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How Will Russia Maintain Its Military in the Long-Term, Given Its Dwindling Resources?

Lieutenant-Commander Kevin R. Maarse

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AIM

1. This service paper aims to explore to what extent Russia will be able to maintain its military in the long term given its dwindling resources in some key areas such as economic strength and human capital. The intent of this paper is to analyze these trends and their impacts on the Russian military.

INTRODUCTION

2. Russia has a vast territory and is rich in many resources such as oil, natural gas, fresh water, forests and more, however their economic and social resources are dwindling.¹ These resources hold particular importance to the long-term maintenance of military capability. For this reason, understanding how these developments will impact Russian military capabilities is critical to national defence acquisition and planning. To increase our understanding of Russia's future military capability this paper will look at the resources underlying Russian military power. It will then examine the functions and capabilities of Russia's land component as a case study (specifically the Ground Forces Branch), to analyze the effects of these resource challenges in the long term.

DISCUSSION

3. There are a number of resources underlying Russian military power. Most can be grouped into four categories: political, demographic, economic, or societal. This paper will focus mainly on the latter three, identified as being under strain. Political factors do not appear to be a major challenge at present. "Public attitudes currently show broad support for Russia's government, foreign policies, and the military," therefore stability inside Russia is not currently a major concern.²

4. Beginning with demographic challenges, Russia is currently faced with "the three terrible population problems: uneven distribution of population, imbalance between men and women, and a sharp decline in population."³ Russia's population, specifically, has been declining for a long time. It is now beginning to affect Russia's sustainment in a number of areas such as: the economy, society, resources, and the environment. Although these are complex, long-term issues for Russia, there are some positive signs as Russia's demographics are beginning to stabilize due to higher birth rates and continued immigration. While Russia's population growth is quite weak, its demographic situation is by no means crippling.⁴ "Russia has also built a relatively stable

¹ Cordell, Jake. "Russia's Economy Set to Face Old Problems in New Year." The Moscow Times. January 24, 2022. <https://www.themoscowtimes.com/2022/01/04/russias-economy-set-to-face-old-problems-in-new-year-a75842>.

² Radin, Andrew, Lynn E. Davis, Edward Geist, Eugeniu Han, Dara Massicot, Matthew Povlock, Clint Reach, Scott Boston, Samuel Charap, William Mackenzie, Katya Migacheva, Trevor Johnston, and Austin Long, The Future of the Russian Military: Russia's Ground Combat Capabilities and Implications for U.S.-Russia Competition. Santa Monica, CA: RAND Corporation, 2019. https://www.rand.org/pubs/research_reports/RR3099.html. p.11

³ Xiong, Binyi, Russia's Demographic 'Crisis'. 2020. <https://storymaps.arcgis.com/stories/3ecbd7ec493943afb665ec93f476b081>

⁴ Radin, The Future of the Russian Military, 44.

mixed conscript and contract Manning for the military enabling it to address the challenges that undermined its military in the late 1990s and early 2000s.”⁵ Provided the situation does not worsen Russia can likely sustain the current size of its military.

5. The next dwindling Russian resource is their economy. The Cold War arms race significantly drained the Soviet Union’s economic resources. Since the collapse of the Soviet Union, the Russian economy has been faced with protracted stagnation. “Recent lack of confidence in the Russian economy stemmed from at least two major sources. The first was the fall in oil prices in 2014. The second was the result of international economic sanctions imposed on Russia following the annexation of Crimea.”⁶ Analysts are predicting meagre economic growth for Russia in the coming years. “The World Bank estimates Russia’s growth potential — a key indicator of how fast an economy can expand in normal times and which is seen as the best predictor of long-term prosperity — at below 2% a year.”⁷ The list of items constraining their economy is long. It includes “adverse demographics, structural economic bottlenecks, a lack of far-reaching reform to diversify from the oil and gas sector’s dominant role in the economy, weak governance, high vulnerability to geopolitical risk, weak physical infrastructure...” among others.⁸ To make matters worse, growing tensions between Russia and the West have raised the prospect of new, possibly more severe, sanctions being imposed on Russia if it attacks neighboring Ukraine again.⁹

6. Russia’s economic performance will be important in determining the level of investment in defence, and the defence industry, over the coming decades. Since 1998, “Russia’s military budget has increased substantially, [mainly] due to acquisition expenditures.”¹⁰ “Future military budgets are expected to level out and grow proportionately to GDP,”¹¹ leveling out at around 3% of gross domestic product.¹² So, while the Russian economy is stagnant, it is not on the brink of collapse. The government would also likely be willing to cut spending elsewhere to support defence spending.

7. Last on the list of dwindling Russian resources is human capital, also known as brain-drain, or emigration of intellectuals. Since Putin became the president, “between 1.6 and 2 million Russians—out of a total population of 145 million—have left for Western democracies and some new destinations where they can be freer, with their skills put to a better use.”¹³ This

⁵ Radin, *The Future of the Russian Military*, 68.

⁶ Mpra.ub.uni-muenchen.de. 2021. *Spillovers among Energy Commodities and the Russian Stock Market*. [online] Available at: <https://mpa.ub.uni-muenchen.de/108990/1/MPRA_paper_108990.pdf> [Accessed 23 January 2022].

⁷ Cordell, Jake. “Russia’s Economy Set to Face Old Problems in New Year.” *The Moscow Times*. January 24, 2022. <https://www.themoscowtimes.com/2022/01/04/russias-economy-set-to-face-old-problems-in-new-year-a75842>.

⁸ According to analyst Levon Kameryan. Ibid

⁹ Reuters. “Russia Is Facing ‘Severe’ Sanctions for Ukraine Threats. Here’s What That Could Mean - National.” *Global News*, January 20, 2022. <https://globalnews.ca/news/8526714/russia-ukraine-severe-sanctions/>.

¹⁰ Radin, *The Future of the Russian Military*, 12.

¹¹ “Trends in World Military Expenditure, 2020 - Sipri.org.” Accessed January 24, 2022. https://www.sipri.org/sites/default/files/2021-04/fs_2104_milex_0.pdf?fbclid=IwAR3ghsHg2V6XewWwADU0jX1Uvww0O5OVFvFrXBEAcsUC6t2EqjrygMMp3sE.

¹² Radin, *The Future of the Russian Military*, 59.

¹³ “The Putin Exodus - Atlantic Council.” Accessed January 24, 2022. <https://www.atlanticcouncil.org/wp-content/uploads/2019/09/The-Putin-Exodus.pdf>.

emigration “sped up with Putin’s return as president in 2012, followed by a weakening economy.”¹⁴

8. Brain-drain remains a complex problem to solve, with the biggest concern being the exodus of university graduates and scientists. According to a recent report by *Future Today*, one of Russia’s leading recruitment agencies, currently 85% of graduates of domestic universities are considering permanent or temporary emigration.¹⁵ Meanwhile, “almost 50,000 scientists left Russia during 2014-19, compared to 20,000 within the shorter period of 2010-13 and despite the efforts of the state, most of them continue to work abroad.”¹⁶ People are leaving for a variety of reasons including: “new economic and career opportunities, family reunion, growing corruption, and [a worsening] political atmosphere.”¹⁷ According to Putin, there are two ways to solve the problem “Either to close the country as it was during the Soviet times and impose additional obligations on professors, or [by] increasing payments to them.”¹⁸ However, in a free market economy, restrictions on intellectual workers labour migration is a difficult problem to solve.

9. To analyze the effect of these resource trends on the Russian Ground Forces a brief overview of the organization is needed. The Russian Ground Forces (also known as the Russian Army) remains, at least on paper, one of the largest armies currently fielded by any country. The official primary responsibilities of the Russian Ground Forces are “the protection of the state borders, combat on land, the security of occupied territories, and the defeat of enemy troops.”¹⁹ Regarding the Ground Forces budget, it has always accounted for the bulk of Russian defence spending (around 43%). However, the vast majority of spending on the Russian Ground Forces (around 65%) goes to personnel costs, given the size of the army (in theory around 300,000). This is large number, however the bulk of the Russian ground forces personnel consist of conscripts that are not highly trained. That being said, they do possess enough high-quality units to give Russia the ability to deploy an effective fighting force anywhere in its periphery.²⁰

10. The ground forces have arguably suffered the worst of all the Russian service branches from the post-Cold War drop in defence spending.²¹ Over the last decade large amounts of money has been spent trying to modernize equipment, such as new armoured fighting vehicles. Modernization efforts have been aimed at improving capability in intense, short, and complex operations into enemy territory, as well as increased readiness levels and deployability at short notice. Widespread reforms have significantly altered the shape of the Russian Ground Forces from 2008 onwards. In particular, command and control has been greatly simplified, while the entire order of battle has been restructured. “When it comes to the combat readiness and

¹⁴ Ibid

¹⁵ “Can Putin Really Solve the Problem of Brain Drain?” University World News. Accessed January 24, 2022. <https://www.universityworldnews.com/post.php?story=20200402141401228>.

¹⁶ According to data of the Russian Academy of Sciences, Ibid.

¹⁷ “The Putin Exodus - Atlantic Council.” Accessed January 24, 2022. <https://www.atlanticcouncil.org/wp-content/uploads/2019/09/The-Putin-Exodus.pdf>.

¹⁸ “Can Putin Really Solve the Problem of Brain Drain?” University World News. Accessed January 24, 2022. <https://www.universityworldnews.com/post.php?story=20200402141401228>.

¹⁹ “Russian Ground Forces.” Wikipedia. Wikimedia Foundation, January 24, 2022. https://en.wikipedia.org/wiki/Russian_Ground_Forces.

²⁰ De Larrinaga, Nicholas. Return of the bear: Russian Ground Forces Modernization. London. Janes. 2016. <https://customer-janes-com.cfc.idm.oclc.org/DefenceWeekly/DisplayFile/jdw61209?edition=2016>

²¹ Ibid

operational experience, although Russian troops have trained in the fighting of large-scale joint inter-service operations in [a number of] military exercises, their reformed ground forces have never been tested in [a large-scale] conflict.”²² Some fruit has begun to be borne however, demonstrated recently by Russian ground force effectiveness in eastern Ukraine.

11. Significant modernization work remains. The Ground Forces are still a shadow of their Soviet equivalent and their technology in many cases is now significantly behind their Western equivalents.²³ Western sanctions and Russia’s difficult economic situation are significantly hampering these efforts, not just in the Ground Forces but across the entire military.²⁴ Morale issues also remain a challenge.²⁵ As part of this paper’s analysis, eight capability areas will be examined: maneuver ground forces, indirect fire, long-range strike, rapidly deployable forces, command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR), air defence, electronic warfare (EW) and internal security forces.²⁶

12. Russian maneuver ground forces include units that operate tanks, armored personnel carriers, and infantry fighting vehicles, as well as electronic warfare, integrated air defence, and other supporting roles. These units have seen a modernization of some of their legacy systems, but slow progress has been made at adopting next-generation platforms, such as the T-14 and T-15. The T-15 is the new Russian heavy infantry fighting vehicle, first unveiled in 2015, while the T-14 is the new Russian main battle tank. Russia plans to acquire 2,300 T-14s by 2025 with delivery expected to begin in 2022. Due to its’ shared chassis with the T-14, the T-15 represents a unique capability. At 48 tons it is larger and more heavily armoured than any other infantry fighting vehicle (IFV). It is unknown when initial deliveries will begin.

13. Efforts also continue to further adopt advanced fire control, sensors, and protection technologies on legacy Soviet systems. Although continued modernization of Soviet-era Russian platforms is expected, there will likely not be significant number of new Russian platforms in the next five to ten years. Given the financial challenges currently being faced, it may not be until 2025 or 2030 before the first brigade of new IFVs will be fielded. New unmanned systems are also being heavily pursued.

14. Regarding indirect fire, current equipment and employment remain effective, having recently been demonstrated in both Ukraine and Syria. Although most platforms are based largely on Soviet-era designs, these systems have benefited indirectly by improvements in C4ISR. On the new capability front, Russia is developing a new self-propelled artillery system

²² Norberg, Johan, “Training to Fight: Russia’s Major Military Exercises, 2011-2014,” Swedish Defense Research Agency (FOI) Report, December 2015, 5, <http://foi.se/rapport?rNo=FOI-R--4128--SE> (accessed January 2016).

²³ De Larrinaga, Nicholas. Return of the bear: Russian Ground Forces Modernization. London. Janes. 2016. <https://customer-janes-com.cfc.idm.oclc.org/DefenceWeekly/DisplayFile/jdw61209?edition=2016>

²⁴ “Russia’s New Ground Forces : Capabilities, Limitations and Implications for International Security.” Accessed January 24, 2022. [https://cfc.ent.sirsidynix.net/client/en_GB/cfc/search/detailnonmodal/ent:\\$002f\\$002fSD_ILS\\$002f\\$002fSD_ILS:95039/ada](https://cfc.ent.sirsidynix.net/client/en_GB/cfc/search/detailnonmodal/ent:$002f$002fSD_ILS$002f$002fSD_ILS:95039/ada).

²⁵ Glantz, David M. “The Russian Way of War: Force Structure, Tactics, and Modernization of the Russian Ground Forces.” *The Journal of Slavic Military Studies*, February 9, 2018. <https://www-tandfonline-com.cfc.idm.oclc.org/doi/full/10.1080/13518046.2017.1414732?scroll=top&needAccess=true>.

²⁶ Radin, The Future of the Russian Military, 45.

based on the T-14 main battle tank architecture; however, these designs are only in the early stages. Realistically, indirect fire capabilities are “unlikely to experience a meaningful improvement in the next ten years.”²⁷ Instead, continued emphasis will be placed on volume area effects over precision, using legacy Soviet-era systems. A similar story can be seen with Russia’s long range strike capability.

15. With the collapse of the Intermediate Range Nuclear Forces (INF) treaty, “Russia’s long-range strike capabilities are expected to increase, although “production challenges may place limits in the near term.”²⁸ Land based intermediate range ballistic and cruise missiles will almost definitely grow in number over the next five years. Incorporation of these missiles into the Iskander Teleporter Erector Launcher (TEL) system should not be complicated as they have been in service for some time. Russia will also continue to improve upon legacy Soviet systems to increase capability for long-range conventional precision strike, emulating the US approach.

16. Regarding Russia’s rapidly deployable forces, this includes elite units such as airborne and special forces. These units are amongst the highest readiness in the Russian Ground Force and have been heavily used in Ukraine and Syria. They are likely to experience steady investment and gradual improvement over the medium term given they are a high strategic priority. They formed a key element of post-2008 reforms, with focus on operations in the “near-abroad” and expeditionary operations. Readiness and effectiveness of this capability has been realized through an increased reliance on contract personnel.²⁹

17. On the air defence front, the Russian ground forces operates a powerful air defence capability, consisting primarily of short and medium range systems. This capability is expected to continue to slowly improve, thereby continuing to threaten western air superiority. This capability has also seen incremental improvements through advancements in C4ISR.

18. Since the 1980s Russia has watched western developments in command and control and information gathering systems (C4ISR) change the nature of warfare and enable battlefield superiority. After 2008 Russia began to invest heavily in these capabilities. “Russian C4ISR is expected to improve, though its ability to meet its goal of a unified information space and production of ISR systems will be pushed farther back,”³⁰ barring improved relations with the West or greater oil revenue to fund the high costs of domestic procurement. Because of this, the gap between Russia and the West will persist, although will lessen with increased spending. Russia will continue to pursue advanced C4ISR as well as import substitutions to resolve foreign dependence.

19. Much like C4ISR, Russia has sought to integrate EW capabilities throughout Russian ground force units with resultant capabilities continuing to improve. Given the minimal costs involved with EW, Russia will likely continue to view it as useful asymmetric capability, although recruiting and sanctions related challenges remain.³¹

²⁷ Radin, *The Future of the Russian Military*, 102.

²⁸ Ibid

²⁹ Ibid, 103.

³⁰ Ibid

³¹ Ibid, 75.

20. Lastly is Russia's internal security (IS) forces. IS forces are "a major way Russia seeks to defend itself from foreign aggression."³² These forces are also used abroad. Russia is likely to retain their current size, given persistent concerns related to terrorism, unless they experience a "significant economic collapse or increased domestic protests, which could lead to an increase in its size."³³ Current resource constraints should enable the force to maintain its' current strength going forward.

CONCLUSION

21. Over the past decade, the key resources that have enabled Russia to generate military capability have changed significantly, however these factors now show signs of stability over the medium term.³⁴ Despite a decline in the key demographic, economic, and societal resources highlighted, Russia's ground force capabilities do not appear to be majorly impacted. Russia continues to trail its' Western competitors, however, in terms of technological advancement across the spectrum of capabilities.

22. While data is limited regarding the specific links between resources and capabilities, there remains value in comparing the net impacts of dwindling resources. What is clear from the available data is that the present resources are facilitating continued incremental modernization of Russia's military which will likely not result in any sudden improvements or collapses in capability in the foreseeable future. Whether this holds true in long-term is more difficult to assess. However, as was demonstrated during the Cold War, all good things must come to an end. For the Soviet Union, decades of economic, political, demographic, and societal turmoil eventually led to a tipping point. For Russia it may well be a similar fate if the present trends continue.

³² Radin, *The Future of the Russian Military*, 71.

³³ *Ibid*, 103.

³⁴ *Ibid*, xi.

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