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Abstract

This thesis analyzes methods of Russian power projection in the Putin era through three categorical case studies: (1) recent developments in the military modernization program, (2) covert means of power projection, (3) the confluence of *soft power* and economic means of power projection. The thesis employs an interdisciplinary approach including; history, theories of international relations, and security studies, with limited forays into economic theory.

Ultimately the Russian Federation has attempted in this period to project an enhanced power status through various techniques, the primary goal of which to operate as one of the premier global powers.

Firstly the thesis explains the historical development of the Russian military modernization program's (SAP-2020) creation and supply a brief survey of some of the advancements made to the Ground Forces, Navy, and Air Force. The Airborne troops and Strategic missile troops are not given special focus.

Secondly, the most effective means of projecting Russian power has been covert means of power projection, this includes; hybrid warfare in Ukraine, political manipulation through cyber actions, assassinations, and penetration of independent states. Most of these actions are misjudged by Western scholarship as something new, but drawing on the continuation of Soviet techniques one can realize that these are not new but a continuation of old techniques.

Thirdly, Russia utilizes formal levels of its power to not only coerce others into a preferred action but also to gain influence. The third chapter will focus on some of the recent trends in Russian *smart power* action. These trends include: the role of the Russian Orthodox Church in foreign policy, the relationship with Beijing, attempts at diversifying its economy, and the role of natural resources in its foreign policy.

These factors portray to the reader how the Russian Federation is able to interlope into the club of great powers, through its action. While the Russian Federation has been dealt a relatively weak hand in comparison to other nations, it is able to play that hand very strongly and achieve its goals, operating as a great power. The time period focussed on for the bulk of the analysis is 2000 to 2016, however in certain cases for historical background and the latest developments this timeline may be deviated from.

Abstrakt

Diese Masterarbeit befasst sich mit einer Analyse von drei verschiedenen Komponenten der Russischen Machtprojektion. Die erste Komponente behandelt das Modernisierungsprogramm des Militärs. Im zweiten Abschnitt geht es um die Beschreibung der verschiedenen Trends bei den Geheimdienstoperationen und die sogenannte „hybride Kriegsführung“. *Soft Power* und ökonomische Arbeitsmittel stehen im Zentrum des dritten Teils. Die Verbindung dieser drei Komponenten rückt Russland in die Position einer Großmacht im Internationalen System. Dabei greift diese Arbeit auf geschichtliche Geschehnisse, Theorien der Internationalen Beziehungen, Sicherheitsstudien und Wirtschaftstheorien zurück.

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Introduction

The title of this thesis draws upon George F. Kennan's classic Long Telegram, entitled the "Sources of Soviet Conduct", published in 1947 in *Foreign Affairs* magazine.^{1 2} This article, was deeply influential in forming American policy-makers' understanding of the Soviet Union in the early days of the Cold War. Kennan offered an analysis of the Soviet Union for the West that characterized the personality of the USSR, and how the West could confront that conduct. Not dissimilar this paper is written nearly three decades after the creation of the new variant of Kremlin governance, and offers a keyhole glimpse into the conduct of the Russian Federation through three levels of power projection. These analyses can offer the reader an understanding of how the Russian Federation is able to remember in the club of Great Powers and threaten the Western-Liberal order.

The first stage of analysis will focus on the development of and advancements from the Russian Federation's military modernization program, the State Armaments Program 2020 (SAP-2020). How the program developed, will be briefly discussed, and a survey of some of the advancements made through the program will be visited, followed by an assessment of the state of the Russian military. As an amalgamation of Russian power projection, the military modernization program not only postures the Russian Federation to be able to engage in new conflicts in the coming years, but also the proliferation of these systems outside of Russia will serve to not only gain influence for the Russian Federation but also project a status that comes with one of the more advanced militaries in the world. The Russian Federation has attempted to occupy the space in the international system left by the Soviet Union (USSR), and while they are by no means as powerful as the USSR they have attempted to warn the West through conventional military reform, that they are just as dangerous and capable.

The second stage of analysis will visit the Russian pursuance of covert means of power projection, through the so-called Gerasimov doctrine, or what some trendy analysts

¹ "X", (George F. Kennan). "The Sources of Soviet Conduct: July 1947 Issue." *Foreign Affairs Magazine*. Council on Foreign Relations, 21 Oct. 2016. Web. 15 June 2017.

² Kreis, Steven. "George Kennan, The Sources of Soviet Conduct." *Historyguide.org*. History Guide Lectures on the 20th Century, 1947. Web. 15 June 2017.
<<http://www.historyguide.org/europe/kennan.html>>.

have termed *hybrid*- or irregular-warfare. In addition to the conduction of actual warfare, these “covert means” incorporate a wide array of tools and techniques, to achieve Russia’s goals and project an inflated status. Therefore a closer examination of the *hybrid* threat and clandestine activities employed by the 21st century Russian Federation can also provide context for their means of power. As the Prussian strategist and officer Clausewitz’s adage has long been held, “war is politics by other means”, this does not just extend to the open field but increasingly towards so-called *hybrid* operations.

The third level of analysis will offer a study in how Russia is able to use its “formal” channels of power projection to achieve its goals. The importance of oil and gas in Russian diplomacy will be visited, as well as Russian attempts to modernize their economy, and how Russia has attempted to curry favor with their eastern partners. Finally, due to the ideological deficit faced by the Russian Federation provide a brief analysis of various new forms of transnational ideology employed by the Russians, be they the historical protector role of Slavs or particularly the Orthodox Christian Church. This latter analysis will help the reader to understand how military power, clandestine operations, and diplomatic efforts can combine to project the Russian Federation as a formidable giant, which inevitably will confront the New World Order established by the West in the last century.

Upon the initial stages of the research conducted for this thesis, the original goal was to analyze Russian re-establishment as a Great Power in the Post-Soviet epoch. While utilizing the conventional power, hybrid tactics, and diplomatic policies of the Russian Federation in recent years, as three categorical case studies these analyses would have been centered on the Russian attempt to re-establish a lost Great Power status. This goal became immediately problematic due to the fact that one must first define a Great Power, in order to analyze why Russia fits into this formula or not. That is not the goal of this paper, rather the more concrete goal of this paper, was not to analyze whether Russia fills the criteria of a Great Power, but to take a closer look at the conventional strength, and clandestine efforts the Russian Federation has undertaken in its short history, and how Russia attempts to operate as a Great Power.

Analysis of Russian power projection must first be prefaced by an analysis of how theories of international relations (IR) conceptualize power. In order to draw conceptual framework around specifically Russian power projection one must understand the

conceptualization of types of power. While IR theorists have supplied academics for years with various theories that can help to explain the international system, the conceptualization of power is a rather new phenomena in comparison. Scholars have developed loaded terms such as; *hard power*, *soft power*, *smart power*, *institutional power*, *structural power*, *network power*, *compulsory power*, *productive power*, *normative power*, etc.³ Petersen, also conceptualized her own terms of power in four variants; as *coercive power*, *bargaining power*, *concerted power*, and *institutionalized power*. However for the terms of this paper, discussions of theoretical terms for power serves little purpose and delineates from the analysis of the Russian Federation's projection of their power. Nevertheless, as an academic paper, having a degree of theoretical basis for the analysis, can serve the reader to ground the practical analysis in the terms of IR scholars. Therefore focusing exclusively on Nye's *hard power* and *soft power* levels of analysis, and the latest development of his theory *smart power* the three distinct case studies will be discussed and analyzed.

Drawing on the source of these terms creation Nye defines *hard power* as: "the ability to use carrots and sticks of economic and military might to make others follow your will."⁴ Conversely, soft power utilizes: "a country's ability to persuade others to do what it wants without force or coercion."⁵ This modus of power (*soft power*) employs primarily diplomacy, history, and cultural tools that are difficult to measure. Nye further adapted his theory to include a combination of his two forms of power, a so-called *smart power*.⁶ As Nye has asserted soft power alone cannot "produce an effective foreign policy", and *smart power* must be utilized by a modern state to achieve their goals. *Smart power* can also assist a country in overcoming some of the limits to one of their power arsenals. Thus, while the first level of analysis fits neatly into the category of *hard power*, the second and third do not. The former

³Petersen, Kira`. "Four Types of Power in International Relations: Coercive Power, Bargaining Power, Concerted Power, and Institutionalized Power." *IPSA XXIIInd World Congress of Political Science* (2012): n. pag. *IPSA.org*. Web. 01 Dec. 2016.

⁴ Nye, Joseph S. *Power in the Global Information Age: From Realism to Globalization*. London: Routledge, 2005. Print.

⁵ Nye, Joseph S., Jr. "Soft Power: The Means to Success in World Politics." *Foreign Affairs*. Foreign Affairs Magazine -- ONLINE, 28 Jan. 2009. Web. 14 June 2017.

⁶ S. Nye, Joseph S., Jr. "Get Smart." *Foreign Affairs*. Foreign Affairs Magazine--ONLINE, 02 July 2009. Web. 14 June 2017.

(covert means) utilizes secretive power of *hard* and *soft* elements, while the latter draws upon economic coercion and social attraction.

Chapter I: The Victory Day Parade: An Analysis of the Development of Russian Hard Power

The Russian Federation's Military Modernization Program (SAP-2020 and Beyond)

Hard Power Definition and Application

The first analysis of Russian power projection will be on the level of exclusively hard power and even more specifically one amalgamation of Russian *hard power*, the development of and advancements culminating from their most recent military modernization program, SAP-2020. Rather than analyzing how these developments will be deployed (as this paper trepidatiously avoids any crystal ball-ology) , rather analyzing the program's historical development and some of the advancements which it has produced can serve to inform the reader about some of the strides the Russian military is making.

An adaptation from Nye is also necessary for this level of analysis, rather than applying the economic side of Russian hard power, while still noting the economic implications of the military modernization program, the Russian economy should be paid separate and distinct attention. Therefore, the first chapter will dedicate its analysis entirely to the Kremlin's desire to overcome some of the structural and technological weaknesses of the Russian military, the ultimate goal being to strengthen their asset of one of the world's ablest and most powerful fighting forces.

The Case for Military Reform and Challenges to Reform

In 2003, while the first-elected term of President Vladimir Vladimirovitch Putin was winding down, the discussions precipitating Russian military reform had already commenced. Steven Miller offered not only the rationale at the time behind military reform in Russia, but some of the challenges preventing policy-makers from achieving those goals.

To briefly summarize his assertions he listed the reasons for military reform as: (1)the armed forces the Russian Federation inherited from the Soviet Union were oversized, (2) they stood in "poor shape" and were already deteriorating, (3) the Russian Federations forces were maldeployed, (4) buttressed by underfunding, and finally (5) linked to a bloated and unaffordable defense industry. These factors demanded that the Russian Military High Command and the procurement officers make a change.

To elaborate briefly on each point, the first imperative demanding Russian military reform was due to its inheritance from the Soviet Union. While the Soviet Union was unquestionably a superpower, it was not clear after its dissolution if any superpower(s) would emerge from the ruins of the USSR. The Russian Federation was as close as one could get, mainly due to its taking of the lion's share of the USSR's vast arsenal, especially the entirety of its nuclear arsenal.⁷ But this enormous inheritance was not only much more than the Russian Federation needed but it did not suit the national security needs of the newly formed Russian Federation. This leads one to another point, it was not clear in the 1990s what those needs were, a fact which persists to the contemporary era. The Soviet Union's adversaries, while not entirely dissimilar to the Russian Federation's, were quite clear, however at the turn of the millennia this was not the case for the Russian Federation.

The second factor that demanded a reformation of the military was the quality of the equipment inherited from the Soviet Union. While Miller's first imperative for reform was purely quantitative and strategic, the second dealt with a more qualitative approach. After the example set in the Gulf War and US action in Kosovo during the 1990s, it quickly became apparent to Russian strategists that the aging and rusting equipment of the Soviet Union would not only fail to provide the Russian Federation its security needs, but stood in an inferior technological position to its Western counterparts. Miller highlighted C.J. Dick's postulation that "the Russian army has been in decline since before it came into existence....increasingly in a state of disrepair..." This further encouraged military strategists to recognize the need for a 21st century military capable of defending the Russian homeland.

The maldeployment issue certainly did not help this problem, considering that a substantial portion of Russia's forces were stationed in Eastern Europe, as Soviet contingency planning for a potential war with the capitalist adversarial West. When problems began to arise within Russia's own borders the maldeployment issue would become abundantly clear, as in the case of the Chechen conflicts (1994 and 1999). Additionally, at the foundations of the Russian Federation the West was no longer viewed as a strategic adversary, but rather at the time of the Atlanticists control of the Kremlin, a future close partner. Therefore rather than prepare for a great conflict with the North Atlantic Treaty Organization (NATO), Russian

⁷ Felgenhauer, Pavel, Michael Tsypkin, and Elizabeth Skinner. "RUSSIAN MILITARY REFORM: TEN YEARS OF FAILURE." *Fas.org*. Sevodnya , Newspaper and the Naval Postgraduate Institute, Mar. 1997. Web. 14 June 2017.

leadership was forced to look at consolidating its newly established borders and later effectively engaging in counter-terrorism operations.

Considering the vast size of the Russian military in the post-Soviet phase of the 1990s it also came as no surprise that the Russian Federation could no longer financially support the burden the Soviet Union had attempted to weather. Defense budgets, throughout the later years of the Soviet Union, had stood in the hundreds of billions of dollars, conversely following the USSR's collapse the Russian Federation (who had inherited the majority of their forces) would be forced to attempt to maintain that same apparatus on less than ninety billion per-year.⁸ This would prove impossible and lead to further deterioration of the Russian Armed Forces. In addition to the arsenal inheritance from the Soviet Union, the Russian Federation was also bequeathed the majority of the defense-industrial complex. This industry had been a prime beneficiary of the centrally planned model of the Soviet system, and received unparalleled funding which ultimately the Russian Federation could not maintain. These economic and bureaucratic factors contributed to a further decline of Russian conventional power.

All of these factors combined to provide a very strong case for military reform in Russia. Subsequently, this case that was advocated for not only in the Ministry of Defense, but also in the State Duma.⁹ However the current modernization effort (under the auspices of SAP-2020) did not come without its challenges and opponents to reform, as is so often the case regarding Russian reform efforts throughout history.

At the early stages of reform efforts, one of the primary discussions had revolved around how to democratize the military and place it firmly under civilian control. This also factored into a discussion about professionalizing the military, and abolishing the universal conscription which had percolated through the transition from Soviet times. As any occasional observer of the Russian military will know, neither of these goals came to fruition and this eventuality is easily explainable. They were against the military's interest, the generals did not want conscription abolished. Conscription not only provided for a steady influx of troops each year, but also ensured that the size of the Russian military would reflect that of the country.

⁸Miller, Stephen E. *The Russian Military: Power and Policy*. Ed. Dmitri V. Trenin. London, England: MIT, 2004. Print. American Academy of Arts and Sciences : Cambridge Massachusetts.

⁹ Miller 2004

One should also not forget that a military coup was often discussed as a real threat to the newly formed democratic government, and this fear ensured that the early leaders of the Russian Federation would not attempt to implement reforms the military could perceive as threatening or hostile. Yeltsin spent much of his time before the Constitutional crisis in 1992 courting the military to prevent such a challenge to his leadership.¹⁰

Of course, as with any inefficient bureaucracy, factors that demanded reform did not necessarily initiate reform. One of the major reasons for lack of reform being that the military itself did not want it. As Herspring observed, “The Russian military has traditionally been very conservative...it is unlikely to change on its own. It will tend to keep the same size, force structure, personnel policies, strategy, and tactics it had prior to the transitional stage, unless the president forces it to modify its behavior.”¹¹ This truly speaks to a major impediment of Russian military reform in the Post-Soviet era, the lack of desire from the High Command. Stipulating that the Russian military will not experience an organic reformation, but this must be injected into the military from external leadership. Boris Yeltsin, perhaps concerned with other matters, and deeply fearful of the military establishment could not initiate the far reaching modernization program that his successors did, perhaps due to political will, but certainly due to political capital to engage in such an effort.

Yeltsin Era and Relationship with the Military

When considering the Yeltsin era, it is important to recognize the complex relationship Yeltsin maintained with the military. Herspring asserts that the then Soviet military had begun to view Gorbachev as untrustworthy following the debacle in Vilnius in January 1991. This was further complicated by the issue that Yeltsin had begun courting the generals, prior to the KGB led coup in August of the same year. It became clear that Yeltsin would need to consolidate support in the military, if he was to lead Russia into its next chapter. Herspring goes on to point out that the Union Treaty was the final straw for the High Command, who viewed the signing of it as a total departure from sanity by Gorbachev, and abandoned any hope or willingness to work with the last Soviet leader. In order to sure up the support of the

¹⁰ Herspring, Dale R. *The Kremlin & the High Command: Presidential Impact on the Russian Military from Gorbachev to Putin*. Lawrence: U of Kansas, 2006. Print

¹¹ Herspring : 2006 P. 8

generals, candidate Yeltsin visited various military outposts, and visibly promised and gifted the military into supporting him (from wristwatches to new housing complexes for officers).¹² He demonstrated to the military that unlike Gorbachev, Yeltsin would listen to their needs and fully support efforts to meet those needs. He also established a vast network with retired officers to further tap into the military's level of contentment, he then finalized support among the officer corps by picking Colonel Alexander Rutskoi as his vice-president, a veteran from the Afghanistan campaign.¹³

Rutskoi would ultimately turn on Yeltsin during the constitutional crisis in 1993, but by then the Duma had already signed its own death warrant, by enacting a law in February of 1993 that shortened obligatory military service and offered a wide array of exemptions to avoid conscription, a move strongly opposed by the high command.¹⁴ All of Yeltsin's courting of the military would come to a head during the Constitutional Crisis when Yeltsin ordered that the White House (the Duma administrative building housing Rutskoi and the cabal of anti-Yeltsin rebels during the crisis), be cleared of all plotters. The Minister of Defense at the time Pavel Grachev, was forced to make a decision. Ultimately Yeltsin's cultivation had paid miles in dividends in that it allowed him to retain power on the back of the military (by the end of the crisis, tanks were seen firing on the White House, an iconic building in Moscow).

Chechnya: A Lesson in Failure

While the downward spiral of the Russian military had begun in Afghanistan, it became a prevalent limitation to their power in the First and Second Chechen Wars. As Coffey asserts, these limitations were exposed from the command level which "manifested a near systematic dysfunction" which affected the Ground Forces where Chechen irregulars

¹² Starr, S. Frederick, and Karen Dawisha. *The International Politics of Eurasia*. Vol. 4. Abingdon, UK: Routledge: Taylor and Francis, 1996. The Making of Foreign Policy in Russia and the New States of Eurasia. *Google Books*. Web. 14 June 2017.

¹³ Simes, Dimitri K. *After the Collapse: Russia Seeks Its Place as a Great Power*. New York: Simon & Schuster, 1999. Print.

¹⁴ Spivak, Andrew L., and William Alex Pridemore. "Conscription and Reform in the Russian Army." *The National Council for Eurasian and East European Research* Title VII Program. Washington, D.C. (2004): n. pag. Web.

lightly armed with small-arms and handheld anti-tank weapons obliterated elements of the 131st Motorized Rifle Brigade and the 81st Motorized Rifle Regiment, Russian loses numbered 225 armored vehicles in the first month of the conflict alone.¹⁵ These weaknesses went beyond the Ground Forces, and exposed the military's inability to conduct urban operations, and lack of co-ordination and preparation left the Russian Ground Forces without close air support or reconnaissance from the Russian Air Force. During the Second Chechen War in 2000 in the first days of Putin's leadership, it was clear that the Russian military had learned from some of their mistakes in dealing with the Chechens in the previous conflict, but also left the Russian command structure wanting. These weaknesses would not be properly addressed until nearly a decade later, following another debacle of the Russian military, their excursion into Georgia during the Olympics in 2008.

Georgia: The Last War the Old Russian Army Fought

While the Georgian invasion in 2008 has been seen operationally as a success story, it does bear in mind the epic failures and breakdowns of the Russian army on their way to victory. The US Army War College was able to identify some of the major implications the conflict would have on the future of Russian operations which are also relevant to note for their contemporary application, these included; (1) the use of granting Russian citizenship to create cleavages of protected populations in the country in question, (2) expanding Caucasian influence, and (3) discouraging NATO aspirant countries in the FSU.¹⁶ While these implications speak little of the performance of the Russian armed forces within the conflict, they do highlight some of the operating principles which have formed the basis for the operations in Eastern Ukraine, and the annexation of Crimea (see below).

It is important to note that the Russo-Georgian war exposed deep inefficiencies within the Russian military and its potential vulnerabilities. As with Chechnya they predicated the necessity to transition towards military reform particularly aimed at technical capabilities. One of the chronic structural deficiencies in the Russian military laid in their ability to

¹⁵ Coffey, Michael. "Military Learning Between the Chechen Wars." *SRAS*. SRAS- The School of Russian and Asian Studies, 24 Oct. 2006. Web. 14 June 2017.

¹⁶ Cohen, Ariel, and Robert E. Hamilton. "The Russian Military and the Georgian War: Lessons and Implications." *Strategic Studies Institute Publications ERAP Monograph* (2011): n. pag. *US Army War College*. Web.

conduct and coordinate the rapid deployment of its forces. This weakness was highlighted in 2008, when VDV forces stationed in the Caucasus deployed to the theater slower than those from the interior.¹⁷ This also spoke to the necessity of the Russian Ministry of Defense's need to create a more viable command structure to conduct operations. On the command level Russian units thrusting into South Ossetia were not supplied with accurate intelligence about Georgian troop deployments or artillery positions, which proved detrimental to the spearheading units.¹⁸ On the technical level the Georgian conflict exposed weaknesses in their reliance on old and outdated kits. During the conflict the Russian forces lacked secure communications avenues when the satellite communications went down, forcing some commanders to resort to motorcycle messengers and their own personal cell-phones to deliver orders¹⁹, and operationally lacking much of the equipment the Georgian forces were able to deploy such as unmanned aerial vehicles (UAVs).²⁰

It became clear that Georgia was a wake-up call to the Russian Ministry of Defense, and that reform was not only necessary but paramount to any hope Russia had of challenging the West closer to NATO's borders. The military modernization program was first announced, by then President Medvedev, immediately after the Georgian conflict and was intended to address the shortcomings exposed by that war.²¹

Structure of the Russian Ministry of Defense

The institutional framework of the Russian Armed Forces, is nothing spectacularly unique, but important to recount for the purposes of this paper. Not dissimilar to the United States of America, the President of the Russian Federation also holds a multi-functional role on being the "Supreme Commander-in-Chief of the Armed Forces of the Russian

¹⁷ Bowen, Andrew S. "Russia's Deceptively Weak Military." *National Interest* 7 June 2015: n. pag. *Thenationalinterest.org*. Web. 01 Dec. 2016.

¹⁸ Weir, Fred. "In Georgia, Russia Saw Its Army's Shortcomings." *The Christian Science Monitor*. The Christian Science Monitor, 10 Oct. 2008. Web. 14 June 2017.

¹⁹ Galeotti, Mark. *The Modern Russian Army 1992-2016*. Cumnor Hill, Oxford: Osprey, 2017. Print.

²⁰ Clayton, Nicholas. "How Russia and Georgia's 'little War' Started a Drone Arms Race." *Public Radio International*. Global Post Investigations Series, 23 Oct. 2012. Web. 14 June 2017.

²¹ Blank, Stephen J. *Civil-Military Relations in Medvedev's Russia*. Vol. SSI Monograph. Place of Publication Not Identified: Bibliogov, 2012. *US Army War College*. Strategic Studies Institute, Jan. 2011. Web.

Federation.”²² Directly answerable to the President of the Russian Federation, is the Minister of Defense of the Russian Federation, an office held since the 6th of November 2012 by Sergei Shoigu (oftentimes spelled as Shoygu).²³ Sitting beneath the Minister of Defense is a litany of Deputy Ministers of Defense, all responsible for various functions, and also representing different branches of the Russian Armed Forces. One Deputy Minister of Defense sits *primus inter parus* as the Chief of the General Staff of the Armed Forces of the Russian Federation, this position has been held since 2012, by Valery Vasilevich Gerasimov.²⁴ For further information on the personnel assigned to the leadership of the Ministry of Defense of the Russian Federation please refer to the Appendices.

In addition to the personnel separation of the Armed Forces of the Russian Federation, there is obviously a separation among the branches of the Armed Forces. There are three “services”, and two “arms forces”, under the heading of the Ministry of Defense. The “Services” are quite obviously: (1) the Land Forces, (2) the Aerospace Forces, and (3) the Navy.²⁵ The “Arms Forces”, are tasked with specific strategic roles and are: the (1) Strategic Missile Forces (the main component of the Strategic Nuclear Forces (SNF)), and (2) the Airborne Forces (“the elite of the Russian Armed Forces”²⁶).²⁷ The separate Arms Forces modernizing efforts will not draw particular attention in this paper, as they factor into the broader “Services” advancements, with some limited exceptions.

²² "The Constitution of the Russian Federation." *Constitutziya.ru*. Rossiskaya Gazeta, 1993. Web. 14 June 2017.

²³ "Leadership." *The Ministry of Defence for the Russian Federation*. Trans. Linguistic Centre of the Russian Federation Ministry of Defence. MOD RF, n.d. Web. 14 June 2017. <<http://eng.mil.ru/en/management.htm>>.

²⁴ "Valery Gerasimov." *Ministry of Defence of the Russian Federation*. Trans. Linguistic Centre for the Russian Federation Ministry of Defence. MOD RF, n.d. Web. 14 June 2017. <http://eng.mil.ru/en/management/deputy/more.htm?id=11113936%40SD_Employee>.

²⁵ "Services." *Ministry of Defence of the Russian Federation*. Trans. Linguistic Centre for the Russian Federation Ministry of Defence. MOD RF, n.d. Web. 14 June 2017. <<http://eng.mil.ru/en/structure/forces/type.htm>>.

²⁶ "Airborne Forces." *Ministry of Defence of the Russian Federation*. Trans. Linguistic Centre for the Russian Federation Ministry of Defence. MOD RF, n.d. Web. 14 June 2017. <<http://eng.mil.ru/en/structure/forces/airborne.htm>>.

²⁷ "Airborne Forces." *Ministry of Defence of the Russian Federation*. Trans. Linguistic Centre for the Russian Federation Ministry of Defence. MOD RF, n.d. Web. 14 June 2017. <<http://eng.mil.ru/en/structure/forces/airborne.htm>>.

Before fully delving into the reform efforts directed at each branch in their minutiae, it should be noted that each branch is also tasked with different roles and has various commands underneath their own heading. While it is important to be aware of these separations, it will be treated as assumed knowledge in the body of this paper, (please refer to the Appendices for a closer look at the separations among the armed branches themselves).

The modernization program of the Russian Federation's military, has been aimed at all levels of the Armed Forces. From the uniforms the soldiers wear to the multi-million dollar fixed-wing aircraft flying in the sky, Putin and his leadership structure have attempted to fully re-envision the Armed Forces of the Russian Federation, fitted for the 21st century. Logically it will be important to view some of the major advancements in turn, and a logical sequence for this analysis is to look at each branch separately.

It should not be lost on the reader that since 2010, all three "branches" (the Ground Forces, the Navy, and the Air Force) are distributed among five military districts. This separation was based on the American system of unified combatant commands for specific regions (i.e. EUCOM for European Command and CENTCOM for the Middle East, Central Asia, and North Africa. PACCOM for the Pacific, etc.). The Russian system is much more based on its own geography rather than that of the globe, the commands are the JSCs (Joint Strategic Command) of (1) the Western Military District (headquartered in St. Petersburg, and the command responsible for the Baltic Fleet), (2) the Northern Fleet (headquartered in Severomorsk), (3) the Southern Military District (headquartered in Rostov-on-Don, which maintains both the Caspian Flotilla and the Black Sea Fleet), (4) the Central Military District (headquartered in Yekaterinburg), and finally (5) the Eastern Military District (headquartered in Khabarovsk, which maintains the Far-Eastern elements of the Russian military and the Pacific Fleet).²⁸ One of the initial structural reforms was to create a nucleus that could coordinate the elements of all five military districts, this centralization culminated in the creation of the National Defense Control Center (NDCC), opened in 2014 and dubbed by some Russian journalists as more powerful than the Pentagon.^{29 3031} Built directly on the

²⁸ Pike, John. "Military: World: Russia: Ministry of Defense." *Russian Military Districts*. Globalsecurity.org, n.d. Web. 14 June 2017. <<http://www.globalsecurity.org/military/world/russia/mo-md.htm>>.

²⁹ "Russia's National Defense Control Center Officially Takes up Combat Duty." TASS. TASS: RUSSIAN NEWS AGENCY, 01 Dec. 2014. Web. 14 June 2017. <<http://tass.com/russia/764480>>.

Moskva River in the short span of two years, the facility can be seen across the river from Gorky Park. The Ministry of Defense's behemoth headquarters offers any visitor to Moscow, the symbolic role the military plays at the center of Russian culture and society, as the author found out in late 2016 (refer to Appendices for a picture of the new complex).

Major Advancements of the Land Forces of the Russian Federation

The Land Forces (or Ground Forces) of the Russian Federation, have long been recognized for their dependence on old and deteriorating kits. However in conjunction with the reform efforts aimed at the Armed Forces, the Russian Federation is deeply fearful of the great strides made by the People's Republic of China's People's Liberation Army (PLA) due to their own modernizing efforts, and Russia's traditionally laggard capabilities in regards to the West. Therefore specific attention has been paid to the Land Forces of the Russian Federation in order to prepare them for any future conflicts with their neighbors, which would certainly take on a ground dimension.

Perhaps the most visible change of the 21st century Russian soldier will be the full adoption of the *Ratnik* program. This program was formally adopted in October of 2014, and deliveries of some elements have already begun, as has been observed in the Crimean crisis.³² This program is expected to be at full deployment by 2020.³³ It is not unique to the Russian Army to seek to completely refit their infantry soldiers, with a new combat kit. Both the British and French armies, have undertaken to refit their soldiers with similar programs: the F.I.S.T. (Future Infantry Solider Technology)³⁴ and the FELIN (Fantassin à Équipements et

³⁰ Rogoway, Tyler. "Look Inside Putin's Massive New Military Command And Control Center." *Foxtrot Alpha*. Foxtrotalpha.jalopnik.com, 19 Nov. 2015. Web. 14 June 2017.

³¹ "The National Defence Control Center." *Russiantimes.net*. Russian Times, 05 Apr. 2015. Web. 14 June 2017. <<http://russiantimes.net/national-defence-control-center/>>.

³² Chivers, C. J., and David M. Herszenhorn. "In Crimea, Russia Showcases a Rebooted Army." *Nytimes.com*. The New York Times, 02 Apr. 2014. Web. 14 June 2017.

³³ Galeotti, Mark. *The Modern Russian Army 1992-2016*. Cumnor Hill, Oxford: Osprey, 2017. Print.

³⁴ Batchelor, Tom. "How the Soldier of 2020 Will Fight ISIS: MoD Unveils Vision of the Future UK Army." *Express.co.uk*. Express.co.uk, 17 Sept. 2015. Web. 14 June 2017.

Liaisons Intégrés)³⁵ respectively, with many other countries making similar efforts. The *Ratnik* system will not only better prepare the Russian military for the future conflicts they may face, but also bridge some of the technological abyss, between its perceived competitors, faced by the Russian army at the turn of the century. The *Ratnik* envisions the Russian soldier to be fully equipped with a newly modernized 40 piece uniform including; the new VKPO camouflage uniform, a new lightweight 6B47 helmet (which can also be equipped with advanced vision gear), 6B45 body armor, and finally a multi-tool/ knife. While the run of the mill soldier will become familiar with this new outfit, the *Ratnik* also envisions various modular elements to accompany the uniform catering to the operation at hand, or the specific military district needs. Such attachments may include: the Arctic readiness module (an additional heavy winter coat / facemask), or other weather specific modifications to withstand temperatures from -58° F to +122° F (-50° C to +50° C), additional armored trauma plates designed for infantry (thigh and shoulders), and most importantly perhaps the modern *Strelets* (named for the musketeer guards of the Tsar) communications system utilizing video, voice, data, and the GLONASS satellite navigation system.³⁶ As Galeotti further asserted, this new *Strelets* system was a direct consequence of some of the lessons learned from the Georgian campaign, where the Russian GPS systems were shut off externally (Russian soldiers had to resort to motorcycle couriers and the use of their own personal cell phones) as aforementioned.

While the *Ratnik* program has not even neared full completion to outfit the entire Army, the Russian High Command has been very pleased with the results of the program thus far. Reports have already surfaced that a second generation program of the *Ratnik*, the aptly named *Ratnik-2* will attempt to improve the system and be fielded in the 2025-2035 period as Galeotti further asserts.³⁷

The *Ratnik* infantry combat system is a clear attempt to outfit the 21st century Russian infantryman, and prepare him for the types of conflicts that the Russian military will face over the next few decades. The development of this program says nothing however about the standard issued small arms that the Russian military will use. This, while it may some

³⁵ "FELIN (Fantassin à Équipements Et Liaisons Intégrés) - Future Infantry Soldier System, France." *Army Technology.com*. Army Technology Services a Product of Kable, 2017. Web. 14 June 2017. <<http://www.army-technology.com/projects/felin/felin1.html>>.

³⁶ Galeotti 2017

³⁷ Galeotti, Mark. *The Modern Russian Army 1992-2016*. Cumnor Hill, Oxford: Osprey, 2017. Print.

inconsequential is highly important to consider when analyzing the effectiveness of the Armed Forces of the Russian Federation, and their traditional international customers. To accompany the *Ratnik*, the next generation of Russian war fighters will most likely be equipped with the new AK-12 assault rifle.³⁸ Since Mikhail Kalashnikov invented the first *Avtomat Kalashnikova* in 1947, the AK-47 selective-fire assault rifle (and its variants) has remained the most widely produced assault rifle in the world. It has also remained the standard issue assault rifle of the Russian Armed Forces. In 1974, the model was updated and a new variant was adopted, by the then Soviet military, the AK-74. The AK-74 utilized a lighter 5.49 x 39mm cartridge and first saw service in the Afghanistan campaign in 1979, specifically designed to pierce NATO body armor.³⁹ It has transitioned through the Soviet era, to continue its service to the Russian Federation. However, the AK-74's tenure of service has been plagued with operational problems and the transition to a newer version has begun. With the adoption of the *Ratnik* system a competition began to transition away from the AK-74. Ultimately the AEK-971 would fail to meet the needs of the Russian military, and the adoption of the AK-12 was decided upon.

What made the AK-12 more attractive to the Russian military than its competitors, according to Southfront.org (a public analytical project), was its versatility.⁴⁰ Primarily the mobility, ease of use, and improved ergonomics made the assault rifle more attractive to military planners. Furthermore, the AK-12 design allowed for attachment use (i.e. forward hand grips, laser designators, night vision systems, sighting systems, etc.) mainly due to its use of a Picatinny Rail, a must have for any modern day assault rifle.⁴¹ However, while the testing phase of the AK-12 is still ongoing, efforts to fully equip the Armed Forces with the new standard issue assault rifle have stalled. Many analysts have pointed to the issuance of the AK-74M3 to the newly formed National Guards, as evidence that the current leadership,

³⁸ Hawk, J., Daniel Deiss, and Edwin Watson. "Russia Defense Report: AK-12 or AK-74M3?" *Southfront.org*. SouthFront: Crisis News, World Events, Political Survey, 07 May 2016. Web. 14 June 2017.

³⁹ Hambling, David. "Taliban Seek Rifles with More 'Punch'?" *Wired*. Conde Nast, 04 June 2017. Web. 14 June 2017.

⁴⁰ Hawk, Deiss, Watson 2016

⁴¹ Hawk, J., Daniel Deiss, and Edwin Watson. "Russia Defense Report: AK-12 or AK-74M3?" *Southfront.org*. SouthFront: Crisis News, World Events, Political Survey, 07 May 2016. Web. 14 June 2017.

while not entirely abandoning the project have opted to improve current models intended for mass issue, while still utilizing the AK-12 for the elite forces on smaller scales.

Equipped with the new *Ratnik* and the new AK-12 the Russian infantryman of 2020 begins to appear. From head to toe, this soldier will be equipped with the latest technology of the Russian Federation, and the most modern tools. The Russian infantryman of 2020, makes quite the leap from his counterpart in the 1990s, and seems more comparable to his Western and global counterparts. This soldier's kit is quite the departure from the infantry forces' kit engaged in Chechnya, plagued by failing and outdated equipment, which had seen service as far back as the 1970s and beyond.

While some of the advancements aimed at the individual soldier of the Russian Federation have been recounted above, it is important to note that putting their infantry in new clothes, and giving them new communications systems, and a shiny new gun is not the only objective or consequence of the modernization program for the Army. The Ground Forces of Russia will also experience changes aimed at phasing out old technology and adopting the most modernized weapons systems, to not only improve the capabilities of the Russian Land Forces but also attract foreign customers interested in purchasing the new systems. Beyond the individual soldier, these advancements also include; air-defense systems, armored personnel carriers (APCs), artillery, combat robots, etc., and most notably tanks.

The flagship of these modernizations for the purposes of the Russian Ground Forces will be the new Armata Universal Combat Platform series. As Galeotti asserts, "depending on whom you ask, with the imminent introduction of the Armata AFV series the Russian Army is either about to achieve a breakthrough in armored vehicle design, or else faces the prospect of an overhyped and overpriced debacle."⁴² This universal combat platform chassis, if successfully introduced, will revolutionize the armored vehicular arsenal of the Russian Army. While the series includes a host of vehicles, mounted on the same chassis, the brow raising variants include the T-16 armored recovery vehicle, the T-15 infantry fighting vehicle, and most notably the T-14 main battle tank (sometimes dubbed as the new Russian "super

⁴² Galeotti, Mark. *The Modern Russian Army 1992-2016*. Cumnor Hill, Oxford: Osprey, 2017. Print.

tank”).⁴³ As the *The National Interest* staff have asserted (based on Mamjundar and Roblin’s publications, see works cited), the Armata series is a “complete departure from previous Soviet and Russian tanks.” In that same article it is further postulated that the Armata series, in contrast to prior Kremlin tanks is a specialized system geared to meet the situation at hand rather than the mass produced, simple and inexpensive platforms developed in the preceding half a century. They further claim that in conjunction with Russia’s push to professionalize the military (a heavier reliance on *kontraktniki*), a higher investment has been made in crew survivability, and “very advanced features never before implemented in an operational tank anywhere else in the world”. Equipped with the Afghanit Active Protection System, the Armata series will be equipped with a highly advanced shell of protection.⁴⁴ This system combines, deceptive radar paneling and pre-emptive explosive system that will make it less susceptible to anti-tank missiles and other systems. On top of the system the turret of the T-14 is uniquely unmanned, which further increases its indestructibility factor. All things considered if the platform rolls out as a success it could certainly challenge the battle tanks of the West, and play a major role in any conflict with NATO states, or Russia’s enemies.

Implausibly the Armata Series is expected to produce 2,300 units by the 2020 mark (replacing the current mishmash frontline force of 2,700 T-72s, T-90s, T-80Us). However UralVagonZavod, the primary tank producer of the Russian Army, even working at full capacity will only be able to produce a maximum of 500 per annum. This has lead many, even within the corridors of Russia’s own military to doubt the sustainability and viability of this program. These fears were buttressed by one T-14 breaking down during rehearsals for the Victory Day Parade of 2015.⁴⁵ ⁴⁶ Until the completion and delivery of the Armata series, the workhorses of the Russian Army will remain the BMP-3 and BMP-2 infantry combat vehicles, BTR (82A/80) APC’s, as well as the T-72, T-80, and T-90 battle tanks.

⁴³ Staff, TNI, Bill Wirtz, Robert Keatley, and Robert E. Kelly. "Russia's Armata Tank vs. America's M-1 Abrams and TOW Missile: Who Wins?" *The National Interest*. The Center for the National Interest, 15 Sept. 2016. Web. 14 June 2017.

⁴⁴ Majumdar, Dave, Bill Wirtz, Robert Keatley, and Robert E. Kelly. "The Game Changing Feature in Russia's T-14 Armata That Might Make NATO Tanks Obsolete." *The National Interest*. The Center for the National Interest, 28 Sept. 2016. Web. 14 June 20

⁴⁵ Harress, Christopher. "Russia's New T-14 Armata Tank Breaks Down During Victory Day Parade Rehearsal In Moscow." *International Business Times*. Newsweek Media Group, 07 May 2015. Web. 14 June 2017.

⁴⁶ Galeotti, Mark. *The Modern Russian Army 1992-2016*. Cumnor Hill, Oxford: Osprey, 2017. Print.

The BTR series are also uniquely interesting for their versatility and range of options similar to the Armata series. Like the Armata series the BTRs are capable of being mounted with a variety of turrets for different functions. These eight wheel carriers can be specifically fitted to meet the needs of the Russian Military. The Strategic Rocket Forces for instance use a particular variant equipped to protect their missile bases. However, APCs and particularly the BMP series will also play a much less important role in the further advancement of the Russian military. It is however important to note that the VDV regularly conducts exercises with these APCs dropped in an airborne role with up to ten parachutes ready for combat.⁴⁷

As a final note on the impediments to making advancements towards the armored vehicles of the Russian Ground Forces, it is also important to note that a Kurganets family of armored vehicle has also been awarded government contracts for political reasons. This follows a long held Kremlin practice of awarding various contracts for political reasons. Perhaps the most interesting of these systems which highlights the awarding of government contracts for political purposes is the development of the amphibious Kurganets-25 IFVsystem.⁴⁸

When considering air defense systems it is important to note that the Russian Armed Forces, maintain one of the most advanced systems on the global market, the S400 *Triumf* (NATO reporting name SA-21 Growler).⁴⁹ While it is regularly supplied to the Air Force, to strategically maintain air cover, with its variants and modifications it is a system whose components stretch to all branches. It is operated throughout the Russian military and assigned to anti-aircraft rocket regiments, some of which are stationed at Kaliningrad. It is also a prime product those seeking to purchase Russian arms are interested in.

Naval Advancements and Problems

“Any ruler that has but ground troops has one hand, but one that also has a Navy has both”

⁴⁷ "Russia: See Airborne Troops Drop BTR-MD Rakushka from Plane (comments)." *LiveLeak.com*. Ruptly GmbH, 24 Feb. 2015. Web. 14 June 2017. <https://www.liveleak.com/view?i=19e_1424807147&comments=1>.

⁴⁸ Galeotti 2017

⁴⁹ "Turkey and Russia Cosy up over Missiles." *The Economist: PRINT Brothers in Arms*. The Economist Newspaper, 04 May 2017. Web. 14 June 2017. <<http://www.economist.com/news/europe/21721665-their-friendship-should-worry-nato-turkey-and-russia-cosy-up-over-missiles>>.

-Peter the Great

The one branch of the Russian Armed Forces that an observer could track the newest developments most easily, is of course the Russian Navy. This is primarily due to the nature and cost of a modern Navy. Large ships do not come cheap, and they are not easy to hide from the outside world. Additionally if one is to understand Russian ambitions of their role on the international stage, one should naturally start with their military, and particularly the historically important Navy. The undisputed founder of the Russian Navy is of course Peter I (Peter the Great). While the detailed history of the Russian Navy is not the focal point of this thesis, (one should tangentially note that maritime exploration began much earlier than Peter the Great), it is crucial to note that Russia's 17th century acceptance into the club of great powers was buttressed by the creation of the Imperial Navy. From an historical and architectural perspective look no further than the importance St. Petersburg pays to the Navy, and observe the Admiralty, the nucleus of St. Petersburg's historical architecture and the modern-day headquarters of the Russian Navy. When viewing Russian power projection through the lens of "reform" or "modernization" it is very important to remember the important and historic role the Navy holds in the mindsets of many Russian patriots, and decision-makers.

Before delving into the minutiae of the military modernization program's effects on the Russian Navy, it is important to understand the structure of the Russian Navy. Perhaps the logical place to start is the commander tasked with running the Navy. Although much of the Navy's developments over the recent years have taken place under the tutelage of Commander-in-Chief of the Russian Navy Viktor Chirkov (appointed in 2012), after taking sick leave and being forced into retirement in March of 2016, the top post in the Admiralty has been taken up by Vladimir Korolev, who previously had served as the Commander of the

Northern Fleet.⁵⁰ ⁵¹ The Main Commands of the Navy are; the Surface Forces, the Submarine Forces, Naval Aviation, and the Coastal Troops (which consists of a Coastal Missile and Artillery element, as well as a Marine Infantry element.⁵² The Navy is separated into 5 fleet distinctions, sometimes called 4.5 fleets. These distinctions are; (1) the Northern Fleet, (2) the Baltic Fleet, (3) the Pacific Fleet, (4) the Black Sea Fleet, and (4.5) the Caspian Flotilla. Quite logically, each fleet is tasked with basing operations in their respective geographical location, but all are tasked with ensuring Russian presence and power projection throughout the world.

As aforementioned, the Russian Navy has experienced perhaps the most visible and notable effects of the far reaching military modernization program. But additionally, to the observer, the effects of the Western sanctions and the situation in Ukraine's effects on the ambitious program are very visible in the development of the Russian Navy. A closer look at the developments in the vessels in the water or the new classes of vessels will inform the reader the exuberant and ambitious plans the of the Russian Federation, aimed at putting a 21st century armada into the water by the 2020s.

The advancements in the Navy hold to the motif of the entire reformation project of the Military, a lean and mean force that values quality over quantity (a motif of the modernization efforts). One can observe this through the new classes of vessels the Russian Federation is in the process of launching, or will launch in the next few years. It is prudent not to forget, that a primary part of the strategic deterrence maintained by the Russian Federation is the use of nuclear platforms, an integral part of which is the Submarine Force of the Russian Navy. In Admiral Chirkov's own words, "the nuclear fleet is the priority in the Navy

⁵⁰ «Коммерсантъ». "В Минобороны подтвердили увольнение главкома ВМФ адмирала Чиркова(The Defense Ministry Confirmed the Dismissal of Rear Admiral Chirkov)." *Вооруженные силы: Силовые структуры*. Lenta.ru Originally Published on Kommersant, 14 Mar. 2016. Web. 14 June 2017. <<https://lenta.ru/news/2016/03/14/chirkov1/>>.

⁵¹ "Vladimir Korolev." *Ministry of Defence of the Russian Federation*. Trans. Linguistic Centre for the Russian Federation Ministry of Defence. MOD RF, n.d. Web. 14 June 2017. <http://eng.mil.ru/en/management/combatant_arms/more.htm?id=10558562%40SD_Employee>.

⁵² "Main Command of the Navy." *Ministry of Defence of the Russian Federation*. Trans. Linguistic Centre for the Russian Federation Ministry of Defence. MOD RF, n.d. Web. 14 June 2017. <<http://eng.mil.ru/en/structure/forces/navy/structure.htm>>.

shipbuilding program” (6th July 2015).⁵³ Due to this reason the modernization of the Russian nuclear submarine force is well underway. The Dolgorukiy-class SSBN (Nuclear-power ballistic missile-armed submarines), also known as the Borey-class, will form the nucleus of the nuclear force, considering that each vessel can carry and deliver 16 SLBMs (Bulava missiles, SS-NX-30 NATO designation). The first two units (the *Yuriy Dolgorukiy* and the *Alexander Nevsky*) were launched in 2013, and the Russian Navy has planned to ambitiously launch 8 units by 2020.⁵⁴ Initially the launch of the Borey-class was delayed due to problems in the testing phase of the long-range missile capabilities. However these tactical glitches have been eliminated and if the Russian Navy is to be believed, these are the most advanced submarines on the planet.⁵⁵ The third (the *Vladimir Monomakh*, aptly named after the Grand Duke of Kievan Rus’) was launched in 2015, and the program continues.⁵⁶

An additional 4th generation submarine has been designed for the Russian Navy, the Sevrodinsk -class SSGN, also known as the Yasen-class. This class of sub is distinct from the Borey-class due to its purpose and designation as an ASW/ASuW (Anti- Submarine Warfare / Anti Surface vessel Warfare) vessel classification. The Yasen-class is designed to be a multi-purpose submarine, but is considerably more expensive than the Borey-class. Therefore, although the Yasen project was also forecasted to deploy 8 units by 2020, up to this point in time only one has been deployed, and a projected 3 or four more to be completed by 2020.⁵⁷ Due to its cornucopia of weapons (such as KALIBR missile systems designed for anti-ship, land, or anti-sub strikes, deep water torpedoes, etc.) the Yasen-class will most likely be the premier hunter-killer sub of the Russian Navy, and its export clients.

⁵³ Gertz, Bill. "Intelligence Report Warns of Russian Naval Buildup." *Freebeacon.com*. The Washington Free Beacon, 22 Dec. 2015. Web. 14 June 2017.

⁵⁴ "IDN TAKE: India Is Planning to Procure the Super Advanced Borei Class Nuclear SSBN's." *Indian Defence News*. IDN, 11 July 2015. Web. 14 June 2017. <<http://www.indiandefensenews.in/2015/07/idn-take-india-is-planning-to-procure.html>>.

⁵⁵ Gibbons-Neff, Thomas. "Russia Readies Two of Its Most Advanced Submarines for Launch in 2017." *The Washington Post*. WP Company, 29 Dec. 2016. Web. 14 June 2017.

⁵⁶ "3rd Russian Borei-class Nuclear Sub Raises Its Colors (VIDEO)." *RT International*. TV Novosti, 19 Dec. 2014. Web. 14 June 2017. <<https://www.rt.com/news/214155-russia-submarine-vladimir-monomakh/>>.

⁵⁷ Gady, Franz-Stefan. "Russia Makes Progress on Fielding New Fleet of Nuclear-Powered Attack Submarines." *The Diplomat*. The Diplomat, 25 Jan. 2017. Web. 14 June 2017.

A final warfare submarine to be noted in this paper is the Petersburg-class SS, also known as the Lada-class. This submarine is seen as a modified version of the Kilo-class sub, running on diesel/electric rather than the nuclear powered submarines referred to above.⁵⁸ It is expected to be fitted with new propulsion, sonar, and a combination of information support. The project was initially intended to produce eight units by 2020, but similar to the Yasen-class up to this point in time only one has been laid down and put into the water. The *Sankt Petersburg* was officially handed over to the Northern Fleet in 2015⁵⁹, and the Baltic Fleet's *Krohnstadt* and *Velikiye Luki* are under construction and are expected to join the Fleet in 2019.⁶⁰

There have also been rumors circulating about a 5th Generation SSN/SSGN (Nuclear General Purpose Submarine/ or Advanced Non-Nuclear General Purpose Submarine). While it is not the objective of this paper to deal in rumors, but measurable advancements, this sub is thought to be an umbrella project for future advancements of the Russian Navy, or perhaps a replacement for the stalled Lada-class project. Another experiment in new submarine technology is the use of the so-called Sarov-class sub is officially a test class sub, which utilizes and tests new capabilities for the Russian Navy. Its existence was clandestinely hidden, until the local government of Nizhny Novogorod accidentally verified its existence, when they mistakenly published a meeting with its commander on their website.⁶¹ The exact role of the Sarov-class is unknown; however some have speculated that equipped with a hydro-acoustic surveillance system the Sarov-class could be a quite formidable intelligence

⁵⁸ "Lada Class Patrol Submarine |." *Military-Today.com*. Ed. Andrius Genys. ARG, 2017. Web. 14 June 2017. <http://www.military-today.com/navy/lada_class.htm>.

⁵⁹ "Источник: третью подлодку типа "Лада" перезаложат в Петербурге 19 марта (Source: Third Submarine Lada Launches in St. Petersburg March 19th)." TASS. TASS: RUSSIAN NEWS AGENCY, 27 Feb. 2015. Web. 14 June 2017. <<http://tass.ru/armiya-i-opk/1796279>>.

⁶⁰ Hicks, Kathleen H., Andrew Metrick, Lisa Sawyer Samp, and Kathleen Weinberger. "Undersea-Warfare-in-Northern-Europe." *Rowman & Littlefield*. Center for Strategic and International Studies: International Security Program, 2016. Web. 14 June 2017..

⁶¹ "Russian Blunder as 'secret' Sub Plans Get Posed Online." *Daily Mail Online*. Associated Newspapers, 12 Sept. 2007. Web. 14 June 2017.

gathering ship.⁶² The same source also has asserted that the Sarov has been involved in the testing of underwater drones and other robotics.⁶³

When analyzing the advancements made below sea level, for the uninitiated it is quite easy to become overwhelmed and forget about the changes made to the Russian Navy on the surface level. Nevertheless, these advancements are highly visible and just as significant and far reaching. Firstly it is important to make the distinction between the types of surface vessels. While this paper is not designed for naval analysts, but for the purposes of this paper the distinction must be made between; Surface Combatants, Amphibious ships, Auxiliary Vessels, and Oceanographic Vessels (which are not discussed in this paper). Looking at each in turn, it is important to note that this is not a survey of all Russian surface vessels utilized by the Navy but the newest advancements that can trace their legacy back to the overarching military modernization program discussed above.

When considering the newest addition of patrol combatants joining the Russian Navy important capabilities are being deployed in line with the *Sviyazhsk* PGG (Guided Missile Patrol Ship) and the rest of the Buyan-class corvette program (the lead ship of which was the Astrakhan PG). While these are comparatively smaller ships in the Russian Navy, their usefulness and employment in projecting Russian power globally are unmatched. The Buyan-class corvettes for instance were heavily involved in 2015, in the launching of cruise missiles from the Caspian Sea to Syria.⁶⁴ Even considering that a few missiles malfunctioned and landed in Iran, the ability to launch guided munitions from the Caspian Sea to ISIS and Nusra Front targets in Syria (over 1,500 km), display the evolving capabilities of the Russian Navy.⁶⁵ This particular operation utilized four ships in the Caspian Sea, three of which were

⁶² "Sarov Intelligence Collection Submarine." *Military-Today.com*. Ed. Andrius Genys. ARG, 2017. Web. 14 June 2017. <<http://www.military-today.com/navy/sarov.htm>>.

⁶³ "Russian Military Deploying SOSUS-like Global Maritime Surveillance System Named Garmoniya." *Navy-Recognition.com*. TASS: RUSSIAN NEWS AGENCY, 30 Mar. 2017. Web. 14 June 2017. <<http://www.navyrecognition.com/index.php/focus-analysis/naval-technology/5041-russian-military-deploying-sosus-like-global-maritime-surveillance-system-named-garmoniya.html>>.

⁶⁴ "4 Russian Warships Launch 26 Missiles against ISIS from Caspian Sea." *RT International*. TV-Novosti, 7 Oct. 2015. Web. 14 June 2017. <<https://www.rt.com/news/317864-russian-warships-missiles-launch/>>.

⁶⁵ "US Official: 4 Russian Cruise Missiles Fired from Caspian Sea Landed inside Iran Soil." *Mojahedin.org*. People's Mojahedin Organization of Iran, 10 Sept. 2015. Web. 14 June 2017. <<https://www.mojahedin.org/newsen/38573/US-official-4-Russian-cruise-missiles-fired-from-Caspian-Sea-landed-inside-Iran-soil>>.

designated as the Buyan-M-class corvettes (*Grad Sviyazhk*, *Uglich*, and *Veliky Ustyug*) according to the Russian Ministry of Defense, who proudly displayed the launches on Youtube.⁶⁶ It is also important to note that six of the active eight Buyan-class corvettes are assigned to the Caspian flotilla, maintaining projection capabilities in the Northern Middle East and Central Asian theaters. The armaments fitted to these corvettes also display the latest in Russian technology, and not only enable the corvettes to carry out operations against land based targets but also the VLS (vertical launch system) equipped with YAKHONT anti-ship missiles makes these corvettes quite the formidable warship. The *Sviyazhsk* for instance has not only been fitted with the YAKHONT, but is also capable of carrying the KALIBR family of missiles, which comes in LACM (Land-Attack Cruise Missile), ASCM (Anti-Ship Cruise Missile), and ASM (Anti-Submarine Missile) variants. The distinction between the *Astrakhan*, *Makhachkala*, the *Volgodonsk*, and the *Grad Sviyazhsk* lies in their project designation and not in class.⁶⁷

As with most new members of the Russian Navy the *Astrakhan* was unveiled at the International Maritime Defence Show (IMDS) in St. Petersburg in 2011. By 2013 two vessels of the Buyan-class had entered into the service of the Caspian flotilla (the *Astrakhan* and *Makhachkala*). Many analysts have asserted that the delay in the program came from problems associated with the mounting of the A-190 100 MM gun on the deck of the ship.⁶⁸ Nevertheless with eight ships already apart of the Russian Navy, another was launched for sea trials in 2016 and expected to be commissioned in 2017 and three additional Buyan-M-class corvettes are at the time of publication laid down.⁶⁹ Undoubtedly this ship will become an integral part of not only the Russian Navy but Russia's ability to project power through maritime means. An export variant of the ship will serve to recover some of the investment

⁶⁶ *First Video: Russian Warships Attack ISIS Position in Syria from the Caspian Sea*. Perf. Russia's Defense Ministry. Published on Youtube. RT International, 7 Oct. 2015. Web.

⁶⁷ "Buyan-class Corvette." *Rusnavy.com*. CC BY-SA, n.d. Web. 14 June 2017.
<https://readtiger.com/wkp/en/Buyan-class_corvette>.

⁶⁸ USER: Nonothai. "Buyan Class Corvettes (Project 21630/21631)." *Thai Military and Asian Region*. Nonothai Blog Post, 26 Mar. 2017. Web. 14 June 2017.
<<https://thaimilitaryandasianregion.wordpress.com/2016/06/17/buyan-class-corvettes-project-21630-russia/>>.

⁶⁹ Akulov, Andrei. "Packing a Punch: Buyan-M Corvettes Built for Russian Navy." *Strategic-Culture.org*. - Strategic Culture Foundation: Online Journal of Strategic Culture, 26 Sept. 2016. Web. 14 June 2017.

made in the project, Kazakhstan having already agreed to purchase the export variant (Project 21632 “Tornado”⁷⁰) and other clients expected to follow suit.

While the Buyan-class corvettes are a shining example of the strides made by the Russian Navy, they are by no means the only combatants of the Russian Navy that Chirkov and Korolev have acquired in recent years. And while the Russian Navy has been responsible for some of the largest strides of the modernization program they have also been responsible for some of the modernization programs biggest failures and follies.

Another class of corvette that has been fitted with the KALIBR and YAKHONT missiles is the Bykov-class FFLG (Guided missile) corvette, also known as Project 22160-class patrol corvette. None have up to this point entered the service of the Russian Navy but five hulls have been laid down. As aforementioned, they will be equipped with KALIBR missiles, and interestingly enough a helicopter landing pad, and space for the maintenance of such rotary-wing aircraft. The full delivery of the order for six such ships is projected by the 2020 mark.⁷¹

The Russian navy is not only looking to modernize its corvette class ships but also its larger ships, such as the frigate-class ships. The first new class of frigate that has already begun its incorporation into the Russian Navy is the Steregushchiy-class FF / FFG (Guided-Missile Frigate) or Project 20381, sometimes also classified as a corvette. This class is intended to phase out the Albatross-class (Grisha-Class NATO reporting name), which aligns with the broader goals of the modernization program, to phase out older equipment. Thus far, six such Steregushchiy-class frigates have been launched (two from the Far East Amur shipyard and the other four from the St. Petersburg shipyards), however the program has been stalled by the Western led sanctions regime instated as a consequence of Russia’s involvement in the situation in Ukraine. These ships would have employed a German made propulsion system, the importation of which would violate the sanctions regime, hence the

⁷⁰ "Tornado: The Project 21632 Small-size Missile (gun) Ship Tornado | Catalog Rosoboronexport." *Рособоронэкспорт (Rosboronexport)*. Rosboronexport Russian Defence Export, 2017. Web. 14 June 2017. <<http://roe.ru/eng/catalog/naval-systems/surface-ships-ships-and-boats/tornado/>>.

⁷¹ Global Naval Surface Combatants and Warfare Systems Market 2011-2021. "Project 22160 Class Patrol Ships, Russia." *Naval-technology.com*. Naval-Technology.com a Product of Kable, n.d. Web. <<http://www.naval-technology.com/projects/project-22160-class-patrol-ships/>>.

stalls associated with this program.⁷² However as with the majority of the sanctions it has merely hankered down the Russian resolve and the propulsion systems for the Steregushchiy-class are now being made in St. Petersburg, which has decreased the use of and reliance on Europe for the Russian defense sector.⁷³ The same U.S. Office of Naval Intelligence Report has claimed that the ship is, “designed for operations in adjacent maritime zones, fighting enemy surface ships and submarines, as well as to provide naval gunfire support for amphibious landings.”⁷⁴ The program has spawned two variants of the ship, the Gremyashchiy-class and the Derzhky-class (a stealth variant), which both belong to the overarching project of the Steregushchiy-class.

Two more projects were stalled or cancelled due to sanctions related import complications, the Grigorovich Class FFG (also known as Project 11356) and Gorshkov FFG (also known as Project 22350 or the “Admiral-Class Frigate”). The former class has already completed three units but the remaining three were cancelled. The latter class initially garnered large orders from the Russian Navy for 20 units (five for each fleet), and its multipurpose roles as an anti-Sub, Air, and Surface Frigate would have been an interesting acquisition for the Russian Navy’s blue water capabilities and the Defense export industry.⁷⁵ Nevertheless both Guided Missile Frigates employed marine gas turbines imported from Ukraine, and hence have led to the programs’ abrogated or abandoned status. If the historic arc of the Steregushchiy-class frigate should be any lesson, these sanctions could serve the Russian Federation over the long-term in decreasing Russia’s reliance on imports for the defense sector. Additionally Russian shipbuilders may even utilize this opportunity to produce

⁷² Official U.S. Navy Intelligence Report on New Developments Shaping Russia's Navy and Operations in the 21st Century, Review of Ships, Weapons, Leadership. *The Russian Navy: A Historic Transition*. Washington, DC: Office of Naval Intelligence, 2015. Print. U.S. Government , U.S. Military, Department of Defense (DoD).

⁷³ "Корвет «Гремящий» полностью укомплектовали главными двигателями (Corvette Greyashcy- Engines Fully Stocked)." *Nordsy.spb.ru*. Sevranaya Verf, 19 May 2016. Web. 14 June 2017. <<http://www.nordsy.spb.ru/pressroom/14362/>>.

⁷⁴ Official U.S. Navy Intelligence Report on New Developments Shaping Russia's Navy and Operations in the 21st Century, Review of Ships, Weapons, Leadership. *The Russian Navy: A Historic Transition*. Washington, DC: Office of Naval Intelligence, 2015. Print. U.S. Government , U.S. Military, Department of Defense (DoD).

⁷⁵ "A Complete Guide To The Admiral Grigorovich-Class Frigate." *21st Century Asian Arms Race*. N.p., 03 May 2015. Web. 14 June 2017. <<https://21stcenturyasianarmsrace.com/2015/05/03/a-complete-guide-to-the-admiral-grigorovich-class-frigate/>>.

the gas turbines internally, thereby strengthening the Russian war machine rather than weakening it, having the opposite effect of the sanctions initial aims.

When considering the consequences of the sanctions regime on the Russian Navy, it has visibly suffered to achieve its modernizing goals in the short-term, another example of which was the importation of amphibious assault ships, particularly the Mistral-class (LHD) debacle. In 2010, Russian officials struck a 1.5 billion dollar deal for four French-built Mistral-class amphibious assault ships (the first two to be French built and the second two to be built in Russia, utilizing and adapting the French technology). Oftentimes the Mistral-class is dubbed a “Swiss-Army knife” due to its versatility and dual role as a helicopter carrier. The ship has the capability to carry an entire tank battalion, and with its hovercraft landing capabilities makes this ship the perfect ship from which to launch an amphibious assault, much to the fear of the Baltic States.⁷⁶ The first two ships were completed and scheduled for their 2014 delivery date, however with a new French President, and a sanctions regime launched to stymie Russia’s involvement in Ukraine the orders were cancelled. This cancellation, still obliged the French to reimburse the Russian Federation, but the damage was done and Russia would not acquire her ships. The two completed vessels; the *Vladivostok* and interestingly enough *Sevastopol*, were eventually sold to Egypt and delivered in 2016. (cite) The *Vladivostok* and *Sevastopol*, or the *Gamal Abdel Nasser* and *Anwar Sadat* respectively, will most likely never join the Russian Navy. As with the majority of the defense sector sanctions, this has not stopped the modernization program, but merely delayed it, and strengthened Russian self-reliance. After the cancellation of the Mistral-class orders, the Deputy Commander-in-Chief of the Russian Navy in October of 2014 stated, “We are not dependent on France in any way, it is just one of the contracts of military-technical cooperation and nothing more. The (Russian) shipbuilding program planned building warships of this class, and it will certainly be implemented.”⁷⁷ Many in the Ministry of Defense already believed that domestic manufacturing of this ship would have been better from the starting point, but the French cancellation has merely validated this belief. Therefore, the Russian shipbuilding program has begun designs on their own amphibious assault ship,

⁷⁶ "Mistral Class Amphibious Assault Ship |." *Military-Today.com*. Ed. Andrius Genys. ARG, 2017. Web. 14 June 2017. <http://www.military-today.com/navy/mistral_class.htm>.

⁷⁷ Keck, Zachary, Bill Wirtz, Robert Keatley, and Robert E. Kelly. "Sorry, France: Russia to Build Powerful Mistral-Style Assault Ships." *The National Interest*. The Center for the National Interest, 2 July 2015. Web. 14 June 2017.

tailored for Russia's national security needs, and not to re-tool the French variant. It is widely believed from statements by Russian officials, that rather than an assault focused class of ship, these newer variants will focus on support operations, with a heavier reliance on assault operations coordinated with airborne troops.

This Mistral-class saga should not lead the reader to believe that the Russian Navy does not have other amphibious ships planned in conjunction with the future fleet chapter of the modernization program. One such ship the Gren-class LST (Tank landing ship), or Project 11711, has already bared fruits, such as the lead ship *Ivan Gren* launched and undergoing sea trials, and the second ship under construction at the Kaliningrad based Yantar shipyard is expected to join the Russian Navy in 2017.⁷⁸ An interesting feature associated with this class is the new way it will be capable of unloading, a so-called "contact less" debarkation, which utilizes pontoons.⁷⁹ This ship is capable of carrying 13 main battle tanks or 40 BTRs and up to 300 assault troops accompanying them. This ship would theoretically be able to complicate the operational viability of defending NATO members in the Baltics, if a Russian annexation began. A scenario routinely envisioned by NATO war gaming.

This brief survey is by no means covers the entirety of the military-purpose boats utilized by the Russian Armed Services, but has underlined some of the major advancements directly affecting the Russian Navy from the modernization program. Crucially, the Russian Navy still has many ships that have been held over from the Soviet times and the early 1990s, and these have not yet been discussed. The Russian Navy remains reliant on these older vessels until they can be replaced by the fruits of the modernization program, which limits their naval capabilities. This has led to a similar strategy (discussed above when considering the AK-12 replacing the AK-73M) employed by the Ground Forces, modernizing and refitting older models with the latest technology. The primary naval example of this strategy in action is the Russian Navy's refitting the Soviet era Kilo-class submarine, a vessel that has seen service since 1980, and proliferated to other parts of the world through international export

⁷⁸ "Project 11711 Ivan Gren Class Landing Ships." *Naval-Technology.com*. Naval-Technology.com a Product of Kable, n.d. Web. 14 June 2017. <<http://www.naval-technology.com/projects/project-11711-ivan-gren-class-landing-ships/>>.

⁷⁹ Official U.S. Navy Intelligence Report on New Developments Shaping Russia's Navy and Operations in the 21st Century, Review of Ships, Weapons, Leadership. *The Russian Navy: A Historic Transition*. Washington, DC: Office of Naval Intelligence, 2015. Print. U.S. Government , U.S. Military, Department of Defense (DoD).

variants sold to traditional client countries such as India, Vietnam, China, Iran, Algeria, etc. The Kilo-class was intended to be phased out by the Lada-class, discussed above. However, due to kinks in the testing phase of the Lada-class, the Russian Navy still relies on the service of the Kilo-class, and with the slouching Lada-class program it remains clear the Kilo-class will remain an integral part of the Russian Navy.

Thus far the naval advancements covered in this paper have only dealt with submerged vessels and surface ship deployed during the modernization efforts of the 2000s, and some of the ships they intend to replace. What has remained noticeably absent from our discussions is the climactic expression of any great 21st century Naval power, the aircraft carrier.

The *Admiral Kuznetsov*, which has cycled through various names such as the *Riga*, the *Leonid Brezhnev*, and the *Tbilisi* is perhaps the most glaring argument that the Russian Navy demands modernization. A holdover from the Soviet navy the *Admiral Kuznetsov* has survived its operational life as a dinosaur like Leviathan of the high-seas. Having been ordered in 1981 and still in service today it is light-years behind its American counterparts in terms of the technology and the capabilities it employs. Most recently the *Admiral Kuznetsov* led a carrier group squadron to the Mediterranean outpost in Tartus.⁸⁰ This deployment was marred by failures and embarrassment. Considering that the *Kuznetsov* runs on diesel based propulsion these failures and the carrier are illuminated to the world by a plume of exhaust that follows the carrier around. The primary objective of this deployment was intended to display to the world the ability of the Russian Navy to project power from maritime based air operations, however its deployment had Western military analysts laughing at the failures of the carrier group and achieved the opposite of its intended objective, a loss of Russian military prestige. These failures combined with the outdated propulsion system and the ski-jump launch employed by the *Admiral Kuznetsov* have led some to believe it is high time to replace this status symbol of any Navy with a more modernized nuclear-powered variant that can achieve the Russian objectives of maritime power projection more efficiently. But since the construction of a new Russian aircraft carrier has not begun, discussing it will not be an objective of this paper. But it is important to note that Admiral Chirkov, has announced that

⁸⁰ "Russia Sending Warships to Its Base in Syria." *Reuters*. Thomson Reuters, 28 Nov. 2011. Web. 14 June 2017. <<http://af.reuters.com/article/egyptNews/idAFL5E7MS1XT20111128?sp=true>>.

plans have begun to build a new aircraft carrier that will most likely not be deployed until well into the 2030s.⁸¹

Naturally, every vessel in a Navy's arsenal is not intended for combat, and the modernization program has also been aimed at improving the Auxillary vessel capabilities of the Russian Navy. The Ivanov-class AGI (Communications and Intelligence Ship), or Project 18280 launched in 2013 is a prime example of this effort. This should not be confused with the spy ship *Viktor Leonov*, which dominated the U.S. headlines in February 2017, when it was seen off the East Coast of the continental United States.⁸² The *Viktor Leonov* spy ship was an older variant from the Soviet times, a Vishnya-class SIGINT collection ship, rather than the new Ivanov-class vessels that trace their origins to the modernization program. The Ivanov-class is intended to phase out the Vishnya-class, employing newer and more efficient systems integrations. Thus far the lead ship of the program, the *Yuriy Ivanov*, has been launched and already joined the Northern Fleet, and the second ship of the program, the *Ivan Khurs* was launched in April 2017.⁸³ Two more ships are expected to be constructed and deployed, allowing each fleet to have one of the newest spy ships.

The final new toy for the Russian Navy covered by this paper will be the Belousov-class ASR (Submarine Rescue Ship) or Project 21300, which taken in conjunction with the combat, nuclear, and intelligence vessels discussed above will seem quite puny. Nevertheless it is important to note that for practical purposes and operations the Belousov-class as of mid 2015, was undergoing sea trials, and thus far four hulls have been laid down.⁸⁴ This ship's creation also illustrates the latest technological aspect of the Russian Navy employing; a DSRV (Deep Sea Rescue Vehicle), a decompression chamber intended for sixty-men, two rescue boats, a helicopter landing pad (for reconnaissance/ rescue purposes), and a deep water

⁸¹ Mizokami, Kyle, Bill Wirtz, Robert Keatley, and Robert E. Kelly. "The Russian Navy's 5 Most Deadly Weapons of War." *The National Interest*. The Center for the National Interest, 9 May 2015. Web. 14 June 2017.

⁸² Martinez, Luis. "Russian Spy Ship Now off Virginia Coast." *ABC News*. ABC News Network, 16 Feb. 2016. Web. 14 June 2017.

⁸³ "Северная верфь спустит на воду судно связи «Иван Хурс» до конца апреля 2017 года (Northern Shipyard Launched into the Water the Collection Vessel Ivan Khurs by the End of April 2017)." *Nordsy.spb.ru*. Sevrnaya Verf, 06 Mar. 2017. Web. 14 June 2017.

⁸⁴ Official U.S. Navy Intelligence Report on New Developments Shaping Russia's Navy and Operations in the 21st Century, Review of Ships, Weapons, Leadership. *The Russian Navy: A Historic Transition*. Washington, DC: Office of Naval Intelligence, 2015. Print. U.S. Government , U.S. Military, Department of Defense (DoD).

dive suit for depths of 500m.⁸⁵ Not every ship of the Russian Navy can be as deadly and sexy as the Buyan-class corvette, but some must also serve a practical purpose. Furthermore, the Russian Navy is not interested in having another tragic and embarrassing situation such as the fate of the K-141 Kursk Oscar-II-class submarine, when it sank in relatively shallow water in 2000. This situation left the Presidential Office humiliated and made the Russian Navy seem incompetent⁸⁶, and neither of these results are the intention of the military modernization program.

Russian Aircraft and Air Force

If any foreign minister begins to defend to the death a 'peace conference', you can be sure his government has already placed its orders for new battleships and airplanes.

-Josef Stalin

Russia has long maintained a proud history of aviation that few countries can match. This transcends the military realm, and extends into the civil and scientific realms. Nikolai Zhukovsky, for instance, anointed the “Father of Russian Aviation” by Lenin himself, was a pioneer in the theory of aerodynamics. He was able to solve the problem of lift, and challenged the established science of such greats as Newton and Lord Kelvin. It is safe to say that Russian pioneers led us to the sky and beyond. The Soviet Air Force produced not only unique technical innovations during the Cold War for military application but also the man that led mankind into outer space in 1961, Yuri Gagarin. The modern day Russian Air Force has claimed this legacy, and the modernization program for them has spurred them into further advancements to acquire a future arsenal of top quality fixed-wing and rotary-wing aircraft that can compete with any in the world. Granted it must also be stated, that due to a lack of adequate funds, the speed at which the modernization program has affected the Aerospace Forces is quite lackluster.

At the outset of the modernizing aims, the Russian Ministry of Defense, due to budgetary restrictions, had initially planned to focus its modernization efforts primarily on the

⁸⁵ "Igor Belousov (Project 21300) Search and Rescue Vessel." *Naval-Technology.com*. Naval-Technology.com a Product of Kable, 2017. Web. 14 June 2017.

⁸⁶ Denisova, Inna, and Robert Coalson. "Kursk Anniversary: Submarine Disaster Was Putin's 'First Lie'." *RadioFreeEurope/RadioLiberty*. RadioFreeEurope/RadioLiberty, 12 Aug. 2015. Web. 14 June 2017.

Air Force and the Strategic Missile Forces. While the reforms made to the Ground Forces and the Naval Forces, discussed above may seem extensive, they were not the initial aim of the military reform program. There were caveats within that objective, specifically a refitting and modernization of the nuclear forces (i.e. submarines, launch systems, etc.) and further advancements in Air – Defense systems, the culmination of which were the S-400s mentioned above. Specific scalpel work aside, perhaps no branch of the Russian military was more targeted by the military modernization program than the Air Force. The reasons demanding reform for the Air Force arsenal were numerous and plentiful, however they can be simplified in that many if not all of the aircraft in operation had long outlived its service life and to maintain parity with Russia's potential adversaries reforms were needed.

The Air Force, as one of the main beneficiaries of the procurement plan for the year 2020, had been tasked with modernizing all of their aircraft in the short span of a decade. The objectives included the purchase of a number of new transport aircraft, 350 new fighter airplanes, and 1,000 new helicopters.

The climax of these efforts will be the introduction of the 5th-generation multirole fighter the T-50 or Sukhoi PAK – FA, into the Air Force. This stealth 5th-generation fighter is intended to compete with international counterparts such as the U.S. F-22 *Raptor*, and the F-35 *Lightning II*.⁸⁷ Like the F-35 program the T-50 program is a joint program that the Russians have undertaken with India. The T-50 utilizes state of the art avionics (which some have argued supersedes the F-35) and stealth technology, and quite the armament package including; air-to-air missiles, air-to-surface missiles, two 30 mm cannons, and air-to-ship missiles.⁸⁸ It has also gone through various engines in its testing phase and with the latest engine, expected to debut on the aircraft in the last quarter of 2017, it will have kinematic performance comparable to the F-22 *Raptor*.⁸⁹ The T-50 is expected to enter service in the Russian Air Force by 2018, but as many analysts assert the real question will be how many

⁸⁷ "Russia's Fifth-generation Fighter to Be Cheaper than Foreign Analogues." *Sputnik International Military and Intelligence Files*. Sputnik, 20 July 2010. Web. 14 June 2017.

⁸⁸ Demerly, Tom. "Newest Russian T-50 Stealth Aircraft Makes First Appearance in Spectacular New Camouflage." *The Aviationist*. David Cenciotti, 16 May 2017. Web. 14 June 2017.

⁸⁹ Majumdar, Dave, Bill Wirtz, Robert Keatley, and Robert E. Kelly. "Russia's Fearsome PAK-FA Stealth Fighter Will Enter Service in 2018." *The National Interest*. The Center for the National Interest, 16 Feb. 2017. Web. 14 June 2017.

jets the Russian Ministry of Defense will be able to afford. The most likely scenario is that a strong order will appear in the next procurement plans for the 2018 – 2025 range.

While the new 5th generation fighter is still some time off for the Russian military, this by no means leaves the Russian Air Force unprotected or unequipped in the skies. The Russian Air Force maintains an arsenal of fourth generation fighters, and their so-called 4.5 generation fighters (which reflect some of the later developments within the fourth generation). To place this generation in the American and Western European nomenclature these generations include western models such as; the American F-14 *Tomcat*, the F-15 *Eagle*, the F-16 *Fighting Falcon*, F-18 *Hornet* and *Super Hornet*, as well as European fighters such as the Swedish JAS 39 *Gripen*, French *Mirage 2000* and *Rafale*, and the European Union's *Tornado* and later *Typhoon*.⁹⁰ Russia, as discussed above also maintains her own force of 4th generation fighters which includes; the MiG 29 (NATO reporting name: *Fulcrum*), the MiG-25 (NATO reporting name: *Fulcrum F*), the MiG-31 (NATO reporting name: *Foxhound*), the Su-25 Grach (NATO reporting name: *Frogfoot*), the Su-27 (NATO reporting name: *Flanker*), the Su-30 (NATO reporting name : *Flanker C*), the Su-33 (NATO reporting name: *Flanker-D*), the Su-35 (NATO reporting name: *Flanker E*).

While many of these fighters have in their origins the late Soviet era and 1990s, they do make up the backbone of the Russian Air Force, and some of them will either be phased out or purchased during the military modernization efforts. It is also important to note for those unfamiliar with fighter aircraft, that each designation is not just one aircraft, but a series of variants designed for the operation at hand. Unlike the multirole nature of the 5th generation fighters, oftentimes these jets are designed for specific mission types or purposes and are equipped with strike packages that reflect that. As by way of an example, the Su-25 *Frogfoot* was designed generally for close-air support (CAS) missions, while one variant of the *Frogfoot* the Su-25T is designed for anti-tank missions and another variant the Su-25K is an export variant intended for commercial sales. Finally, a designator might signify a variant of an earlier model that spawned its own series of variants, as is the case with the Su-35 or Su-27M, which is one in the same.

⁹⁰ "4th Generation Fighter Aircraft." *Military Factory*. Military-Factory.com, 2017. Web. 14 June 2017. <<http://www.militaryfactory.com/aircraft/4th-generation-fighter-aircraft.asp>>.

As a part of the stated goals of the military modernization efforts, adopted by President Medvedev, which aligned with SAP 2020, numerous fighters were planned to be purchased in the 2010-2015 goal.⁹¹ Rather than analyze some of the specifications of each jet, as has been analyzed with some of the naval advancements, a more prudent analysis would be in the Russian fighters' role in recent Russian power projection operations.

The role of the Russian Air Force is paramount to the successful completion of the Syrian operations. The deployment of the *Admiral Kuznetsov* carrier group, and the sorties launched from inside Syria (from the airbase at Latakia), and other points of departure have offered the Russian Air Force a prime opportunity to undergo live-fire runs in a combat role. This has not been the case since the Georgian situation bubbled over into open-conflict in 2008 over South Ossetia and Abkhazia. Therefore, many new capabilities and tactics of the Russian Armed Forces have been seen in Syria since 2014, and the Russian Air Force is not anomalous to this.

Since November of 2015, the Russian Air Force has taken a much more active role in the civil-war in Syria. Following the downing of a passenger plane by ISIS linked terrorists in the Sinai, the Russian Ministry of Defense launched Tu-160 (NATO reporting name: *Blackjack*, which have restarted production since Soviet times under the auspices of SAP-2020 and have the capability to carry out global strikes), Tu-22M3 (NATO Reporting name: *Backfire*), and Tu-95 (NATO Reporting name: *Bear*) strategic bombers who fired air-launched cruise missiles at IS targets in Syria.⁹² While these bombers offer little assessment of the fighters' activities in Syria, their deployment serves as the climax of full engagement of the Russian Air Force. By November 20th Su-34s had launched 16 sorties from air bases inside Russian territory, in coordination with operations from the airbase at Latakia.⁹³ While offering no tactical assessment of the operations success or failure, it is important to note that the operation shows an improved level of coordination from the joint exercise that is a direct result of some of the structural changes made to the military.

⁹¹ Gorenburg, Dmitry. "Russia's State Armaments Program 2020: Is the Third Time the Charm for Military Modernization?" *PonarsEurasia - Policy Memos*. PONARS, 23 July 2012. Web. 14 June 2017.

⁹² David, Cenciotti. "This Infographic Provides All the Details about the Russian Strategic Bomber Fleet Operations over Syria." *The Aviationist*. David Cenciotti, 21 Nov. 2015. Web. 14 June 2017.

⁹³ Crowley, Sean. ""Highway to the Danger Zone"." *Leksika*. Leksika Publications, 2017. Web. 14 June 2017.

What is also prudent to note is that the workhorse of the Russian operations in Syria is the *Frogfoot*, which has offered Assad forces relatively great CAS. The *Fullbacks* have also been battle-tested now which sports a unique radar and targeting system, with an air-to-air refueling capacity which can extend the length of the mission it is tasked with undertaking. The *Fullbacks* have shown some of their weaknesses such as the sub-par *Geofizka* targeting pods. Some aircraft have been reported as carrying the newest guided munitions of the Russian Armed Force the KAB-500 satellite-guided bombs and the Kh-29 laser-guided missiles.⁹⁴

The biggest embarrassment and failure of projecting power in Syria, was the aforementioned terrible deployment of the *Admiral Kuznetsov* carrier group to the theater. The carrier's outdated gear cost the Russian Armed Forces two carrier-based fighters and left Western analysts laughing about the maritime operational capabilities of the Russian Federation. In both cases (at the beginning of the operations in Syria in November and December respectively) the complications were due to a failure of the arresting cable which led to the loss of one Mig-29KUBR- *Fulcrum* (which ran out of fuel and crashed in the Mediterranean while awaiting the crew's repair of the malfunctioning cable) and one Su-33 – *Flanker*.⁹⁶ Cables break, it is an occupational hazard of naval aviation, but neglect and disrepair is state-sponsored. These factors were the primary drivers for the failure of the *Kuznetsov* in its most recent deployment. What was intended as an operation to display to the World that the prowess of Russia had returned ended in complete failure for the carrier-group and had the opposite effect on the public opinion of the globe. It is important to note that those aircraft that were lost on the *Admiral Kuznetsov* do not belong to the Russian Air Force, but are Naval aviators operating on the same aircraft used by the Air Force.

⁹⁴ России, Минобороны (Russian Ministry of Defence). "ФОТО: Подготовка авиатехники к нанесению ударов по объектам #ИГИЛ в #Сирии [Http://t.co/pJRAJ2af1h](http://t.co/pJRAJ2af1h) Pic.twitter.com/8zHGmAjm9r." *Twitter*. @mod_rossiya, 05 Oct. 2015. Web. 14 June 2017. Photo published on social media which shows KAB-500 laser bombs deployed in Syria.

⁹⁵ Larrinaga, Nick De. "#Russia Su-24 Strike Aircraft in #Syria Armed with a Kh-25 (not Kh-29) Laser-guided Air-to-surface #missile. Pic.twitter.com/1sQxg3R3UK." *Twitter*. @NickdeLarrinaga, 05 Oct. 2015. Web. 14 June 2017. Photo posted on social media showing the KH-25 reportedly deployed in Syria.

⁹⁶ Majumdar, Dave, Bill Wirtz, Robert Keatley, and Robert E. Kelly. "The 2 Big Reasons Why Russia's Only Aircraft Carrier Is Having So Many Problems." *The National Interest*. The Center for the National Interest, 6 Dec. 2016. Web. 14 June 2017.

Nevertheless, with an ongoing military operation not all the facts regarding these operations remain clear, and many western experts remain divided on how many sorties the Russian Air Force is actually capable of launching in Syria.⁹⁷ And as some analysts have argued although they may be able to launch a heavy number of sorties in a short amount of time during a surge, there is skepticism that the Russian Air Force would be able to sustain a long air campaign. The Syrian operations if continued will however provide the Russian Air Force with a testing ground for its modernization efforts, and new technology could make an appearance over Syrian skies.

Victory Day Parade 2017: Debuts

Unlike some of the previous Victory Day Parades the 2017 display of hard power capabilities from the Russian Armed Forces (the annual Victory Day Parade through Red Square) did not include any major debuts that had Western analysts pouring over footage of a new weapons system. Instead the debuts at the 2017 Victory Day Parade were the newly formed Youth Army (*Yunarmiya*), as well as newly built missile systems belonging to the Baltic Fleet and Arctic troops (the latter fitted with camouflage suited to the theater).⁹⁸

The *Yunarmiya* was created by the order of Vladimir Putin in 2015.⁹⁹ The Youth Army's numbers have expanded exponentially in the last year. From just 100 members in the "Patriotic movement" its membership is now estimated at around 30,000. The creation of such a forum for the youth, was intended as way to invest support for the Kremlin in the future generation of Russians and as Andrei Kolesnikov comments, as "preventative work.. against involvement of young people of Russia into the protest movement."¹⁰⁰ This is also not the first type of Youth movement to be thrust upon Russia's youth from the corridors of the Kremlin, *Nashi* movement which was formed in 2005, and Young Guard of United Russia (A

⁹⁷ Majumdar, Dave, Bill Wirtz, Robert Keatley, and Robert E. Kelly. "Russia Could Fly 96 Sorties a Day over Syria." *The National Interest*. The Center for the National Interest, 5 Oct. 2015. Web. 14 June 2017.

⁹⁸ Taylor, Alan. "Victory Day Parade in Moscow." *The Atlantic*. Atlantic Media Company, 09 May 2017. Web. 14 June 2017.

⁹⁹ Stewart, Will. "Putin's Youth Army: Russian Strongman Sets up Soviet-style Pioneer Scheme for Schoolchildren but Faces Web Claim It's Echo of HITLER." *Daily Mail Online*. Associated Newspapers, 30 May 2016. Web. 14 June 2017.

¹⁰⁰ Schearf, Daniel. "Putin's Youth Army Debuts on Red Square for 'Victory Day'." *VOA*. Voice of America, 08 May 2017. Web. 14 June 2017.

youth organization affiliated with the ruling United Russia party, and with leaders such as Anna Chapman¹⁰¹) also formed in 2005. While *Nashi* and the Young Guard were coincidentally formed around the same time as the Orange Revolution in Ukraine, the latest incarnation of youth mobilization, the *Yunarmiya* has taken on a much more militaristic style.¹⁰² The Russian government is even constructing a miniature *Reichstag* for the *Yunarmiya* to re-enact one of the Red Army's proudest moments.¹⁰³

Assessment of the State of the Russian Military

Considering that the Russian military was in dire straits after the dissolution of the Soviet Union due to the reasons Miller highlighted, the vast strides made by the Russian military are quite impressive. The Russian military was scheduled to spend an exorbitant amount of money for procurement at the outset of SAP-2020. The program allocated 19 trillion rubles (at the time around 630 billion USD) to the Ministry of Defense for procurement of new arms over this time period, many analysts assert that only around half of this sum was actually spent. The next stage in the Russian Federation's procurement program was due to be launched in 2015, but due to budgetary constraints this has been delayed and is now expected to be signed by September 2017.¹⁰⁴

Various sources have asserted that the newest stage in the state procurement program will focus not on the development or purchase of wholly new equipment, but a reliance on well integrated pieces. The Kilo-class submarine and the SU-30SM (*Flanker-C*) are two examples of what will be on the invoices.¹⁰⁵ It is also important to note that equipment aside,

¹⁰¹ "Russia Spy Anna Chapman given Pro-Kremlin Youth Role." *BBC News*. BBC, 22 Dec. 2010. Web. 14 June 2017.

¹⁰² Schearf, Daniel. "Putin's Youth Army Debuts on Red Square for 'Victory Day'." *VOA*. Voice of America, 08 May 2017. Web. 14 June 2017.

¹⁰³ "Russia Building Reichstag Replica for Schoolchildren's Military Exercises." *RT International*. TV-Novosti, 22 Feb. 2017. Web. 14 June 2017.

¹⁰⁴ Kofman, Michael. "The Wars of the Future: Russian Defense Ministry's New Modernization Plan." *Themoscowtimes.com*. The Moscow Times, 4 June 2017. Web. 14 June 2017.

¹⁰⁵ "The State of the State Armaments Program." *Russian Defense Policy BLOG*. N.p., 07 Mar. 2017. Web. 14 June 2017. <<https://russiandefpolicy.blog/2017/03/07/the-state-of-the-state-armaments-program/>>.

the new SAP will devote specific attention to regional strategic goals, such as the FSU and Arctic region.¹⁰⁶

When considering the effects of the current stage of Russian re-armament, it is important to note the effect that this program projects to the rest of the world. While the Russian military cannot modernize at the speed of the Chinese, or has access to the funds of the USA, they have attempted to become a lean and mean force which could rival either. It creates a siege mentality for not only the Russian leadership, but also forms an opinion among Westerners that Russians are entrenching themselves against the West. The fear of Russian aggression, particularly among EU members, is palatable and that without American assistance the militaries of Europe are virtually useless (against the Russian military) are realities that lend to a fear of an advanced Russian force so close to their borders.

If trends within the re-armament program and modernization program can be summarized by a few points they would be; (1) a move towards professionalization of their armed forces (*kontraktniki*), (2) decrease reliance on old and outdated technology, (3) re-structure the command capabilities of the Russian Armed Forces to avoid prior problems due to poor coordination, and (4) aptly prepare for the future conflicts Russia may face with specific regional focus where due. These four points can be applied to nearly every tweak made by the Russian Armed Forces. With the next stage of procurement about to be launched the future of the Russian military will not only be revealed but also the battle-spaces they intend to occupy in the coming years.

It is also important to note that from a tactical and strategic level the modernization program is clearly needed by the Russian Federation's Armed Forces. But what understandably scares European leaders the most is not that they are unwilling or unable to spend one additional cent on their militaries, but unlike Russia there is no political-will to use their *hard power*. The Kremlin does not share this weakness and it will seek to deploy its military (which is beginning to resemble one of a 21st century great power) when it believes its interests are threatened, as opposed to the impotent sanctions from Brussels.

¹⁰⁶ Nikol'skiy, Alexei. "(The New State Armaments Program Will Be Cut by the Ministry of Finance) Новая госпрограмма вооружений будет урезана по требованию Минфина." – *ВЕДОМОСТИ (Vedomosti)*. JSC Business News Media, 10 Jan. 2017. Web. 14 June 2017.

Chapter II: Inside the Lubyanka and Kremlin: Covert Means of Russian Power Projection

Hybrid Warfare and Other Russian Covert Actions

Covert Power its own Mold

The second level of analysis unfortunately fits no Nyesian mold for power. But if power is measured by the ability of one country to get another to do what it wants, the Russian approach to clandestine means of coercion is the most effective. Covert power is here defined by actions that are either secretive in nature, or concealed by the actors. It employs elements of *hard* military power and elements of *soft power* attraction. Also due to the nature of covert power, that it is distinctly concealed or disguised, it is important to note that through open-source analysis this paper is limited. A brief survey of various recent clandestine actions attributed to the Russian Federation can serve the reader to understand how covert power helps Russia to pursue its desired status as a Great Power.

Definitions and Foundations of the Gerasimov Doctrine

“War is the continuation of politics by other means”

-Carl von Clausewitz¹⁰⁷

Before delving one category of the analysis of covert Russian power projection, their use of covert means and hybrid *warfare*, it is important to understand what is meant by *hybrid warfare*. There is much debate among military scholars as to whether “*hybrid warfare*” even exists. Some prominent scholars have argued that *hybrid warfare* is merely a novelty term that has percolated through Western discourse, to describe Russian actions in Ukraine and Syria, and proliferated through NATO’s adoption of the term.^{108 109} The common usage of this term has created a formulated way to describe and conceptualize Russian actions, but these scholars would argue that it does not present anything unique from the Russian and Soviet styles; rather it is merely the latest machination of those styles that utilizing the weapons of the 21st century. For the purposes of this paper *hybrid warfare* can be defined as: a blend of

¹⁰⁷ Clausewitz, Carl Von, and F. N. Maude. *On War*. London: Routledge & K. Paul, 1962. Print.

¹⁰⁸ McDermott, Roger N. "Does Russia Have a Gerasimov Doctrine?" *Learning From Today's Wars* 1st ser. Parameters.46 (2006): n. pag. *Strategic Studies Institute*. U.S. Army War College, 2016. Web. 14 June 2017.

¹⁰⁹ Giles, Keir. "Russia's 'New' Tools for Confronting the West: Continuity and Innovation in Moscow's Exercise of Power." *Chatham House, the Royal Institute of International Affairs*. The Chatham House Russia and Eurasia Programme, 2016. Web. 14 June 2017.

unconventional/conventional warfare, which also utilizes regular and irregular means of information and cyber warfare. Building off of Clausewitz's assertions about the nature of war, if Russian '*hybrid warfare*' is to here be analyzed it should be viewed through the lens of a continuation of their politics by other means. Perhaps a more concise version of my own definition of *hybrid warfare* would be Frank Hoffman's widely disseminated definition: "A tailored mix of conventional weapons, irregular tactics, terrorism, and criminal behavior in the same time and battle space to obtain political objectives."¹¹⁰

Another misreading of Russian military strategy is to claim that such a playbook or document actually exists which details this so-called *hybrid warfare*. Many have termed the Russian variety of *hybrid warfare* as the "Gerasimov doctrine", named after Chief-of-General Staff V. Gerasimov, mentioned above. Many will point to an article that he authored in the *Military-Industrial Kurier* in February 27th of 2013 in which Gerasimov discussed a plethora of strategic realities for Russia and her military, viewed as the origins for the *hybrid war* phraseology establishing ground in the Western analytical vernacular.¹¹¹ In that article he asserts that the Russian military theoreticians have a duty and obligation to construct new strategic plans that are tailored for the mission at hand. At the time of writing this article, which has caused such a stir amongst Western analysts, he wrote as the reactionary Chief-of-the-General-Staff of the Russian Federation observing the developments of the "color revolutions" of the Arab Spring and the NATO led operations in Libya. As many international experts, such as Gerasimov observed, fighting wars in the 21st century would not utilize the same conventional methods that defined conflict in the previous century. This transition revolved around the way in which 21st century wars would be fought or better approached. The very "rules of war" have changed. The role of nonmilitary means of achieving political and strategic goals has grown, and, in many cases, they have exceeded the power of force of weapons in their effectiveness."¹¹²

¹¹⁰ Hoffman, Frank G. "Hybrid Warfare and Challenges." *JFQ (Joint Force Quarterly) Issue 52*. National Defense University, 2009. Web. <smallwarsjournal.com/documents/jfqhoffman.pdf>.

¹¹¹ Gerasimov, Valery. "ЦЕЛЮЩОСТЬ (Value) General Valery Gerasimov on the Future of War." *Military-Industrial Kurier Volume No 8 (476)* 27 Feb. 2013: n. pag. Web. <http://vpk-news.ru/sites/default/files/pdf/VPK_08_476.pdf>.

¹¹² Gerasimov 2013

This should be noted and precipitate an analysis of Russian “other means”. It is an important variable in power projection for conventional conflicts. Having a technologically modern, efficient, and effective military, utilizing those capabilities when necessary is also just as important as the tactics that go on behind what appears on CNN. While the conflicts in Syria and Ukraine have offered a glimpse into some of the leaps and bounds made by the Russian military, it should be noted that what was even more striking about these and other theaters of Russian interest was the application of non-conventional techniques to support and achieve their political aims. This interpretation of *hybrid warfare* is what here should be under discussion and analysis. The primary criticism of *hybrid warfare* terminology is that it oversimplifies Russian doctrine into an umbrella term that does not really define anything of substance. But for lack of more comprehensive alternative it will be herein applied to these other means.

New Continuation of Old Soviet Tactics

The first aspect an observer must consider to understand contemporary Russian behavior is to understand the mindset which those decision-makers find themselves in. The majority of the upper-echelons of the Russian national security strategists have in the roots of their careers a deep Soviet-bureaucratic foundation. While there are certainly notable exceptions such as the legal scholar and former President, Dmitry Medvedev and others, many of the top offices are occupied by former *apparatchiks*. Many of these decision-makers belong to the group of western-dubbed *siloviki* (translating as men of force, mainly drawn from KGB or GRU, with experience in the secret services or Armed Forces).

Thus, it is quite self-explanatory that a degree of continuity (from Soviet times) would exist, from the tactical approach these leaders would take towards their own political goals. Putin himself, educated during the Andropov era, and serving time as a junior case-officer in Dresden alongside the likes of Markus Wolf¹¹³, has certainly been influenced by this background. Therefore, not merely the way he thinks but his approach to governance has been deeply rooted in a *Chekest* mindset. His cabals of friends and fellow leaders of Russia, of whom a stark percentage hold similar backgrounds, also share this *Weltanschauung*.

¹¹³ Dawisha, Karen. *Putin's Kleptocracy: Who Owns Russia?* New York: Simon & Schuster, 2014. Print.

Moreover it defines the way they operate on a day to day basis particularly in intelligence operations.

A long-held tactic in Soviet subversion and infiltration was the use of *kompromat*, or compromising material. These tactics might include; pictures of a married person engaged in extramarital relations, embarrassing or damaging information, etc. This '*kompromat*' was then used to blackmail the person into performing acts for, or passing information to, the Lubyanka. Although the Soviet Union has ceased to exist the practice of using *kompromat* has not. It still today remains an operational reality for many who become the target of Russian intelligence recruiting.

Throughout its history the KGB also was able to utilize penetration operations to infiltrate numerous states throughout the world. Although this is not unique to the operations of any spy agency throughout the world, as Allen Dulles once wrote about Communist operations, "A (sic) major part of the strategy ...is the secret penetration of free states."¹¹⁴ This penetration not only revolved around the ruling elite of a country, but also on the receptive population. Particularly during the Cold War was the alleged usefulness of the peace movements in the West for the KGB, as Lunev (a GRU defector) and the Heritage Foundation have asserted that the western peace movements were merely puppets of the KGB.¹¹⁵ Barlow further asserts, "These agencies in turn influence the activities of organizations in the Western European countries that have been set up as front groups by the pro-Soviet national Communist parties."¹¹⁶ These operations utilized the tools of the West against themselves, to sway public opinion and create a ground swell of sentiment favorable to Moscow's will. These tactics have not been abandoned and could be seen deployed in Ukraine preceding the onset of hostilities, additionally if one was to examine the penetration efforts the Russian's have employed in the Baltic States (see below) they would understand the vulnerability of these countries to a Ukraine-style destabilization campaign.

¹¹⁴Dulles, Allen W. "Craft of Intelligence: The Legendary American Spymaster on the Fundamentals of Intelligence Gathering For a Free World." *Craft of Intelligence*. Lyons Press an Imprint of Rowman and Littlefield, 1963. Web. 14 June 2017.

¹¹⁵ Lunev, Stanislav, and Ira Winkler. *Through the Eyes of the Enemy: Russia's Highest Ranking Military Defector Reveals Why Russia Is More Dangerous than Ever*. Washington, DC: Regnery, 1998. Print.

¹¹⁶ Barlow, Jeffrey G. "'Moscow and the Peace, Offensive'." *Heritage.org*. The Heritage Foundation, 14 May 1942. Web. 14 June 2017.

As Allen Dulles further wrote in 1963, “front organizations supplement the work of local parties and are used as tools for reaching specialized objectives... (Moscow) makes particular use of its ability to “hitchhike” on popular local issues and to exploit them.”¹¹⁷ What the legendary American spymaster was then referencing was the work of the KGB in subverting Western public opinion to the will of the Kremlin.

This innate fear of population subversion also helps to explain the Russian leadership fear of color revolutions, what the author has termed *rainbow paranoia*, a fear of foreign influence through mobilizations of the population. As mentioned above, the Gerasimov doctrine was formulated initially as a counter-reaction to the Arab Spring and color revolutions throughout the FSU, which diminished the Kremlin’s influence over traditionally client states.

The linear development of the KGB, GRU, and other Soviet era secret services transitioning into its successor agencies has not abandoned these practices entirely but rather perfected them. Today as many scholars have asserted, the Russian mission is to sow discontent and disunity among the Western bloc. Whether that means offering logistical support for Russian leaning parties in the West, or launching cyber onslaughts during elections to attempt to sway the vote, or penetrating members of the Western bloc, the Russian security services are on a distinct path and mission to sow discontent and disunity in the West. Nowhere are some of their actions more visible than in the former USSR, and particularly the newly formed Ukraine.

Maskirovka and Ukraine

All warfare is based on deception.

-Sun Tzu

One of the primary techniques utilized by the Russian Federation in their annexation of Crimea and the destabilizing of the Eastern Donbas region of Ukraine was the tactic of *maskirovka*, or deception. As Iancu and Barna among others have asserted the 1978 Soviet

¹¹⁷ Dulles, Allen W. "Craft of Intelligence: The Legendary American Spymaster on the Fundamentals of Intelligence Gathering For a Free World." *Craft of Intelligence*. Lyons Press an Imprint of Rowman and Littlefield, 1963. Web. 14 June 2017.

Military Encyclopaedia offers a definition for *maskirovka* as “carried out at national and theatre levels to mislead the enemy as to political and military capabilities, intentions and timing of actions. In these spheres, as war is but an extension of politics, it includes political, economic and diplomatic measures as well as military.”¹¹⁸ Noticeably absent and equally important is the use of narrative dominance and since the Soviet Military Encyclopedia’s publication in 1978 is the introduction of cyber warfare into these measures.

For the contemporary Ukrainian machination of Soviet strategy it is important to look at the entire operation in two distinctly separate but inter-related phases of the operation. The first phase of the operation included the entire annexation of the Crimean peninsula, and the second phase was intended to stir discontent, confusion, and ambiguity as to their intentions through a full-scale destabilization campaign was funded by the Kremlin in the eastern sectors of the country. It is important to view these two phases as operationally separate but strategically linked. The strategic importance of *maskirovka* is not necessarily to gain an edge on the battlefield, but rather create confusion and to sow discontent in the adversary’s ranks through classic Machiavellian strategy of divide *ut regnes*. Through a combination of conventional military operations, special operations, diplomacy, information warfare, cyber warfare, targeted mobilization, and other elements Russia has marshaled all her resources to dominate not only the situation on the ground but the narrative in international media. This also further underlines the problematic nature of countering such a multi-faceted operation as one can not merely win on the battlefield anymore, but has to win on every plane of conflict. A closer analysis of some of examples utilized in the Ukrainian case can serve to portray this complexity to the reader.

The Crimean Annexation

On the 23rd of February 2014, pro-Russian protests began in Sevastopol, the southern-Crimean city situated on the Black Sea.¹¹⁹ These protest occurred against the backdrop of the

¹¹⁸ Iancu, Niculae, Andrei Fortuna, Christian Barna, and Miheala Teodor. "Countering Hybrid Threats: Lessons Learned from Ukraine (ebook)." *EBooks.com*. IOS Press BV, 29 Sept. 2015. Web. 14 June 2017.

¹¹⁹ Amos, Howard. "Ukraine Crisis Fuels Secession Calls in Pro-Russian South." *The Guardian*. Guardian News and Media, 23 Feb. 2014. Web. 14 June 2017.

Euromaidan protests in Kiev, and pro-Euromaidan protests throughout the country, which forced President Viktor Yanukovich to flee the country.¹²⁰ The parallel pro-Russian protests featured Russian flags and slogans of “Putin is our President.”¹²¹ Ultimately the protestors in Sevastopol would decide to establish their own administration of Crimea and establish local militias most notably with the support of the pro-Kremlin motorcycle club the Night Wolves.¹²² The protestors in Sevastopol by the end of February had fully destabilized the Crimean peninsula, blocking access to the parliament building, electing a Russian citizen as de-fact mayor of Sevastopol, and demanding referendums to separate from Ukraine. Ultimately Russian security forces would decide to act, and by February 26th Russian troops had taken control of the main route to Sevastopol.¹²³ On the next day unmarked Russian special forces seized the Supreme Council of Crimea, the parliament of Crimea, and fortified the building from any potential counter attack. These “little green men” occupied the Parliament building and a referendum was held to terminate the Crimean government and instate a new Prime Minister from the Russian Unity party. This was the beginning of the end, and under the Russian occupation more referendums were held to increase the autonomy of Crimea, and eventually join Russia.

Before the Ukrainian security services were able to act, they were faced with a complication as to what and whom they were dealing with. The “unmarked Russian special forces” referred to above, were masked men who were not wearing any insignias identifying them.¹²⁴ Although the equipment they were carrying (unique to Russian Special Forces and paratroopers) pointed to their true origin, Ukraine was unsure if these were militias supplied by Russian interlocutors or Russian forces themselves. This crisis was further complicated legally due to a Status of Forces Agreement (SOFA), made between Ukraine and the Russian

¹²⁰ Malkin, Bonnie, and Raziye Akkoc. "Vladimir Putin Saved My Life, Says Ousted Ukrainian President Viktor Yanukovich." *The Telegraph*. Telegraph Media Group, 22 June 2015. Web. 14 June 2017.

¹²¹ Shuster, Simon. "Vladimir Putin: Why He's Accusing Ukraine of Terrorism." *Time*. Time, 11 Aug. 2016. Web. 14 June 2017.

¹²² Tabor, Damon. "Putin's Angels: Inside Russia's Largest Motorcycle Club." *Rolling Stone*. Rolling Stone, 08 Oct. 2015. Web. 14 June 2017.

¹²³ Marshall, Tim. "Russia and the Curse of Geography." *The Atlantic*. Atlantic Media Company, 31 Oct. 2015. Web. 14 June 2017.

¹²⁴ Kofman, Michael, and Matthew Rojansky. "A Closer Look at Russia's "Hybrid War"." *Kennan Institute*. Wilson Center, 29 Dec. 2015. Web. 14 June 2017.

Federation for the Black Sea Fleet's basing rights which allowed Russian troops to be present in Crimea, although it did not allow them free reign throughout the peninsula (see more below).¹²⁵¹²⁶

The Use of Tactical Cyber in Ukraine

While the Russian military and intelligence services have continuously refined and ventured into unfamiliar realms in cyber space, perhaps the most recent example of their advancements have been observed through their actions in Ukraine. While not delving into the discourse of the merits of the Russian re-annexation of Crimea, or destabilizing actions of the *Novorossiia* militias loyal to the Kremlin, this analytical approach will collect some of the actions of the Russian military and intelligence services that are breaking the mold of traditional warfare.

Cyber defensive measures, as well as offensive attacks have been utilized throughout the Russian campaign in the former Imperial lands. CrowdStrike, the cyber security firm tasked with the forensic analysis of the DNC hacks, has as recently as December 22nd 2016, released reports about FANCY BEAR operations (also known as Sofacy or APT 28) deploying malware to track field artillery units of the Ukrainian military specifically those using the D-30 Howitzer.¹²⁷ APT 28 is long believed to be a cyber arm of the military intelligence directorate of the Russian armed forces (see section Political Manipulation Through Cyber)¹²⁸

¹²⁵ Felgenhauer, Tyler. "Ukraine, Russia, and the Black Sea Fleet Accords." *WWS Case Study* 2.99 (1999): n. pag. *Princeton University*. Woodrow Wilson School of Public and International Affairs. Web. <<http://dtic.mil/dtic/tr/fulltext/u2/a360381.pdf>>.

¹²⁶ Marxsen, Christian. "The Crimea Crisis: An International Law Perspective." (n.d.): n. pag. NYU Max Planck Institute for Comparative Public Law and International Law, 2014. Web. <http://www.mpil.de/files/pdf4/Marxsen_2014_-_The_crimea_crisis_-_an_international_law_perspective.pdf>.

¹²⁷ "Use of Fancy Bear Android Malware in Tracking of Ukrainian Field Artillery Units." *Crowdstrike Report* (2016): n. pag. *CrowdStrike, INC*. CrowdStrike Global Intelligence Team, 22 Dec. 2016. Web. <<https://www.crowdstrike.com/wp-content/brochures/FancyBearTracksUkrainianArtillery.pdf>>.

¹²⁸ "Who Is FANCY BEAR? »Blog." *CrowdStrike/ Research and Threat Intel*. Editorial Team, 17 May 2017. Web. 14 June 2017. <<https://www.crowdstrike.com/blog/who-is-fancy-bear/>>

While, actual analysis of the malware employed would be better suited for a computer science paper, an analysis of the techniques employed to insert and deploy the malware can help to illustrate the capabilities which the Russians are demonstrating. The technique they employed in the particular case of the D-30, was in directed at a *target acquisition application*, *Понп-Д30*, designed for more expedient and efficient artillery support from the Howitzer crews. Although this was not a public app, listed on the Android app store, it was distributed among Ukrainian military personnel. Later the user CrowdStrike intelligence analysts believed to be the original developer of the app posted the application on the Russian social media web based sharing platform Vkontakte. Crowdstrike analysts further surmised in the report, that although this app was thought to be developed for operational training purposes, the application was also verified as used by the Ukrainian military by at least one unit operating close to the frontlines against the pro-Russian separatist militias.

Developing and deploying FANCY BEAR malware into this app, enabled the *Novorossiia* militias to monitor the movements of the D-30 units. CrowdStrike underlined the advantage the malware would give to the Separatist forces: “a tool such as this has the potential ability to map out a unit’s composition and hierarchy, determine their plans, and even triangulate their approximate location.” These units could then be geo-located and *Novorossiia* militias could then monitor the Ukrainian forces movements, buttressed by ISR (intelligence and surveillance reconnaissance) collected by the deployment of Unmanned Aerial Vehicles (UAVs) prior to the commencement of hostilities. According to the Chinese military expert Sun Tzu, “the reason the enlightened prince and the wise general conquer the enemy whenever they move and their achievements surpass those of ordinary men is foreknowledge” and the usefulness of knowing ones enemies is not lost on the pro-Russian separatists. Utilizing the tools of the GRU digital-arsenal they were able to gain a strategic advantage on the battlefield. This advantage would ultimately bear fruit, according to the same CrowdStrike report, “ they [Ukrainian Artillery Forces] have lost nearly 50% of their artillery pieces and over 80% of the D-30 Howitzers. Far more than any other piece of Ukrainian Artillery.” (cite crowdstrike)

There are disputes that refute the findings of the Crowdstrike report. Jeffrey Carr the Founder of Suits and Spooks (a serial Russia doubter), questioned the validity of the

CrowdStrike report¹²⁹, even citing a statement made by the Ukrainian Ministry of Defense. However while the statement he cites published on the Ukrainian Ministry of Defense's website does indeed seem genuine, it is difficult to believe that the Ukrainian military realistically would state openly they had lost 80 % of their deployed equipment, regardless of the manner in which they lost it.

While the CrowdStrike report highlights one particular activity in cyberspace of the Russian military assets in Ukraine, it is not an isolated instance of cyber warfare. The entire arsenal of the cyber warriors of the Russian Federation has been unleashed upon Ukraine, and they are very good at what they do. There are routine reports of spear-phishing campaigns directed at the Ukrainian electrical grid.¹³⁰ One recent Reuters report by Pavel Polityuk and Alexander Winning has claimed that the capital and Crimea has experienced a series of partial blackouts due to malicious activities of the pro-Russian cyber actors.¹³¹

A recurring vulnerability in cyber space is the relative ease at which hackers are able to break into SCADA systems tasked to run the electrical grid. Unfortunately this problem is a vulnerability the entire world faces and is so often overlooked by policy-makers. This ill-protected aspect of the electrical grid was highlighted by suspected Russian-backed operations in Ukraine, when in late December 2015 *Kyivoblenergo*, one of Ukraine's largest electrical providers began reporting outages to its providers.¹³² According to a report published by the E-ISAC (Energy- Information Sharing and Analysis Center) nearly 225,000 customers were affected by these attacks.¹³³ The report further assessed that the penetration operation utilized a variety of strategies to vector into the system; particularly one of the routinely successful

¹²⁹ Carr, Jeffrey. "The GRU-Ukraine Artillery Hack That May Never Have Happened." *Medium*. Medium, 03 Jan. 2017. Web. 14 June 2017. <<https://medium.com/@jeffreycarr/the-gru-ukraine-artillery-hack-that-may-never-have-happened-820960bbb02d#ajnxcxbeg>>.

¹³⁰ Zetter, Kim. "Everything We Know About Ukraine's Power Plant Hack." *Wired*. Conde Nast, 03 June 2017. Web. 14 June 2017. <<https://www.wired.com/2016/01/everything-we-know-about-ukraines-power-plant-hack/>>.

¹³¹ Winning, Alexander, and Pavel Polityuk. "Power Blackouts Test Loyalty to Kremlin in Russian-annexed Crimea." *Reuters*. Thomson Reuters, 26 Nov. 2015. Web. 14 June 2017. <<http://www.reuters.com/article/us-ukraine-crisis-crimea-idUSKBN0TF2AS20151126>>.

¹³³ Lee, Robert M., Michael J. Assante, and Tim Conway. "Analysis of the Cyber Attack on the Ukrainian Power Grid." *Electricity Information Sharing and Analysis Center (E-ISAC)* (2016): n. pag. *Defense Use Case*. E-ISAC, 18 Mar. 2016. Web.

techniques is the use of ‘spear-phishing’. Spear-phishing should be noted here primarily due to the fact that not only does it allow the attackers to have access to the system, but it further highlights the human flaw in cyber-security, that causes nightmares for cyber-security experts. By merely clicking on the wrong email one employee could allow an entire electrical grid to come under further assault. This not only left the system endangered, but also further allowed the intruders to recon the system, and to harvest data and personal credentials such as login details.

The use of BlackEnergy3 and KillDisk malware, also illustrates how difficult it is to defend against such attacks, due to their multifaceted nature. In this particular case BlackEnergy3 initially infected Word documents established a beachhead, which was then used to launch KillDisk malware to shut down the entire system.¹³⁴

Naturally the Ukrainian media was quick to lay the blame for the intrusion and disruption firmly at the feet of the Kremlin. SBU officials claimed that Russian security services had attempted to break into the system and that the Ukrainians had suppressed this operation.¹³⁵

However attribution is always nigh on impossible for cyber forensic analysts. Therefore definitively saying that Russian backed cyber warriors are behind the litany of attacks on Ukraine since 2014 is unfeasible. In the case of the D-30 Howitzers, the attribution to Russia rests principally on the fact that the X-agent malware deployed fits a very similar set of malware commonly used by the Russian security services. In other cases attribution is supported by circumstantial facts such as the attacks originated in an IP address or time-zone (specifically UTC +4), which due to location and time reasons are suspected to be within the Russian sphere of influence, or Russian territory itself. Other possible reasons include coding of the malware on Cyrillic keyboards

Due to the difficulties associated with attribution, it is quite easily counter argued against for people to merely say that just because the attacks and all the evidence points to the Russian government this does not mean that the Russian government was necessarily

¹³⁴ Lee, Assante, Conway

¹³⁵ Ukrinform. "Russian Hackers Plan Energy Subversion in Ukraine." 28.12.2015 15:50 - *Ukrinform News*. Ukrinform, 28 Dec. 2015. Web. 14 June 2017. <<https://www.ukrinform.net/rubric-crime/1937899-russian-hackers-plan-energy-subversion-in-ukraine.html>>.

involved. This dismissive argument can also be buttressed by the proliferation of so called hacktivist groups around the globe. Many people even believe that these hacktivist groups are doing a public service, however White Hat hacker groups are one thing and Black Hat or the gray that falls somewhere in between are something else. It is also ridiculous to state that the likes of Julian Assange's Wikileaks or the mass dump of classified information from the likes of Edward Snowden or Chelsea Manning operate without an agenda. They are politically motivated persons that cannot claim the banner of altruism which forms the foundation for most White Hat hacker groups. However this confusion works to the benefit of the BEARS conglomeration of hacker groups, especially when it comes to disinformation campaigns during the fallouts. One recent example can help to illustrate this, the DNC (Democratic National Committee) hacks in the lead up to the 2016 US Presidential elections, when a so-called hacktivist Guccifer 2.0 (taking the name from the Romanian hacktivist Guccifer) conducted the initial break and grab operation snagging thousands of emails from DNC servers. Guccifer was later determined to be associated with the FANCY BEAR (APT 28) and COZY BEAR (APT 29) groups.¹³⁶ These groups are believed to be linked to two agencies of the Russian intelligence apparatus, the GRU and FSB/SVR respectively. The contents were then strategically published on Wikileaks, at crucial points in the election. As former members of the US intelligence community have asserted, Wikileaks has become nothing more than a "Laundromat" for Russian intelligence services. (For further information on this hack please refer to section entitled "Political Manipulation through Cyber")

Irregular Warfare in Ukraine

Jeffrey B. White, a thirty-four year veteran of the DIA, had this to say about irregular warfare.

"The acquisition and use of modern military technology is often seen as a solution to the problems of warfare in the late 20th century, with information warfare the latest example. Irregular warfare, however, remains confoundingly (sic) unaffected by changes in technology. In an irregular conflict, sociology, psychology, and history will have more to say about the nature of the conflict, including its persistence and intensity."¹³⁷

¹³⁶ Nance, Malcolm. "The Plot to Hack America: How Putin's Cyberspies and WikiLeaks Tried to Steal the 2016 Election 2nd Edition." Skyhorse Publishing New York, 2016. Web. 14 June 2017.

¹³⁷ White, Jeffrey B. "Some Thoughts on Irregular Warfare." *Central Intelligence Agency: Studies in Intelligence*. Central Intelligence Agency CSI Publications, 27 June 2008. Web. 14 June 2017.

At no time in history has this been more relevant than the current epoch of military conflicts. Throughout the world the flashpoints that have stumbled over into open conflict have seen increasing use of irregular warfare. Eastern-Ukraine is no different. While conventional means are of course an integral part of *hybrid warfare*, they have increasingly lost their importance as inter-state conflicts are no longer the way wars are fought. But rather through insurgencies, guerrilla tactics, psychological warfare, non-state actors, terrorism, etc. wars are waged. These dimensions are no longer operational abnormalities but the norm. The confluence of these dimensions is defining the way wars will be fought in the 21st century.

This is painfully clear in Ukraine, as White asserts: history, sociology, and psychology have all been deeply influential in defining the conflict. Russian-language media has been able to successfully play on the fears and divisions within the Ukrainian society to spin the narrative to their advantage. The Russian propagandists and apologists have also been able to frame the debate about Crimea particularly in a historical narrative, and justified it by snap elections that provide further justification for the peninsular annexation. Psychological warfare has long been a tool in the box for states and non-state actors to utilize and the conflict within Ukraine is another in a series, rather than a revolution in conflict.

Baltics, the Next Stage?

The Ukrainian crisis can be viewed as an anomaly of particular singularity, while this is true, it is important for Western and NATO strategists to learn from the crisis lest it be repeated. One particular area of interest for the Russian Federation remains the Baltic states (Latvia, Lithuania, and Estonia), and many of the same factors precipitating the annexation of Crimea also exist in the Baltics.

The Baltics, in the Post-Soviet epoch, have remained a strategic nightmare for the Russians. While the strategic dilemma of the Russian Federation is complicated and should not be simplified, when the Vilnius Group of States acceded to NATO, it presented an altogether unique strategic concern. On the 29th of March 2004 all three of the Baltic States joined the North Atlantic Treaty Organization.¹³⁸ The effect was two-fold for Kremlin

¹³⁸ "NATO Update: NATO Welcomes Seven New Members - 2 April 2004." *North Atlantic Treaty Organization*. NATO, 2 Apr. 2004. Web. 14 June 2017.

strategists; (1) it placed members of the NATO alliance adjacent to the Russian Federation's border, for the first time since the alliance's establishment, (2) flanked Russian territory on both sides by members of a hostile alliance in the case of the Kaliningrad oblast (formerly known as *Koenigsberg*). From a politico-military standpoint the implications were clear, that NATO expansion had now encroached on the doorstep of the Russian Federation and NATO members were within medium-range striking distance of the former capital of the Russian Empire (St. Petersburg, coincidentally President Putin's hometown). The military and strategic ramifications are more worrisome in the Kremlin's eyes and their policy towards the Baltics has reflected that.

The Russian Federation has long taken up the mantle of the patrimonial protector of the ethnic Russians outside of the formal borders of its territory. Many Russians see the collapse of the Soviet Union as the great tragedy of history within their lifetimes and view ethnic Russian diasporas as a consequential fact of the creation of new States.

Estonia

Estonia was long an imperial land of the Russian Empire, while its history is convoluted and complicated with competing narratives, linguistic and social differences, their national awakening was a relatively new thing. After the First World War it became one of the new states formed from the old Teutonic order lands.¹³⁹ However, following the end of the Second World War it was firmly behind the Iron Curtain. The Estonian Soviet Socialist Republic persisted to be one of the most problematic republics during the Soviet times. Routine vandalisms of statues and mobilizations of Estonians plagued the Soviet Politburo.

The modern Baltic country of Estonia, has remained a splinter in the Russian national security doctrine. From its incorporation into the Russian Empire following the Northern War between Sweden and Russia in the early 18th century, the Estonian national problem has long plagued the decision-makers of the Kremlin (be they Soviet or Russian). Their national awakening may have been spawned under the classical nationalist movements of the 19th century. But the Tsarist policies of Russification in the late 19th century (primarily under Tsar

¹³⁹ Aruja, Endel, and Kazimierz Maciej Smogorzewski. "Estonia." *Encyclopædia Britannica*. Encyclopædia Britannica, Inc., 10 Feb. 2017. Web. 14 June 2017.

Alexander III) further entrenched the Estonian national movement, and the coming of the First World War at the start of the 20th century created a ripe environment for the Estonians to chart their own path.

The Treaty of Brest-Litovsk (1918) may have temporarily silenced the Kremlin's claim on the Estonian territory, but following the peace the Imperial German forces returned home paving the way for the return of the Soviets. Consequential to the Bolshevik revolution in the Russian heartland and the White counter-revolution that ensued, the Baltics were on the mind of the architects of the peace. This sparked the Estonian War of Independence. Many different belligerents saw action in this short conflict including; The White Guard (counter-revolutionary forces loyal to the Tsar), The Baltic Landwehr (Livonian and Baltic nobility, primarily German speakers), and of course the Bolsheviks themselves.¹⁴⁰ These 14 months were extremely influential in the national memory of the Baltics. The Estonians were able to achieve marginal independence in 1918, which would last until the Second World War.

Throughout the young life of the Estonian nation during the post-Soviet era, the treatment of the ethnic Russians has remained a policy-consideration for the Kremlin. This is not unique to Estonia, but a consideration that proliferates throughout the Baltic States. While there have been nationalist led, anti-Russian policies enacted in the Baltics a sizable minority of ethnic and linguistic "Russians" have remained in these states. According to the CIA World Factbook, Estonia's population is around a quarter ethnic Russian (24.8%) with a bit more linguistically Russian (29%).¹⁴¹ These issues are further exacerbated by the post-1991 citizenship laws, which demanded people pass Estonian language tests to obtain Estonian citizenship, if they had not been Estonian citizens prior to the "Soviet occupation". This left a sizeable portion of Russian "non-citizens" in the country. Much to the consternation of Russia, the treatment of ethnic Russians remains a complex issue.

The ethnic Russians in Estonia are also not without political representation in the *Riigikogu* (the Estonian Parliament) and more provincial administrative offices. By far the majority of the ethnic Russians politically support the *Kesakerakond* (Estonian Centre Party)

¹⁴⁰ Brueggeman, Karsten. "'Foreign Rule' during the Estonian War of Independence 1918-1920: The Bolshevik Experiment of the 'Estonian Worker's Commune'." *Journal of Baltic Studies* 37.2, Special Issue: Foreign Rule and Collaboration in the Baltic Countries, 1860-1920: New Directions in Research (2006): 210-26. JSTOR. Web.

¹⁴¹ "The World Factbook: ESTONIA." *Central Intelligence Agency*. Central Intelligence Agency, 07 June 2017. Web. 14 June 2017.

which holds 21 of the 101 seats in the *Riigikogu*, and the Mayor's Office of Tallinn. Another party (a direct descendant of the Estonian Communist Party) has also courted the Russian minority the *Eestimaa Ühendatud Vasakpartei* (Estonian United Left Party), and other pro-Russian political movements remain active in the country such as Night Watch and the Constitution party.

The connective tissue of Estonia and Russia may be clear from this thesis, but thus far Russian activities inside Estonia are not. According to the *Kaitsepolitsei* (KaPo, Estonia's Internal Security Service) elements of the Russian Federation's security apparatus remain dedicated to influencing Estonia's domestic policy.¹⁴² KaPo has claimed that the Constitution party mentioned above is merely a puppet party created by the SVR and FSB. According to KaPo,

"The role of the Federal Security Service of the Russian Federation (FSB) has significantly increased in expanding intelligence activities for Estonia: attempted recruitment, influence activities, observation of domestic and foreign policy, observation of regional cross-border cooperation, influencing of economic cooperation."¹⁴³

The "symbiosis of military and non-military means"¹⁴⁴ is Russia's primary mode of achieving strategic goals, and Estonians are on the frontlines of this strategy of *hybrid warfare*. Estonians have remained vigilant in countering Russian operations and according to KaPo's 2016 Annual Review they arrested two "smugglers" who were caught working for the FSB (supplying them with information on the Estonian Border Guards)¹⁴⁵, but unfortunately this is not the extent of Russian operations or influence in Estonia.

One of the most internationally notable cases was that of the Bronze Soldier of Tallinn, when the statue was moved out of the center of Tallinn it enflamed the ethnic Russian minority, and also sparked a wave of cyber attacks on Estonian government servers (see political manipulation through cyber).

¹⁴² "Influence Activities." *Kaitsepolitseiamet*. KaPo, n.d. Web. 14 June 2017.
<<https://www.kapo.ee/en/content/influence-activities.html>>.

¹⁴³ "Areas of Intelligence." *Kaitsepolitseiamet*. KaPo, n.d. Web. 14 June 2017.
<<https://www.kapo.ee/en/content/areas-intelligence.html>>.

¹⁴⁴ "Estonian Internal Security Service Annual Review 2016." *Kapo.ee*. KaPo, 2016. Web. 15 June 2017.
<<https://www.kapo.ee/sites/default/files/public/.../Annual%20Review%202013.pdf>>.

¹⁴⁵ "Estonian Internal Security Service Annual Review 2016." *Kapo.ee*. KaPo, 2016. Web. 15 June 2017.
<<https://www.kapo.ee/sites/default/files/public/.../Annual%20Review%202013.pdf>>.

Estonia, just as the other two Baltic states must remain vigilant to counter Russian influence operations and actual incursions. One high profile case in 2014, led to the abduction of a KaPo officer, Eston Kohver by Russian security services, from Estonian territory.¹⁴⁶ The Western press held to the line of KaPo that Kohver had been abducted from within Estonian territory, but of course the Russians refuted this allegation and countered that Kohver had been arrested inside Russian territory.¹⁴⁷ KaPo asserts that he was awaiting contact from an informant on the Estonian side of the border, when he was lured into an FSB trap.¹⁴⁸ KaPo director Arnold Sinisalu had also stated very publicly that his officers are under strict instruction never to cross the border. Whatever the facts of the abduction may be, the situation remained a problematic one for the Estonian government while one of their internal security agents sat in a Lefortovo cell, painfully reminiscent of Soviet occupation, when this particular Moscow prison was used for political prisoners.¹⁴⁹ Therefore, in September of 2015 the Estonians struck a deal with the Russians to swap Kohver for Alexei Dressen¹⁵⁰, a seasoned KaPo employee who had been caught at the Tallinn airport in 2012 attempting to smuggle information out of Estonia into the hands of Russian intelligence.¹⁵¹ The spy swap on a bridge between the Russian Pskov region and Estonia, was eerily reminiscent of the Cold War.

While the Estonian case does not end here these examples should illustrate the *hybrid* threat that Russia poses to Estonian sovereignty and security. With a sizeable Russian minority, they are ripe for infiltration and coercion. If properly mobilized Tallinn could become the victim of similar pro-Russian protests to those seen in Ukraine in early 2014. Nor does the threat end there, the political system (if KaPo is to be believed) has already been

¹⁴⁶ Salming, Per Olaf. "New Russian Charge Against Kidnapped Estonian Policeman." *UpNorth*. UpNorth.eu, 24 Apr. 2015. Web. 14 June 2017.

¹⁴⁷ "Russia Says Detained Estonian Police Officer Is a Spy." *The Guardian*. Trans. Agence France-Presse in Moscow. Guardian News and Media, 07 Sept. 2014. Web. 14 June 2017.

¹⁴⁸ Borger, Julian. "Estonia Says Official Seized by Russia Was Lured into FSB Trap." *The Guardian*. Guardian News and Media, 08 Sept. 2014. Web. 14 June 2017.

¹⁴⁹ "Kohver Is Still in Lefortovo Prison." *The Baltic Course - Балтийский курс & Analytics*. The Baltic Course, n.d. Web. 14 June 2017.

¹⁵⁰ Kase, Karin, Kati Paike, and Viola Maemurd. "Security Policy 2008–2015." *Issuu*. Ed. Maris Sander. Republic of Estonia Ministry of Interior, 15 Apr. 2015. Web. 14 June 2017.

¹⁵¹ "FSB Spy Scandal Shakes Estonia." *Themoscowtimes.com*. The Moscow Times, 23 Feb. 2012. Web. 14 June 2017.

infiltrated by Russian intelligence and if Russian tools (both military and non-military) were directed at Estonia, not only would the Estonians themselves be under threat but so would NATO and the EU. Russian assets are already in the country, and Estonia has already dealt with cyber attacks stemming from domestic policy decisions, and future hostilities breaking out is not beyond the realm of possibilities.

These complications coalesce to keep Estonians up at night, and the actions Russians have taken in Crimea, have offered a modern playbook to GRU and Lubyanka officials looking to reestablish more lands to the Kremlin's fealty. As for NATO strategists and war gamers, Estonia's position is further complicated due to geography, bordering Pskov where the 76th Guards Air Assault is garrisoned.¹⁵² A division which was heavily used in not only the annexation of Crimea, but also the War in Donbass and awarded the Order of Suvorov for their actions by President Putin himself in August of 2014.¹⁵³ This is one of the highest awards a division can receive, and the reason behind this was for "their successful completion of military missions...courage and heroism" in "local conflicts"¹⁵⁴, a very interesting achievement for a country not officially engaged in any local conflicts.

Estonia will remain a strategic vulnerability for both NATO and the EU, and due to a lack of meaningful responses from either to confront the Russians after Crimea and Donbass, Russian military strategists have only become more emboldened.

Latvia

Latvia, has a similar demographic makeup to Estonia. According to the CIA World Factbook; the Russian ethnic minority makes up about a quarter (26.2 %) and linguistically a little over a third of the population (33.8%).¹⁵⁵

¹⁵² Van Ierkeren, Frederick. "The 76th Guards Air Assault Division." *Baltic Defense*. Blogspot, 1 Nov. 2016. Web. 14 June 2017. <<http://balticdefense.blogspot.co.at/2016/11/the-76th-guards-air-assault-division.html>>.

¹⁵³ Sanderson, Bill. "Leaked Transcripts Reveal Putin's Secret Ukraine Attack." *New York Post*. New York Post, 21 Sept. 2014. Web. 14 June 2017. <<http://nypost.com/2014/09/21/leaked-transcripts-reveal-putins-secret-attack-in-ukraine/>>.

¹⁵⁴ Newby, Anna. "Georgetown Journal of International Affairs, Winter/Spring 2015." *Google Books*. Georgetown University Press, 11 Mar. 2015. Web. 14 June 2017.

¹⁵⁵ "The World Factbook: LATVIA." *Central Intelligence Agency*. Central Intelligence Agency, 07 June 2017. Web. 14 June 2017.

Another similarity in Latvia is political representation of that minority within their own domestic parliamentary assembly, the *Seima*. The flagship of the formal political representation of the Russian minority is the Harmony Party (*Saskana*). This party formed as a merger of three parties in 2010; the National Harmony Party, the New Centre Party, and the Social Democratic Party.¹⁵⁶ In addition to holding 24 of the 100 seats in the *Seima* (the most of any one political party in the *Seima*) they also hold municipal offices of note such as the Mayor of Riga's office, since 2009 by Nils Usakovs.¹⁵⁷ Another complicating factor concerning Harmony is their close connection to United Russia, Putin's own political machine.¹⁵⁸

The Mayor of Riga, Usakovs is quite an interesting character in his own right. As VoxEurop has claimed he "embodies the complex relationship between the Latvian majority and the strong Russian minority of the country."¹⁵⁹ Compared to other descriptions of him as an agent of Russian security services this is quite the mild characterization. Usakovs naturalized as a Latvian at the age of 23, due to Latvian citizenship laws, his story mirrors that of many Latvian Russians. He also makes regular trips to Moscow to meet Russian elite and was reported as meeting with a local Russian embassy official that was alleged to be a Russian intelligence officer, Alexander Hapilov.¹⁶⁰ Formally dealing with "cultural cooperation" Mr. Hapilov has also been accused of being expelled from Georgia for espionage, a report denied by the Russian Ambassador.¹⁶¹ Leonids Jakobsons, a journalist that

¹⁵⁶ Lansford, Tom. "Political Handbook of the World 2014." *Google Books*. CQ Press, 20th Mar. 2014. Web. 14 June 2017.

¹⁵⁷ R.M.H. "How to Deal with Harmony." *The Economist*. The Economist Newspaper Eastern Approaches, 06 Oct. 2014. Web. 14 June 2017.

¹⁵⁸ Schwirtz, Michael. "Gains of Pro-Russian Party in Latvia Show Worries on Economy and Graft." *The New York Times*. The New York Times, 18 Sept. 2011. Web. 14 June 2017.

¹⁵⁹ Rytas, Lietuvos. "Latvia: A Russian in Charge in Riga." *VoxEurop.eu*. VOXeurop, 18 Dec. 2013. Web. 14 June 2017.

¹⁶⁰ Ellis, Glenn. "The Baltic and the Bear." *Al Jazeera*. N.p., 29 July 2015. Web. 14 June 2017.

¹⁶¹ "Russia Denies Former Spy in Riga." *The Baltic Times in Cooperation with BNS*. N.p., 29 Sept. 2009. Web. 14 June 2017.

published emails supposedly between Usakovs and Hapilov, conveniently ended up shot in the face and the website portal which published the documents came under cyber threat.¹⁶²¹⁶³

Harmony, is not the only political representation for the Russian minority, but the one which consistently is represented in the *Seima*. Another pro-Russia party is that of the Latvian Russian Union, a left-wing political party. While they currently have no seats in the *Seima*, they do hold one in the European Parliament, a seat they have maintained since the 2004 European Parliamentary elections.¹⁶⁴ The Latvian Russian Union in addition to strongly opposing Latvia's NATO membership has signed a cooperation agreement with the Crimean Branch of United Russia in order to "strengthen the unity of *Russkiy Mir*."¹⁶⁵ Non-governmental Organizations also serve a valuable avenue for Russian subversion of Latvian society, particularly those representing the Russian minority.

Latvia has been one of the hardest hit by EU sanctions and Russian counter-sanctions. As the Latvian economy is in need of Russian tourism revenue, and due to the counter-sanctions the Latvian dairy industry and the economy as a whole has taken a huge hit. The traditional Hanseatic League city of Riga also serves as a major port terminal for Russian exports; from these dockyards the Russian economy is able to supply coal by rail from as far as Siberia to the rest of the world via maritime routes in the Baltic Sea. While not essential for the Russian economy some 28,000 Latvian workers are employed at the dockyards and the railway.¹⁶⁶ As EU sanctions backfire, Latvians will be the cannon-fodder that collects the first volley and Russian information warriors and provocateurs are prepared to exploit these realities.

¹⁶² Kolyako, Nina. "Journalist Jakobsons: Attackers Wish to Halt My Professional Work in Latvia." *The Baltic Course - Балтийский курс & Analytics*. The Baltic Course, 1 Apr. 2012. Web. 14 June 2017.

¹⁶³ LETA. "Investigative Journalist Shot and Injured in Riga." *Baltic News Network - News from Latvia, Lithuania, Estonia*. N.p., 30 Mar. 2012. Web. 14 June 2017.

¹⁶⁴ Williams, Carol J. "Latvia, with a Large Minority of Russians, Worries about Putin's Goals." *Los Angeles Times*. Los Angeles Times, 02 May 2015. Web. 14 June 2017.

¹⁶⁵ "Pro Russia Party Signs Major Deal with Crimea Group." *The Baltic Times*. N.p., 13 Aug. 2014. Web. 14 June 2017. <<http://www.baltictimes.com/news/articles/35355/#.VA97mRbgJHU>>.

¹⁶⁶ Macdonald, Alastair, and Aija Krutaine. "Leader of Latvia's Russian-speakers Fears Sanctions Backfiring." *Reuters*. Thomson Reuters, 09 Jan. 2015. Web. 14 June 2017. <<http://www.reuters.com/article/us-ukraine-crisis-latvia-riga-idUSKBN0KI16D20150109>>.

Lithuania

Lithuania, of course fits in with the other two Baltic states through her shared history with the Russian Federation. However Lithuania has the smallest Russian minorities of the three (both ethnically and linguistically), according to the CIA World Factbook the population of Lithuania is comprised of 5.8% ethnic Russians and linguistically about 8% of the population are Russian speakers.¹⁶⁷

Lithuania also maintains a land border with the Russian exclave of Kaliningrad, where one of the largest Russian bases outside of the mainland exists. This border, while not contentious does concern Lithuanian strategists. There is little that Lithuanian security forces would be able to do to stop a full scale military incursion of the Russian military. Nevertheless this strategic reality does not stop the Lithuanian armed forces from conducting drills which simulate an incursion by unmarked masked soldiers, similar to the “little green men” which contributed to the full destabilization of Ukraine preceding the Crimean annexation, nor does it stop the Lithuanian politicians from erecting a fence along the border with Kaliningrad.¹⁶⁸ In addition to a fear of Russian aggression into the Baltics, Lithuania also experiences a flood of illegal crossings which could also serve to destabilize the country.

What remains clear is that the Kremlin strategists still maintain an interest in the Baltic States and the population is ripe for Soviet style penetration, which is already well underway. If the Russians are able to highjack the public opinion and mobilize it in these three small countries, especially among the sizeable Russian minorities, the Brussels institutions could have quite the problem on their hands. Dulles writes, “Wherever possible Soviet tacticians will maneuver Communists or their sympathizers into key government positions and attempt to penetrate the target country’s military and security structure with the idea of eventually taking them over.”

¹⁶⁷ "The World Factbook: LITHUANIA." *Central Intelligence Agency*. Central Intelligence Agency, 07 June 2017. Web. 14 June 2017.

¹⁶⁸ "Lithuania to Build Fence along Border with Russia's Kaliningrad." *Reuters*. Thomson Reuters, 17 Jan. 2017. Web. 14 June 2017.

¹⁶⁹ While the Cold War language is dated, as can be seen from the Ukrainian case and the development of Russian assets in the Baltics, the strategy is not so obsolete.

Political Manipulation through Cyber; Georgia, Estonia, US elections 2016, APTs 28/29

When formal military strength and infiltration of civil-society are not enough, another tool at the disposal of the Russian Federation is the deployment of cyber weaponry and an array of SIGINT collection tools. These tools can all contribute to the achievement of Russia's objectives by *other means*. Three examples can offer the diverse nature in which cyber has been used by pro-Kremlin hacktivists in addition to Ukraine; the hacks in Georgia (targeting NATO websites and government websites), the Estonian hacks (following the Bronze soldier incident), and most recently the use of cyber in the 2016 Presidential elections, which have been traced by the U.S. intelligence community back to Russia. These three events contribute to a broader understanding of how Russia utilizes cyber tools to achieve its political objectives, *politics by other means*.

The primary actors conducting active Russian cyber operations are the Russian states employment of what are called Advanced Persistent Threat (APT) groups, specifically two numbered APT 28 and APT 29. Each is suspected as inextricably linked with a Russian intelligence service(s) the GRU and SVR/FSB respectively. APT 28, also known by other names that are catchier to Western press agencies such as FANCY BEAR, the Sofacy Group, STRONTIUM, etc. was believed to be responsible for the Ukrainian artillery malware discussed above, but is also suspected in a number of cyber events such as; the Bundestag attacks in 2014, TV5Monde attacks, the attacks on White House and NATO, the Bellingcat attacks, and of particular focus to this paper the DNC attacks in 2016. APT29 with the interesting monikers; COZYBEAR, COZYDUKE, the Dukes, and Office Monkeys also has a wide array of successful hacks on their CV such as; the Office Monkeys campaign in 2015 which targeted US government offices with the use of a monkey video, the Pentagon in 2015,

¹⁶⁹ Dulles, Allen W. "Craft of Intelligence: The Legendary American Spymaster on the Fundamentals of Intelligence Gathering For a Free World." *Craft of Intelligence*. Lyons Press an Imprint of Rowman and Littlefield, 1963. Web. 14 June 2017.

also believed to be involved in the DNC hacks, and most recently has targeted the Norwegian government.

The pervasive nature of APT 28 and 29's reach is frightening, and all signs point to their increasing rather than decreasing use as an element of foreign policy for the Russian government. To say that the Russian secret services are responsible for every high-profile attack over the last few years is a gross overstatement. However, it is clear that the Russian intelligence services have only been encouraged by their efforts and successes to aim higher and try new tactics.

For the cyber un-initiated it is also important to note that attribution is a source of extreme skepticism in the cyber security world. It is nearly impossible to attribute with definitive proof that a state is behind any event in cyber space. Cyber security firms and forensic analysts use a wide array of evidential information to assert with relative certainty that an attack originates from a specific actor or group of actors.

When considering the DNC hacks it is important to note the stages in which the attacks took place. Rather than a surveillance operation, this operation functioned much more as an information campaign that was strengthened by the collection of data deriving from cyber. While the nature of the DNC hack remains murky, some analysts believe the Russian government to have used an intermediary in the operation, Guccifer 2.0 who then delivered stolen information to Wikileaks. While the Russian narrative that Guccifer 2.0 was a concerned Romanian whose distaste for Hillary Clinton motivated him to target the DNC employees and servers, this is a story fabricated for the cyber illiterate in the West. This is the goal of Russian information warfare and *maskirovka*, to sow confusion and skepticism among the West. But all signs point to Wikileaks being no more than a "landromat for Russian intelligence."

Nevertheless, the facts of the case remain, that someone penetrated a DNC server and stole a trove of emails and data.¹⁷⁰ This person or persons then supplied the information to Wikileaks, which strategically leaked emails, in conjunction with the U.S. Presidential Election timeline. Three U.S. agencies the FBI (primary agency tasked with counter-

¹⁷⁰ Lubban, Alex. "Trump Adviser Roger Stone Communicated with DNC Hacker "Guccifer 2.0" during the 2016 Campaign." *VICE News.com*. Vice News, 12 Mar. 2017. Web. 15 June 2017.

intelligence), the CIA (primary agency tasked with collection of intelligence), and the NSA (the primary agency tasked with SIGINT collection), in a declassified report stated that,

“we assess with high confidence that Russian President Vladimir Putin ordered an influence campaign in 2016 aimed at the US presidential election, the consistent goals of which were to...denigrate Secretary Clinton, and harm her electability and potential presidency. We further assess Putin and the Russian Government developed a clear preference for President-elect Trump...All three agencies agree with this judgment.”¹⁷¹

Rarely does it occur that these three agencies agree about anything, let alone an assessment of this magnitude. The report would go on to claim that the GRU and “Russian Intelligence” were the two hacking groups responsible for the initial breach and the dissemination of the content gained from that breach. This would fall in line with countless cyber experts assertion that the aforementioned APT groups were responsible for the hacks. James Clapper the head of DNI who speaks for all intelligence agencies further asserted with even greater certainty that the Russian intelligence agencies hacked the DNC with the intention of casting doubt on the efficacy of the American democratic system.¹⁷² The CIA has also identified that the Russian used third parties to supply the leaked emails to Wikileaks.¹⁷³ However all 17 U.S. intelligence agencies assessing the same conclusion is still not enough for many to believe Russia took action through cyber channels in the U.S. election. Even when Russian President Putin himself has conceded those maybes Russian hacktivists were involved acting out of some form of patriotic duty, when asked about his country’s role in the hacks he stated, “hackers are free spirits like artists...if they are feeling patriotic they will start contributing, as they believe, to the justified fight against those who speak ill of Russia.”¹⁷⁴ But yet this plausible deniability is bought by many in the West.

Jeffrey Carr, mentioned above as disputing Russian involvement in the D-30 howitzer attacks, also doubts the Russian culpability in these hacks, which considering they utilized similar sets of malware does not seem like a stretch for him. His doubts rather contribute to

¹⁷¹ *Assessing Russian Activities and Intentions in Recent US Elections*. Washington, D.C.: Office of the Director of National Intelligence, National Intelligence Council, 2017. CIA. NSA.FBI. Office of the Director of National Intelligence, 6 Jan. 2017. Web. 15 June 2017.

¹⁷² Zengerle, Patricia, and Dustin Volz. "U.S. Spy Chief 'resolute' on Russia Cyber Attack, Differs with Trump." *Reuters*. Thomson Reuters, 06 Jan. 2017. Web. 15 June 2017.

¹⁷³ "CIA Identifies Russians Who Gave DNC Emails to WikiLeaks." *Time*. Time Magazine, 05 Jan. 2017. Web. 15 June 2017.

¹⁷⁴ Barrett, Brian. "Don't Buy Into Putin's Latest Misdirection on Election Hacking." *Wired*. Conde Nast, 07 June 2017. Web. 15 June 2017.

the growing body of evidence that Russia did indeed hack the US elections. Russian disinformation campaigns have already begun to take root and cast doubt onto whether the hacks were indeed Russian sponsored or conducted. This also underlines the difficulty policy-makers face when attempting to respond to cyber, without foolproof evidence and no country claiming responsibility formally, responding can be a complex endeavor.

Cyber Irregulars

The DNC hacks were not the first usage of cyber means of influencing other countries' decision-making processes. As the development of technology continues and the internet of things becomes more extensive and pervasive, it offers all cyber warriors including those connected with state instruments new opportunities to create chaos, influence opinions, conduct espionage, and other nefarious activities. Two contemporary examples (which have been attributed to Russian backed hackers) can illustrate the ability of Russian cyber elements to project power covertly to their neighbors in the FSU. Russia knows that it is a cyber heavyweight, and it enjoys punching at that weight class to achieve its objectives.

The cyber irregular movement began gaining traction in the early 2000s when a group of adamantly pro-Kremlin supporters began gathering on online forums. Some forums began their cyber ambitions by focusing on pro-revolutionary Chechen websites. One such group, *Anticenter.org*, stated that "the main target of our community is the complete destruction of Web sites that propagate terror and violence, distort facts, and lie to their readers."¹⁷⁵ This trend continued through other avenues such as *the Siberian Web Brigade* and other individual hackers which at the very least were tacitly supported by the FSB. The FSB at the time praised the hackers' actions as an "expression of their position as citizens, one worthy of respect."¹⁷⁶ This tacit support some have argued has developed much further into APT groups which routinely conduct cyber warfare operations with operational support from the two primary conduits for Russian cyber operations the GRU and FSB. This is not the only instance of praise the Russian government gave to hackers, but yet another example of tacit encouragement from Russian state officials.

¹⁷⁵ Soldatov, Andrei, and Irina Borogan. "The New Nobility: The Restoration of Russia's Security State and The Enduring Legacy of the KGB." *Public Affairs*. Perseus Books Group, 2011. Web. 15 June 2017.

¹⁷⁶ Interfax. "FSB ne chitaet hackerov hackerami, February 2nd 2002; newsru.com. "FSB ne vidit narushenia zakona v deistviyah tomskih hackerov protiv saita Kavkaz-Tsentr", February 4th 2002

While non-state actors became some of the initial targets of Russian activists, a state targeted campaign began against Georgia preceding the war in 2008 and during the conflict. Almost all of these attacks were DDoS attacks (Directed-Denial of Service) which overload a website and incapacitate it.¹⁷⁷ The nature of DDoS attacks makes them nearly impossible to attribute, as the primary means of conducting a DDoS attack utilizes a botnet (a series of computers infected by malware whose computing power is subverted to a puppet master user) directed at a single target. The attacks began with the President's office, Georgian President Mikhail Saakashvili's website was targeted the first wave of DDoS attacks in Georgia precipitating the conflict, when on July 20th 2008 the website was overloaded by traffic and taken down for 24 hours.¹⁷⁸ The attacks took on the form of cyber vandalism and would peak in early August of 2008, replacing Georgian media content and government websites with pro-Russian information and anti-Georgian symbols.¹⁷⁹ One such defacement likened Saakashvili to Hitler, some analysts have asserted that these techniques combines cyber operations with psychological operations (PSYOPS), playing on cultural elements and planting the seeds of doubt and fear into the Georgian government and population. In addition to media sites, other government websites also came under attack such as the Georgian Parliament and the Ministry of Foreign Affairs websites. The floodgates had been opened, and this was further buttressed by one website called *StopGeorgia* which supplied anyone possessing an internet connection with malicious software and a list of targeted websites. As *the Economist* further reported anyone could become a cyber warrior by visiting one of the pro-Russian forums, downloading the software, and deploying it at a preferred vector.¹⁸⁰ According to a Greylogic report in March 2009, *StopGeorgia* and other forums for cyber activity were coordinated and organized by the FSB and GRU.¹⁸¹ Naturally foolproof

¹⁷⁷ Smith, David J. "Russian Cyber Strategy and the War Against Georgia." *Atlantic Council.org*. The Atlantic Council, 17 Jan. 2014. Web. 15 June 2017.

¹⁷⁸ Danchev, Dancho. "Georgia President's Web Site under DDoS Attack from Russian Hackers." *ZDNet*. ZDNet, 04 Dec. 2015. Web. 15 June 2017.

¹⁷⁹ Danchev, Dancho. "Coordinated Russia vs Georgia Cyber Attack in Progress." *ZDNet*. ZeroDayNet, 04 Dec. 2015. Web. 15 June 2017.

¹⁸⁰ "Marching off to Cyberwar." *The Economist*. The Economist Newspaper: Timekeeper, 06 Dec. 2008. Web. 15 June 2017.

¹⁸¹ Reveron, Derek S. *Cyberspace and National Security: Threats, Opportunities, and Power in a Virtual World*. Washington D.C., USA: Georgetown UP, 2012. Print. Political Science Ser.

attribution in cyberspace always remains problematic for analysts, but all signs point to Russian government involvement, if not tacit support.

The trend did not start with Georgia but with Estonia in 2007, when leaders of the Baltic nation began plans to remove the Bronze Soldier of Tallinn out of the center of the city and relocate it to a less prominent part of the city. In addition to stark criticism in the Russian media, the plan sparked a series of cyber attacks emanating from the territory of the Russian Federation. Hactivists and APT groups launched a series of DDoS attacks at the *Rigikogu*, the Estonian Presidency and the majority of the ministries. The attacks like Georgia did not confine themselves to the public sector of the Estonian society but also to civil society when banks and media outlets also became victims to the attacks. While sanctioning of the Russian government has never been proved without a doubt, it would explain the development of such a strategy as was implemented in the Georgian case, when deficiencies on the battlefield were strengthened by cyber aggression and psychological warfare.¹⁸²¹⁸³¹⁸⁴¹⁸⁵ Since the attacks linked to the Bronze soldier in 2007, the Estonians have tightened their cyber defensive capabilities, and remain one of the cyber contributors to the NATO alliance. Tallinn is now also home to the Alliance's Cooperative Cyber Defence Centre of Excellence.¹⁸⁶ Estonia at the time of the attacks was one of the most connected countries in the world, and disabling the internet services of public and civil society have a detrimental effect and create a permanent resonance on the national memory of society. As discussed above Estonia remains a strategic conventional vulnerability for the alliance and the covert forces of Russian power have continued to view the Baltics as a battle space for influence, both on the ground and in cyber space.

¹⁸² Davis, Joshua. "Hackers Take Down the Most Wired Country in Europe." *Wired*. Condé Nast, 21 Aug. 2007. Web. 15 June 2017.

¹⁸³ Kinstler, Linda. "How to Survive a Russian Hack." *The Atlantic*. Atlantic Media Company, 02 Feb. 2017. Web. 15 June 2017.

¹⁸⁴ O'Neill, Patrick Howell. "Web War I: The Cyberattack That Changed the World." *The Daily Dot*. The Daily Dot, 20 Mar. 2016. Web. 15 June 2017.

¹⁸⁵ McGuinness, Damien. "How a Cyber Attack Transformed Estonia." *BBC News*. BBC, 27 Apr. 2017. Web. 15 June 2017.

¹⁸⁶ "About Cyber Defence Centre." *NATO COOPERATIVE DEFENCE CENTER OF EXCELLENCE*. NATO CCDCOE, 02 Feb. 2017. Web. 15 June 2017. <<https://ccdcoe.org/about-us.html>>.

Information Warfare

In addition to the investment Russian intelligence has made in HUMINT in the FSU and SIGINT throughout the world, it is important not to forget that Russia has also made huge strides in their tactics of information warfare. This is perhaps one of the most important variables in Russian irregular warfare as it can shape the narratives of not only those in Russia, but also in the West and around the world. Projecting Russian power through narratives and freely available information.

A Chatham House report entitled, “Russia’s ‘New’ Tools for Confronting the West,” has outlined the development of Russian information warfare. They assert that there were three distinct experiences which formed the development of the modern Russian information warfare, which will be discussed below. Among others, the report also asserted that these ‘new’ efforts merely are advanced versions of Soviet subversion campaigns that proliferated during the Cold War. The Chatham House report summarized the following three main areas which Russian information warfare is directed at; “(1) internally and externally focused media with a substantial online presence, of which RT is the best known example, (2) use of social media and online forums as a force multiplier to ensure Russian narratives achieve broad reach and penetration; and (3) language skills, in order to engage target audiences on a broad front in their own language.”¹⁸⁷ These language skills also highlight the reach the Russians are attempting to gain, with French, Spanish, Chinese, Arabic, etc. important assets for their information warfare cells.

These information campaigns have developed on a linear trajectory from Soviet era information campaigns. While Russian decision-makers noticed after the end of the Cold War that their global influence in real terms had diminished, without a global ideology fomenting every scrap of propaganda, their ability to wage information war had also diminished. Conversely that did not diminish the desire to conduct such operations, but new strategies and fora would have to be implemented. These techniques refinement can be analyzed through

¹⁸⁷ Giles, Keir. "Russia's 'New' Tools for Confronting the West: Continuity and Innovation in Moscow's Exercise of Power." *Chatham House, the Royal Institute of International Affairs*. The Chatham House Russia and Eurasia Programme, 2016. Web. 14 June 2017.

the Second Chechen War, the Georgian crisis, and the protests in Moscow in 2011-12. Each event offered something new to Lubyanka and Kremlin officials; beyond the lessons they learned they were also able to refine their own techniques. In Chechnya the first attempt at shaping the internal and international narrative revolved around coverage of the War. The Russian government held full autonomy in the allowance of press corps into the conflict zone, and the stories that came out. What they learned in Chechnya from their enemies, a more tech-savvy enemy, controlling the narrative would become much harder in the global age. The concern to create dedicated information troops subsided after the Second Chechen War, but would arise again in 2008 during the crisis with Georgia. During the crisis the Russians watched on as Georgian President Mikhail Saakashvili was able to address the West in their own languages, and the Russians began seeking an alternative. The new approach would include; linguists (of numerous languages not just Russian and English, to disseminate across international media platforms), hackers, journalists, specialists in psychological warfare, and strategic dialogue. Col. Gen. Leonid Ivashov stated to *RIA Novosti*, "We must stop offering excuses and force the West into the defensive by conducting operations to expose its lies."¹⁸⁸

While the creation of Russian information warfare divisions had already been under consideration the impetus that mobilized the leadership into action was start of the Arab Spring in late 2010 and its implications for Russia. As Russian security services and the leadership perceived it, social media was not only a tool that could mobilize society against the establishment, but also a grave national security threat the West could use to topple the leadership. If any other reason was needed by the leadership, the anti-Putin protests that erupted in Moscow in 2011 finalized that notion. These protests over the Parliamentary elections were blamed directly on Hillary Clinton (at the time U.S. Secretary of State), who had criticized the Parliamentary elections pursuant to a preliminary report by the OSCE which reported some irregularities. Putin himself stated that, "she set the tone for some actors in our country and gave them a signal...and with the support of the U.S. State Department began active work."¹⁸⁹ It also projected some of the first signs of Russian active measures on social media, which are commonplace in 2017, the use of twitter-bots, DDoS attacks, etc. all aimed

¹⁸⁸ Isachenkov, Vladimir. "Russia Announces New Branch of Military to Focus on Information Warfare amid Hacking Allegations." *The Independent*. Independent Digital News and Media, 22 Feb. 2017. Web. 15 June 2017.

¹⁸⁹ Herzenhorn, David M., and Ellen Barry. "Putin Contends Clinton Incited Unrest Over Vote." *The New York Times*. The New York Times, 08 Dec. 2011. Web. 15 June 2017.

at the suppression or disruption of social media as a tool for mobilizing Russians. This effort is part of broader Russian government effort to counter dissent from within, similar to the Yunarmiya. The Kremlin began employing actual humans, due to unreliability in the bot-software, to actively comment on a wide array of social media sites and spin the narrative in Russia's terms. Thus the "Kremlin's troll army" was born.

The work of the old 5th directorate of the KGB, is not the only goal of the Russian troll army. In addition to the suppression of mobilization and dissent, it is also an important tool for narrative control, and as the Chatham House has postulated social media and the Western media are enablers of the troll army, which makes their work that much more effective.¹⁹⁰ The troll army has targeted, critical newspapers like *Kommersant*, critical politicians like Alexei Navalny, of course foreign governments especially Western and FSU governments perceived as disloyal, and other targets.¹⁹¹

Of course information warfare is nothing new for the Kremlin, as they had experienced various successes throughout the Cold War, shaping narratives is a long held practice of any great state. The form that Russia is taking now is quite different

Latest Machination of Foreign Influence: Montenegro Attempted Coup

The newly created states of the former Yugoslavia, which once formed a Union of six federative republics, have remained areas of strategic interest for the Russian Federation. In a traditional area where the confluences of interests have determined the lines on the map, historically the Austrian Hapsburg Empire and the Ottoman Empire among others, Russia has also attempted to play its part. The Russian infatuation with the Balkans has its roots in not only Pan-Slavism but more important for contemporary discussions in the geo-strategic importance of the region. This importance has also not been lost on NATO, as the previous two decades have shown. Most recently on December 5th 2015, the Alliance invited the small

¹⁹⁰ Giles, Keir. "Russia's 'New' Tools for Confronting the West: Continuity and Innovation in Moscow's Exercise of Power." *Chatham House, the Royal Institute of International Affairs*. The Chatham House Russia and Eurasia Programme, 2016. Web. 14 June 2017.

¹⁹¹ Sindelar, Daisy. "The Kremlin's Troll Army." *The Atlantic*. Atlantic Media Company, 12 Aug. 2014. Web. 15 June 2017.

state of Montenegro to begin negotiations to join as a Member State.¹⁹² This drew firm opposition from the Kremlin, and assisted to ferment Russian fears of unfettered NATO eastward expansion.

It is important to keep in mind that Montenegro has not been an independent state for very long, only in 2006 did a referendum achieve independence from a union with Serbia.¹⁹³ This fragile democracy has seen joining the alliance not only as a chance to validate their national independence from Serbia and develop their own country, and also to join the Western consensus and further integration with the West. However, the Russian Federation has seen Montenegro's accession into the Alliance as another encroachment on its borders and another client falling out of their orbit. While publicly this has drawn criticism, the criticism turned into action in October of 2016. While protests against the government of Milo Dukanovic, had been ongoing since September of 2015, on the day of the general election October 16th 2016 the Montenegrin authorities arrested 20 Serbians in connection with what they began calling an attempted coup.¹⁹⁴

The details of the attempted coup are a bit muddled by conjecture about what actually happened, but according to Western intelligence sources and Montenegrin authorities, the plan included a seizing of the Parliament and capture or an assassination of Dukanovic.¹⁹⁵ The coup allegedly was planned by Russian intelligence officers residing in sanctum in Serbian territory. If successful the operation would have plunged the country into total chaos just months before joining NATO.¹⁹⁶ According to analysts and the informant which foiled the plot, it began with two Russian nationals and officers of the GRU (Eduardo Shirkov and

¹⁹² "Alliance Invites Montenegro to Start Accession Talks to Become Member of NATO." *NATO*. The North Atlantic Treaty Organization, 2 Dec. 2015. Web. 15 June 2017.

¹⁹³ "The World Factbook: MONTENEGRO." *Central Intelligence Agency*. Central Intelligence Agency, 30 May 2017. Web. 15 June 2017.

¹⁹⁴ "20 Serbs Arrested in Montenegro over Planning Armed Attacks on Election Day - Police." *RT International*. TV Novosti, 16 Oct. 2016. Web. 15 June 2017.

¹⁹⁵ Bellingcat Contributor. "Montenegro Coup Suspect Linked to Russian-backed." *Bellingcat*. Bellingcat, 01 June 2017. Web. 15 June 2017. <<https://www.bellingcat.com/news/uk-and-europe/2017/04/25/montenegro-coup-suspect-linked-russian-backed-ultranationalist-organisation/>>.

¹⁹⁶ Farmer, Ben. "Reconstruction: The Full Incredible Story behind Russia's Deadly Plot to Stop Montenegro Embracing the West." *The Telegraph*. Telegraph Media Group, 18 Feb. 2017. Web. 15 June 2017.

Vladimir Popov) arriving in Serbia months before Election Day.¹⁹⁷ Arriving with encrypted phones and a slush fund, they were able to recruit an anti-Western Serb and veteran of the Ukrainian Novorossiia militias, Alexander Sindjelic, to do their bidding.¹⁹⁸ Sindjelic hired another man to buy dozens of rifles and boxes of ammunition, Mirko Velimirovic who ultimately would turn informant and foil the plot. He was also tasked with renting a safe house in Pogdorica, and make contact with the former head of Serbia's elite Gendarmerie forces Bratislav Dikic.¹⁹⁹

Another alleged plotter was tasked with manpower, Nemanja Ristic, who recruited Serbs with which to carry out the coup.²⁰⁰ According to some reports Ristic is linked to the far-right nationalist group Zavetnici linked with the Russian state. Ristic also posted a photo on his Facebook account which showed him an arm's length away from Sergei Lavrov alongside other leading members of the Zavetnici group.²⁰¹ The linkage between Ristic and elements of the Russian state do not just stop there, according to various sources, Ristic had met with journalists from *News-Front* in September of 2016, a Russian propaganda machine that also has ties to separatists within Crimea and Eastern Ukraine. If that was not enough Ristic is reported as maintain close contact with the Russian military attaché in Belgrade, oftentimes a position held by a military intelligence officer working under official cover.²⁰²²⁰³ Some have asserted that this linkage shows some degree of evidence that a Russian

¹⁹⁷ "Montenegro: 'Nationalists from Russia' Organized Assassination Attempt Against Prime Minister Djukanovic." *Atlantic Council*. AP and RFE/RL, 21 Nov. 2016. Web. 15 June 2017.

¹⁹⁸ "Sindjelic Killed Ukrainian Soldiers along with Pro-Russian Rebels?" *CdM*. Izver: Pobeda, 04 Nov. 2016. Web. 15 June 2017. <<http://www.cdm.me/english/sindjelic-killed-ukrainian-soldiers-along-with-pro-russian-rebels/>>.

¹⁹⁹ Weiss, Michael. "It's Putin's World Now." *The Daily Beast*. The Daily Beast Company, 30 Jan. 2017. Web. 15 June 2017.

²⁰⁰ "Ristic, Nemanja : Wanted by the Judicial Authorities of Montenegro." - *INTERPOL.int*. General Secretariat of Interpol, 2017. Web. 15 June 2017.

²⁰¹ RFE/RL. "Suspect In Alleged Montenegrin Coup Plot Pictured With Lavrov In Belgrade." *RadioFreeEurope/RadioLiberty*. RadioFreeEurope/RadioLiberty, 15 Dec. 2016. Web. 15 June 2017.

²⁰² "Montenegro Coup Participant's Ties with Russian Military Attache in Serbia Revealed (фотор)." *LB.ua*. Gorshenin Institute, 7 Jan. 2017. Web. 15 June 2017.

²⁰³ Kirkpatrick, Lyman B. "Unrecognized Potential in the Military Attachés:DECLASSIFIED." *Central Intelligence Agency*. Central Intelligence Agency Studies Archive Index, 04 Aug. 2011. Web. 15 June 2017.

information campaign has begun in Serbia and the Former Yugoslavia which could help to foment instability and confusion reminiscent of Ukraine.

However, these plans were foiled and the attempted assassination of Dukanovic and taking over of the Parliament proved to be an unsuccessful operation. While Montenegro once could champion itself as one of the most steadfast allies of the Russian Federation, it is rapidly becoming one of the most integrated with the West. With the June accession of Montenegro to the ranks of NATO, the RF will have to face the entirety of the Adriatic Sea bordered by NATO states. On the 5th of July 2017, Montenegro joined the alliance, becoming NATO's 29th full-member, sending a very strong signal to those being intimidated or interfered with by Russian aggression.²⁰⁴

Targeted Killings and Poisonings: Liquidating Political Liabilities

You may succeed in silencing one man but the howl of protest from around the world will reverberate, Mr Putin, in your ears for the rest of your life. May God forgive you for what you have done, not only to me but to beloved Russia and its people!

-Alexander Litvinenko

While manipulation of other countries remains the bane of existence for most powerful intelligence agencies worldwide, what is perhaps the most unsettling about the covert actions of the Russian Federation is their ability and willingness to assassinate political dissidents. What must be stated is that most of these rumors are unsubstantiated by hard evidence, but the coincidence remains that being Russian and critical of the Kremlin leadership does not lead to a long life expectancy. Various examples exist of this trend a chronological approach to some of these high profile killings the most viable way to approach the analysis of this trend, to illustrate to the reader the daring and pervasive nature that the assassins of Kremlin critics have acquired up to this point.

2006 was a watershed year for the assassins, in that they were able to eliminate two very vocal leaders possessing anti-Kremlin voices. Two examples stand out as notable instances of intimidating the opposition forces in Russia that of former intelligence officer Alexander Litvinenko and journalist and activist Anna Politkovskaya. The former was

²⁰⁴ "Montenegro Joins NATO as 29th Ally." NATO. The North Atlantic Treaty Organization, 5 June 2017. Web. 15 June 2017. <http://www.nato.int/cps/en/natohq/news_144647.htm>.

assassinated by radiation poisoning while living in exile in London, and the latter was found dead in her apartment building in Moscow. These two cases not only illustrate the geographical pervasiveness of the assassins, but also the plethora of means at which those loyal to the Kremlin can utilize to silence political liabilities.

Firstly, a short introduction to Politkovskaya's reporting and biography will assist the reader in understanding the threat she posed to the leadership. She gained international notoriety during the Chechen War when much to the dislike of the Kremlin, she reported about the brutality of Russian forces in the war.²⁰⁵ As a journalist for *Novaya Gazeta* she was also highly critical of Ramzan Kadyrov the *de facto* ruler of Chechnya and Kremlin loyalist. This criticism did not stop with the Chechen ruler but extended to the President of Russia himself, *the Economist* reported that she used to say, "Mr. Putin's regime was utterly brutal and corrupt... He represented the worst demons of the Soviet past, revived in modern form."²⁰⁶ Politkovskaya had a scare with death prior to being shot in the elevator of her apartment building, in 2004 during one of the bloodiest events of terrorism in Russia, the Beslan School siege, where armed terrorists stormed a school and a hostage situation broke out.²⁰⁷ She flew to Beslan hoping to act as an inter-mediator between the hostage takers and the Russian government, but was poisoned and nearly died before her arrival there. As *Forbes* has claimed only the Russian FSB was in a position to execute this type of poisoning on her flight to Rostov.²⁰⁸ Her traumatic experience on the flight and the aftermath of a poisoning (from which the medical tests disappeared²⁰⁹) did not silence her but two bullets in her chest eventually would. Since her assassination in October of 2006, the Russian government has obviously taken no responsibility for her death and a four day stale condemnation from Putin illustrates the official line on their position towards the murder. As of June 2014, six men

²⁰⁵ Parfitt, Tom. "Putin Silent as Fiercest Critic Is Murdered." *The Guardian*. Guardian News and Media, 09 Oct. 2006. Web. 15 June 2017. <<https://www.theguardian.com/world/2006/oct/09/topstories3.russia>>.

²⁰⁶ "Anna Politkovskaya." *The Economist*. The Economist Newspaper, 14 Oct. 2006. Web. 15 June 2017. <<http://www.economist.com/node/8023316>>.

²⁰⁷ "Beslan School Siege Fast Facts." *CNN: Library*. Cable News Network, 15 Aug. 2016. Web. 15 June 2017. <<http://edition.cnn.com/2013/09/09/world/europe/beslan-school-siege-fast-facts/index.html>>.

²⁰⁸ Satter, David. "Remembering Beslan." *Forbes*. Forbes Magazine, 01 Oct. 2009. Web. 15 June 2017.

²⁰⁹ Soldatov, Andrei, and Irina Borogan. "The New Nobility: The Restoration of Russia's Security State and The Enduring Legacy of the KGB." *Public Affairs*. Perseus Books Group, 2011. Web. 15 June 2017.

have been convicted of the conspiracy to murder her, two of which received life sentences.²¹⁰ Suspects in the case included Chechen hit men, an FSB Lt. Colonel, a police officer, and others but it is hard to believe that a journalist of this level would be assassinated by an outsourced operation of the FSB without some degree of allowance from Director Patrushev or higher levels.

The death of Alexander Litvinenko was another case entirely, and should be analyzed as such. Litvinenko remained a vocal critic of the regime from the confines of exile, publishing books and claiming that the Moscow apartment bombings which precipitated the Second Chechen War were organized by his previous employer, the FSB.²¹¹ Living in London he was able to become one of the most vocal critics of the Russian regime and particularly Vladimir Putin and the cabal of committed intelligence officers he claimed had placed Putin in his seat of power over the Russian Federation. Much like the American defector Edward Snowden a former contractor for the U.S. intelligence community, during his asylum he resided under strict protection from the British security service MI6 (in Snowden's case that of the FSB), who according to some sources financed his residence in the United Kingdom by a monthly stipend. This in turn, led some Russian security service personnel to claim that he had been flipped by British security services prior to his defection who allowed him to plant discrediting information about the Russian security services in the media. Obviously this is not dissimilar to Edward Snowden's role for the Russian security services, criticizing the American intelligence agencies approaches towards signals collection from the confines of Russia with protection supplied by the FSB. However, Edward Snowden appears to have a long life ahead of him, while Alexander Litvinenko was not nearly as lucky. Litvinenko died on the 23rd of November 2006, after an excruciating few weeks of radiation poisoning.²¹² On November 1st he suddenly became sick and doctors discovered that he had

²¹⁰ "Who Ordered Politkovskaya's Murder?" *The New York Times*. The New York Times: The Editorial Board, 10 June 2014. Web. 15 June 2017.

²¹¹ Litvinenko, Alexander. *Blowing up Russia: The Secret Plot to Bring Back KGB Power: Acts of Terror, Abductions, and Contract Killings Organized by the Federal Security Service of the Russian Federation*. London: Gibson Square, 2013. Print.

²¹² Harding, Luke. "Alexander Litvinenko and the Most Radioactive Towel in History." *The Guardian*. Guardian News and Media, 06 Mar. 2016. Web. 15 June 2017.

been poisoned by radionucleotide polonium-210.²¹³ This particular radionucleotide was believed to be administered to Litvinenko via a former FSB agent turned businessman Andrei Lugovoi who had come into contact with a cup of tea that Litvinenko drank.²¹⁴ Polonium-210 is about as sure fire a kill can be, once ingested it begins to destroy cells from the inside and the victim is faced with incessant vomiting, nausea, headaches, loss of hair and blood cells and there is no way to stop death when the amount is as vast as was given to Litvinenko.²¹⁵ It is not just killing someone, but making them suffer every last minute until death is a welcome relief. Edward Snowden can take comfort that if he becomes the target of an American operation to assassinate him, the Americans are not usually known for utilizing radio nucleotides to silence dissident voices.

Boris Nemtsov, was one of the most recent high-profile killings of a Putin critic, and remains a source of controversy today. As a politician and former Deputy Prime Minister of Russia, Boris Nemtsov was one of the most relevant figures in Russia's transition from Soviet times into modern times. Gaining prominence in the aftermath of the Chernobyl disaster as a community organizer, he quickly rose to prominence in the Russian Federation, a trajectory rivalled only by perhaps Putin himself.²¹⁶ During the *Nord-Ost* hostage crisis, he was named as one of the figures the hostage takers would negotiate with directly.²¹⁷ This illustrates his level of celebrity and image as a reasonable progress-minded politician.

By 2008, Nemtsov had developed a firm opposition towards the leadership and began to publish various white papers critical of the regime much to the distaste of the leadership. Some of the titles included; *Putin and Gazprom*, *Sochi and the Olympics*, *Putin. Results*, and others which criticized the regime on various levels particularly corruption and poor

²¹³ Harding, Luke. "Alexander Litvinenko: The Man Who Solved His Own Murder | Luke Harding." *The Guardian*. Guardian News and Media, 19 Jan. 2016. Web. 15 June 2017.

²¹⁴ Miller, Christopher. "4 Things to Know about the Russian Assassin Who Allegedly Killed an Ex-spy in London." *Mashable*. Mashable, 21 Jan. 2016. Web. 15 June 2017.

²¹⁵ Gander, Kashmira. "Alexander Litvinenko: What Does Polonium-210 Do to the Body?" *The Independent*. Independent Digital News and Media, 21 Jan. 2016. Web. 15 June 2017.

²¹⁶ Mommen, Andre. "Boris Nemtsov, 1959-2015 The Rise and Fall of a Provincial Democrat." *Demokratizatsiya: The Journal of Post-Soviet Democratization*. Institute for European, Russian, and Eurasian Studies, The George Washington University, 24 Feb. 2016. Web. 15 June 2017.

²¹⁷ "Boris Nemtsov: From Reformist Wonder Boy to Disgruntled Opposition Leader." *RT International*. TV Novosti, 28 Feb. 2015. Web. 15 June 2017.

governance.²¹⁸ Before his murder he had begun working on a report to prove that the Russian military did maintain a presence in Eastern Ukraine reporting that over 200 Russian soldiers were deployed to Ukraine. The report has been posthumously published in May of 2015.²¹⁹

Nemtsov's assassination took place on the 27th of February 2015, on the *Bolshoy* Bridge in Moscow (which connects the seat of Russian power, the Kremlin, with the *Zamoskvorechye* District of Moscow), like *Politkovskaya* bullets were the preferred means of disposing of their victim. At night when the Russian politician was walking home with his girlfriend Anna Duritskaya (a 23 year-old Ukrainian model), Nemtsov's assassin fired 6 shots, 4 of which found their mark, while he was crossing the bridge. According to *Kommersant* all the close proximity cameras had been turned off at the time of the assassination for maintenance and the only footage captured of the assassination was from quite a distance obscured by a large truck parked in the camera's viewpoint.²²⁰ Nemtsov had intended to lead an anti-war protest (the Spring March) in Moscow the next day, which would have focused on the economic strains facing the Russian economy, due to the war in Ukraine.²²¹

Since the assassination the FSB has arrested men believed to have carried out the assassination. These men are of North Caucasian descent and have been connected to Ramzan Kadyrov the Head of the Chechen Republic.²²² While the facts of the murder still remain murky, the assassination illustrates the effect being critical of the Kremlin can have on one's life expectancy. As a source of the opposition movement the makeshift monument where Boris Nemtsov was murdered also remains a source of dissident activity in Russia, as it is routinely bedecked by flowers and pictures dedicated to the slain politician. These impromptu

²¹⁸

OneEurope. "Boris Nemtsov - The Shocking Murder of a Russian Opposition Activist." *Storify*. One Europe, 2015. Web. 15 June 2017. <<https://storify.com/OneEurope/boris-nemtsov-who-was-he>>.

²¹⁹ Balmforth, Tom. "Nemtsov's Report Finally To Be Published." *RadioFreeEurope/RadioLiberty*. RadioFreeEurope/RadioLiberty, 11 May 2015. Web. 15 June 2017.

²²⁰ "Человек на мосту (Person on Bridge)." *Kommersant«Коммерсантъ»*. Kommersant, 01 Mar. 2015. Web. 15 June 2017. <<http://www.kommersant.ru/doc/2678101>>.

²²¹ "Boris Nemtsov Murder: Tens of Thousands March in Moscow." *BBC News*. BBC, 01 Mar. 2015. Web. 15 June 2017. <<http://www.bbc.com/news/world-europe-31677506>>.

²²² "FSB-Kadyrov Power Struggle Eclipsing Nemtsov Murder Probe, Media Says." *The Moscow Times.com*. The Moscow Times, 11 Mar. 2015. Web. 15 June 2017. <<https://themoscowtimes.com/news/fsb-kadyrov-power-struggle-eclipsing-nemtsov-murder-probe-media-says-44636>>.

monuments are then removed, and routinely are re-established.²²³²²⁴²²⁵ It could become a staging point for protests which take on an anti-government tone, as has already been seen on the anniversary of the politician's assassination as recent as 2017.²²⁶

Another Russian defector and Putin critic that has ended up dead in recent memory was that of Denis Voronenkov a former Russian Duma member. As a member of the Communist Party, one of the accepted opposition parties in Russia, he had initially supported the annexation of Crimea, which after his defection claimed that support was due to political pressure.²²⁷ It must also be stated that the former lawmaker had been placed on international wanted lists by the Russian government who had accused him of "masterminding a large scale fraud."²²⁸ He and his wife, also a Duma member from the governing United Russia Party and opera singer, Maria Maksakova, had fled to Kiev in October of 2016 being granted Ukrainian citizenship later in December.²²⁹

Denis Voronenkov, was shot on the 24th of March 2017, alongside his bodyguard when a hooded assailant approached them on the Kievan streets and executed the former lawmaker and wounding the bodyguard, all of which was caught on CCTV footage. The attacker died later, and was identified as a Ukrainian citizen. But the attack left Voronenkov

²²³ Agencies, Staff And. "Boris Nemtsov: Moscow State Workers Demolish Memorial to Slain Russian Opposition Leader." *The Independent*. Independent Digital News and Media, 27 Feb. 2017. Web. 15 June 2017. <<http://www.independent.co.uk/news/world/europe/boris-nemtsov-memorial-demolish-russia-moscow-state-workers-opposition-leader-shot-dead-murder-red-a7601491.html>>.

²²⁴ Gessen, Masha. "The Battle for Flowers on Nemtsov Bridge." *The New Yorker*. The New Yorker Magazine Online, 16 Apr. 2015. Web. 15 June 2017.

²²⁵ Service, RFE/RL's Russian. "Makeshift Nemtsov Memorial On Bridge Near Kremlin Removed Again." *RadioFreeEurope/RadioLiberty*. RadioFreeEurope/RadioLiberty, 02 Mar. 2017. Web. 15 June 2017.

²²⁶ "Thousands of Russians March on Anniversary of Opposition Leader's Murder." *Www.efe.com*. Agencia EFE, 26 Feb. 2017. Web. 15 June 2017. <<http://www.efe.com/efe/english/agencia-efe/thousands-of-russians-march-on-anniversary-opposition-leader-s-murder/50000270-3190993>>.

²²⁷ Walker, Shaun. "Denis Voronenkov: Ex-Russian MP Who Fled to Ukraine Killed in Kiev." *The Guardian*. Guardian News and Media, 23 Mar. 2017. Web. 15 June 2017. <<https://www.theguardian.com/world/2017/mar/23/former-russian-mp-denis-voronenkov-shot-dead-in-kiev>>.

²²⁸ "CCTV Captures Cold-blooded Murder of Former Russian Lawmaker in Kiev (GRAPHIC VIDEO)." *RT International*. TV Novosti, 24 Mar. 2017. Web. 15 June 2017.

²²⁹ Polityuk, Pavel, and Alexei Kalmykov. "Ukraine Accuses Russia of 'state Terrorism' after Former MP Shot." *Reuters*. Thomson Reuters, 23 Mar. 2017. Web. 15 June 2017.

with two bullets in his head and dying on the streets of the Ukrainian capital. Ukrainian President Poroshenko quickly pointed the finger at Russia, and stated that it was, “an act of Russian state-funded terrorism” and the “signature style of the Russian special services.”²³⁰ Direct Russian state involvement in the murder has yet to come to light, but Voronenkov joins the long list of names that have remained critical of the Kremlin and eventually forfeited their lives. In addition to his criticism of the Kremlin policies in Ukraine he was also a material witness in the Viktor Yanukovych treason case, which could also point to domestic sources for his assassination.

Vladimir Kara-Murza, has become a survivalist since his targeting by those who wish to silence opposition to Vladimir Putin. Kara-Murza has become the subject of a poisoning attack not once but twice, May of 2015 and most recently January of 2017.²³¹ He is a coordinator of the Open Russia opposition group, a liberal-values promotion initiative supported by Putin’s critics such as exiled oligarch Mikhail Khodorkovsky. Their goals include; human-rights promotion, free and fair elections, promotions, and open media promotion.²³² Kara-Murza was initially poisoned and almost died due to the first poisoning; he fell into a coma and had very little chance of survival. However he survived and suffered another poisoning in February 2017 where doctors induced him into a coma and he has subsequently survived the initial poisoning. The second poisoning took place in Moscow, where Open Russia is based, therefore since his poisoning he has relocated to Washington D.C. where he remains a vocal critic of the regime.²³³ Kara-Murza has remained relentless in his reform efforts at home and abroad, alongside Boris Nemtsov in 2009 he was able to lobby the U.S. Congress to adopt the Magnitsky act which opposes targeted sanctions against officials who abuse human rights. It was named for Sergei Magnitsky, a whistleblower who

²³⁰ "Russian Ex-MP Voronenkov Shot Dead at Kiev Hotel." *BBC News: Europe*. BBC, 23 Mar. 2017. Web. 15 June 2017.

²³¹ Peck, Tom. "Vladimir Kara-Murza, a Twice-poisoned Russian Dissident, Says: 'If It Happens a Third Time, That'll Be It'." *The Independent*. Independent Digital News and Media, 18 Mar. 2017. Web. 15 June 2017.

²³² "Open Russia." *Khodorkovsky.com*. MBK IP Limited, 2017. Web. 15 June 2017.
<<https://www.khodorkovsky.com/programmes/open-russia/>>.

²³³ Nordlinger, Jay. "A Russian Patriot and His Country, Part I." *National Review*. The National Review, 10 Apr. 2017. Web. 15 June 2017.

was tortured to death in custody back in 2009.²³⁴²³⁵ Lobbying foreign governments and promoting civil-society in Russia, remains the work of Kara-Murza, but in a climate where Litvinenko, Politikovskaya, Nemtsov, Voronenkov, and others have fallen it remains to be seen if Kara-Murza will outlive his predecessors who criticized the regime, or join the growing cemetery of Kremlin critics.

Assessment of Russian Covert Power Projection

When noting the covert means of Russian power projection it is prudent to note that this has been a much diluted survey of their different modes of operations. Thus this is not a complete analysis of their various operations but a collection of some persisting trends. As a branch of Russian power projection, covert power has remained their most sophisticated and successful avenue for coercion. The operations in Ukraine highlight two things for Western observers; (1) where Russia can gain support among the local population, that support may also be mobilized against the country and (2) where formal diplomacy and pressure fails the Russian military and security services will be employed to conduct asymmetrical warfare directly or indirectly to achieve Russian objectives. This has recently become apparent in the use of cyber operations in the US Presidential Elections and the attempted coup in Montenegro.

While the covert arsenal of the Russian Federation has grown since the Soviet days, the goals have not developed in too extreme of a trajectory. The primary tool that Andropov did not have at his disposal was cyber-weaponry; however his astute student Vladimir Putin does and has utilized it effectively. Many of the same factors precipitating the conflict in Ukraine also exist in the Baltics and considering Pskov and Kaliningrad flank the three independent states; it will remain a strategic vulnerability in the side of NATO and the EU. If the pro-Russian segments of the population are mobilized, a full-scale invasion or destabilization campaign could be launched with little the slow moving bureaucracies in Brussels could do about it. The lack of a sense of urgency for the Brussels institutions would

²³⁴ Cardin, Benjamin. "S.284 - 114th Congress (2015-2016): Global Magnitsky Human Rights Accountability Act." *Congress.gov*. The United States Congressional Service, 18 May 2016. Web. 15 June 2017.

²³⁵ Zengerle, Patricia. "U.S. Congress Votes to Apply Magnitsky Human Rights Act Globally." *Reuters*. Thomson Reuters, 08 Dec. 2016. Web. 15 June 2017.

concern the likes of Dulles, and for a man who spent his entire life countering the Soviet threat, many of the Soviet tactics have been retooled and deployed from the latest re-branded Kremlin of the Russian Federation.

Information warfare disseminated by the Lubyanka continues to misinform Western audiences and creates a false narrative on an array of issues, planting doubt and misinformation among the populations of the West. The mouthpieces of the Kremlin obviously further Kremlin narratives, but when a successful disinformation campaign is launched the mouthpieces can quickly become the population of the foreign state. Furthermore when these narratives are challenged from within, the truth becomes tangential and obscured.

Due to the laggard economic power of the Russian Federation and its hesitation to engage in military conflicts outside of the FSU, the covert means of power projection are the most viable for the Russian Federation to extend its reach globally. Russia can smartly employ its security services to achieve its objectives, a strategy that has not only proven significant but the return on investment has paid miles in dividends. Their successful policy goals can and have been achieved by *other means*, and until the West comes to this realization they will struggle to defeat and counter these means.

Chapter III: Formal Means of Smart Power Projection

Introduction to 3rd Level

“to consolidate the Russian Federation’s position as a centre of influence in today’s world”

-Excerpt from Russia’s Foreign Policy Concept Goals (November 2016)²³⁶

The third level of analysis will apply Nye’s development of his conceptualizations of power and analyze Russian *soft power* and *hard power* which culminate into *smart power*. This analysis will focus on formal means of Russian power projection (e.g. the Russian economy, as well as *soft power* initiatives through religion, history, diplomacy and culture). While the Russian economy functions as a force of coercion and attraction; it does not neatly fit into the box of *hard* or *soft*, and according to Nye’s typology economics is an element of a country’s *hard power*. As the primary stimulus for the Russian economy, the oil and gas industries are inextricably linked to the government and function as an element of foreign policy. As Nye has asserted one cannot have an effective foreign policy by *soft power* alone, but must buttress their *soft power* by elements of their *hard power*.²³⁷ This third level of analysis will attempt to coordinate an understanding of Russian *smart power* capabilities, where the *hard power* elements of the military and economy, transect the foundations of Russian *soft power* through their historical role as a patrimonial protector country (as discussed above in regards to the Baltic States) and the development of that status.

The Russian economy is perhaps the weakest asset of the Russian Federation. In real terms the GDP (Gross Domestic Product) of Russia has remained in a state of stagnation and low growth.²³⁸ While their GDP purchasing power parity is ranked 7th globally (behind Germany and before Brazil on a list which includes the EU), conversely their GDP per capita ranks on par with Kazakhstan and French Polynesia.²³⁹²⁴⁰ Considering what may seem a

²³⁶ "Foreign Policy Concept of the Russian Federation (approved by President of the Russian Federation Vladimir Putin on November 30, 2016)." *Fundamental Documents*. The Ministry of Foreign Affairs of the Russian Federation, 30 Nov. 2016. Web. 15 June 2017.

²³⁷ Nye, Joseph S., Jr. "Get Smart." *Foreign Affairs*. Foreign Affairs Magazine--ONLINE, 02 July 2009. Web. 15 June 2017.

²³⁸ "Russia GDP per Capita PPP 1990-2017." *Tradingeconomics.com*. Trading Economics, 2017. Web. 15 June 2017. <<https://tradingeconomics.com/russia/gdp-per-capita-ppp>>.

²³⁹ "COUNTRY COMPARISON :: GDP - PER CAPITA (PPP)." *Central Intelligence Agency:Publications*. Central Intelligence Agency, 2017. Web. 15 June 2017.

lackluster performance, the size of the labor force in the Russian Federation also lists around 8th place on the same list.²⁴¹ The Russian economy also experienced a steady rate of growth in 1998-2008 at around 7%. Due to the recent detrimentally low oil prices the Russian Federation has seen devastating shocks to its economic power; some have even estimated that the recent oil prices have led to an up to 5% decrease in GDP.²⁴²

Client States Do Not Listen to Sanctions Especially for the Defense Sector

While Russia may seem as an economic minnow compared to their Leviathan-like power in military terms it is also important to note that the one of the largest industry within the Russian economy is the defense industry. Furthermore, this industry in coordination with the *Realpolitik*-style business operations of the Russian oil and natural gas sector (see below) make for quite the effective economic projection of power to the globe. A closer look at the structure of the Russian defense industry is prudent to understand the role this sector plays in Russian power projection, and its connection with the elite of Russian leadership. It is also prudent to note that Russian defense exports are primarily directed at *client states* or traditional allies and customers of Russian weapons.

Rosboronexport, is an Open-Joint Stock Company (OJSC) which is responsible as the sole exporter of Russian defense and dual use products, owned by the corporation *Rostec* who is responsible for high-tech development in Russia.²⁴³ While a variety of companies produce the MG (military goods) which are utilized by the Russian Armed Forces and its *client state*, only *Rosboronexport* is able to make international sales of these goods.²⁴⁴ Created by Presidential decree, *Rosboronexport* has become a giant in international arms sales and are a

²⁴⁰"The World Factbook: RUSSIA." *Central Intelligence Agency*. Central Intelligence Agency, 07 June 2017. Web. 15 June 2017.

²⁴¹ "COUNTRY COMPARISON :: LABOR FORCE." *Central Intelligence Agency:Publications*. Central Intelligence Agency, 2017. Web. 15 June 2017.

²⁴² Gregory, Paul Roderick. "The Russian Decline Is Accelerating: GDP Down 4.3% In 1q15." *Forbes*. Forbes Magazine, 29 May 2015. Web. 15 June 2017.

²⁴³ "Rosoboronexport." *Rostec :: About :: Rosoboronexport*. Rostec, 2017. Web. 15 June 2017. <<http://rostec.ru/en/about/direct-control-companies/659>>.

²⁴⁴ "Status." *Status Rosoboronexport*. Rosboronexport Russian Defence Export, 2017. Web. 15 June 2017. <<http://roe.ru/eng/rosoboronexport/status/>>.

valuable asset of the Russian government to project its economic-military power.²⁴⁵

According to their website's "Corporate Strategy" page, "*Rosoboronexport*'s activities are aimed at the consolidation of Russia's military and political foothold in various regions across the globe, preservation of the country's position among global exporters of MG."²⁴⁶ As an element of international influence, Russia ranks firmly in the top cadre of arms exporting countries around the globe. According to SIPRI (The Stockholm International Peace Research Institute) the Russian Federation accounted for 23% of the top arms exporters globally from 2012-2016.²⁴⁷ *Rosoboronexport* as the sole intermediary of state licensed exports accounted for nearly a quarter of global arms sales, during that time period.

While sanctions regimes have been established and directed at the Russian arms industry, and in particular *Rosoboronexport*, which will be discussed in more detail below, it is important to note that like other arms producers Russian defense exports are directed primarily at those states who fall within their orbit of influence or maintain at least some degree of loyalty to Russian interests. Therefore, while the sanctions may inhibit some western countries from acquiring Russian arms, they do not discourage states that have traditionally fallen outside the orbit of the West, rendering the sanctions less effective on global sales. Such *client states* as the Islamic Republic of Iran, the Syrian Arab Republic, Belarus, Vietnam, India, the People's Republic of China, and Algeria have continued to purchase Russian weaponry from *Rosoboronexport*.^{248 249} The "traditional markets" of Russian arms sales are little affected by the sanctions and the Russian economy remains happy to supply these markets with high-tech products from the catalogue of hardware they produce annually.

²⁴⁵ "Company Overview of Rosoboronexport State Corporation." *Bloomberg.com*. Bloomberg Latest Update, 15 June 2015. Web. 15 June 2017.

²⁴⁶ "Corporate Strategy." *Corporate Strategy Rosoboronexport*. Rosoboronexport Russian Defence Export, 2017. Web. 15 June 2017. <<http://roe.ru/eng/rosoboronexport/strategy/>>.

²⁴⁷ "International Arms Transfers." *SIPRI*. Stockholm International Peace Research Institute, 2017. Web. 15 June 2017. <<https://www.sipri.org/research/armament-and-disarmament/arms-transfers-and-military-spending/international-arms-transfers>>.

²⁴⁸ Panibratov, Andrei. "Russian Multinationals: From Regional Supremacy to Global Lead." *Rosoboronexport State Corporation*. Routledge, 19 June 2013. Web. 15 June 2017.

²⁴⁹ "Western Sanctions 'didn't Hurt Russian Arms Trade'." *RT International*. TV-Novosti, 13 Aug. 2014. Web. 15 June 2017. <<https://www.rt.com/news/180000-sanctions-russia-arms-export/>>.

While countless examples of these sales exist, just focusing on two can illustrate this trend in furthering Russian geo-political interests. In October of 2016, the Russian Ministry of Defense delivered S-300 missile defense systems to the Syrian Arab Republic.²⁵⁰ This delivery not only strengthened the capabilities of the Russian and Syrian operations in theater, but significantly reduced the flexibility of the Western coalition to conduct sorties on targets within the range of the S-300 further consolidating Assad's position.²⁵¹ Another example of that same sophisticated system being deployed was in the Islamic Republic of Iran in August of 2016. As Iranian state media and Reuters reported this particular system was deployed to provide aerial coverage around the Fordow uranium enrichment site, where pursuant to the JCPOA (Joint-Comprehensive Plan of Action) Iran was required to stop enriching uranium seven months prior.²⁵²

Diversification of Russian Economy

Due to the Russian economy's reliance on commodity exports, the Russian government did attempt to take proactive steps to diversify the Russian economy. While most of these steps were taken during the later years of the Medvedev administration, the foundation of the Russian economy of the future was laid, and like the many unfinished buildings in Moscow, they have remained in a state of stagnation.

One of the most audacious plans was a flirtation with the high-tech sector to construct what was then called a Russian "silicon valley". The *Skolkovo* Innovation Center was intended to become an area that promoted high-tech innovation and a hub outside Moscow for technological activity, when then President Dmitry Medvedev announced the plan's

²⁵⁰ "Moscow Delivers S-300 Missile System to Syria for Defense of Russian Naval Base." *RT International*. TV-Novosti, 4 Oct. 2016. Web. 15 June 2017. <<https://www.rt.com/news/361586-russia-s300-supplied-syria/>>.

²⁵¹ "'S-300, S-400 Air Defenses in Place': Russian MoD Warns US-led Coalition Not to Strike Syrian Army." *RT International*. TV-Novosti, 6 Oct. 2016. Web. 15 June 2017. <<https://www.rt.com/news/361800-russia-syria-usa-airstrikes/>>.

²⁵² Hefezi, Paresa. "Iran Deploys Russian-made S-300 Missiles at Its Fordow Nuclear Site: TV." *Reuters*. Ed. Toby Chopra. Thomson Reuters, 29 Aug. 2016. Web. 15 June 2017. <<http://www.reuters.com/article/us-iran-missiles-fordow-idUSKCN1140YD>>.

conception in 2009, and later in September of 2010 signed it into law.²⁵³ According to the *Skolkovo* Foundation (the managing non-profit for the project) the “project is split into five research clusters”, these “clusters” are: (1) Information Technologies, (2) Energy Efficient Technologies, (3) Nuclear Technologies, (4) Biomedical Technologies, and (5) Space Technologies and Telecommunications.²⁵⁴²⁵⁵

A further stimulus for the importation and creation of high-tech and digital innovation in conjunction with the *Skolkovo* project was the adaptation of the visa policy for foreign nationals seeking employment at *Skolkovo*. The foreign experts would be eligible for a negotiation and interview period of 30 days, and upon successful hiring status they would be eligible for a visa for up to 3 years.²⁵⁶ It became clear in 2010 that the Russian government was serious about this project, providing the majority of its fiscal support. They believed that *Skolkovo* would not merely be a hub for innovation but the driving force behind the diversification of the Russian Economy. Major firms in the tech business have also partnered up with this project, such names as; Boeing, Airbus, General Electric, Samsung, Ericsson, Siemens, Panasonic, and many more, highlighting the international interest in the endeavor.²⁵⁷

The campus also includes *Skoltech* (the Skolkovo Institute of Technology) in collaboration with the Massachusetts Institute of Technology.²⁵⁸ This offers the future generations of Russian innovators an educational and research platform to obtain a postgraduate degree or doctorate in the intended hub of Russian innovation.

²⁵³ "About Skolkovo Foundation." *Skolkovo Community*. Skolkovo Foundation, 2017. Web. 15 June 2017. <<http://sk.ru/foundation/about/>>.

²⁵⁴ "Clusters." *Skolkovo Community*. Skolkovo Foundation, 2017. Web. 15 June 2017. <<http://sk.ru/foundation/about/p/clusters.aspx>>.

²⁵⁵ "Специалистам "Сколково" определили визовый режим (Experts Defined Skolkovo Visa Regime)." *Kommersant«Коммерсантъ»*. «Коммерсантъ» Russian News Agency, 23 Aug. 2010. Web. 15 June 2017. <<https://www.kommersant.ru/doc/1492089>>.

²⁵⁶ Matthews, Owen. "Creating a 'Smart' City in Russia." *Newsweek*. Newsweek LLC, 21 May 2010. Web. 15 June 2017.

²⁵⁷ "SkPartnersList: Foundation Partners." *Skolkovo Community*. Skolkovo Foundation, 2017. Web. 15 June 2017. <<http://sk.ru/net/partners/p/skpartnerslist.aspx>>.

²⁵⁸ "MIT Skoltech Program." *MIT Skoltech Program*. Massachussets Institute of Technology, 2017. Web. 15 June 2017. <<https://skoltech.mit.edu/>>.

One of the richest men in Russia is also the Co-Chairman of the Skolkovo Foundation Council, and President of the Skolkovo Foundation, Victor Vekselberg.²⁵⁹ The other Co-Chairman is Craig Bennet the former CEO of the Intel Corporation.²⁶⁰ Vekselberg is not only close to the government of Russia but he also chaired the Board of Directors at the Renova (an asset management venture) and participated as a Board Member of the TNK-BP joint venture (which was a joint venture of Russian businessmen and British Petroleum, until it was sold to *Rosneft*).²⁶¹ According to *Forbes.ru*, Vekselberg ranks as the tenth richest man in Russia claiming an estimated worth of 12.4 billion dollars.²⁶²

With this ambitious endeavor the Russian leadership intended to make an investment in the future of its economy led by one of the most experienced high-tech industrialists in Russia, and the financial backing of the Russian government. However the initiative to invest in technology incubators similar to Palo Alto, California did not stop with *Skolkovo*, another incubator has been reconstructed on the grounds of the former Soviet attempt at an innovation center, *Akademgorodok* deep in Siberia.²⁶³

Akademgorodok, was established in 1957 during Khrushchev's reign when the Soviet government founded a branch of the Academy of Sciences in *Novosibirsk*. It was intended to be a nucleus of innovation and scientific breakthrough deep in Siberia. The Soviet government also incentivized scientists to relocate to *Akademgorodok* by preferential treatment of food rationing and luxurious standards of living in comparison to the rest of the Soviet Union. Furthermore, prior to the Brezhnev era, the community was allowed flexible societal expression in that they were able to attend exhibitions of banned Soviet artists, recite poetry that was not allowed for wider consumption in the Soviet Union, on the scientific level

²⁵⁹ "Skolkovo Foundation Board." *Skolkovo Community*. Skolkovo Foundation, 2017. Web. 15 June 2017. <<https://sk.ru/foundation/team/p/foundationboard.aspx>>.

²⁶⁰ "Person: Craig Barrett." *Skolkovo Community*. Skolkovo Foundation, 2017. Web. 15 June 2017. <<https://sk.ru/foundation/team/p/person.aspx?un=barrett>>.

²⁶¹ "Person: Victor Vekselberg." *Skolkovo Community*. Skolkovo Foundation, 2017. Web. 15 June 2017. <<https://sk.ru/foundation/team/p/person.aspx?un=vvf>>.

²⁶² "Виктор Вексельберг (Viktor Vekselberg)." *Forbes.ru*. ACMG The New Media, 2017. Web. 15 June 2017. <http://www.forbes.ru/profile/viktor-vekselberg?from_rating=342579>.

²⁶³ "Russia Is Building Its Own Silicon Valley in Siberia." *Bloomberg.com*. Bloomberg, 01 Dec. 2016. Web. 15 June 2017. <<https://www.bloomberg.com/news/articles/2016-12-01/russia-is-building-its-own-silicon-valley-in-siberia>>.

the restraints of anti “pseudo-sciences” such as genetics and cybernetics which were encouraged to flourish there. It had always been a hub that did not necessarily fit into the rest of the Russian homeland.

After the dissolution of the Soviet Union the primary enabler of funding was not only cut but some of the commitment to technical progress was eliminated, this has steadily been changing and *Akademgorodok* is once again becoming the “Silicon Forest” (*Silicon Taiga*) that the initial Soviet planners foresaw, albeit in a then command style economy. To illustrate this effectively the level of investment into this incubator can inform the reader of the speed and progress at which the investment is flowing into *Akademgorodok*. While in the 1990s the city saw investments from a IBM supplier Novosoft at around 10 million dollars, this number had exploded by 2006 to almost 150 million dollars, and some current estimates have that number closer to 1 billion dollars as of today.²⁶⁴²⁶⁵

Oil and Gas Diplomacy: Black Sea fleet SOFA

An analysis of the Russian economy would not be complete without some degree of understanding of how Oil and Gas function in the Russian grand geopolitical strategy. While a fully developed analysis of the Oil and Gas diplomacy of the Russian Federation deserves due attention, it is not the ambition of this paper to conduct such an analysis but rather by utilizing the case of Crimea, analyze one case study that can illustrate the normality of the elements of the Russian economy transitioning into a tool of foreign policy for geo-political reasons.

The Treaty of Friendship and Co-operation was struck between the government of Ukraine and of the Russian Federation in the early 1990s. In addition to the usual diplomatic malarkey that spoke of strategic partnership and friendly relations it also contained other provisions such as the protection of the ethnic and linguistic minorities in both their countries, and also spoke of the equal promotion of linguistic cleavages in their countries. This special attention remained in the mind of the architects of the treaty due to the linguistic and ethnic

²⁶⁴ "Akademgorodok, or 'Science City'." *THE 20th Century Russia: Posted by User: Kathaskew*. Word Press, 27 Oct. 2014. Web. 15 June 2017. <<https://blogs.lt.vt.edu/kathaskew/2014/10/27/akademgorodok-or-science-city/>>.

²⁶⁵ Wainwright, Oliver. "Step into Silicon Forest, Putin's Secret Weapon in the Global Tech Race." *The Guardian*. Guardian News and Media, 05 Jan. 2016. Web. 15 June 2017.

minorities in the two countries. In addition to other points of contention, perhaps none was more controversial than the Black Sea Fleet's basing rights. Sevastopol, where the fleet is based in Crimea, has both historical and strategic implications as Rear Admiral Grinko asserted in 1996:

The entire Black Sea has no more convenient, deep, closed and vast bays than the Sevastopol bays. Their advantages are obvious from all standpoints: geopolitical, geostrategic, operational, and tactical. In years of the Soviet Union's existence a dock frontage extending over 10km was built in Sevastopol; a developed system of basing, command and control, defense, operational and combat support and ship repair was created; and the organization of deployment of forces from the base had been worked out. As a main base, Sevastopol was framed by a system of defense and protection against strikes from the air, from under water, from sea and from land. A system for identification and for issue of target designation and a stable, reliable system of navigation, hydrometeorological and logistic support were developed. Because of this, Black Sea Fleet forces are capable of controlling all main axes of deployment and action of probable enemy forces, and above all, exists from the Bosphorus Strait and the western and central parts of the Black Sea, thereby providing protection for Russia's southern borders.²⁶⁶²⁶⁷

Establishing the Sevastopol's base strategic importance, underlines the impetus for the Russians to hold that key base for their maritime operations. Therefore in 1997 the *Agreement Between the Russian Federation and Ukraine on the Status and conditions of the Russian Federation Black Sea Fleet's Stay on Ukrainian Territory* was struck and signed.²⁶⁸ It stipulated that Russia would have the authority to base troops in Crimea and maintain the Black Sea Fleet, a massive strategic victory for the Russian Ministry of Foreign Affairs. The deal was due to expire in 2017, and following the Orange Revolution in 2004 the Russian government became concerned that an extension would not be possible with an adversarial pro-Western leadership in Ukraine. President Viktor Yuschenko vowed that the Russians would lose their base in Sevastopol, as he feared the growing fortress of Russian influence in Crimea which could threaten his own country's sovereignty.²⁶⁹ However due to dire economic

²⁶⁶ "Full Text of "The Russian-Ukrainian Friendship Treaty and the Search for Regional Stability in Eastern Europe"." *Archive.org*. Internet Archive, Dec. 1997. Web. 2014.
<https://archive.org/stream/russianukrainian00stew/russianukrainian00stew_djvu.txt>.

²⁶⁷ Alexander Grinko, "Ukraine/Russia: Russia's Rear Admiral Grinko Opposes Sevastopol Fleet Basing Division," "Foreign Broadcast Information Services (FBIS) Doc # FBIS-UMA-96-177-s, fibis.fedworld.gov, 14 Aug. 1996, 15 June 2017.

²⁶⁸ "The Agreement between Ukraine and Russia "Concerning Stay of the Black Sea Fleet of the Russian Federation in the Territory of Ukrai." *CIS -Legislation*. SoyuzPravoInform LLC, 21 Apr. 2010. Web. 15 June 2017. <<http://cis-legislation.com/document.fwx?rgn=31091>>.

²⁶⁹ Osborn, Andrew. "Russian Fleet at Heart of Ukraine Crisis Is Central to Putin." *Reuters*. Thomson Reuters, 07 Mar. 2014. Web. 15 June 2017.

recessions in Ukraine, the Presidential elections in 2010 offered the Russian government a chance to utilize its natural-gas exports to influence the polls in its favor.

Upon Viktor Yanukovich's ascension to the Presidency, it offered the pro-Russia candidate and President Medvedev the unique opportunity to come to a new agreement concerning the Black Sea Fleet. In an agreement made on the 21st of April 2010, less than two months after Yanukovich had taken office, one his first major international agreements struck a deal with the Russian government which in exchange for a major discount on Russian gas from 330\$ per 1000 cubic meters to 100\$, the Ukrainians would extend the Black Sea's basing rights till 2042 (a 25 year extension on the initial agreement).²⁷⁰ The lower gas prices had a dual function for the two countries, the lower price would help in stimulating the effects of the global economic crisis for Yanukovich, and utilizing the export policy of natural gas the Russians were able to achieve a major geo-strategic victory.²⁷¹ The price would further be lowered upon Yanukovich's decision to opt for closer cooperation with Russia, rather than sign the Association Agreement with the European Union sparking the pro-EU Maidan protests.²⁷²

This episode highlights the importance natural gas exports play in Russian foreign policy. Masterful *smart power* at its finest, used to the detriment of those reliable on Russian commodity exports. Since the annexation of Crimea, the Russian Federation has annulled the Black Sea Fleet SOFA as it is obsolete in their eyes as Crimea is Russian territory in their view. But the initial agreement, and leveraging the economic tools of Russian energy commodities, served the Russian's geo-political interests. This chapter in Russian export policy demonstrates the Kremlin's ability to employ *soft power* (diplomatic tools) and *hard power* (economic tools) to achieve their broader goals without the use of their vast military.

²⁷⁰ Harding, Luke. "Ukraine Extends Lease for Russia's Black Sea Fleet." *The Guardian*. Guardian News and Media, 21 Apr. 2010. Web. 15 June 2017.

²⁷¹ Yuhas, Alan, and Raya Jalabi. "Ukraine Crisis: Why Russia Sees Crimea as Its Naval Stronghold." *The Guardian*. Guardian News and Media, 07 Mar. 2014. Web. 15 June 2017.

²⁷² "Russia Again Hikes Gas Prices for Ukraine." *Fin24*. Inet BFA, 03 Apr. 2014. Web. 15 June 2017. <<http://www.fin24.com/Economy/Russia-again-hikes-gas-prices-for-Ukraine-20140403>>.

Sanctions policy with the West

Following the destabilizing actions of the Russian Federation in Ukraine, the international community installed sanctions directed at the Russian economy. These sanctions can be easily divided into two categories: (1) those concerned with the annexation of the Crimean peninsula, and (2) the destabilization of the Donbas region. In response to the sanctions directed at Russia, the Kremlin enacted their own set of counter-sanctions directed primarily at the European Union and the United States. While the Russians have suffered economically since the sanctions were installed, the primary conduit for Russian economic downward trend is their economy's reliance on commodities and the low commodity prices which have devastated the Russian economy.

The counter-sanctions from Russia, were aimed at EU agricultural products and quite effectively. The annexation of Crimea occurred in March of 2014 and a little more than 12 months later *Forbes* reported that European food exporters suffered a half a billion dollar loss in Russian sales.²⁷³ The sanctions aimed at the Russian Federation initially focused on individuals but later developed to their banking and energy sectors. The EU however remains heavily reliant on the importation of Russian energy sources, and therefore cannot sustain a wholesale ban on Russian natural resources which power parts of Europe indefinitely. This further underlines the reality that the sanctions from the EU are unviable and fail to curb Russian behavior. While the European Union's sanctions were symbolic and ineffective, Russian counter-sanctions were targeted and effective. If the intention of the sanctions was to curb Russia's behavior (*hard power*) they have failed and Russia continues to maintain its position in Ukraine. While the European Union may be one of the strongest economies in the world, the reality is that they border one of the strongest military powers in the world, whose behavior does not seem malleable when faced with weak EU economic *hard power*.

Pivot to Eurasia and the Chinese Relationship

²⁷³ Rapoza, Kenneth. "Here's What Putin's Counter-Sanctions Did To E.U. Exporters." *Forbes*. Forbes Magazine, 06 May 2015. Web. 15 June 2017.

As can be seen from the symbolism of the Russian Federation (which draws from imperialist times), if one is to analyze the Imperial Eagle of Russia which still adorns the Russian coat of arms one will see that the eagle is a double-headed eagle. The charge is traditionally associated with the concept of an empire, a tradition Russia has not yet abandoned. In the particular Russian case, another degree of symbolism can be surmised from closer inspection of the Emblem of the Russian Federation. In the left talon of the eagle one can see a scepter, symbolizing justice and authority facing westward towards Europe, while conversely an imperial orb signifying authority under Christ is gripped in the right talon of the eagle with its eastward facing head. To not delve too deep into the symbolism in the heraldry of the Russian Federation, it is important to note not only the linkage the modern Russia has recalled between church and state (which plays a heavy role in foreign policy, see below) but also that Russia's unique identity is not limited to Europe or Asia, but belongs in its own category, that of Eurasia.

The extent of this notion does not merely appear in the symbols of the Federation, but also in the political activities, economic ties, and foreign policy of the Russian Federation. Since the world has increasingly become more multi-polar with the development of globalization, the center has increasingly shifted away from the West and towards the East a sentiment echoed in Russia's foreign policy concept.²⁷⁴ While the Soviet Union experienced tense ties with the People's Republic of China during the late days of the Cold War, since the dissolution of the Soviet Union, the governments of Moscow and Beijing have flirted with strategic alliance in areas of mutual interest. The culmination of this flirtation was initially the Shanghai Five forum in 1996, which developed into the Shanghai Cooperation Organization created in 2001.²⁷⁵ It is a permanent intergovernmental organization which seeks to promote mutual trust among its original six members: the Republic of Kazakhstan, the People's Republic of China, the Kyrgyz Republic (Kyrgyzstan), the Russian Federation, the Republic of Tajikistan, and the Republic of Uzbekistan as well as five observer members; Afghanistan, Pakistan, India, Iran, Mongolia and Belarus, and five other dialogue partners. India and

²⁷⁴ "Foreign Policy Concept of the Russian Federation (approved by President of the Russian Federation Vladimir Putin on November 30, 2016)." *Fundamental Documents*. The Ministry of Foreign Affairs of the Russian Federation, 30 Nov. 2016. Web. 15 June 2017.

²⁷⁵ "上海合作组织 Шанхайская организация сотрудничестваThe Shanghai Cooperation Organisation." *About SCO / SCO*. Shanghai Cooperation Organization Secretariat, 2017. Web. 15 June 2017. <http://eng.sectsco.org/about_sco/>.

Pakistan are full-members of the organization as of the Astana Summit on June 8-9, 2017.²⁷⁶ ²⁷⁷It is clear that the organization which some doubted as having major international relevance in the coming years, has still followed a path of enlargement.

The origins of the organization lay in regional security and inter-regional cooperation, particularly in combating terrorism and settlement of border disputes that may have arisen among the newly created nations of the FSU. Nevertheless, their activities, much to the concern of the Western nations has taken on a much more militaristic tone, conducting joint exercises with Russian and Chinese forces conducting large-scale war games in 2005, 2007, 2009, and since 2012 joint naval operations and exercises.²⁷⁸ Chinese and Russian security doctrines experience clear convergences in certain areas and also clear divergences in others. In recent years, Chinese military strategy has increasingly utilized the practice of populating previously uninhabited places much to the dismay of the international community (e.g. the South China Sea dispute), while the Russian security doctrine has not shied away from engaging in hot conflicts within its orbit of influence (e.g. Chechnya, Kosovo, Georgia, Ukraine, Syria, etc.). Co-operation on the ad-hoc security level seems a well-suited prospect to both of them, and as Godement argues “the key driver of the rapprochement” being a growing mistrust of and oppositional bloc to the US.²⁷⁹ Highlighting Russia’s historical links with its orbiting states is yet another amalgamation of Russian *soft power*.

Before examining the economic ties between the two it is important to note that 60% of *Rosboronexport*’s and Russian international arm sales are headed to the Asia-Pacific region.

²⁷⁶ Korzun, Peter. "India, Pakistan to Become Full Fledged SCO Members." *Strategic-Culture.org Online Journal Strategic Culture Foundation*. Strategic Culture Foundation, 26 Apr. 2017. Web. 15 June 2017.

²⁷⁷ "Press Release on the Results of the Shanghai Cooperation Organisation Heads of State Council Meeting." 上海合作组织 Шанхайская организация сотрудничества *The Shanghai Cooperation Organisation*. Shanghai Cooperation Organization Secretariat, 09 June 2017. Web. 15 June 2017. <<http://eng.sectsc.org/news/20170609/289274.html>>.

²⁷⁸ Weitz, Richard. *Parsing Chinese-Russian Military Exercises*. Carlisle, PA: Strategic Studies Institute and U.S. Army War College, 2015. *Strategic Studies Institute*. Army War College, Apr. 2015. Web. 15 June 2017. <<http://ssi.armywarcollege.edu/pdffiles/PUB1266.pdf>>.

²⁷⁹ Duchâtel, Mathieu, and François Godement. "China and Russia: Gaming the West." *ECFR.EU European Council of Foreign Relations Press Office*. China Analysis, 02 Nov. 2016. Web. 15 June 2017. <http://www.ecfr.eu/publications/summary/china_and_russia_gaming_the_west7166>.

Maintaining clients in the Asian-Pacific region remains not just a business decision for *Rosboronexport* executives but also for Russia's geo-political strategists who can utilize client states to stifle the expansion of China's influence in the region. Chief among Russia's customers is Vietnam, who ranks as the second highest importer of Russian arms, only behind Venezuela.²⁸⁰

China and Russia have also spearheaded the economic cooperation and integration of Eurasia. In 2000, a regional organization aimed at economic integration was created the Eurasian Economic Community (EAEC) which lasted until 2014, which China was not a part of, but consisted of the newly formed states of the former Soviet Union.²⁸¹²⁸² While being purely an economic cooperation organization, the EAEC began to fall apart when discussions of a common market began and were announced in 2003.²⁸³ While looking to form a trading bloc that could strengthen Russia's international negotiating position and their inter-linkages with its former territories, the victory of Yushchenko to the Presidency following the Orange Revolution, led the Ukrainians to abandon the project altogether in favor of joining the European Community.²⁸⁴ ²⁸⁵ The EAEC project has led however to the creation of the Eurasian Customs Union (EACU), consisting of all the member states of the Eurasian Economic Union: Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia.²⁸⁶ While as of yet

²⁸⁰ Duchatel and Godement 2016

²⁸¹ "About EurAsEC." *ЕврАзЭС. Евразийское экономическое сообщество* (Eurasian Economic Community), 2011. Web. 15 June 2017. <<http://www.evrases.com/en/about/>>.

²⁸² "Agreement on Foundation of the Eurasian Economic Community." *Articles I-XX* (n.d.): n. pag. *Wits.worldbank.org*. The World Bank and the Eurasian Economic Community, 10 Oct. 2000. Web. 15 June 2017. <<http://wits.worldbank.org/GPTAD/PDF/archive/EAEC.pdf>>.

²⁸³ Turner, Barry. "Eurasian Economic Community (EurAsEC)." *The Statesman's Yearbook 2014*. Palgrave Macmillan UK, 2013. Web. 15 June 2017.

²⁸⁴ Haran, Olexiy, and Maria Zolkina. "Ukraine's Long Road to European Integration." *PONARS Eurasia Policy Memo 311* (2014): n. pag. *PONARS Eurasia*. Web.

²⁸⁵ Haran, Olexiy. "President Yanukovich's Growing Authoritarianism DOES UKRAINE STILL HAVE EUROPEAN PROSPECTS?" *PONARS Eurasia Policy Memo 265* (2011): n. pag. *PONARS EURASIA*. July 2013. Web. 15 June 2017.

²⁸⁶ ЕДИНЫЙ ТАМОЖЕННЫЙ ТАРИФ Евразийского экономического союза (Eurasian Common Tariff)." *Евразийская экономическая комиссия*. Eurasian Economic Commission, 16 July 2012. Web. 15 June 2017. <<http://www.eurasiancommission.org/ru/act/trade/catr/ett/Pages/default.aspx>>.

not a free-trade area, it does impose a common tariff on all goods entering the area and bans customs on goods travelling within the union.

President Xi's China has been left out of these Russian led arrangements but his massive project known as the Belt and Road initiative, aimed at promoting development and ties to China's historical trade routes does include the Russian Federation. Both countries also cooperate economically through the Asian Infrastructure Investment Bank (AIIB), considering that Russia is a junior partner holding around 6.3 % of the voting power and China holding 27.8% of the voting power.²⁸⁷ The AIIB functions as an international financial institution whose investment goals are specifically aimed at improving the infrastructure in the region, and the improvement of infrastructure is a pre-requisite for any further economic cooperation throughout the region.²⁸⁸ The bank is also expanding as countries courting Beijing's favor line up to join, but with Russian participation they will be well-positioned to also gain influence and improve some of Russia's infrastructural deficiencies, which can in turn improve market access, as European markets look less and less viable as an economic partner for the Russians.

What remains clear between the governments of Beijing and Moscow, is that they will seek to co-operate in areas of mutual interest (such as the SCO) and look to deepen the economic ties (through institutions such as the AIIB) among their respective partners to remove some of their economic reliance on the Western bloc, which has increasingly become adversarial to both on a variety of issues. It is also important to note that what the Eurasian Economic Union and the Belt and Road Initiative, attempt to do is expand each country's economic influence in the region. Competition for influence had already begun between the two countries during the Cold War, and through these economic mechanisms the two countries may return to a state of competing interests. But with two of the world's most powerful militaries sharing a 4,209.3 km bordering line that separates them, and considering the economic disparity between the two, the relationship continues to remain an important one

²⁸⁷ "Members and Prospective Members of the Bank." *Members of the Bank - AIIB*. Asian Infrastructure Investment Bank-- Jing ICP Bei, 2017. Web. 15 June 2017.
<<https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html>>.

²⁸⁸ Malle, Silvana. "Russia and China in the 21st Century. Moving towards Cooperative Behaviour." *Hanyang University. Journal of Eurasian Studies*, 03 Feb. 2017. Web. 15 June 2017.
<<http://www.sciencedirect.com/science/article/pii/S1879366517300052>>.

for both states to court with care. Furthermore, if the Russian search for its civilizational identity continues and it is increasingly isolated from the West, it will maintain its interests in Asia at the very least out of necessity and pragmatism.

Historical Protector: Orthodoxy as a Tool of Foreign Policy

Russia, can recall from its long standing history the role of patrimonial protector of like-minded nations or peoples. From the days of the Tsar this took the form of the protector of Orthodox and Slavic peoples. This led them into multiple wars and eventually towards the downfall of the Empire.

Following the collapse of the Tsarist structures in St. Petersburg and Moscow, a new patrimonial role was created by revolutionary minded leaders such as Lenin and Trotsky. At the start of the Russian revolution they believed that their revolution would export itself to the other capitalist countries around Europe and the world. When that idealistic pipe-dream failed the leaders of the Soviet Union focused on the consolidation of their newly formed socialist state and throughout the Cold War took on the role of exportation of that revolution to the other corners of the globe.²⁸⁹ This led them into conflict with the West not just in the lands of Europe, but also in Latin-America, Asia, the Caribbean, Africa, and the Middle East.²⁹⁰

Since the dissolution of the USSR, the new rulers of Moscow have experienced a degree of identity crisis in what their new role would be. While the new form of Russian patrimonial protector is in its adolescent days of taking shape, it should be noted that some characteristics are beginning to appear particularly in the FSU since the Putin/Medvedev years.²⁹¹ These include a deep-seated commitment to the Russian Orthodox Christian Church (ROC), the traditional Christian values the Russian government claims to uphold as well as the exportation of a counter-movement of ideas and belief structures, so-called 'Eurasianism'

²⁸⁹ Kennan, George F. *Russia and the West under Lenin and Stalin*. Boston: Little, Brown, 1960. Print.

²⁹⁰ Westad, Odd Arne. *The Global Cold War*. 2010 ed. Cambridge: Cambridge UP, 2005. Print.

²⁹¹ White, Stephen. *Understanding Russian Politics*. Cambridge: Cambridge UP, 2011. Print.

which is diametrically opposed to Europeanism.²⁹² While these two new phenomena are present in the speeches and symbolism of the Russian Federation, they also influence the legislative actions of the government and inform to a degree Russian external action.

Father Kirill the Patriarch of the Russian Orthodox Christian Church, has also taken on a new role that has not yet been seen by a Patriarch, that of a foreign policy advisor. The ROC's role in foreign policy offers a telling example of Russian attempts at *soft power* projection. Due to the dichotomy between the Kievan Orthodox Church and the Moscovite Orthodox Church, religion has become a valuable piece of *soft power* for the Russian government. This is not lost on the Russian government nor on the leader of the Kremlin's loyal brand of the Eastern Orthodox Church. In addition to his formal seat on the Russian Ministry of Foreign Affairs Council for Foreign Policy from 1994-1996, he currently (since 2003) co chairs a working group committed to the cooperation between the Russian Orthodox Church and the Russian Foreign Ministry.²⁹³ The ROC also is a primary organizer of events to commemorate the victory of the Great Patriotic War throughout the FSU, interestingly a monumental victory for the anti religion Soviet Union. The ROC remains an active instrument of *soft power* abroad through their Department of External Relations. The Department of External Relations engages in an array of activities in the near and far abroad which include; fundraising campaigns to assist war affected populations of Syria²⁹⁴, participation in the World Defense summit for persecuted Christians²⁹⁵ in Washington where ROC officials are

²⁹² Kranebitter, David C. *Russia's Challenge to World Order: The Role of Eurasianism in the Post-Soviet Russian Foreign Policy*. Vienna: U of Vienna and the Diplomatic Academy of Vienna, 2016. Print. Master Thesis.

²⁹³ "His Holiness the Patriarch Kirill of Moscow and All Russia." *The Russian Orthodox Church: Department of External Church Relations*. Moscow Patriarchate: The Russian Orthodox Church, 2017. Web. 15 June 2017. <https://mospat.ru/en/the_patriarch/>.

²⁹⁴ "Fundraising Campaign Begins to Help War-affected Population of Syria." *The Russian Orthodox Church: Department of External Church Relations*. DECR Publication Service, 18 May 2017. Web. 15 June 2017. <<https://mospat.ru/en/2017/05/18/news146009/>>.

²⁹⁵ "Presentation by the DECR Chairman Metropolitan Hilarion of Volokolamsk at the World Summit in Defense of Persecuted Christians." *The Russian Orthodox Church: Department of External Realitions*. DECR Publication Service, 12 May 2017. Web. 15 June 2017. <<https://mospat.ru/en/2017/05/12/news145803/>>.

able to interact with high profile officials like U.S. Vice President Mike Pence²⁹⁶, and other meetings with diplomats and officials from around the world. Clearly Father Kirill's patriarchate and the ROC's Department of External Relations have become quite a political source of theological *soft power* operating in areas the Kremlin cannot.

This role of the patriarchate has been further developing throughout the years of Putin's reign, and is reminiscent of the traditional connection that the ruling class of Imperial Russia maintained with the Church. While it may be an extremely valuable source for *soft power*, penetration and engagement abroad, the Orthodox Church's role in Ukraine is immeasurable but nevertheless crucially important for narrative development. It further underlines the differences of the governments of Kiev and Moscow and due to the fact that geographically the ROC is much more powerful in the East than in the West, it proves to be an effective source of recruitment and dissemination of Russian narratives to the People's Republics of Donetsk and Luhansk respectively.²⁹⁷

The role of the ROC in the near abroad also extends beyond conflict zones, one example of Russian power projection through the ROC, is its presence in the Serbian capital of Belgrade. Serbia is a primarily Orthodox Christian country, as the CIA World Fact book asserts 84.6% of the population identifies as Orthodox.²⁹⁸ For historical and religious reasons the former Yugoslavian state is ripe for Russia to invest in *soft power* initiatives. One such initiative is the reconstruction efforts directed at the Temple of Saint Sava in Belgrade, which ranks not only as one of the biggest Orthodox churches in the world, but also one of the largest churches globally.²⁹⁹ It is a mammoth of the Serbian metropolis and has been under renovation since 2000, and the Russian state, the ROC, and Russian donors (particularly

²⁹⁶ "Metropolitan Hilarion of Volokolamsk Meets with Vice President of the United States Michael R. Pence." *The Russian Orthodox Church: Department of External Relations*. DECR Publication Service, 11 May 2017. Web. 15 June 2017. <<https://mospat.ru/en/2017/05/11/news145766/>>.

²⁹⁷ Garrard, John Gordon, and Carol Garrard. *Russian Orthodoxy Resurgent: Faith and Power in the New Russia*. Princeton, NJ: Princeton UP, 2008. Print.

²⁹⁸ "The World Factbook: SERBIA." *Central Intelligence Agency*. Central Intelligence Agency: Publications, 31 May 2017. Web. 15 June 2017.

²⁹⁹ https Melton, J. Gordon., and Martin Baumann. *Religions of the World: A Comprehensive Encyclopedia of Beliefs and Practices*. Santa Barbara, CA: ABC-CLIO, 2010. Print.

Gazprom Neft) have been at the forefront of the reconstruction efforts.³⁰⁰ These formal efforts also included a signing of a cooperation agreement between the Ministers of Foreign Affairs of both the Republic of Serbia (Vuk Jeremic) and the Russian Federation (Sergei Lavrov) in March of 2012.³⁰¹ This deal was struck as a result of efforts between the Republic of Serbia and the ROC's Department of External Church Relations. While transnational ecumenical cooperation is nothing unique to the ROC, what remains clear is as an element of Russian *soft power*, its Department of External Relations is quite the effective tool in the Orthodox world for the Russian state to utilize. The mosaic contract fully demonstrates the mechanisms of Russian *soft power* working in coordinated efforts.

Assessment of Russian Power Projection through Formal Means

Russia is not a rich country by fiscal means, but through their possession of natural resources, historical relevance to the region, and potential as an actor in IR they are able to project themselves as a very strong nation.

Considering the sanctions, it is important to note that Europe in the short term will not be able to fulfill its energy needs from anywhere else besides Russia. Furthermore traditional markets of Russian exports, especially in arms sales (in extremely important piece of the Russian economy) disregard the sanctions and continue to conduct business with Russia. As long as Russian commodities remain an important piece of Russian economic power, the state will use this power to coerce others to its will and achieve its goals as can be seen in the Black Sea Fleet's relationship to Russian natural gas exports.

Branching away from Europe will remain important to the Russian economists and decision-makers as the West further isolates and alienates Russia, Russian firms will seek new partners and markets in which to conduct business. Chief among these partners are the Eurasian Economic Community members and the People's Republic of China who continue to disregard sanctions. Furthermore, the Russian and China detente has offered the two the opportunity to cooperate in mutual areas of interest. Both economic and regional security

³⁰⁰ "Обнова градње од 2000. до 2016.(Renovation Works 2000-2016)." *Hram Svetog Save*. Temple of Saint Sava : Serbian Orthodox Church, 2017. Web. 15 June 2017. <<http://hramsvetogsava.rs/obnova-gradnje-mart-2000/>>.

³⁰¹ "Обнова градње од 2000. до 2016.(Renovation Works 2000-2016)." 2017.

arrangements have began to take shape in the form of: the AIIB, the SCO, and the Belt and Road Initiative could serve to gain Russia more influence in the Far East and bring the two countries closer.

Finally, as Russia continues to see its role as a patrimonial protector of not only ethnic Russians in countries like the Baltics but also as the Third Rome of Orthodox Christianity throughout Europe it will continue to use its protector role to project *soft power* through the ROC. The ROC could serve the Russian Federation to mobilize citizens outside of Russia, as has been seen in Ukraine, or it could serve to conduct *soft power* initiatives outside of the Russian Federation, as has been demonstrated in Serbia. Where there is a segment of Orthodox Christians in a population, Russia will seek to gain influence over them and in any potential conflict seek to protect them, whether through the ROC itself or the formal elements of state *hard power*.

Russia certainly lacks in its economy, but this inefficient economy is certainly made up for in other regards. Russia plays their very weak position like a grandmaster, utilizing all elements of their smart power they are able to overcome any economic weakness they may have and perform as a regional hegemon. Unfortunately for the West their region extends from the Baltic Sea to the Pacific and the North Sea to the Black Sea.

Conclusion: Decision Makers Mindsets and Motivations

“At last, Russia has returned to the world arena as a strong state-a country that others heed and can stand up for itself.”

-Vladimir V. Putin

In conclusion, the sources of Russian conduct have developed throughout its history, by way of power projection efforts: the development of their hard power, the usage of covert tactics, and a confluence of economic and soft power has successfully projected a formidable status for the Russian Federation.

While this paper has only briefly covered three aspects of how the Russian Federation operates in the current age, these three modes of power projection highlight a willingness of the elites to project to the world that the Russian Federation, may have experienced a shock to their prestige at the dissolution of the Soviet Union, but will attempt retain the historical position of Russia in the international system. As any student of Russia knows a ‘*Kremlin*’ is a fortified structure inside of a larger city, and this irony is not lost on the ruling elite in Russia. They maintain: a siege mentality, skepticism of foreigners, and commitment to gaining respect for Russia among its international partners and adversaries. Many members of Russia’s ruling class were dedicated servants of the Soviet Union who in their minds believe that they must remain vigilant to counter Western influence; consolidation of power in the Kremlin was one way to accomplish this. When dealing on the international stage, they believe that Russia should not follow, but lead, where it has always traditionally led. When this notion is challenged, the leaders of the Russian Federation will backlash against the forces they perceive as against them, both internally or externally.

This mindset has led to Russian annexation of traditionally imperial lands in Ukraine and elsewhere, and where full annexation and occupation seems too costly, merely competing for dominant influence is enough. This mentality has spurred on a commitment to maintain a formidable military for the future, as well as a willingness to employ every tool of Russia in order to shape the international and especially regional system in their image. Russia will not dissipate into the history books any time soon, but will seek to play a more prominent role where it believes it should, and if the West does not learn from their mistakes and underestimation of Russia, they are doomed to suffer the same consequences by repeating the same mistakes.

With Russia possessing arguably the world's second or third strongest military, and it is redefining itself to maintain that status throughout the 21st century via a modernization program and a *cabal* of leaders committed to that cause Russia, it is crucial to note that the Russian Federation will be hard to confront militarily. The Russian military's primary weakness has always been in its lacking quality and an oversized force, but as Russia modernizes its technology and increases its reliance on a professionalized army it will overcome both these issues. The developments and aims from the SAP-2020 illustrate this willingness, and as has been shown, the Russian Armed Forces are making great strides, projecting to the West that Russian *hard power* remains a viable threat to Western interests.

With covert means, whether through: political manipulation in cyberspace, *hybrid warfare* in Ukraine, active measures utilizing information warfare, political assassinations, etc. Russia is able to achieve its policy goals by *other means*. The United States may have recently been threatened by Russian APT groups and active measures, however this is a daily threat for the three countries of the Baltics and throughout Russia's perceived sphere of influence such as: Montenegro, Georgia, Ukraine, Romania, etc. While the military is strong but rarely used, the economy is weak and inefficient, the Lubyanka is both efficient and regularly deployed, and covert means remains the most effective way for Russia to project to world a Great Power status it so deeply desires.

Where it must not resort to military measures nor has it sought to deploy the Lubyanka, Russia still maintains a heavy economic arsenal and *soft power* arsenal for which to achieve its objectives. Through Gazprom, Rosneft, etc. Russia will seek to dictate the geo-political terms to those who rely on their exports. Through arms exports, Russia can make many states reliable on their MGs and exert that influence when need be. If the Russian Federation is also able to spark innovation within its own country, which it is attempting to do through initiatives such as *Akademgorodok* and *Skolkovo* its reliance on the world commodity prices will stop determining the Russian economic condition. Russia has also sought to shift its attention away from its European side and seek methods of integration with its Central Asian and Far Eastern partners, a so-called pivot to Eurasia excluding its Western frontier from its economic horizons. Chief among these partners is China, whether it be mutually beneficial economic co-operation or regional security co-operation, Beijing and Moscow offer a formidable counter-bloc to the militarily impotent European powers (especially if the trans-Atlantic structures begin to crumble). 'Eurasianism' will also serve as a viable element of

Russian *soft power*, a primary part of this is the external work of the ROC, which gains Russia societal influence throughout the Orthodox world. Russian *smart power* which includes: economic, military, diplomatic, historical, and cultural tools, remains extremely effective and assists Russia in overcoming any weaknesses it may possess in the international system of powers.

How long Russia will be able to sustain its behavior remains unclear, but unlike the USA the Russian Federation is not looking to sustain status of global hegemony indefinitely. Russia is attempting to re-assert its perceived right to be one of the great powers in the international system, which they believe their geography and historic role alone would grant them, and as history has shown is the behavior of Great Powers in decline. This re-assertion is fully underway and up to this point has been quite successful. Therefore if a divided Europe and crumbling transatlantic alliance persists, little challenge will come from the West. On the Eastern front the People's Republic of China could attempt to challenge Russian interests, but with each recognizing the others importance, any potential conflict between the two seems unlikely. As Russia remains unchallenged they grow stronger and will continue to project their power, whatever little of it remains.

The new Russian empire is driven by the old one, because the Russian Federation's character and interests are more or less enduring. Putin can be removed from power, the government can be swapped out, and the Duma can change the laws, but Russia will still be Russia, Moscow will still be Moscow, the Kremlin will still be the Kremlin, and the Lubyanka will still be the Lubyanka. This reality comes along with the historical desire to come to the aid of oppressed 'ethnic and linguistic Russians' and Orthodox brothers alike, not to mention their international partners. While they may live in a very militarized state, with power concentrated in the corridors of Gazprom, the Lubyanka, and the Kremlin, what is important is the way Russians see themselves, as citizens of a Great power. Perception is everything, and the Russian perception colors every decision they have made under Vladimir Vladimirovich Putin.

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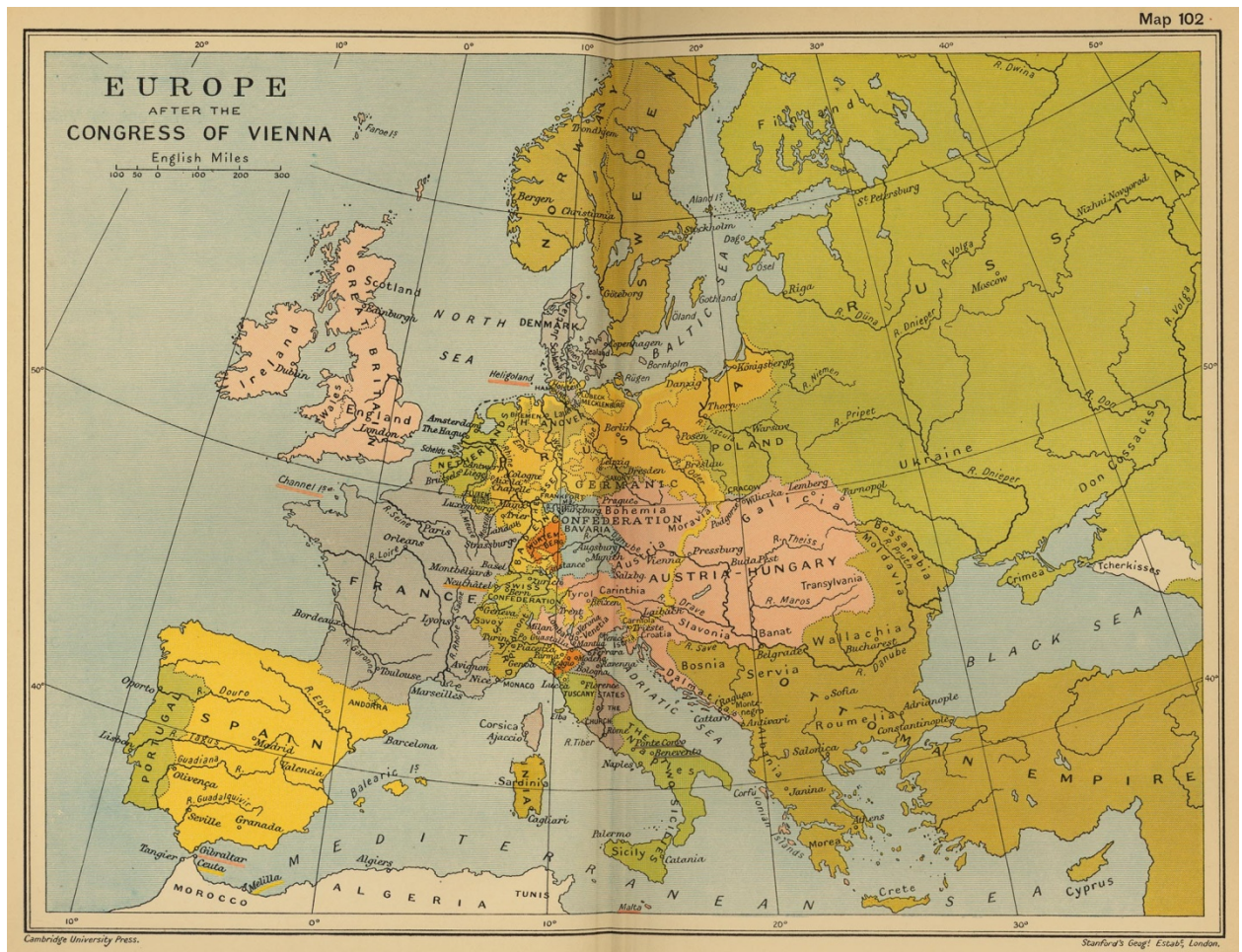
APPENDICIES

Maps

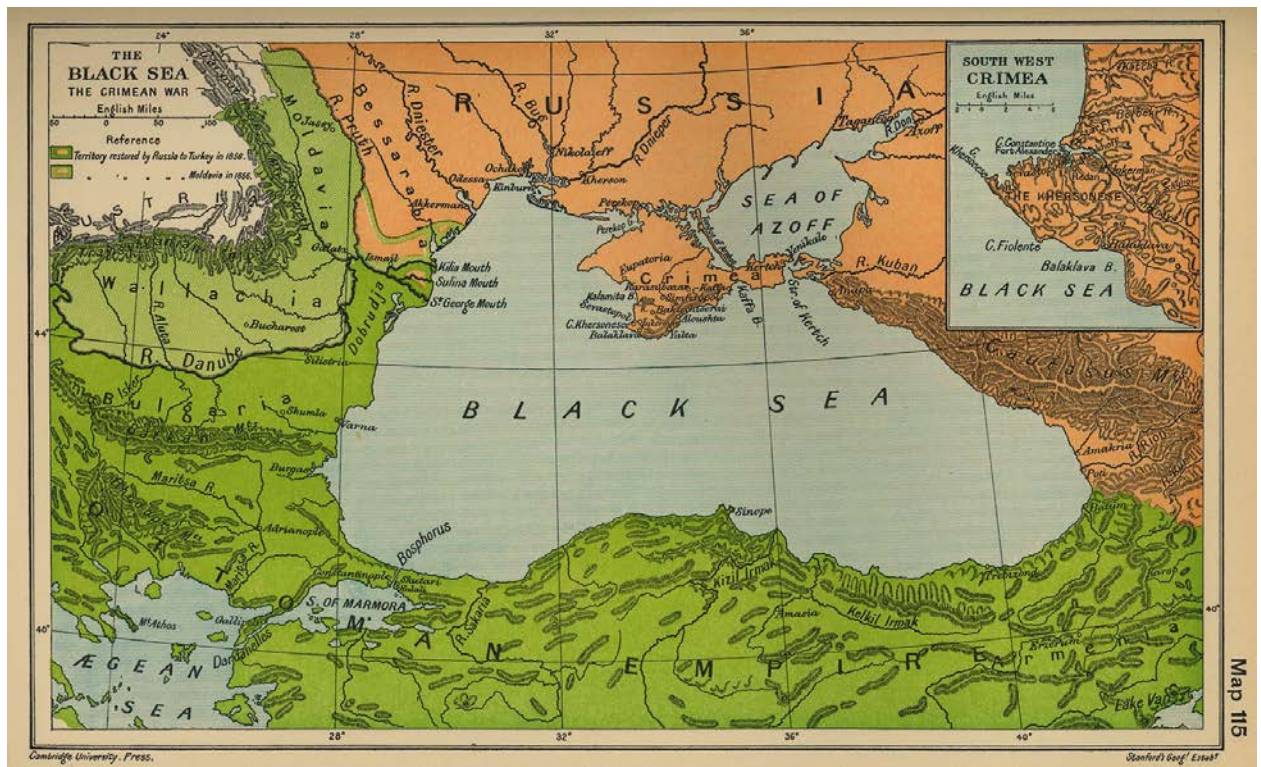
- Map of Russian Empire at the time of Peter the Great (Resembling First Ever Map of Russia) (Google Images)



- Map of the Russian Empire at the Congress of Vienna (1815) (Relative to Europe)
(Google Images)



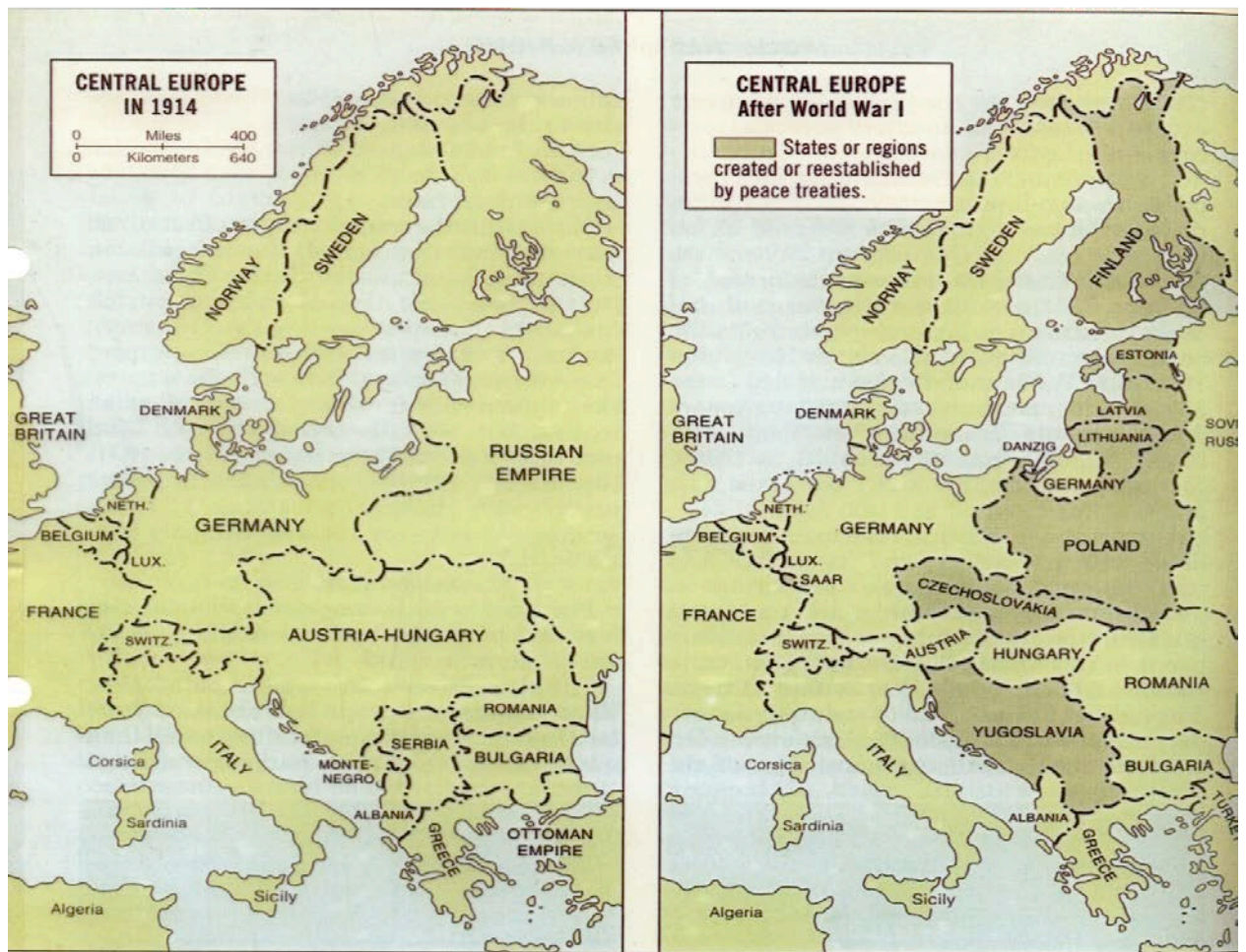
- Map of Black Sea Crimean War (Google Images)



- Map of Europe prior to WWI (1914) (Google Images)



- Map of the Central Europe Before and After Versailles (Google Images)



Map of the Soviet Union Military Commands (Galeotti-1995)



Map of the “Successor States to the USSR” (1990) (Galeotti- 1995)



Regions of the Russian Federation (Galeotti-1995)



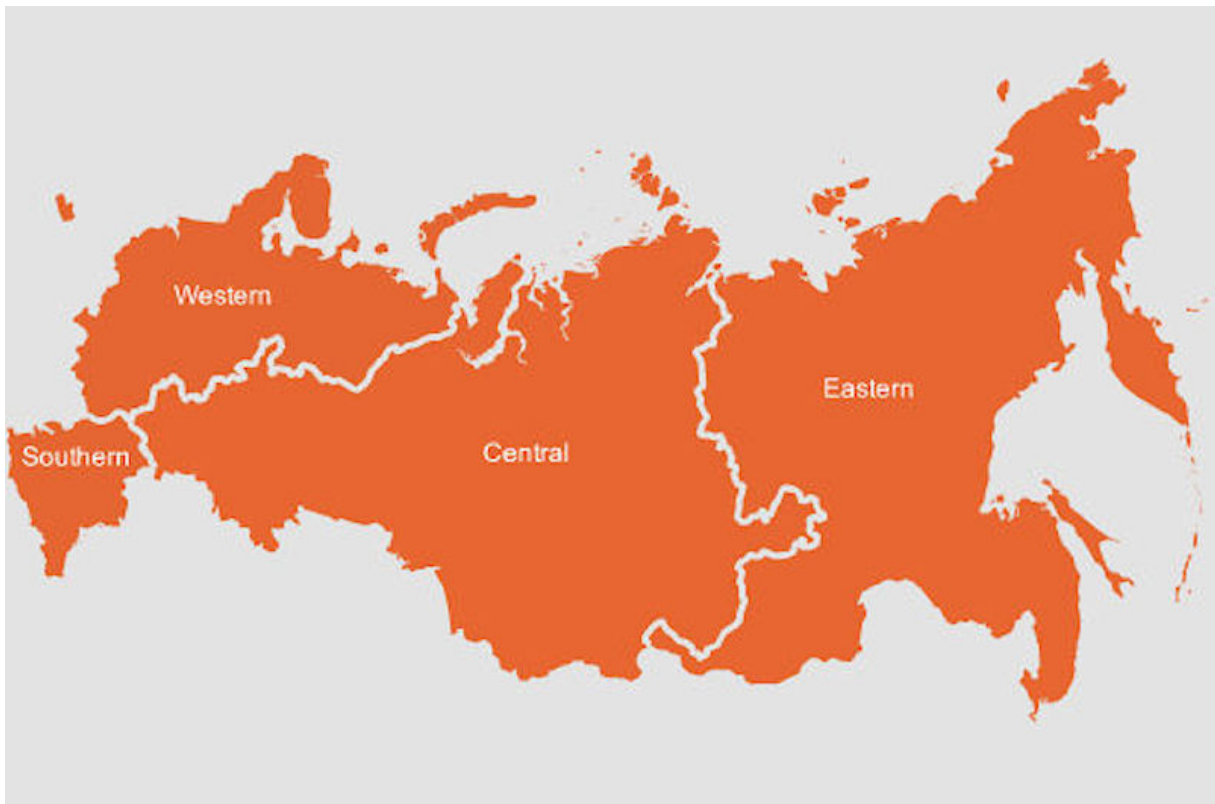
Russia's Regional Military Commands (RIAN.RU)

(<https://sputniknews.com/infographics/20100924160713452/>)



Russian Regional Military Commands

(<http://www.globalsecurity.org/military/world/russia/mo-md.htm>.)



Pictures/ Graphics



11. Portrait of Tsar Aleksei Mikhailovich (father of Peter I), 1672. Pen and watercolor on paper. Inscription in traditional Cyrillic script reads: "Tsar and Grand Prince Aleksei Mikhailovich of All Great and Little and White Russia Autocrat." (From N. V. Ustiugov et al., *Russkoe gosudarstvo v XVII veke: Sbornik statei*, Moscow, 1961, fig. 6)

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³⁰² Cracraft, James. *The Revolution of Peter the Great*. Cambridge, MA: Harvard UP, 2003. Print.



22. Godfrey Kneller, portrait of Peter I, 1698. Oil on canvas. (The Royal Collection © 2003, Her Majesty Queen Elizabeth II)

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³⁰³ Cracraft, James. *The Revolution of Peter the Great*. Cambridge, MA: Harvard UP, 2003. Print.



Picture of the Russian Ministry of Defense taken by the author, from across the *Moskva* River from the vantage point of Gorky Park, in August 2016. Michael R. G. Lyons.

ISKANDER-M TACTICAL BALLISTIC MISSILE SYSTEM

ISKANDER-M'S ELEMENTS



MISSILE SPECIFICATIONS

LAUNCH RANGE	50 - 500 KM
MISSILE WEIGHT	3,800 KG
WARHEAD WEIGHT	480 - 700 KG
SPEED	2,100 M/S (MACH 6.2)
TIME TO LAUNCH	4 - 16 MIN
INTERVAL BETWEEN LAUNCHES	UP TO 1 MIN



GUIDANCE SYSTEM - INERTIAL GUIDANCE, OPTICAL DSMAC, USE OF GPS / GLONASS IN ADDITION TO THE INERTIAL GUIDANCE SYSTEM

SELF-PROPELLED LAUNCHER

CREW	3
NUMBER OF MISSILES	2 (+ 2 ON TRANSLOADER)
MAXIMUM ROAD SPEED	70 KM/H
OPERATIONAL RANGE	1,000 KM
COMBAT WEIGHT	40 T
OPERATING TEMPERATURE RANGE	-50 °C TO +50 °

WARHEADS

- CLUSTER
- FUEL-AIR EXPLOSIVE
- BUNKER-BUSTING
- ELECTRO-MAGNETIC PULSE
- NUCLEAR

SELF-PROPELLED LAUNCHER



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³⁰⁴ "Russia Is Preparing For Permanent Deployment Of Iskander-M Missile Systems In Kaliningrad – Media." *Southfront.org*. SouthFront: Crisis News, World Events, Political Survey, 27 Mar. 2017. Web. 15 June 2017. <<https://southfront.org/russia-is-preparing-for-permanent-deployment-of-iskander-m-missile-systems-in-kaliningrad-media/>>.

Iskander (SS-26 Stone) tactical missile system and its target coverage in Europe



"Russia will deploy Iskander missile systems in its exclave of Kaliningrad to neutralize if necessary the anti-ballistic missile system in Europe"

Russian President Dmitry Medvedev
His first state of the nation address to parliament

Technical characteristics

	Iskander-E	Iskander-K
Number of missiles:	2	2
Missile type:	9M723K1 "quasi-ballistic," guided missile	R-500 cruise missile
Range:	280 km (173 miles)	500 km (310 miles)

9M723K1 missile

- Single-stage
- Solid propellant
- Flight trajectory - up to 50 km (30 miles)
- Launch preparation time: 4-16 minutes depending on alert status
- Delay time between firing 1st and 2nd missile: less than a minute



Transporter Erector Launcher (TEL):

- Based on the new BAZ6909 eight-wheeled chassis truck.
- Weight with two missiles: 40 tons
- Missile weight: 3.8 tons
- Warhead: 480 kg
- Maximum vehicle speed: 70 km/h
- Crew: 3

The system comprises:

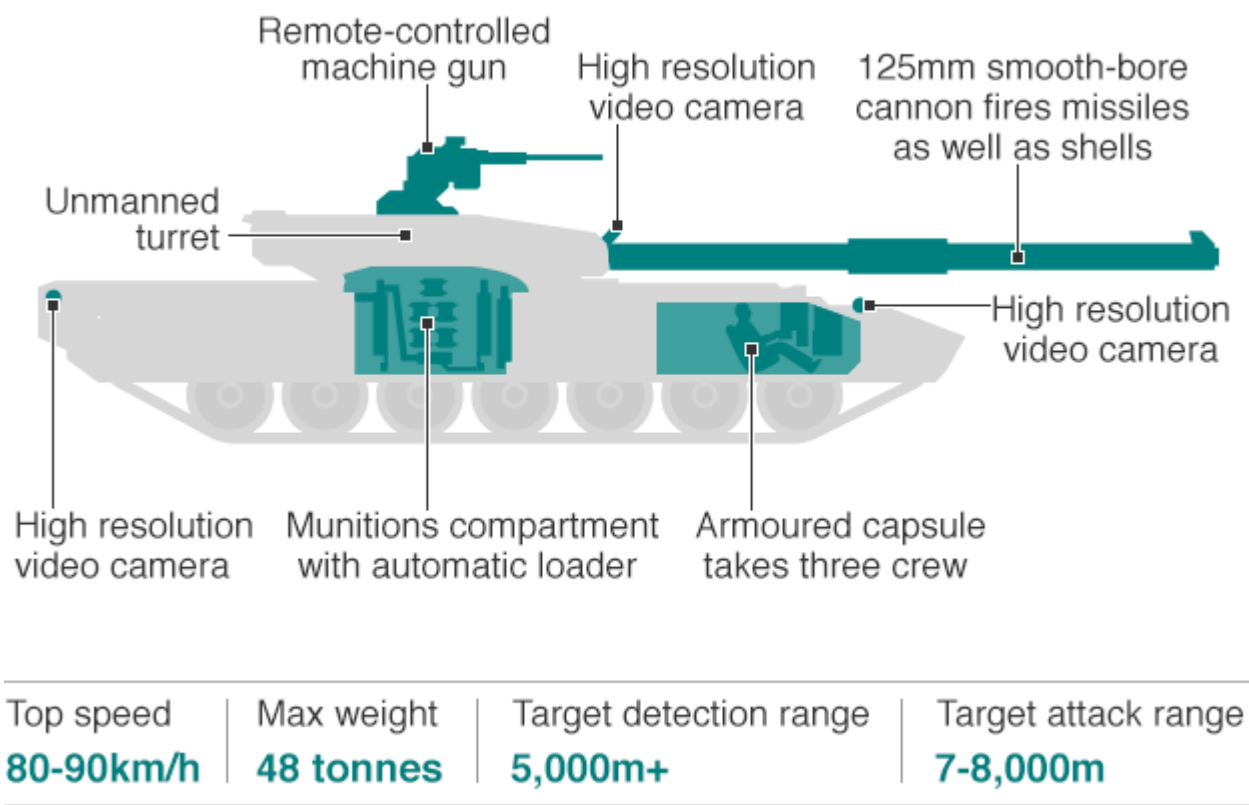


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For permission, please contact us on + 7 (495) 645-6601 (# 7251) or by e-mail at infographica@rian.ru

³⁰⁵ "Effective Deterrent: Russia's Iskander Missiles 'Almost Impossible to Down' INFOGRAPHIC." *Sputnik International - Breaking News & Analysis - Radio, Photos, Videos, Infographics*. Sputnik, 03 Apr. 2017. Web. 15 June 2017. <<https://sputniknews.com/europe/201704031052242829-russia-iskander-missile-kaliningrad/>>.

Russia's new tank: Armata T14



Source: Rossiiskaya Gazeta/Russkoye Oruzhiye

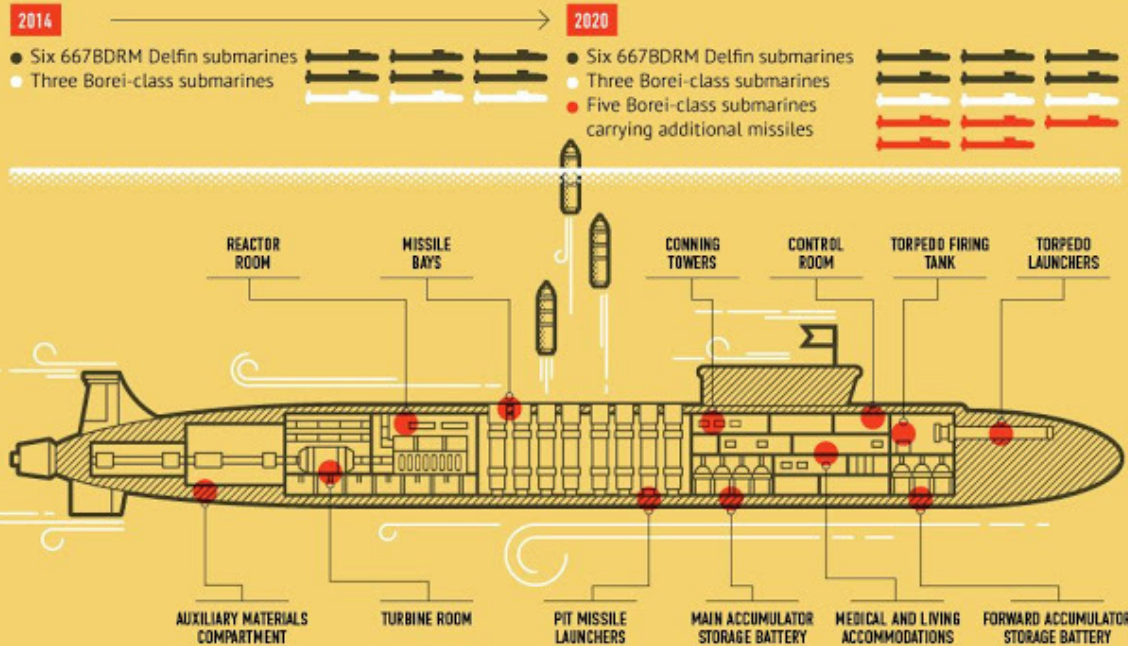
306

³⁰⁶ Barry, Author Brendan. "The T-14 Armata." *Coffee Spoons*. BBC/ Rossiiskaya Gazeta, 9 May 2016. Web. 15 June 2017. <<http://coffeespoons.me/2016/05/the-t-14-armata/>>.

Russian nuclear-powered submarine Vladimir Monomakh

CONFIGURATION OF PROJECT 955 BOREI-CLASS SUBMARINES

Vladimir Monomakh is a Russian Ballistic missile submarine, the third vessel of the Project 955 (Borei)



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³⁰⁷ USER: Nonothai. "Buyan Class Corvettes (Project 21630/21631)." *Thai Military and Asian Region*. Nonothai Blog Post, 26 Mar. 2017. Web. 14 June 2017.
<<https://thaimilitaryandasianregion.wordpress.com/2016/06/17/buyan-class-corvettes-project-21630-russia/>>.

DELFIN

In the long run, Project 955 (Borei) submarines will replace their predecessors, namely the 667BDRM Delfin submarines

Surfaced speed, kmh

Submerged speed, kmh

Operating depth, meters

MAXIMUM depth, meters

COMPLEMENT, PEOPLE

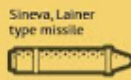
MISSILE PITS

533-MM TORPEDO LAUNCHERS

650-MM TORPEDO LAUNCHERS

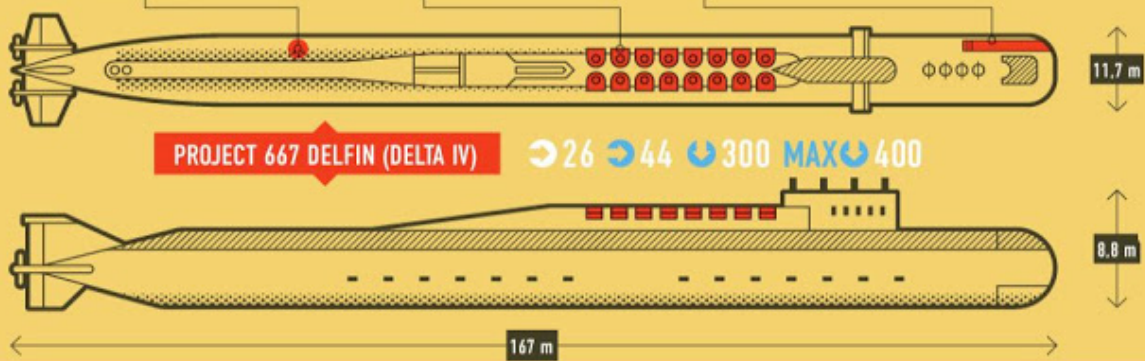
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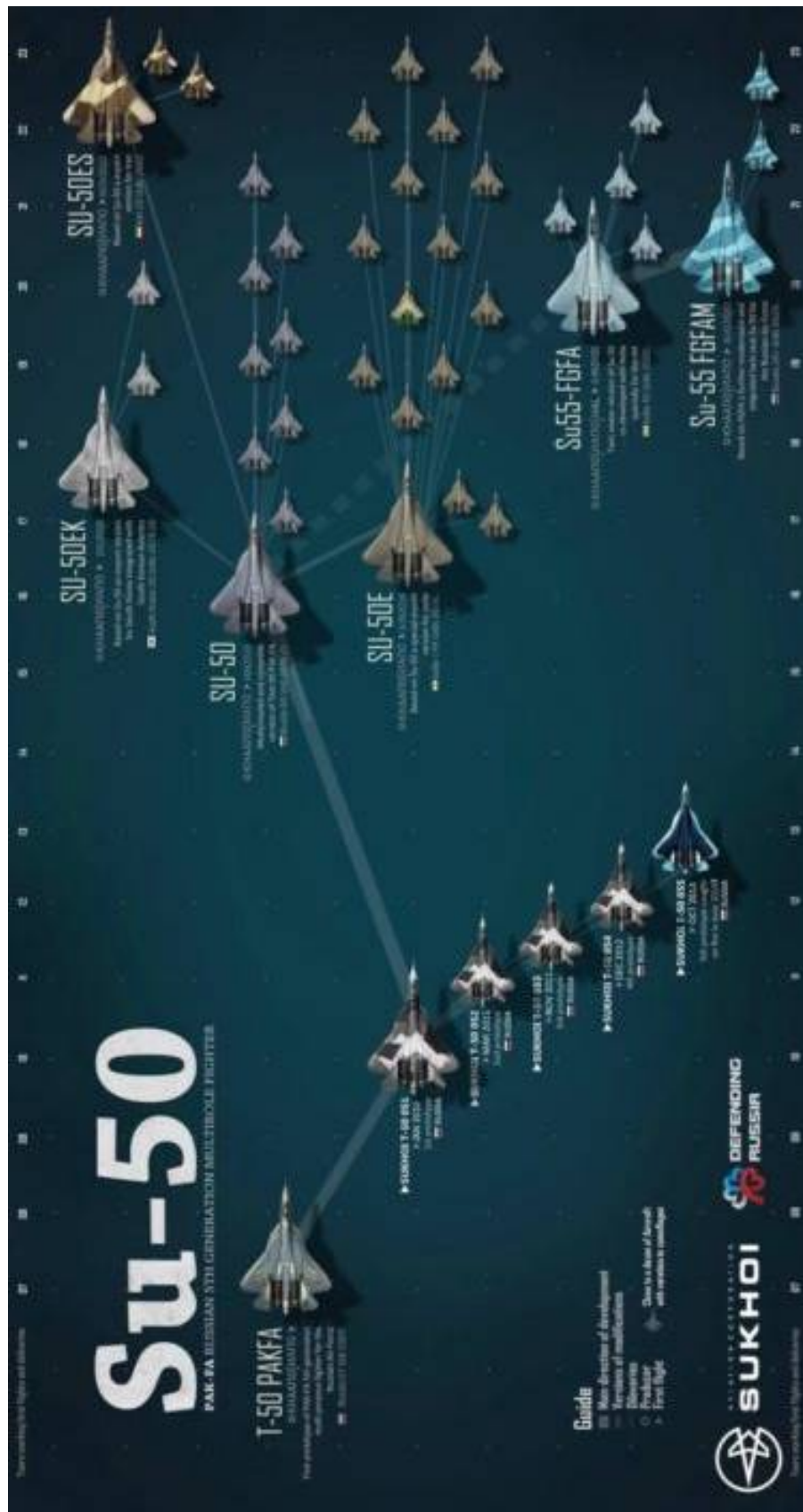
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³⁰⁸ "IDN TAKE: India Is Planning to Procure the Super Advanced Borei Class Nuclear SSBN's." Indian Defence News. IDN, 11 July 2015. Web. 14 June 2017. <<http://www.indiandefensenews.in/2015/07/idn-take-india-is-planning-to-procure.html>>.



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³⁰⁹ "More on Su-50 PAK FA Plan by Sukhoi 5." *Thai Military and Asian Region*. N.p., 20 Mar. 2016. Web. 15

S-400 Triumf air defense missile system

Alphanumeric code

Russian Army: **S-400**
NATO reporting name
SA-21 Growler

Designation

A surface-to-air missile system designed to engage with all types of aerial targets (aircraft, UAVs, cruise missiles, etc.) with a range of **400 km (250 miles)** and an altitude of **30 km (10,000 feet)**

Specifications

Operational range:
– for aerodynamic targets **3 km to 240 km**
– for ballistic targets **5 km to 60 km**
Altitude **of up to 30 km (10,000 feet)**
Maximum target speed **of up to 4,800 m/s**
Deployment time **of 5-10 min.**
Missiles per system **up to 48 (384 in all)**



Composition

- Command & Control System
- Several different radar units
- Up to 8 medium- and long-range surface-to-air missile systems (up to 12 missiles per system)
- 48N6E, 48N6E2, 9M96E, 9M96E2 midrange guided missiles and a 40N6E long-range missile

Missile 9M96E2



Guided 24-kg fragmentation warhead

Operational range of **120 km (75 miles)**
Altitude of **up to 30 km (10,000 feet)**
Reaction time of **no more than 8 seconds**
Service life of **15 years**
Weight of **420 kg**

Features

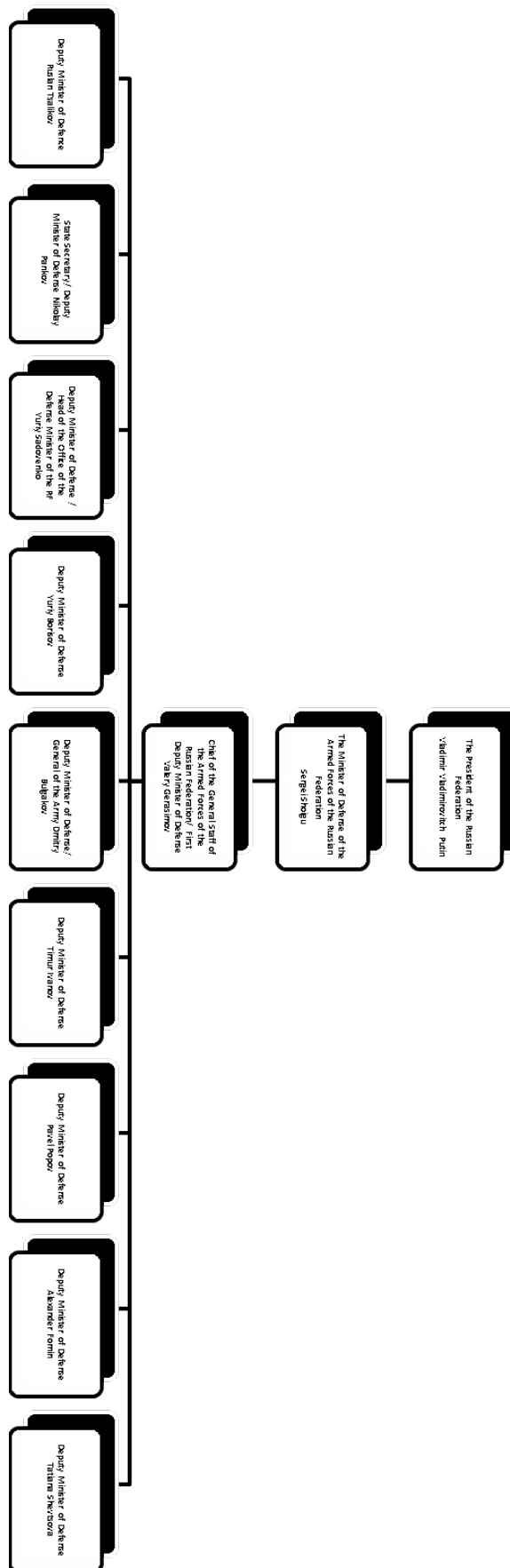
- Twice as effective as previous generation systems
- The only system capable of selectively deploying one of five types of missiles
- All operations are completely automated, from target acquisition to assessment of results of engagement
- Considered a 4+ generation system by specifications and combat capabilities

RIANOVOSTI © 2009

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June 2017. <<https://thaimilitaryandasianregion.wordpress.com/2016/04/27/sukhoi-t-50-pak-fa-russia/more-on-su-50-pak-fa-plan-by-sukhoi-5/>>.

³¹⁰ Infinite. "Russia To Give S-400 Anti-Aircraft Missiles, The World's Most Advanced Air Defense System & The TOC-1, The Most Developed Artillery Weapon Of Its Kind To Syria?" *Infinite Unknown*. RIA Novosti 2009, 23 June 2013. Web. 15 June 2017. <<http://www.infiniteunknown.net/2013/06/23/russia-to-give-s-400-anti-aircraft-missiles-the-world%E2%80%99s-most-advanced-air-defense-system-the-toc-1-the-most-developed-artillery-weapon-of-its-kind-to-syria/>>.



High Command of the Land/ Ground Forces

Motorized Rifle Troops	Tank Troops	Missile Troops and Artillery	Air Defense Troops	Reconnaissance Formations and Military Units	Engineer Troops	Troops of Radiological, Biological, and Chemical Defense	Signal Communications Troops
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High Command of the Aerospace Forces

Air Force

Space
Forces

Aerospace
Defense
Forces

Main Command of the Navy

Surface
Forces of
the Navy

Submarine
Forces of
the Navy

Naval
Aviation

Coastal
Troops of
the Navy

Marine
Infantry of
the Navy



STRENGTHENING RUSSIA'S DEFENSE CAPABILITY IN 2014

Modernization and reorganization of the Russia's Armed Forces in 2014



NEW WEAPONS DELIVERY

NAVY

Project 11356P/M frigates
Admiral Grigorovich,
Admiral Essen

Project 636.3 submarines
Rostov-on-Don
Stary Oskol

Project 855 Yasen nuclear submarine
Severodvinsk

Project 955 Borei nuclear submarine
Vladimir Monomakh

ARMY FORCES

About 16 thousand units of weapons and military hardware

AIR FORCE

50 aircraft

STRATEGIC MISSILE FORCES

5 RS-24 Yars land-based mobile missile systems

AIRBORNE FORCES

Airborne parachute D-12 Listik (in trials)



³¹¹ "Strengthening Russia's Defense Capability in 2014." TASS. Infographics by TASS More: [Http://tass.com/infographics/7263](http://tass.com/infographics/7263), 2013. Web. 15 June 2017. <<http://tass.com/infographics/7263>>.

Экипировка солдата будущего «Ратник»

Российская боевая экипировка «Ратник» объединяет новейшие разработки в области стрелкового оружия, защитного обмундирования, систем разведки, управления и связи. Она состоит из модулей, которые можно менять в зависимости от поставленной задачи. Выдерживает температуры от -50 до $+50^{\circ}\text{C}$

ЧТО МОЖЕТ ВХОДИТЬ В КОМПЛЕКТ

Защитные очки способны выдержать попадание осколков диаметром до 6 мм, летящих со скоростью около 350 м/с

Бронежилет с керамическими пластинами максимального класса защиты может остановить 10 бронебойно-зажигательных пуль, выпущенных из винтовки СВД с расстояния 10 метров



Базовая комплектация

- 1 Противоосколочный модуль (круговая защита торса и шеи) площадью 42–47 дм²
- 2 Грудной и спинной вентиляционно-амортизационные модули
- 3 Грудной и спинной противопульные модули площадью 7,5–8,2 дм²



Штурмовая комплектация дополнительно включает

- 1 Боковые противопульные модули (бронепанели) площадью 3–3,5 дм²
- 2 Паховый противоосколочный модуль площадью 5–5,3 дм²
- 3 Паховый противопульный модуль (бронепанель) площадью 3–3,5 дм²
- 4 Плечевые противоосколочные модули площадью 13,8–17,2 дм²
- 5 Боковые вентиляционно-амортизационные модули
- 6 Спинной нижний противопульный модуль (бронепанель) площадью 2,5–3 дм²

На бронежилет крепятся съемные элементы (модульные подсумки), позволяющие укомплектовать солдата исходя из поставленных задач



Нож «Шмель»

Оружие – АК–12

Щитки на коленные и локтевые суставы

Противоосколочный комбинезон из арамидного волокна выдерживает попадание осколков гранат, мин и снарядов массой до 1 г, летящих со скоростью 140 м/с. В течение 10 секунд защищает от действия открытого огня

-50°C $+50^{\circ}\text{C}$
Экипировка подходит для использования при температурах от -50 до $+50^{\circ}\text{C}$ (от Арктики до тропиков). Она не боится осадков, горюче-смазочных материалов и падения на твердый грунт

14 кг
вес стандартного комплекта «Ратника»

20 кг
полный вес комплекта «Ратника» с бронежилетом

В бронежилет встроена система быстрого сброса – чтобы его снять в экстренной ситуации, нужно просто выдернуть чеку. Это займет менее 2 секунд

36 кг
вес предыдущего комплекта «Барница»

³¹² Kazak, Babay. "Russian Army - Russian Military Российская армия - российские военные." *Pinterest*. N.p., 01 Oct. 2015. Web. 15 June 2017. <<https://www.pinterest.com/pin/504543964482587290/>>. Infographic taken from Social media

Future Soldier equipment "Ratnik"

Russian combat equipment "Ratnik" includes newest developments in area of firearms, protective clothing, reconnaissance, navigation and communication systems. It consists of parts that can be changed depending on the mission. It can withstand temperatures ranging from -50 to +50 degrees Celsius.

What can be included in the complex

Protective Goggles

Can withstand impacts of shrapnel up to 6mm flying at 350 meters per second.

Ballistic Vest with ceramic plates of maximum protection level can stop up to **10 armor-piercing incendiary rounds** fired from **SVD Sniper Rifle** from minimal distance of 10 meters



Base configuration

- 1 Ballistic module: shrapnel protection for entire torso and neck
- 2 chest and back ventilation modules
- 3 chest and back armor plates



Assault configuration

- 1 side armor plates
- 2 groin ballistic plate
- 3 groin armor plate
- 4 shoulder ballistic plates
- 5 side ventilation modules
- 6 lower back armor plate



Vest rig supports variety of modular pouches that can be swapped depending on the mission

- 1 multifunctional knife
- 2 signal lamp
- 3 ammunition magazines
- 4 grenades

"Bumblebee" Knife

Weapon AK-12

Protective pads for knees and elbows

Ballistic jumpsuit made of **Aramid** fiber fabric can withstand grenade shrapnel up to 1 gram flying at 140 m/s. Withstands up to 10 seconds in open fire.

-50°C +50°C

Equipment works as intended in temperatures ranging from -50 to +50 degrees Celsius. (from arctic to tropics) it's not susceptible to dirt, fuel and lubricants or falls on hard surfaces.

14 kg weight of Ratnik complex

20 kg weight of Ratnik complex with ballistic vest

vest has a built-in fire release function: in extreme situations it's possible to take it off with single pull of a pin in less than two seconds

36 kg weight of old complex

ballistic helmet can save soldier's life from direct hit by **makarov pistol round** from 5 meters distance. It's much lighter compared to foreign helmets.



1.62 kg American army helmet

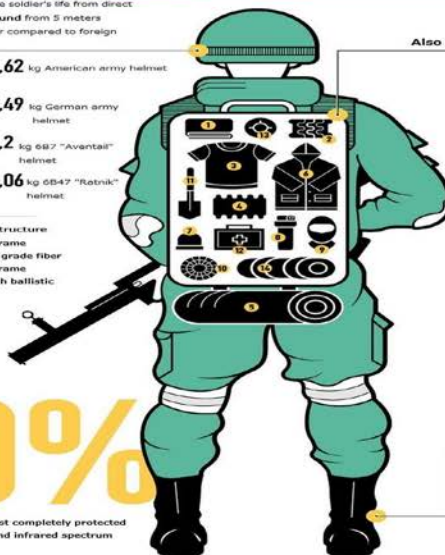
1.49 kg German army helmet

1.2 kg 6B7 "Aventail" helmet

1.06 kg 6B47 "Ratnik" helmet

Helmet has three-layer structure: composite frame, dry military grade fiber, composite frame. This technology grants high ballistic protection qualities.

Helmet can mount variety of high tech observational devices



Also included in Ratnik equipment

- 1 camouflage kits
- 2 removable insulation for use during cold season
- 3 vented shirt
- 4 folding insulated sheet
- 5 insulated roll mat
- 6 rain coat
- 7 cold weather cap
- 8 personal water filter
- 9 balaclava
- 10 mosquito net
- 11 small infantry shovel
- 12 first aid kit
- 13 sleeping bag
- 14 tent

50 liters volume of the universal backpack

10 liters volume of other cutting edge backpacks

90% of soldier's body is almost completely protected. Also blocks ultraviolet and infrared spectrum radiation

Boots with anti slip soles great fixation of ankles, made of breathing materials with non-decaying pads

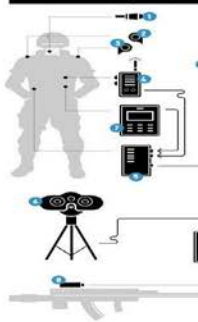
48 hours of comfortable time in the equipment

5 years average service life of the equipment

different parts of the equipment have different service life. Summer uniform should last two soldiers

winter uniforms, helmets, armor and weapons have longer average service life

Reconnaissance, navigation, communication complex "ARCHER"



- 1 communications headset
- 2 individual radio communication module
- 3 satellite navigation module
- 4 operation management console controls the complex, activates on touch (doesn't have screen). button "rescued" lets commander know about the problem and call for help
- 5 middle range recon station: can detect moving targets (people and vehicles) up to distance of 10 kilometers any time of day and year. implements tracking of objects and sending of targeting information to automatic weapon systems.
- 6 hardware case: processor CRUZ is protected from water, mud and impact. it works in temperatures from -40 to +60 Celsius
- 7 distance/angle measuring device: measures distance to targets, determines their position and calculates ballistic solutions. equipped with thermal vision, can take and relay photographs
- 8 commander's personal computer: weighs around 2.5 kg displays current position of every soldier in the unit, his status and even remaining ammunition. with the help of CPC, commander can get picture and video feed of targets, plan strategy and relay orders.
- 9 multifunctional console: can relay text messages and graphical information
- 10 thermal sight "Shahin": relays visual feed to commander and soldier's helmet mounted display. When using the remote camera, can be used to shoot behind corners. Works in darkness and fog.
- 11 accumulator battery: can last 14 hours of nonstop workload. works in heat and cold weather alike.
- 12 charging station: can charge 8 batteries at the same time. can be connected to classic sockets on automobiles and tanks

Source: www.military-technology.com

Illustration: Gennadiy Shchegolev, Dmitry Zaykov, Prokhorovskiy, Mikhail Gerasimov, Igor Gerasimov, Andrei Gerasimov

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Charts

Derived From Galeotti (1995) and Knight (1996)

The Soviet Union Ministry for State Security Apparatus	First Reorganization after the dissolution of the Soviet Union (KGB dismantled in 1991)	Later Reorganizations during the Russian Federation
KGB – First Chief Directorate Tasked with Foreign Espionage	Foreign Intelligence Service (SVR)	
KGB- Second Chief Directorate Tasked with Counter Espionage	Ministry of Security (January 1992 – December 1993) Later Federal Counterintelligence Service (FSK)	Federal Security Service (FSB) (April 1995 – Present Day)
KGB- Third Chief Directorate Tasked with Counter Espionage and control over the Armed Forces	Ministry of Security (January 1992 – December 1993) Later Federal Counterintelligence Service (FSK)	Federal Security Service (FSB) (April 1995 – Present Day)
KGB – Fourth Directorate Tasked with Transportation Security	Ministry of Security (January 1992 – December 1993) Later Federal Counterintelligence Service (FSK)	Federal Security Service (FSB) (April 1995 – Present Day)
KGB – Fifth Chief Directorate Tasked with Controlling Dissent Within the Soviet Union		

KGB – Sixth Directorate Tasked with Economic Crime and Corruption	Ministry of Security (January 1992 – December 1993) Later Federal Counterintelligence Service (FSK)	Federal Security Service (FSB) (April 1995 – Present Day)
KGB- Seventh Directorate Tasked with Surveillance of Soviet Citizens and Foreigners within the Soviet Union	Ministry of Security (January 1992 – December 1993) Later Federal Counterintelligence Service (FSK)	Federal Security Service (FSB) (April 1995 – Present Day)
KGB- Eighth Chief Directorate Tasked with Government Communications and interception and deciphering of foreign communications	Federal Agency for Government Communications and Information (FAPSI)	
KGB – Ninth Chief Directorate “Guards”, Tasked with the protection of VIP’s and government offices and personnel	Main Guard Directorate (GUO) As of July 1995 subordinate to the SBP	1993 Presidential Security Service (SBP) Part of the GUO until November 1993
KGB- Chief Directorate of Border Protection Tasked with Protection of the Borders and Control over the Border Troops	Committee for the Protection of the Russian Border Later Border Troops under the Ministry of Security	Federal Border Service (December 1993)

Supranational Structures in the Post Soviet Space

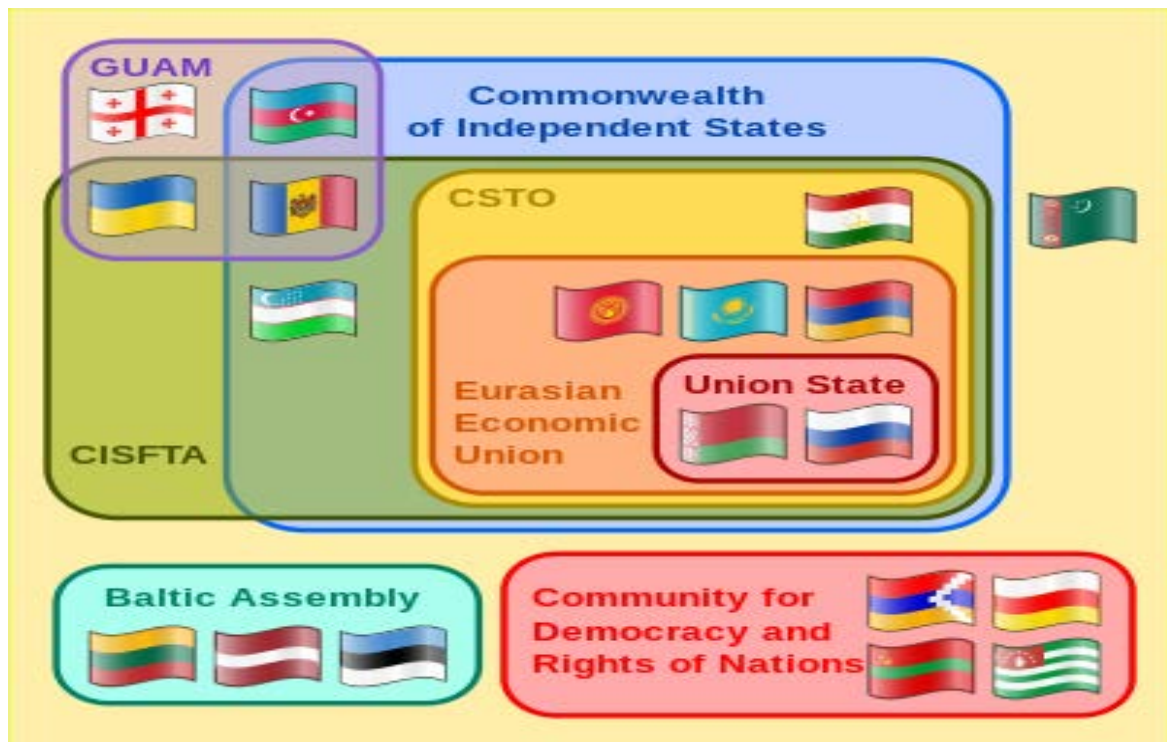
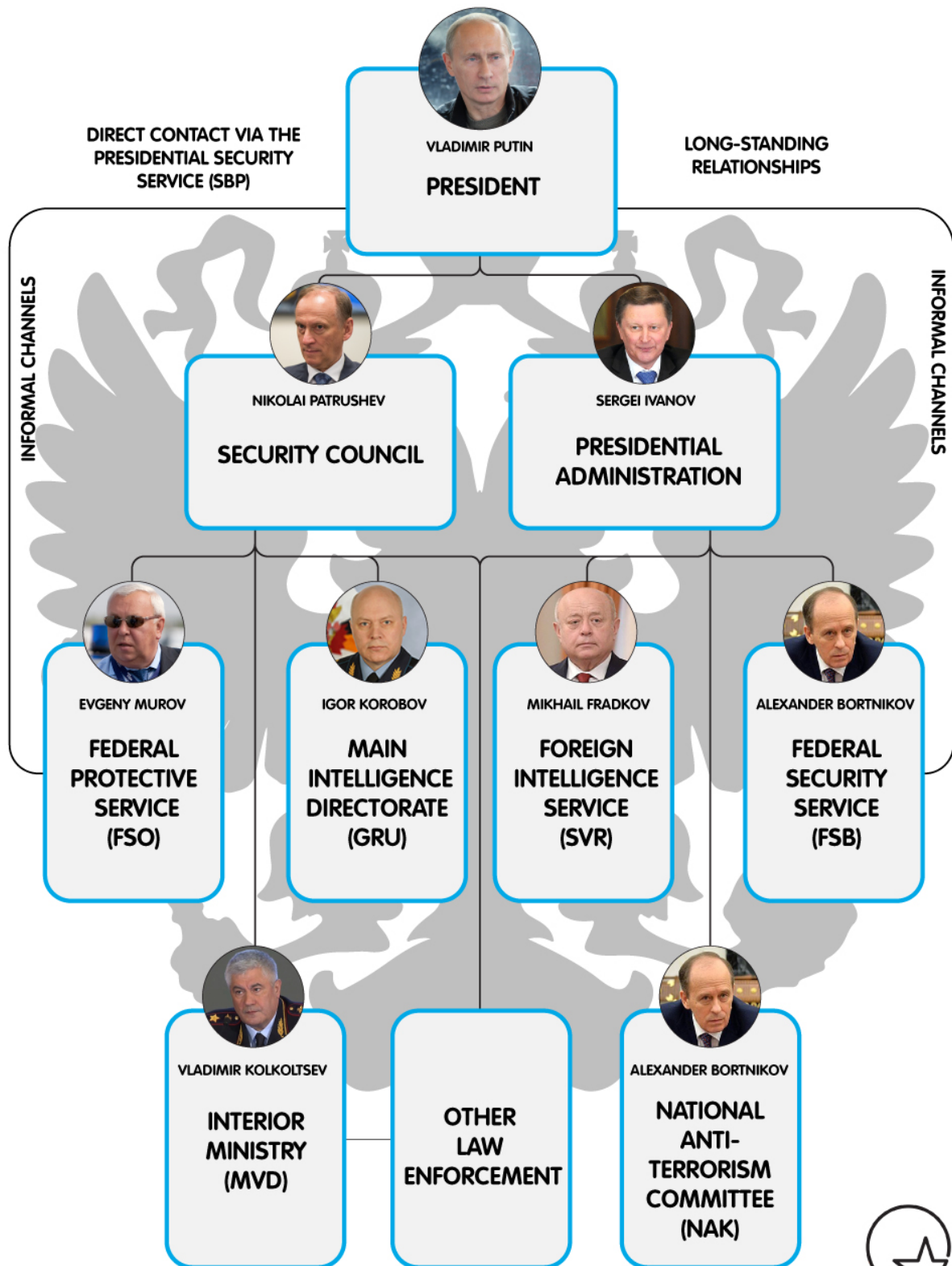


Chart from Galeotti's Policy Brief: Already obsolete dated from May 2016 Sergei Ivanov is no longer head of the PA, this post is held by an Estonian-born Russian named Antonin Vaino. Furthermore Evgeny Murov is no longer the leader of the FSO this position is now held by Dmitry Kochnev. Mikhail Fradkov has also been replaced by former Chairman of the State Duma Sergey Naryshkin, Fradkov is now director of the Kremlin think tank, the Russian Institute for Strategic Studies. This further highlights the findings of the brief that Putin seems to hold hostility "to questioning ...visible in the shrinking of his personal circle". These fast-paced changes highlight the changing dynamic of the Putin-buro and upper echelon of the intelligence and security apparatus. ³¹⁴

³¹⁴ Galeotti, Mark. "Putin's Hydra: Inside Russia's Intelligence Services." European Council on Foreign Relations Policy Briefs ECFR (2016): n. pag. Web. 14 Feb. 2016.

Russia's intelligence architecture



Briefing Papers

Reflections on the Petrine Era Modernizations and Their Relevance Today

All Information Derived From Cracraft

Long before United Russia's hold over the corridors of power in the Kremlin, or the communist intelligentsia conniving for power in the rooms of Hotel Metropole during the revolution, Russian leaders beginning with Peter I (Peter the Great) had continuously undertaken various programs of modernization, and along with these programs has remained a correlation between success and failure of the State as a whole. When Russia in all of its amalgamations has successfully modernized, it has experienced eras of success stemming from this modernization, inversely when modernizations have failed to come to fruition, the State ultimately suffered the brunt these failures. However special regard should be given to the maiden voyage of these efforts, the modernizations of the Petrine Era in Russian history, in order to understand the similarities with the current regime's efforts to remold Russia into the Great Power it rightly sees itself as. The central departure of the modern era from the Petrine era reforms remain in the foundation for their respective reforms, while the first Russian Emperor looked to the West to inspire his efforts, the current leadership finds its foundations inside their own country and remains inward looking.

At the time of Tsar Peter's ascension to power in the late 17th century, Russia was not viewed as the Great Power it is today. The Russian monarchy was much more concerned with their regional neighbor's intentions than the more general European great power games which would plague the following centuries. As an Orthodox State Russia was largely withdrawn from the Great Protestant and Catholic conflicts of the Thirty Years War which plunged Europe into chaos and destruction, relegated to a supportive role, logistically supporting the anti- Hapsburg coalition, and thereby pitting one of their regional rivals (the Kingdom of Sweden) against the other (The Holy Roman Empire, led by the Austrian Hapsburg rulers). Except for a very brief period of direct involvement, Russia had remained relatively intact and unaffected by the consequences of the Thirty Years War in stark contrast to other parts of Europe. Regardless, Russia would become involved in various conflicts throughout the 17th century following the Peace of Westphalia, including their long standing rivalry with the Kingdoms of Sweden and Poland over the Baltic and Polish lands

which boiled over into open conflict during the reign of Peter's father Alexis I. The Monarchy came to an impasse in which they must reform or perish. This reformation began under Peter's elder half-brother, Feodor III, but while his reforms were directed at the church, Peter's were more effectively directed at the Military, mechanisms of the State and Culture more generally.

Perhaps the fact that Peter was not born as the heir to throne led to his upbringing which shaped his Western looking and not traditionally Muscovite reign. Peter began his reign under the Regency of his elder half-sister and in concert with his half-brother, who by all accounts was unfit to rule as co-Tsar. Nevertheless it must be asserted that regardless of his adolescence, Peter utterly destroyed the mold of previous Russian monarchs and reshaped the country in a distinctly modern and European light, a Europeanization of the country. Cracraft classifies the Petrine reforms (or "revolutions" as he refers to them) into three general categories; one along naval and military lines and another other along bureaucratic and diplomatic lines, the final category being concerned with the cultural revolution of his reign.³¹⁵ The first category was unquestionably instrumental in shaping the power status Russia would maintain throughout the following centuries while the latter two categories of "revolution" ensured his efforts would endure beyond his reign. They should be briefly recounted in order to fully grasp the revolutionary effect that they had on the country at that time, and to understand how Russian reform efforts of the contemporary era are utterly dissimilar.

While the effects of the reforms of the Petrine era were all to the benefit of the Russian state, they were not purely Russian in their form or context. Having been educated and trained by foreign mercenaries (primarily Germans and Scotsmen), Peter had a firm grasp and understanding of European military tactics and matters prior to these reforms. Utilizing and practicing these military tactics with his own toy regiments at a very young age, he was able to form friendships and bonds with his "soldiers" that he would not only grow up with, but who would serve him loyally in adulthood. This characteristic is not dissimilar to

³¹⁵ Cracraft, James. *The Revolution of Peter the Great*. Cambridge, MA: Harvard UP, 2003. Print.

the current Russian leader, who drew upon his own close colleagues to fill the senior positions of his leadership. In addition to scholastic endeavors, Peter is also known to have consorted with and spent exuberant amounts of time in the German district of Moscow. This certainly influenced his fascination with the West, and stimulated his desire to develop his own country to reside among the Great Powers of Europe. This desire culminated in the Grand Embassy (1697-1698).

The Grand Embassy was undoubtedly the foundation and fuel of Peter's reform efforts. Romanticized by many writers as Peter's regal attempt at 17th century corporate espionage, it did function as an intelligence gathering mission for emissaries of the Russian State and the Tsar himself. Travelling incognito (at his distinctly abnormal height of 6 feet 8 inches) under the pseudonym Peter Mikhailov, the Tsar set out with the official purpose of strengthening Russia's formal alliances against the Ottoman Empire's Black Sea ambitions. However this primary mission would result in utter failure, but not without returning to Russia with the spoils of a secondary mission, that of gathering logistical materiel, bureaucratic knowledge, expertise, and personnel in order to reform the Russian empire. In addition to contracting the services of foreign mercenaries and specialists, Peter was also personally able to observe shipbuilding techniques in the famed English and Dutch shipyards, acquire vital military weaponry and the personnel to use it, and meet with various leaders without the intermediaries that normal diplomatic protocol ensured, and subsequently bring all of these things back to his own country to put his goals of modernization into effect.

When analyzing Peter's "Military and Naval Revolutions" as classified by Cracraft it first must be stated that these modernizations were not anomalous to Early Imperial Russia, but followed a much larger systematic trend throughout the Great courts of Europe. Nevertheless their impact on Imperial Russia cannot be underscored enough in two shocking causalities; (1) allowing Russia to challenge their regional rival the Kingdom of Sweden and thereby join the exclusive club of Great Powers in Europe and (2) by the establishment of the Russian Navy not only was their military standing strengthened but at a time when the mercantilist economies of the late 1600s and early 1700s were the norm, primarily buttressed by maritime trade, Russia was able to increase its trading power and its partners. Cracraft particularly underlines the strengthening of trading ties with England in raw

materials through the maritime import and export of goods. In addition to increases in size and technological advancements of the Russian military such as siege tactics which would ultimately prove vital in their future wars with Sweden over the Baltics, a striking feature of these reform efforts was of a bureaucratic revolution under the auspices of the military institutionally developing a State war machine. As aforementioned the bureaucratization of the military revolution ensured its permanence long after Peter's reign would end. He founded artillery schools as well as engineering schools, furthermore he centralized the 18 offices in Moscow concerned with military affairs into one single centralized College of War. He also founded a Naval Academy in Moscow, which was later moved to St. Petersburg, based on the English models he had observed during the Grand Embassy. As well as countless other institutional advancements in making a State war machine. These institutional advancements would be short-lived if there were not able bodied men to operate them, and this was a crucial calculation of the Grand Embassy's mission. Peter was able to hire well-qualified and educated instructors for these new institutions and implement the new strategies and tactics acquired throughout Europe during the diplomatic mission. Having recruited from Europe's premier officer corps he was able to import the intellectual acumen that Russia so lacked in modern warfare, and impart that expertise on a generation of Russians, who were ultimately intended to replace the imported foreigners. Peter's military advancement campaigns may have fallen in line with the military-bureaucratic revolutions proceeding throughout Europe, in contrast, by implanting foreign experts into Russia and developing the capabilities of what would become the Russian General Staff, he ensured that although his efforts were Western facing and Western fueled, they were purely for the benefit of Russia itself.

The second category of revolutions as classified by Cracraft were that of a "Diplomatic and Bureaucratic" nature, while some of the bureaucratic military reforms have already been discussed it is equally important to recount some of the more general bureaucratic developments of the Petrine era to fully understand how they influence the Russian Federation of today. When analyzing the Diplomatic revolutions of Peter the Great one must understand the context in which their development occurred. While the Grand Embassy helped to acquire the logistical and conceptual aspects of Peter's Europeanization

efforts, it was first and foremost a diplomatic mission. The diplomatic development of the Russian Empire under Peter the Great would not by any means stop there, during his reign permanent embassies of the Russian Empire would be erected throughout the capitals of Europe, with educated envoys to staff them. Developing a taste for international law Peter would also publish and disseminate political and legal treatises, which grounded not only his authority as the ruler of all of Russia on a legal basis, but also Russia's further ascension into the European club through a formal recognition of norms international law. For instance Peter Shafirov's publication of a legal rationale and justification for Russia's conflict with Sweden was one of the first of its kind in Russian history. To conclude, when discussing the diplomatic revolutions associated with Peter the Great, one must note that he was an important piece in the formation of the notion of diplomatic immunity, a key aspect of international relations today, which while it developed out of England, its adoption and eventual recognition as a legal norm was a direct consequence stemming from the arrest of one of his diplomats in England. While by no means was this a Russian or Petrine development it is pertinent to illustrate the role Peter played in the development of international law at that time, and how his revolutions still have relevance in the conduct of international relations today.

The most powerful of the three revolutions of Peter the Great was perhaps the Cultural Revolution. While Cracraft separates the cultural revolution into 3 categories; the architectural, the visual, and the verbal. Reviewing each in minute detail would be superfluous to the overall discussion of this essay, but regarding each in its own right will be important to the overall understanding of the effect they had on the country. The architectural revolution of Peter the Great origins reside in the Grand Embassy, when Peter and his entourage had observed the architectural masterpiece cities of late 17th century Europe. Importing not only architects but establishing schools of arts to inspire future generations of Russians, led to the modern European flavor that cities like St. Petersburg would eventually acquire. This would gradually spread to other parts of the Empire. This same consequence occurred as a result of the visual aspect of the Cultural Revolution, having grown from the sovereign's fascination with all things European, not only would his intellectual demeanor resemble that of his European contemporaries but so would his attire

and style. Included in the appendices are two pictures which perhaps illustrate this better than words ever could, the stark contrast in symbolism utilized in two pictures of the rulers of Muscovy (that of Tsar Alexei Mikhailovich, Peter's father and the infamous portrait of Godfrey Keller of Peter himself illustrating his ambitions of establishing a Navy and distinct European appearance) which starkly contrast one another and illustrate how much Peter differed from that of his predecessors. The visual element of the Cultural Revolution was also influenced by the architectural, and was institutionally supported by Peter's establishment of Academies of Arts, which attempted to import some of the artistic developments from Europe. This would anger those established Muscovites who clung to their traditions. Finally the verbal, with Peter's deep love for and understanding of European languages, he was able to standardize the Russian language along European lines, the culmination of this development being the standardization of the alphabet. This effort was heavily supported (as the motif of this discussion should show) by yet more imports from Europe. Having left the traditional Slavonic languages to that of the church, he was able to secularize the languages of academia by importing translations (in his own standardized Russian) of books on military strategy, science, mathematics, navigation, and other non religious subjects and thereby having the dual effect of promoting his own country's enlightenment but also his form of standardized Russian language. While these developments all reshaped the country in a very drastic manner, it is also important to note that these were developments for the intelligentsia as it were, and that the Russian peasantry was not deeply influenced by the Petrine era reforms in the same sense as the Russian elite. Serfdom of course would live on for more than a century after Peter's reign, these reforms of an intellectual nature were purely for the benefit of noblemen with the intent that they would begin to resemble their European counterparts.

Peter's reforms and general Europeanization did not carry on unabated without criticisms and attempts to stem the tides of these shifts. Peter's own son and heir was arrested and tried for treason, backed by forces within the Empire which sought to reverse the trends of Peter's rule. Peter's rule was also interrupted by two revolts and attempted coups of the *streltsy* (the royal musketeers who favored his half brother and co-ruler Ivan and later half sister Sophia who had been acting as Queen Regent) in 1683 and 1698.

Opposition to Peter's reforms was not just limited to the members of the monarchy and security apparatus most affected by Peter's reign, but the clergy as well. The Nobility throughout the country, conscripted into state service according to strict rules enacted by the emperor, also experienced a level of dissatisfaction with their European Emperor and his policies. Disinherited further by the fact that many of the senior positions within the military and newly formed Navy were occupied by foreigners, certainly did not improve their view of the Tsar and his policies. One of the most noted aspects of the Russian dissatisfaction with these shifts was that of a cultural dynamic, particularly grooming standards among those in the military.

While stark similarities can be drawn between Peter the Great and Vladimir Putin; their drive and effort to redefine Russia's status in the international system, a deep seeded willingness to redefine how Russia is perceived by the outside world, a rejection of their predecessors, governing under pressure from an arguably stronger force on their Western frontier (the Kingdom of Sweden during Peter's reign, and the NATO alliance in the Putin era) threatening the power structure in the Baltic and thereby forcing a development of their military capabilities, forming their inner circle from a cadre of trusted friends and colleagues known to be loyal, etc. The comparisons should stop there. Although President Putin has attempted to reverse the relative decline of Russia as a Great Power through military modernization, development of diplomatic and bureaucratic strength, and covert action the fuel that of his drive is of a completely different nature than that of Peter the Great. While Peter looked westward to import ideas, styles, techniques, etc. Putin's remolding of the country is distinctly inward looking. The current President of the Russian Federation and the officials of the current regime constantly speak of a notion of xenophobic and Western views against Russia and there is a sense of outright rejection of the values and developments in Europe and the West. While some may argue that rightly so the officials of the Russian Federation are skeptical of a new capitalist world of which they have attempted to integrate into over the last three decades, what is more powerful is the stark contrast one can observe between two Russian leaders' strategies to achieve the same goal, a parity with or accession to the club of Great Powers in the world. While the threat from the West forced Russia to

modernize under Peter the Great and adopt many of the characteristics of Europe, ultimately changing the country forever and abandoning some aspects of the national identity of ancient Muscovy, the threat from the West in modern times has had the exact opposite effect. Russia looks inwardly and to its historical roots to defy the West, and while the nations of the West fail to unify and confront Russia, the people of the Russian Federation have rallied around their leader against the West and their way of life.

List of Abbreviations

ABM: Anti-Ballistic Missile

AP/PA: Presidential Administration (*Administratsiya prezidenta*), preferred use of PA as not to confuse any potential source material with the Associated Press. However, direct citations may use the Russian language abbreviation.

APC: Armored Personnel Carrier

CIA: Central Intelligence Agency (USA)

CIS: Commonwealth of Independent States

CPSU: Communist Party of the Soviet Union

CSCE: Conference on Security and Cooperation in Europe

DIA: Defense Intelligence Agency (USA)

DNI: Director of National Intelligence

DOSAAF: Military sports and activities organization

EAEU: Eurasian Economic Union

EEC: European Economic Community

EU: European Union

FAPSI: Federal Agency for Government Communications and Information

FCD: First Chief Directorate of the KGB

FF: Frigate

FFG: Frigate, Guided Missile

FFLG: Frigate, Laser Guided Missile

FIS / SVR: Foreign Intelligence Service

FSB: Federal Security Service

FSKN: Federal Service for the Control of the Struggle against Narcotics

FSO: Federal Protection Service

GDR/DDR: German Democratic Republic or *Deutsche Demokratische Republik*

GOU: Main Operational Directorate of the General Staff (the planning think tank)

GP: Prosecutor General's Office

GRU: Main Intelligence Directorate (under the auspices of the Ministry of Defense, or referred to as the military intelligence service)

GUO: Main Guard Directorate

HUMINT: Human Intelligence

ICBM: Inter-Continental Ballistic Missile

KaPo: The Estonian Internal Security Service *Kaitsepolitsei*

KGB: Committee for State Security

MB: Ministry of Security

MID/ MFA: Ministry of Foreign Affairs

MI6: Secret Intelligence Service of the British Government

MVD: Ministry of Internal Affairs, or the Interior Ministry

NAC: North Atlantic Council

NATO: North Atlantic Treaty Organization

NAK: National Anti-Terrorism Committee

NKVD: People's Commissariat of Internal Affairs

NSA: National Security Agency (USA)

OSINT: Open-Source Intelligence

RF: The Russian Federation

RSFSR: Russian Soviet Federal Socialist Republic

RISS: Russian Institute for Strategic Studies

ROC: The Russian Orthodox Church

SACEUR: NATO Supreme Allied Commander Europe

DESACEUR: NATO Deputy Supreme Allied Commander Europe

SAP (-2020): State Armaments Program

SBP: Presidential Security Service

SB: Security Council

SBU: Ukrainian Security Service

SCO: Shanghai Cooperation Organization

SCSE: State Committee on the State of Emergency

SIGINT: Signals Intelligence

SK: Investigatory Committee

SOFA: Status of Forces Agreement

SSBN: Submarine Ballistic Nuclear

SSGN: Submarine Guided Nuclear

START: Strategic Arms Reduction Talks

USSR: Union of Soviet Socialist Republics

VDV: Air Assault Troops: paratroopers

VLS: Vertical Launch System

Vita

Michael “Mike” Robert Gates Lyons was born in Fort Gordon, Georgia but grew up in Fort Huachuca, Arizona and in the suburbs of Phoenix, Arizona. He obtained a Bachelors of Arts from the University of Arizona in 2014, double-majoring in Political Science (with an emphasis on Foreign Affairs) and German Studies, as well as conducted a Study Abroad program in Sweden at Uppsala, University. After his undergraduate studies and relocating from Istanbul, Turkey he began his graduate studies in the MAIS program at the Diplomatic Academy of Vienna, in Austria. He has participated in various conferences, symposiums, and competitions throughout his time in Vienna such as: the Geneva 9/12 Cyber Security Competition (where he was a semi-finalist), the 2016 CTBTO Symposium, and DASICON 2016: Hackers, Contractors and Drones Warfare in the 21st Century. During his final year of study at the DA, he conducted research in the Russian Federation (on exchange at the Moscow State Institute of International Relation – MGIMO), Ukraine, Poland, the Western Balkans, and Northern-Iraq.

On my honor as a student of the Diplomatic Academy of Vienna, I submit this work in good faith and pledge that I have neither given nor received unauthorized assistance on it

Michael R. G. Lyons