

Cover Russia's leadership has made tough decisions and instituted sweeping change in the military ranks to the dislike of many officers. While some Imperial and Soviet traditions remain, the reorganization of the force and its "informatization" have produced innovations that are "recasting the red star" that the bear has protected for so long. Forging these pieces—tradition, technology, and toughness—is represented in the cover artwork through the images of Russia's historical legacy, updated equipment, and tough civilian leadership.



Russia Forges Tradition and Technology through Toughness

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Foreign Military Studies Office (FMSO) Fort Leavenworth, KS 2011 The views expressed in this document are those of the author and do not reflect the official policy or position of the Department of Defense or the US government.

The author works for the Foreign Military Studies Office (FMSO), Fort Leavenworth, Kansas. FMSO is a component of the US Army's Training and Doctrine Command (TRADOC). The office is charged with preparing studies and assessments based on the reading of foreign and domestic publications and through contacts with a network of foreign and US military and civilian security specialists. FMSO researches, writes, and publishes from unclassified sources about the military establishments, doctrines, and practices of selected foreign armed forces. It also studies a variety of civil-military and transnational security issues affecting the US and its military forces. FMSO products are prepared for the US Army and other services, the Department of Defense, as well as non-DoD organizations to include the Treasury and Justice Departments.

DEDICATION

This book is dedicated to Dr. Jacob Kipp, mentor and coach to me and hundreds of foreign area officers (FAOs) in the US Armed Forces. "Comrade" Kipp, as his US friends sometimes call him, unselfishly gives of his time and wisdom to develop analytical expertise in the American force. His love of teaching and especially of "Mother Russia" and national security affairs remain his primary focus even in retirement. He and his beloved wife Masha, now also retired after serving as a professor of language and theater at the University of Kansas, have hosted hundreds of students and luminaries at their home and advised them on matters both professional and personal. For this, I and his students and friends both foreign and domestic are eternally grateful.

ACKNOWLEDGEMENTS

The author used only open-source translations for the construction of this document. Until August 2009, the author utilized the translation talents of the Open Source Center (formerly the Foreign Broadcast Information Service or FBIS). After that date, he used government contracted Russian translators in order to write other chapters in this book. The author is solely responsible for the selection and analysis of the material others translated.

The author is indebted to the staff and instructors at the Defense Language Institute in Monterey, California and at the US Army's Russian Institute (USARI) in Garmisch, Germany. The Institute no longer exists, having been replaced by the more comprehensive George C. Marshall European Center for Security Studies. However, some USARI instructors remain employed at the Center. The insights of these instructors and their patience in teaching a host of foreign area officers in the Russian language, culture, and social and military affairs was exceptional. USARI instructors were particularly helpful in regard to the latter subject areas.

Further, the author would like to acknowledge the local support of Mr. Charles A. Martinson III of Fort Leavenworth who designed the cover artwork. Mr. Martinson is an exceptionally gifted graphic artist with the unique ability to produce innovative and original, defining designs that have accurately reflected the content of both this work and others by the author. The author would like to acknowledge the assistance of Mr. Robert Love of the Foreign Military Studies Office (FMSO) who translated some of the material used in this publication and monitored commercial translations of other Russian source material, ensuring their timely delivery as well; and Mr. Dennis Giangreco of FMSO who edited several of the chapters. The director of FMSO, Mr. Tom Wilhelm, provided his total support and encouragement for the project and ensured the author had adequate time to prepare this work.

Finally, the author would like to express his thanks to the Training and Doctrine Command (TRADOC) G-2 at Fort Eustis for financing the second printing of this book. The 318th Information Operations Group within the 688th Information Operations Wing in San Antonio, Texas financed the book's first printing.

FOREWORD

Since the dissolution of the Soviet and emergence of the Russian armed forces, the country's leadership has worked to reestablish the military's place among its own populace and the world community at large. Recasting the Red Star follows Russia's progress in accomplishing these goals through three standards: tradition, technology, and toughness. Tradition is represented by elements of the Tsarist and Soviet legacy that have survived (the dialectic thought process, military culture, deception, the reconnaissance-strike complex, etc.). Technology is represented by the present effort to introduce the necessary information- and nano-technologies into its modern weaponry and to address the accompanying changes to organizational and conceptual issues. Toughness is represented by the efforts of the defense ministry and political leadership to rid the armed forces of clans and corruption and impose actual reform on the military. The cover artwork of this book includes examples of these standards.

Recasting the Red Star describes Russia's modernization effort in a comprehensive fashion. The Defense Ministry's military reform effort and the operational environment implied in Russia's national security strategy (2009) and military doctrine (2010) are described. The Soviet culture of military thought is examined to include a short history of Tsarist and Soviet military traditions. These chapters serve as a reference point for the traditions behind Russia's modernization effort. Next the author examines technological developments, such as Russia's concept of high-technology deception, information war, reconnaissance- and information-strike systems (a C4ISR equivalent), and resulting future war construct. Finally, the book closely examines the Russian-Georgian conflict of August 2008. These chapters question why Russia and Georgia went to war, how information warfare figured into the conflict, and, most important of all, "who set the bear trap."

The material assembled for this publication indicates that Russia's armed forces are on their way back to becoming a legitimate military power. A long road lies ahead with many potential pitfalls but under the leadership of President Dmitriy Medvedev and Prime Minister Vladimir Putin a reform course has been set. Russia has retained its nuclear capability and is modernizing its weaponry, equipment, and organizational structure. Russia may not yet be "back" in the author's opinion—but it is making good progress.

Tom Wilhelm Director Foreign Military Studies Office 2011

INTRODUCTION

The armed forces of the Russian Federation are still regaining their strength as they emerge from the collapse of the Soviet Union in 1991. This has been a slow process filled with pain and frustration over the past two decades as several reform initiatives failed to materialize. Further exacerbating the process were Russia's two wars fought against Chechen extremists and the war fought against Georgia over South Ossetia. These conflicts were less successful than anticipated. However, the military is advancing and modernizing. Weaponry and equipment updates represent responses to the perceived impact of information-age technologies on military affairs. Russia's military leaders have integrated these digital processes into their operational art and strategic planning. Further, they have reorganized the military establishment and started a serious campaign against corruption in the force. The book Recasting the Red Star tracks the military's modernization through the three threads of tradition, technology, and toughness, with the latter thread represented by the staunch support that President Dmitriy Medvedev, Prime Minister Vladimir Putin, and Defense Minister Anatoliy Serdyukov have provided the reform effort.

The metaphor "recasting the red star" was chosen as the title for this book since these words emphasize the changing nature of an armed force that still relishes its legacy. The Red Star has been the symbol of the armed forces for nearly a century. The concept of the star first appeared in the 1908 novel Red Star, Alexander Bogdanov's science fiction novel about a communist utopia on Mars in which a scientist travels there to learn about the Martian's socialist system. The star's origin within the armed forces apparently lies in a mass political movement during the Russian civil war and the end of the First World War. According to an English-language Wikipedia entry, the star was used to distinguish Moscow troops from the influx of retreating Russians who had departed the Austrian and German fronts and found themselves in Moscow in 1917 mixed with the local garrison. The officers gave out tin stars to the Moscow garrison soldiers to wear on their hats. When those troops joined the Red Army and the Bolsheviks they painted their tin stars red, the color of socialism, thus creating the original Red Star.

The Red Star was soon adopted as an emblem of the Soviet Union and was often seen on awards such as the Order of the Red Star which was awarded for "exceptional service in the cause of the defense of the Soviet Union in both war and peace." In Soviet times the five points of the star represented the planet's five continents (which was Russia's understanding of the number of continents at the time). Red was the color of the proletarian revolution and the Red Star was often called the "star of Mars," after the Roman god of war, Mars. The Military Collegium for the Organization of the Red Army proposed the Red Star as the symbol of the Red Army. The logo's creator was Konstantin Eremeev, the commander of the Petrograd Military District according to the Russian-language version of Wikipedia. Ironically, in the Soviet tradition, Mars symbolized the protection of peaceful labor and not the Roman god of war. The Red Star symbolized the liberation of the workers from hunger, war, poverty, and slavery. The Red Star is, of course, also closely associated in the Russian mind with victory during the Great Patriotic War (World War II)—no more so than the unfurling of the Soviet flag with its Red Star and Hammer and Sickle over a burning Berlin on May 2, 1945.

The Soviet <u>Voennyy Entsiklopedicheskiy Slovar'</u> (<u>Military Encyclopedic Dictionary</u>) defines the armed forces' Red Star heritage as follows:

The Red Star is a distinctive device worn by Soviet Armed Forces personnel. It was adopted in April 1918 as a chest badge, effective July 1918. It was also worn on headgear with the plow and hammer emblem (hammer and sickle from April 1922) and was worn only on headgear from 29 May 1922. The Red Star became a mandatory component element of cap badges upon their adoption in the Soviet Army. [1]

Today, the Russian military's main newspaper remains <u>Krasnaya Zvezda</u> (Red Star). The star continues as well as one of the elements of the banner of the armed forces of the Russian Federation. The image below is the banner of the armed forces as of 2003. The Red Star no longer has the hammer and sickle in the middle, and it is no longer the center of focus. Red Stars on the current banner are located at its corners, perhaps indicating that the armed forces now occupy a slightly more peripheral aspect of Russia's security and political space (it is no coincidence that the cover to this book features three civilians and no military figures). The back side of the banner has the word *Otechestvo* (Motherland) above the double-headed eagle, and the words *Dolg* (Duty) and *Chest'* (Honor) underneath it.[2] The following image is the front side of the banner.



Recasting the Red Star is divided into three parts. Part One includes four chapters that describe Russia's military reform effort, the traditions and thought processes behind these reforms (including some traditions that hampered reform), and Russia's assessment of the current operational environment. Part One represents the forging of "tradition" into the recasting of the red star.

Part Two also includes four chapters (five through eight). These chapters are of an operational and technological nature. They discuss the Russian concept of high-technology deception; the issue of the information-strike complex (a modern-day command, control, computer, intelligence, surveillance, and reconnaissance, or C4ISR, concept); the Russian attempt to "informatize" its armed forces; and future war concepts promoted by the Russian military and civilian academics. Part Two represents the forging of "technology" into the recasting of the red star.

The final four chapters comprise Part Three of the book. These chapters discuss the August 2008 war with Georgia over South Ossetia from several perspectives. First, there is a general description of what happened. Second, there is an examination of the question "who started the conflict." Third, there is a list of information warfare conclusions drawn from the conflict. Finally, there is a description of three books that describe varying perspectives on the war. One book represents international opinions, one represents US opinions, and one represents Russian opinions about the conflict. Part Three describes practical experiences and the forging of "toughness" through battle

experience and the resulting reform mandates that became inevitable if Russia was to remain an international military competitor. A chapter by chapter summary follows.

Chapter One examines the Russian progress in reforming its military structure. Changes in the nature of combat compelled Russia to review the cumbersome structure left over from the Soviet army and geared toward frontline clashes of forces whose mobilization deployment would take a long time according to General Staff Chief Nikolay Makarov. That structure has ceased to provide national defense capability. Fundamentally new methods of combat necessitated a shift to a new structure and to more modern weapons and materiel linked in a single information-communication space. The reform effort is comprehensive, involving a restructuring of the military districts and strategic sectors of interest; and a reorganization of the officer corps and educational institutions. The reform effort has the support of President Dmitriy Medvedev and Prime Minister Vladimir Putin, which has greatly eased the process. The military budget will be increased some 40% over the next ten years to ensure that modern weaponry accompanies the reform effort.

Chapter Two examines Russian and Soviet military traditions. There are many similarities between the old and the new traditions but there are also differences. Some traditions are captured in books, some are maintained in personal testimonies or gatherings of officers, and some are relived in classical films such as Vladimir Rogovoy's "Ofitsery (Officers)." For example, a few similarities between the Soviet and Tsarist period are:

- Soviet: Loyalty to the Unit Banner or Ship Flag. A 1942 "Decree on the Red Banner" was approved by the Presidium of the USSR Supreme Soviet. The decree noted that "The Banner is a symbol of military honor, valor, and glory; it is a reminder to each soldier, sergeant, officer, and general of their sacred duty to faithfully serve and bravely and capably defend the Soviet Homeland..." Old Russia: Peter the Great developed the banners and several concepts that became significant for generations of soldiers. Even the Soviet writers noted that Peter the Great did much to elevate the banner to a place of prominence in the eyes of the Russian serviceman, as soldiers swore to the oath "I will not leave the command and banner to which I belong, but will follow them as long as I am alive."
- Soviet: Esprit de corps and solidarity in battle. These traits are based on the new, socialist relations between soldiers and the people's unity of class interests. These traits are incompatible with lack of integrity, overlooking a comrade's error, or concealing his transgressions. Honesty is required in relationships. The film "Ofitsery (Officers)" focuses on esprit de corps and underscores the importance of good morale and discipline of the force. The film is remembered most for the line "There is such a profession—defending one's Motherland." Old Russia: Dragomirov believed that the military had more to do with will rather than intellect and thus stressed moral education's objectives: instill fighting spirit, patriotism, and discipline. The community (peasant-commune) had deep roots in the Russian community as the names of many regiments (Orlov, Kozel, Tver, etc.) came from places that sent fighters. This focus on the community and solidarity was reflected in Suvorov's urging that soldiers should "die yourself, but rescue your comrade!"

On the other hand, the focus on the soldier's well-being from Imperial times as stated in historical texts is clearly missing from today's list of Russian traditions. The unfortunate tradition of

dedovshchina (hazing) lives on when it should have ended long ago. Treating soldiers inhumanely goes against many Old Russian military traditions. A final addition to this chapter is a list of traditions that will be taught to Russian conscripts over the coming year. The list includes films, books, and lectures on Russian traditions designed to teach the force about its heritage.

Chapter Three summarizes two books on military thought from the Soviet era. They are <u>The Culture of Military Thought</u> and <u>The History of Soviet Military Thought</u>. The thought processes explained in these works are expected to continue to influence the Russian military's thinking in the decades ahead. The authors of the first work underscored the necessity of using Marxist-Leninist ideological and methodological principles in order to look into the future, forecast military events, and creatively implement military theory's new postulations. Problems must be solved without a direct reliance on practical experience gained in warfare since Russia's most recent experiences (the 1979-1989 war against Afghan insurgents, the wars in Chechnya, and the 2008 war with Georgia) were not high-tech versus high-tech types of conflict. Authors Colonel General F. F. Gaivoronsky and Colonel M. I. Galkin's work also offers a general introduction to other topics covered in <u>Recasting the Red Star</u> such as future war, military traditions, and high-technology applications to military affairs.

I.A. Korotkov wrote the second work. It canvassed the years 1917 to June of 1941. In the introduction to his book, Korotkov noted how Friedrich Engels had stressed not simply drawing conclusions but rather that *study* is what Russia's officers need most of all. He discussed the ongoing importance of military doctrine and the concept of a General Staff, two issues that are as timely and important today as they were in Korotkov's time.

Chapter Four examines the indicators that form Russia's impression of the so-called "operational environment." These indicators are taken from the May 2009 National Security Strategy of the Russian Federation and the February 2010 Military Doctrine of the Russian Federation. While the operational environment is a US construct, the outline of a theoretical model that approaches the US concept can be implied from these documents. Russian military thinking on the geostrategic environment is included. One strategic direction of the operational environment, the Arctic region, is given special attention since it is discussed so thoroughly in the Russian press.

Chapter Five describes the evolution and importance of the Russian concept of deception. Russian military authors over the years have preferred the term *maskirovka* (concealment). However, in the past decade the terms *obman* (deception), *dezinformatsiya* (disinformation), and *vvedenie v zabluzhdenie* (mislead) have become increasingly in vogue (as well as the term "reflexive control," which is close in meaning to perception management). Russia will continue to stress the importance of using deception as a "coefficient of force" (it increases the strength or power of a person or armed force that uses it, especially if the two sides have equal capabilities or if one side is much weaker than the other side) against an opponent while remaining vigilant in case some terrorist organization or nation-state uses deception operations against Russia.

Chapter Six takes a look at Russian attempts to "informatize" its military. The chapter includes new and old definitions of the term "information war" as well as the current discussion surrounding the projected use of the concept known as network-centric warfare. The support of President Dmitriy

Medvedev and Prime Minister Vladimir Putin is crucial to the future success of the informationization effort and to improving the military's command and control system. Their demands to achieve success in these areas are indicative of the tough approach required to make the military-industrial complex of Russia perform as it should. Also covered in the chapter is the attention Russia's military-industrial complex is paying to the development of informatized weaponry and especially to unmanned aerial vehicles (UAVs).

Chapter Seven discusses the Russian equivalent terminology for the US concept of command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) and how the Russian concept has changed over time. The chapter first discusses the reconnaissance-fire and – strike complex, then the reconnaissance-fire and –strike system, and finally the information-strike system and operation. The latter term is especially important in that it indicates planning for a strategic strike on an opponent's information infrastructure and information resources. It is becoming increasingly important in the Russian assessment of future war operations. Russian discussions in military journals also highlight "reconnaissance-strike-maneuver" engagements. These activities could result in one-time engagements of targets and thus eliminate neutralizing and suppressive fires in the opinion of some Russian experts.

Chapter Eight is a look at Russian thinking regarding future war. It examines the thoughts of several leading Russian theorists on the topic. The chapter discusses indirect strategies, information-psychological attacks (to include the use of reflexive control operations), and the disorganization weapon, a key component of Russia's information warfare concept. Also examined is the progress Russia is making in regard to nanotechnologies and the Russian use of asymmetry in future war.

Chapter Nine looks at the August conflict between Russia and Georgia solely from the vantage point of the Russian press. The findings are instructive especially for how the Russians used the media. The press served as a signaling or warning device, as a medium for official pronouncements, and as a forum for criticism and praise among other issues. Russia clearly warned Georgia not to act. When Georgia did, Russia moved in and succeeded in avenging the deaths of their peacekeepers and in establishing control over South Ossetia, an activity it had surreptitiously carried on for the past ten years (passing out Russian passports to residents of South Ossetia, etc.). The appraisal discusses the problems and successes of the Russian military as well as the application of cyber and media operations during the conflict.

Chapter Ten considers the problem of operational deception in the information age and, in the case of the Russian-Georgian conflict, who set the bear trap, Russia or Georgia? The interesting conclusion of both sides is that each drew the other into the fight. Who is telling the truth? Will we be able to see through the fog of operational deception that appears to lie at the heart of this conflict? Or for that matter, is a true rendering of those five days ever going to be discernable? Interestingly, Russia has not held a Parliamentary hearing on the conflict as it did with regard to the war in Chechnya.

Chapter Eleven examines the information warfare theory that Russia has developed and the assessment of this theory after the conflict with Georgia. Opinions were divided as to who won the information war, Russian or Georgian media? More importantly, several recommendations were

made to strengthen Russia's information warfare techniques, procedures, and organization. The lessons learned in this conflict should enable Russia to use practical experience to improve its information forces and information theory for future use.

Chapter Twelve is composed of three book reviews on the fighting in South Ossetia and Georgia. The books reviewed are <u>The Guns of August 2008: Russia's War in Georgia</u> (Svante E. Cornell and S. Frederick Starr, editors); <u>A Little War That Shook the World</u> by Ronald D. Asmus; and <u>The Tanks of August</u> by Russians Mikhail Barabanov, Anton Lavrov, and Vyacheslav Tseluyko. The comparison offers varying perspectives of the fighting as well as different timelines of how the fighting evolved.

Chapter Thirteen offers conclusions that the author draws from the study. It also updates several of the chapters with new information obtained since the various chapters were written and cleared for publication.

There are also five appendixes. Appendix One lists information warfare definitions and related information security policies of the Russian Federation. Appendix Two lists Russian definitions associated with culture and traditions. Appendix Three lists cyber attacks during the Russian-Georgian conflict. Appendix Four lists Russian definitions associated with military deception. Appendix Five contains two maps of South Ossetia to help the reader find their place on the map as they confront the many cities mentioned in Chapters 9-12.

Wherever possible, transliterations of Russian titles were added to the text or footnotes. If there is no Russian transliteration, then the original Russian version of the articles were either lost or only an English translation was available. The transliterations used the BGN/PCGN 1947 Romanization System for Russian.

Timothy Thomas January 2011

CHAPTER ONE: MILITARY REFORM—A "NEW LOOK" FOR REAL?

We have seen with our own eyes that military reform is heading in the right direction. Time alone is required for its full implementation.[3]

Introduction

Ever since the creation of the Russian Armed Forces, military reform has been a topic of hot debate among military and civilian professionals in Russia. Former Defense Minister Pavel Grachev initiated reform proposals in the early 1990s. The discussion was heated and intense due to strong push-back from the higher echelons of the officer corps. Soviet-era officers were the leaders of the anti-reform protests and their positions were understandable: they were protesting to protect the only system and benefits that they had known.

Reform efforts from 1993-2004 were so fruitless that the well-known Russian military journalist Alexander Goltz wrote a book titled <u>Armiya Rossii: 11 Poteryann'kh Let</u> (<u>The Army of Russia: 11 Lost Years</u>) in 2004. Goltz stressed that only a solution reached by civilian society (not a solution offered by general officers protecting their realm) could offer a profound resolution to the problem.

In 2008, however, military reform appeared to begin in earnest. The main factor in finally overcoming the roadblocks of the officer corps was of an objective nature: the establishment (in the words of Russian military expert Vitaliy Shlykov) of Anatoliy Serdyukov as "the first truly civilian Defense Minister" of Russia.[4] A second, subjective reason, for reform effort successes was that Serdyukov was able to "lift the taboo on the study and use of the foreign experience of military organization."[5] In this sense Serdyukov was using a reform method "repeatedly proven in Russian history by military reformers."[6]

Russian President Dmitriy Medvedev believes that the structural (reorganization) reform is now complete. This reform has resulted in officer reductions, in the realignment of educational institutions, and in the development of operational-strategic sectors. However, much work remains, particularly in providing the Armed Forces with modern arms and equipment. This chapter will describe how a combination of toughness and persistence has resulted in these reform achievements. It will also describe the work that yet needs to be done.

The Appointment of Serdyukov as Defense Minister

In February 2007 then-President Vladimir Putin appointed Anatoliy Serdyukov to the position of Defense Minister of the Russian Federation. Serdyukov was, like Putin, from St. Petersburg. From 2004-2007 he led the Tax Ministry of Russia. His initial charge from Putin was to fight corruption and inefficiency in the military. He decided to transform the military personnel structure in the process from an egg shape to that of a pyramid, with more officers at the bottom than at the top; and to change the Armed Forces organizational structure, moving from a four-tier system (military district, army, division, unit) to a three-tier system (military district, operative command, brigade). The purpose of the latter move was to provide for a more efficient and quick reaction capability to military threats. To date thousands of officers have been removed from service and some 85 brigades have been created. Thus Serdyukov has provided solid movement and change in both areas.

The change in a military district system was influenced by Russia's recent wars in Chechnya and South Ossetia. In both conflicts the division and regimental structures hardly participated in the planning and guidance of the conflicts since the focus was on fighting quick wars at the small unit level. Most Russian analysts think the August 2008 conflict with Georgia was the catalyst that caused Serdyukov to act more rapidly than originally anticipated. The Chief of the Russian General Staff, General of the Army Nikolay Makarov, stated in December 2008 that wars will now require troops to spring into action immediately. The lessons learned from the conflict in Georgia have become the catalyst for speeding up the reform process. As he noted, "We had serious deficiencies. We have made the necessary conclusions and we will eradicate them [problems encountered during the conflict]."[7]

Ruslan Pukhov, a Director for Russia's Center for Analysis of Strategies and Technology, thinks Serdyukov provided common sense to an otherwise untenable situation. What didn't hurt, of course, was the backing of Vladimir Putin and Dmitriy Medvedev. Their support was vital if reform was to move forward since Serdyukov had many opponents to his efforts.[8]

Retired officers, journalists, and even academics were the primary opponents to military reform. Among the retired officers, Colonel-General Leonid Ivashov, now President of the Academy of Geopolitical Problems; Major-General Alexander Vladimirov, Vice-President of the Collegium of Military Experts; and Major-General Vladimir Isakov, an Adviser to the President on Military Reform in the 1990s, stand out for their contentious backlash to the reform proposals. Ivashov pointed out that there was no military organizational development in past reform efforts and there is none now. Vladimirov stated that the reform effort does not coincide with any strategy and thus has no chance of being successful. Isakov contended that the brigade structure will turn into an overgrown regiment. Retired officer Anatoliy Tsyganok, head of the Military Forecasting Center, noted that there is no foundation for military reform in the shape of a military doctrine or national security concept.

These critiques all originated in the first three months of 2009. Many other anti-reform articles had appeared earlier. Since 2009, however, both a military doctrine and national security strategy have been produced. These documents provided a base for reform and offset some of the criticism. More importantly, a majority of the upper echelon of active duty officers are in agreement, it appears, with the High Command. General Makarov stated that the reform is the most significant in the past fifty years and consists of five phases: converting units to permanent-readiness status and cutting officer personnel; providing 70-100% of state-of-the-art equipment by 2020; training officers and non-commissioned officers and reforming educational establishments; formulating new regulations and training programs; and raising service member prestige through better pay and allowances. [9]

But problems do remain within the force. In January 2010 three officers were removed from their posts and they were important positions: the commander-in-chief of the Russian Ground Forces of the Army, the commander of forces in the North Caucasus Military District, and the chief of the Housing and Facilities Service. A reason provided for their dismissal was that they did not agree with Russia's "new look." Further, a deputy chairman of the State Duma Defense Committee, Mikhail Babich, stated that the "new look" is not occurring in reality. Rather in his estimation none of the 85 brigades were in a state of combat readiness. [10] The new brigade structure (and lack of a large

army) has also resulted in jokes among Russian defense pundits. According to Alexander Khramchikhin, who works at the Institute for Political and Military Analysis, "the biggest problem for the Chinese Army in case of war with Russia will be not to destroy the Russian Army but to find it!"[11]

Command and Control System Reform

Russia's General Staff Chief, General of the Army Nikolay Makarov, noted in late 2010 that organizational reforms were required since there was a lack of conformity in the country's Armed Forces. Nowhere was nonconformity more apparent than in the country's command and control system. Previously branches of service and combat arms caused significant fragmentation of the command and control system since each branch had its own communication system. The reform effort has eliminated many of these redundancies and simultaneously compressed the time component allowing for swifter decisions. [12]

Automated command and control integration increases Russia's ability to conduct reconnaissance, surveillance, navigation, recognition, control and guidance, and battle management. It will soon be possible for military districts to achieve full operational readiness of all echelons in a theater of military operation in six hours [13] thanks to these improvements.

Reform of the Officer Corps, Creation of New Commands

Defense Minister Serdyukov shocked the military establishment with a reform announcement on 14 October 2008. Serdyukov stated that he intended to reduce the number of army and naval officers from 355,000 to 150,000 within the next three years. Colonels would be cut from 25,665 to 9,114; majors would shrink from 99,550 to 25,000; and lieutenant colonels would decrease from 88,678 to 15,000. Captains would slide from 90,000 to 40,000. Senior lieutenants would gain from the reform, increasing from 50,000 to 60,000. The Moscow-based administrative staff would be reduced by 2.5 times, from 21,813 to 8,500. Just a month earlier, in September, the Communist Party had demanded Serdyukov's resignation, noting how he had destroyed the combat effectiveness of the Defense Ministry with his officer reductions up to that point. [14] To make such drastic cuts only a month later indicates that Serdyukov continued to have the strong backing of the President and Prime Minister.

A little over a year later, on 1 December 2009, Serdyukov reported on progress regarding the task of changing the structure of the Armed Forces. He stated that new strategic and operational commands had been created as well as 85 army brigades that could be deployed to a combat area an hour after an alert was issued. Later the extent of this reorganization was explained. The existing six military districts were merged into four military districts and four joint strategic commands. This action was signed by President Medvedev on 14 July 2010. The same decree created a unified logistical system as well. Commanders will exercise control over all forces (Army, Navy, Air Force, Air Defense) under their strategic command. The new strategic command headquarters will be located in St. Petersburg (Western District), Yekaterinburg (Central District), Rostov-on-Don (Southern District), and Khabarovsk (Eastern District). Russia's strategic nuclear forces were left under central control.

Commanders of the four districts were designated as follows: Western Military District, Colonel-General Arkady Bakhin; Southern Military District, Lieutenant-General Alexander Galkin; Eastern Military District, Admiral Konstantin Sidenko; and the Central Military District, Lieutenant-General

Vladimir Chirkin.[15]

Why were new commands created? Serdyukov reported that one reason was the changing nature of warfare in that the entire country, and not just some sectors, has become a zone of combat operations. The military-administrative division that existed did not meet the threat. There was no command and control agency to integrate the efforts of the army, navy, and air force. Air defense military district borders did not match the zones of air defense responsibility First Deputy Defense Minister Vladimir Popovkin noted that the changes have increased the combat potential of the Central Military District by a factor of 2-2.4.[16]

Reform of the Educational System and other Reform Efforts

Dr. Vitaliy Shlykov, a renowned security specialist of the Russian Federation, noted that less than 3,000 students were enrolled in military educational institutions in 2009, compared with 18,000 to 19,000 in previous years. [17] This has concerned many Russian military analysts. Sergey Kovalchenko, for example, wrote in 2008 that during the reign of Alexander II, Russian Minister of War Dmitriy Milyutin carried out a military reform that was based on improving the quality of the officer corps and not just the quantity. This point appears to have been ignored by the Serdyukov administration (in Kovalchenko's estimation) since fewer officers were being admitted to the higher educational facilities.

Former Russian Minister of Defense Igor Rodionov agreed. He stated that cuts in military education are extremely unfortunate at a time when modern warfare requires highly intelligent officers capable of not only manipulating high-tech equipment but also understanding the significance of the data provided to them. Only 16 senior officers were admitted to the General Staff Academy in 2009 as opposed to 100 being admitted each year previously. It was noted that 18 faculties would be eliminated or reformed at the Academy, with only the military art and national security departments exempt from change. [18]

In February 2009 Russia had 64 military universities that included 15 military academies, four military universities, and 45 higher technical schools. By 2013 there will be three military research centers, six military academies, and one military university according to one report. [19] Officers will be required to become proficient in a foreign language and the ratio of theoretical to practical training will be changed to reflect more input from the latter.

There are several other reform efforts worthy of mention. First, the reorganization of the Russian military media appears imminent. The process of setting up the Zvezda Open Joint-Stock Company for media affairs is nearing completion, a process organized by the Russian Ministry of Defense. This company will provide a single information space for the coverage of Armed Forces news according to a ministry spokesman. Zvezda Company branches will appear in each of the new military districts as well as at Russian military sites abroad. Media outlets of the company include the Ministry of Defense's central TV station and radio studios, the *Voyeninform* (Military Information) news agency, the MOD editorial and publishing center, nearly ten magazines and journals, and media bodies in the military districts. [20]

Not to be forgotten among the reform efforts is the fact that as of November 2010 seven of Russia's

nine deputies of defense are civilians. This is the first time in history that this has occurred. Of these deputies, several are engaged in financial and tax endeavors.

Reform of the Military-Industrial Complex

Russia's military-industrial complex or VPK (*voenno-promychleniy komplex*) is undergoing a reformation in both substance and capability. The former is being aided by developments such as the institution of an organization based on the US Defense Advanced Research Projects Agency (DARPA) model. The latter is being assisted via arms deals and a huge budget.

Russia's Ministry of Defense hopes that the DARPA-equivalent organization will serve as a structure for advanced defense research resulting in breakthrough R&D. Deputy Prime Minister Sergei Ivanov, at one time the Russian Defense Minister, stated that research and development is a strategic issue that must be handled quickly. It is expected that the organization will bind together the Defense Ministry, the Academy of Sciences (the focal point for R&D during the Soviet era), and new and old players on the market such as the Kurchatov Institute, RUSNANO, Rosatom, and Russian Technologies. Further, this DARPA-type organization will pursue the integration of civilian organizations with defense industries in the quest for creative ideas.[21]

To support these efforts Russia plans to spend \$709 billion on its state armaments program over the next ten years. Ivanov told reporters that this was an unprecedented amount and that the plan included money for armament programs of other security and law enforcement agencies as well as the defense ministry. Nearly 20% of these funds would be spent on research and development.[22] On the other hand, Defense Minister Anatoliy Serdyukov noted that the Armed Forces lacked the funding to support a contract system of manning the force and therefore conscription is on the rise.[23] So clearly a priority direction for development has been established by the high command—to produce more high-tech weaponry.

Even a casual glance at Russia's newspapers and Internet sites offers readers an idea of the scope of this reform effort. Consider, for example, just a few of the developments in the armament program:

- Russia is developing combat lasers. At the moment these lasers are mounted on IL-76 aircraft in order to counter an adversary's reconnaissance system.[24]
- The Sukhoi Company is planning to build 500 warplanes in five years. The majority (300) will be made in conjunction with the Irkut Company and are for foreign sales. Sukhoi plans to combine with MiG to produce up to 100 planes annually for the Russian air force. [25]
- The Vega Concern and Taganrog Beriyev Scientific and Technical Complex are planning to build an airborne early warning and control aircraft for both domestic and foreign markets. The name of the aircraft at the moment is Be-250.[26]
- The GLONASS satellite space system will be at full strength in December 2010. Three GLONASS-M satellites were successfully put into space on 2 September 2010. Adding these three make a total of 23 satellites in the space system. Other launches are planned for December (to include the next-generation GLONASS-K satellite) to allow for a full complement of this equipment. Navigation accuracy will be further enhanced next year with the launch of the Luch-5A and Luch-5B satellites. [27]

Defense Minister Serdyukov has stated that 70% of Russia's equipment will be composed of modern weapons by 2020.[28] President Medvedev reiterated this goal a year later, noting that by 2015 at least 30% of weaponry must be modern and "in the future" 70% of Russia's weaponry must be modern.[29]

Testing the Reforms—Vostok-2010

On 29 June 2010 the Russian Armed Forces began a ten day exercise dubbed "Vostok-2010." The exercise's insignia was a circular patch that had the insignia's of the defense ministry and the naval, ground, and air force troops on a green background. A gray border surrounded the green area with the words "operational-strategic training" inscribed on it. The Russian military's newspaper *Krasnaya Zvezda* (Red Star) had the Russian slogan "Difficult in training..." posted above the insignia in its 1 July edition.

The training was reportedly designed to find out if military reform was heading in the right direction; if tables of equipment were properly organized; if new command control equipment functioned properly; and if the newly-formed brigades could rapidly be transported to other areas of the country, in particular to Russia's Far East borders. Units that were transported to the Far East picked up their equipment at their arrival points instead of taking their equipment with them, also a new phase of the exercise. With regard to command and control issues, Lieutenant General Vladimir Chirkin, commander of the Central Military District, stated that the new command and control system is being created so that "in the light of the realities of the present day and the changed international environment the state can independently counter potential security threats against itself and its allies, and pursue its strategic goals."[30]

The training also sought to improve the security of the region and, if required, to help protect Russian national interests there. Many journalists speculated that the exercise included planning for potential operations against Japan, North Korea, and, most prominently mentioned by the journalists, China.

Defense Minister Anatoliy Serdyukov took part in the exercises. He noted that "the main goal at Vostok-2010 was to test and validate the Armed Forces new organizational and personnel structure." [31] The exercise consisted of three phases: air defense, naval conflict, and land conflict all against a hypothetical adversary. It was noted that an interlinked control system was being used for the first time along with new mobile command and control equipment. [32] Not unexpectedly the exercise started with the transition from a peacetime to a wartime footing in the form of an air attack on Russia and the latter's use of air defense forces to protect the nation. The forced march of units on roads and on rail lines along with a massive air lift of troops was exercised to get personnel to the area while air force fighters fended off the hypothetical adversary. Three zones of responsibility were established for air defense forces. Strategic-operational commands were responsible for surface-to-air missile regiments; and brigades were responsible for surface-to-air battalions. [33]

President Dmitriy Medvedev took part in the second phase of the exercise, a naval confrontation. The naval exercise was comprised of six different "events:"

- The rehearsal of an antisubmarine defense
- The establishment of an air defense posture
- The establishment of a defense against ships and small surface craft
- The establishment of cover for fleet attack forces conducting an amphibious assault force landing
- The use of attack aviation that included an intensive missile and bombing strike against an enemy surface strike group
- And the support of ground troop operations in the coastal sector, to include assisting with the landing of an amphibious assault force.[34]

It was reported that, for the first time, interaction with onshore groups were established via combined control channels. The Navy also focused on several tasks other than conflict: protecting the national interests of Russia in its economic zone; controlling fishing rights; curbing smuggling; and countering piracy.[35]

Land forces focused on marches, engagements with potential adversary forces, and river crossings. The land forces scenario even included the explosion of a nuclear mine in the concluding phase of the exercise. [36] The latter event was important in that the Strategic Rocket Forces were not involved but rather the ground forces in the nuclear explosion. This event may have been planned to indicate to its neighbors that Russia can defend itself even without the power of intercontinental missiles. As with air defense and naval forces, the ground forces also emphasized that there was an integration of tactical with national command and control assets.

One problem encountered by the Armed Forces was a shortage of trained sergeants but this issue is being worked. Other problems included improving the tactical and technical characteristics of new combat systems and improving the single rear services material and technical supply system. The latter two issues appeared to play a prominent role in the exercise, as might be expected. Equipment utilized during Vostok-2010 included the An-12, Su-24, Su-34, Tu-142M3, Il-38, A-50, and Il-76 aircraft; the Mi-8, Ka-27PL, and Mi-24 helicopters; unmanned aerial vehicles (UAV's); Tochka-U tactical missile systems (and Polyana-D4M1 guidance systems); and Buk-M1 and S-300PS SAM complexes.[37]

Interagency problems were explored since Vostok-2010 exercised the interaction of several security agencies and ministries in Russia. These agencies and ministries included the Internal Troops (MVD), the Federal Security Service (FSB), the Ministry of Extraordinary Affairs (MChS), the Border Guards, the Federal Protection Service, and the Federal Penal Service. [38]

An Interesting Post-Exercise Observation

On 10 July <u>Segodnya.Rus</u> Online (<u>Today.Rus</u> Online) offered the provocative assessment of Alexander Khramchikhin, Deputy Director of the Institute for Political and Military Analysis, regarding Vostok-2010's results and intent. He offered the following points:

• The exercise was a response to China's exercise last year on its border with Russia, a

rehearsal for potential aggression against Russia in the eyes of the Defense Ministry (deep, large-scale offensive operations to 2,000 km were rehearsed by army groupings). Interestingly, the Russian press continued to rant against NATO but was silent on this rising threat in the East.

- Russia is the main target for Chinese expansion.
- China thinks that America, the European Union, and the Middle Kingdom are the three great powers. China does not pay as much attention to Russia, classifying it along with Japan and India as second level powers.
- Russia will be integrated into the Atlantic concept because NATO does not want Russian territory. China does.[39]

With regard to military reform, Khramchikhin stated that the "new look" of the Armed Forces has been carried out with incredible speed. However, the forces that have been created cannot "repel" a threat without the use of nuclear weapons. This is clear, he notes. Finally, due to the nation's reliance on imports, the destruction of its military educational schools, and the slow death of its military-industrial complex (VPK) the Armed Forces (according to interviewer Kotenok) are becoming a "nanoarmy for a nanocountry."[40]

Conclusions

So, is the "new look" for real? It does appear that the Russian Armed Forces have indeed started down the road to reform. They have done so due to the tough approach taken by President Medvedev and Prime Minister Putin to make hard decisions. Defense Minister Serdyukov has diligently implemented their demands. This united approach has resulted in the arrest of hundreds of officers on charges of corruption; in the downsizing of the officer corps; in the reorganization of departments, educational institutes, and military districts; and in the reallocation of the federal budget to help modernize the weaponry of the Armed Forces over the next decade.

At the same time, there are certain traditions that will remain—the culture of military thought will still be based on the dialectic and other historical traditions and concepts will be passed on to future generations. What will "change" is the development and utilization of technologies to ensure that Russia's entrance into the 21st century is a successful one. There is also increased talk of the integration of military and civilian technologies.

In hindsight it appears that the words of Alexander Goltz were prophetic—that only a solution reached by civilian society (not a solution offered by general officers protecting their realm) could offer a profound resolution to the problem. It took the Medvedev, Putin, Serdyukov triumvirate to get the process underway.

CHAPTER TWO: FROM PETER TO POST-PUTIN: SOMETHING OLD, SOMETHING NEW IN RUSSIA'S MILITARY TRADITIONS

There is such a profession—defending one's Motherland.[41]

Introduction

The halls of Moscow's Military History Institute are lined with the busts of important Tsarist and Soviet era military leaders who fostered many of Russia's best military traditions. The institute, a marble structure of four stories on University Square 14 in the Lenin Hills area of Moscow, houses historically rich texts that contain the essence of Russian military culture and traditions. Access to the building is controlled today, much as it was during Soviet times.

When the era of *glasnost* (openness) and *perestroika* (new thinking) came to fruition in the Union of Soviet Socialist Republics (USSR) under the rule of then Secretary General Mikhail Gorbachev in the late 1980s and early 1990s, things were different. Access to the History Institute was somewhat easier to achieve and some of its military-historical publications began to see the light of day. Many of the topics that these publications addressed had lain dormant since 1917. On occasion, foreigners were presented with military-historical manuscripts and essays that included works on military traditions.

As *perestroika* unfolded, other avenues became available to collect Russian military traditions. For example, in 1992 the Russian commander of the Western Group of Forces in Germany, Colonel General M. P. Burlakov, edited a book on *Istoriya I Traditsii Rossiyskoy Armii* (The History and Traditions of the Russian Military) that Russian officers provided Western analysts. Bookstores also began to offer new works on military traditions. As but one example, a 1991 Chief of the Soviet General Staff, Colonel General Vladimir Lobov, edited a text on Tsarist or Imperial (not Soviet) military traditions titled *O Dolge i Chesti Voinskoy v Rossiyskoy Armii* (On Duty and Honor in the Russian Military).

Traditions were vitally important in reviving the dignity and honor of the Russian military once the ideology of communism faded and the country fell into temporary chaos in 1991. The Soviet military's collapse was more significant and potentially threatening than many Americans realize. There were times in the early 1990s when Russian Lieutenant Colonels working in the General Staff were spotted in the subways of Moscow shining shoes to gain extra money. Other officers were paid in "quantities" (potatoes, matches, etc.) instead of rubles which they then had to sell to get hard currency. Thankfully Russian officers tolerated and survived these conditions instead of taking matters into their own hands. Perhaps tradition played a role that prevented such events from transpiring.

On the other hand, Russia may have lost one of its most important military minds, Marshal of the Soviet Union Sergei F. Akhromeev, because he so fervently took to heart the tradition of a soldier's honor and duty to his Motherland. As he saw the Motherland swept away (in his view) from its Communist heritage and into the hands of a new ideology and regime, he took his own life by hanging in his Kremlin office, perhaps for his inability to defend his people from what he considered an attack

on the entire system. Such was his concept of honor.

This chapter will discuss the military traditions and culture of the Russian and Soviet militaries and how they have changed over time. It will address training and education issues, an officer's honor, and the impact of technology on an officer's professional culture among other issues. Old Russian military traditions, Soviet military traditions, and New Russian military traditions are compared and contrasted (from a limited number of Russian texts). Of particular interest is the writing of military analysts in the 1990-1992 period when traditions and culture were changing (definitions of key terms are presented such as military tradition, military culture, and cultural-educational work are attached at Appendix Two).

The ardent student of Russian affairs will be somewhat disappointed in the scarce number of resources utilized for this chapter. Of course, these were all Russian resources so there is no intermediate filter of, say, a Western interpretation. In total, while a host of journal and encyclopedia articles were accessed, only four books were used extensively. They were:

- Vladimir Lobov's <u>O Dolge i Chesti Voinskoy v Rossiyskoy Armii</u> (On Duty and Honor in the Russian Military), 1991
- R. V. Tsvetkova and N. I. Britvina's <u>Partiyno-Politicheskaya Rabota v Sovetskoy Armii i Voenno-Morskom Flote</u> (<u>Party-Political Work in the Soviet Army and Navy</u>), 1960
- M. P. Burlakov's *Istoriya I Traditsii Rossiyskoy Armii* (The History and Traditions of the Russian Army), 1992
- <u>Dusha Armii</u> (Soul of the Army), compiled by I. V. Domnin, A. K. Bykova, A. B. Grigor'eva, and Yu. T. Belova, Edited by A E. Savinkin, 1997

However, it is believed that even this truncated overview distills for the reader what is most important for the Russian officer of today. The authors are well-known and respected and the journals utilized were all refereed by military professionals.

As Russia moves forward in the twenty-first century, it will be interesting to watch the effect of the reform effort of Defense Minister Anatoliy Serdyukov and see if his efforts reinvigorate discussions of military tradition. If they do, it will be interesting to see which traditions are kept and which are discarded.

Old Russia, Soviet Russia, New Russia

Some Russian military traditions are quite familiar to Russian and even the non-Russian specialist and need no introduction. They include:

- The uniforms and flags of the armed forces
- Military institutions such as military academies and the military encyclopedias that have existed for centuries[42]
- The oath of service administered to each soldier
- The professional culture of the Russian officer
- The focus on military reform over centuries

- The precision of military graphics on Russian maps
- Military toasts.

Some of these traditions have been part of the Russian military since the earliest days of Tsarist history. Other aspects have developed over time. The oath, for example, was known as the "Formula of Solemn Promise" in 1918, and was called the "Military Oath of the Workers-Peasants' Red Army" in 1939. A Soviet-worded oath was ratified by the Presidium of the USSR Supreme Soviet in August 1960. It replaced the words "worker-peasants' Red Army" with the term "Soviet." After the collapse of the USSR in 1991, a new military oath was approved in March 1998. It is much shorter than its Red Army and Soviet predecessors (in the latter case, from 129 to 41 words) and states

I, (last name, first name, middle name) solemnly pledge my loyalty to my homeland—the Russian Federation. I swear to sacredly observe its constitution and laws, strictly fulfill the demands of military regulations and the orders of commanders and superiors. I swear to appropriately fulfill my military duty and to bravely defend the freedom, independence, and constitutional order of Russia, the nation, and Fatherland![43]

Today's Informal Traditions

Some modern day informal Russian military traditions have been observed first hand by US forces serving with Russian forces in Bosnia and by US forces conducting joint operations, conferences, or peacekeeping missions. They are listed here as a source of contemporary informal traditions before delving into the more formal aspects of Russian military traditions.

A tradition familiar to any US officer who has shared a drink of vodka with a Russian officer is their tradition of military toasts. To abbreviate the process dramatically (and hopefully putting these toasts in their correct order from memory), the first toast (if it is a serious discussion between friends) is "to those who have gone before us in military service." Or, if you are listening to a serious Russian, it would be "we drink to the generations of warriors who fought and served and thus made it possible that we are here now. We drink to our fathers and grand fathers, who did their soldiering well." The second toast is "to those who serve now," or to put it more eloquently "to those who serve with us now, but are not around the table at the moment. We drink to those who right now are out in the minefields, on maneuvers, and performing combat tasks and their duty." The third toast (while standing) is to fallen comrades or "to those who are gone forever from the battlefield, those who sacrificed their lives." The words "the third toast" is spoken and there is no clinking of glasses or speeches, only silence as each officer bows his head and remembers for him or herself the meaning of those words. The fourth toast is to the ladies. In fact, every third toast thereafter is to the ladies. With 200 grams of vodka in your stomach at this point (50 grams a shot), the remaining toasts (and there are no limits on the number) give way to greater creativity embracing an entire host of issues.

Drinking vodka is also associated with promotions and holidays. Promotions are especially noteworthy as a drinking tradition. When promoted, an officer is handed a glass of vodka with the new rank lying at the bottom of the glass. The officer must drink the vodka, catch the rank in his teeth, and without touching it, gently spit it out on his epaulet. If it falls off, he has to perform the process (to include the drinking!) all over again.

There are several traditions associated with avoiding bad luck, particularly in the Russian Navy. When torpedoes exploded in their tubes onboard the submarine Kursk, causing it to sink and result in the loss of life of all aboard, two elements of bad luck were listed in a newspaper article as potential causes of the tragedy. One was that a man instead of a woman had christened the submarine, and another was that a chain broke on a censer that a Priest was using to bless the submarine. In the US movie about Russian submarine K-109 (starring Harrison Ford) the champagne bottle did not break when they christened the submarine, and a sailor in the last rank remarks to a fellow seaman "we're doomed."

There also appears to be a "greeting of the day" associated with informal traditions. When officers enter a work area for the first time, they go around the room and shake hands with everyone before starting their work. [44] Americans are more likely to walk into a room, go to their work area and sit down, and greet their co-workers with a "good morning" as they bump into one another in the course of the morning.

A final informal tradition observed by US officers who have conducted staff work with the Russians is the precision of their graphic art work on a map. In all sincerity, the graphics appear to have been printed by a machine rather than a human, they are that precise. One US officer noted that the graphic work is "Rembrandt like" in nature whereas a US officer's graphic work would be more "Picasso like," that is more abstract.

Historical Traditions

Luckily, the military history and traditions of Russia are synonymous with three elements of national history: Tsarist, Imperial, or pre-Soviet; Soviet; and post-Soviet, which could also be termed Old Russian, Soviet Russian, and New Russian military history.

The old Russian military history period (up to 1917) was highlighted by the exploits of great military leaders such as Peter the Great, Aleksander V. Suvorov, and Mikhail I. Kutuzov. The Soviet-Russian period (1917-1991) was highlighted by the theory and practice of Marxism-Leninism and the work of some truly original and giant military theorists and commanders such as Aleksander A. Svechin, Mikhail H. Tukachevsky, Vladimir K. Triandafillov, and Nikolay V. Ogarkov. Today, we await the next great generation of Russian military thinkers. These theorists are likely quietly germinating in the bowels of the General Staff today but will only be visible to outsiders after their theories have taken root. Other great theorists from the Soviet age, such as General of the Army Makhmut A. Gareev, who developed the concept of the operational maneuver group (OMG),[45] are still alive today and most likely are contributing to the development of new officers.

Russian military "tradition" is a term that will be used most often in the discussion below. Traditions make up a military's culture, the latter a term not often used in Russian military jargon. Russia's military encyclopedias, for example, do not discuss military culture, only cultural-educational activities. Coverage of "culture" is spotty in Russian military journals but the well-respected Military Thought does write on culture on occasion and those instances are included in this discussion.

Two words will be used intermittently for the US concept of "country." These are the Russian

words *Otechesvo* and *Rodina*. Both are used to mean Homeland by Russian authors. *Otechesvo* is sometimes translated as Fatherland and even, in its adjectival form, as patriotic (such as in its use to mean the Great Patriotic War or World War II). It has a wider meaning than *Rodina*, the latter sometimes translated as Motherland. *Rodina* can also mean your local village or place of birth. Russian authors tend to alternate between the uses of these two terms. This author will use the terms interchangeably in conjunction with the usage of the terms by the authors he cites.

What follows are three general sections. The first section discusses Tsarist traditions. The second section discusses Soviet traditions. The third section discusses contemporary Russian military traditions.

Old (Tsarist) Russian Military Traditions

One work of prominence on Tsarist military traditions, published in early 1991 (the same year as the August coup against Secretary General Mikhail Gorbachev), that will serve as the sole Russian military source reviewed for this chapter is Vladimir Lobov's <u>O Dolge i Chesti Voinskoy v Rossiyskoy Armii</u> (On Duty and Honor in the Russian Military).

The motivation for writing a book on Russian vice Soviet military traditions in 1991 may have been Gorbachev's *glasnost* (openness) and *perestroika* (new thinking) policies of the late 1980s although this is only speculative thinking. More likely the book was completed before the fall of the USSR and simply was awaiting publication. The book was edited by Colonel General Vladimir Lobov (who was not a particular admirer of Gorbachev!). Perhaps Lobov's motivation for writing the book can be found in the second section of the book, where he writes

The example which our forefathers set through all their activity exhorts us to remember duty to the Homeland. The more time passes, the more we appreciate the significance of their great accomplishments in defense of the Fatherland. Today [1990] we remember with pride the Russian generals and officers who sought the most effective ways to raise the morale and therefore also the combat capability of the army. And perhaps now is the time that we can understand the worth of our forefathers' efforts. [46]

Reexamining the basic traditions of these military greats would make sense since the Soviet military clearly was on the cusp of a major transformation in 1990. In addition to Gorbachev's policies of *glasnost* and *perestroika*, the Soviet armed forces had withdrawn from Afghanistan a year earlier.

Lobov, who would become the Chief of the General Staff of Russia in September of 1991, concentrated his attention solely on Tsarist, not Soviet, military figures and broke his book into three sections: the eighteenth century and first half of the nineteenth century; the second half of the nineteenth century; and the start of the twentieth century.

The book is rather narrowly focused on the concepts of duty and honor, although other traditions are touched upon. Lobov's introduction to the book emphasized how honor and military duty were stressed during training and education sessions in the old Russian armed forces. These traditions became the carriers of patriotic ideas. Lobov stated that "military honor is a soldier's principal

virtue"[47] and cited a regimental trumpet call at cavalry muster for Russian soldiers each morning as indicative of the emphasis on honor:

Shame will fall on the coward Who takes one step backward without an order! He who offends duty, honor, and the oath Old Russia will see as the worst enemy. [48]

In addition, Lobov noted that a "Russian soldier's heroism, tenacity in battle, capacity for self-sacrifice, loyalty to the oath, and soldierly duty remained unchanged through the centuries." [49]

Lobov then proceeded to walk readers through the beliefs and values of a series of outstanding military figures in the pre-Soviet period. These leaders of renown are listed below with important points that Lobov attributed to each. The short list of points he chose to stress is interesting:

- Be an example for your soldiers
- Treat your soldiers well
- Serve with honor and courage
- Officers must be extremely knowledgeable of their duties
- Soldiers must learn how to take the initiative.

This list undoubtedly, to a US officer, sounds much like the traits that American officers stress. But US specialists who study the Russian military would hardly ascribe some of these traditions, especially "treat your soldiers well," to be representative of the Soviet and even Russian military today. Russia's ongoing problem with "dedovshchina (hazing)" in the barracks continues yearly to produce too many deaths or suicides among recruits. Perhaps this tradition is a rite of passage into manhood for the military ranks, but it has as much resemblance to a Lord of the Flies[50] scenario as it does to manhood. Recent reports of soldiers being required to perform sex acts with homosexuals for some military leaders (a limited number, for sure) attest that the treatment of soldiers has taken on a more dysfunctional form than ever imaginable.[51] The first bullet, "be an example for your soldiers," also is called into question by many Russian officers themselves. They have witnessed corruption at the top of the military brass (several leaders have been arrested in recent months) and some of the younger officers are upset by the overweight condition of several high ranking officers.

The comments that follow are those that Lobov made in the book's introduction about several prominent Russian military commanders. Perhaps Western military experts will question just who he chose to include and who he left out of his introduction, but the work does appear to be fairly comprehensive. Words in quotation marks are direct quotes from one of these leaders. Words not in quotation marks are General Lobov's comments.

The 18th Century and First Half of the 19th Century

<u>Petr Alekceevich Romanov, Peter the Great, Russian Tsar (1672-1725):</u> Peter's reforms can be considered as the beginning of the training and education period in Russia, and his "Peter school" was the first practical school of military life in Russia. He demonstrated concern for Fatherland

defenders and paid special attention to the relationship between officers and soldiers. "Officers are to soldiers what fathers are to children, who should be cared for equally in a fatherly fashion." Peter lived on soldier rations for a month and performed military service together with soldiers to see if their rations were adequate. He also attached importance to moral education, believing that high moral principles depend on discipline. Finally, Peter believed that officers should be of high moral character and fighting spirit. His ultimate concept—"there is honor in service"—is part of the flesh and blood of a Russian officer. [52]

Catherine II (1729-1796): One of Catherine's reforms was to "ensure that people are not needlessly bothered in exercises and maneuvers by anything that is for adornment only." Catherine held that a primary responsibility of a military officer was to "hold high the honor and right of his regiment" and his primary concerns were "the regiment's benefit, service, honor, and preservation." Commanders were obliged to "explain that no fear or hardship could ever shake the Russian soldier's bravery and loyalty." Respect (love) should be the primary tool for achieving order and recruits "should be bold, not shy, when speaking to the commander." [53]

Petr Alexanderovich Rumyantsev (1725-1796), General Fel'dmarshal: Rumyantsev had a major impact on troop education and fought "to raise the lower ranks to a state that is proper for military people and instill in them a decent life, manners, and cleanliness. Company officers should seek out opportunities to speak with the lower ranks and convince them that if they profess and obey all orders well, they will be able to do everything in a most praiseworthy fashion." He did not believe in blind implementation of regulations but wanted reasonable discipline and a conscientious attitude to military duty, honor, and a soldier's lofty calling. Soldiers should be protected from inhuman floggings. Rumyantsev believed that officer and soldierly honor were the supreme manifestation of all the virtues of a military person. [54]

Grigoriy Alexanderovich Potemkin (1739-1791), General Fel'dmarshal: Potemkin tried to foster courage and resolve in soldiers, proposing various incentives and a special medal that encouraged daring and bravery. He required his commanders to show paternal care for soldiers and "treat people with every kind of temperance, look after their welfare, not exceed the norms of punishment, and be as I am with them, since I love them like children." He attached importance to a commander's personal example and required they be knowledgeable. He opposed everything formal and pretentious. [55]

Mikhail Semenovich Vorontsov (1782-1856), Count, General Fel'dmarshal: Vorontsov believed that "love and loyalty to the regiment in which he serves should be instilled in the soldier." A soldier's situation relative to others "is undeniable honor and glory, since a soldier overcomes hardships that are often unbearable and does not spare his life to safeguard his fellow citizens..." Commanders were directed to instill self-esteem in soldiers and to consider it shameful if an officer did not care about what pertains to the soldier. [56]

Alexander Vasil'evich Suvorov (1729-1800), Generalissimus: Suvorov believed that success in battle depended not so much on the number of soldiers as on their morale. He felt the Russian soldier was capable of courage and heroism and he could mobilize these characteristics in troops. He started first with himself, with the education of the commander-educator. He thoroughly studied and

understood the soul of the Russian soldier and allowed "a junior to challenge a superior as long as it is done decorously, in private, and not public, otherwise there will be unruliness; only school children engage in unwarranted argument, which does not prove ability—ability is only evidenced by action." This attitude was unprecedented democracy for that time. Suvorov demanded that subordinates exhibit great initiative and rely on themselves, the basis of courage. He also demanded continuous and ceaseless self-education and that "training exercises and the like are conducted without cruelty or haste, and with a detailed explanation of all parts individually and demonstration of them one by one."[57]

Mikhail Illarionovich Kutuzov (1745-1813), General Fel'dmarshal: Kutuzov believed that the spirit of military service, obedience, and discipline are not based on punishment but rather on a conscientious attitude to protect the Fatherland. Russian soldiers displayed enormous courage, heroism, and valor in the War of 1812 and this impacted on troop education. [58]

All of the leaders listed above, Lobov adds, constantly addressed troop training and education issues from the perspective of the application of their concepts and not as simple theoretical thought. However, in the first quarter of the 19th century, *Voyenny Zhurnal* (Military Journal) appeared and made it possible to discuss theory and meaning publicly. Many articles stressed the need to be closer to the people and pointed out that "frequent contact with the soldier makes him courageous, alert, and ambitious, and also wins his love and trust..." Service should be rigorous but moderate, fair, and humane. Only a few blows can make an innocent soldier loath with spite, the journal wrote.

Morale must come from an officer's personal example. Strength is needed but so is greater knowledge and valor. Even the Decembrists (an 1825 officer's protest against Nicholas I's assumption of the throne in Russia) made contributions, with P. I. Pestel noting that "the military rank is so honorable that it should not be the lot of an unworthy person." [59] The leaders described below thus were more affected by theory than those that preceded them.

<u>Vladimir Kornilov</u> (1806-1854) and Pavel Stepanovich Nakhimov (1802-1855), Admiral: These officers paid attention to a soldier's moral upbringing and morale. Nakhimov stressed personal example and often gave orders from the most open and dangerous spots. He noted "of the three ways to influence subordinates—reward, fear, and example—the last is the most sure." He felt that example inspired confidence in subordinates and that he then did not have to micromanage people—they would show initiative on their own. Kornilov also believed in personal example and stated that "if I give the order to fall back, kill me." [60]

The Second Half of the 19th Century

Mikhail Ivanovich Dragomirov (1830-1905), General: Dragomirov's name is linked to the establishment of a whole military-pedagogic school for the Russian army. His training system took into consideration historical realities of the Russian army, unique Russian national traits, and the latest achievements of military-theoretical thought. He believed that the military had more to do with will than intellect and thus stressed moral educational objectives: instill fighting spirit, patriotism, and discipline. Military discipline is "the sum total of the moral, physical, and mental skills needed for officers and soldiers of all ranks to measure up to their calling." With regard to soldier relations, he stated that "in peacetime officers closeness to soldiers will ensure that the latter are correctly

educated. In wartime this closeness will serve as the internal bonding in the army that makes its self-sacrifice boundless; an army in which officers enjoy the soldiers trust has on its side an advantage that cannot be gained through numbers, sophisticated materiel, or anything else." Dragomirov deserves credit for reviving Suvorov's views on troop training and education, resulting in the republication of Suvorov's *Nauka Pobeshdat* (The Science of Victory).[61]

Mikhail Dmitrievich Skobelev (1843-1882), General: Skobelev focused on the moral education of officers and soldiers, much like Dragomirov. He was for iron discipline but against the application of physical force or the humiliation of soldiers. Discipline should be attained through moral authority, not a beating. His ideas were meant to foster mutual respect, mutual assistance, courage, and initiative in officers and soldiers. He suggested his willingness at decisive moments to sacrifice everything for comrades.[62]

The Start of the 20th Century

In this section of his book, Lobov states that "in the post-Russo-Turkish War period, military education was based on several theoretical works developed by Maslov, Butovskiy, Grulev, Kuzminsky, Parsky, Terekhov, Shneur, Mau, and many others who focused on moral education." [63]

Nikolay Dmitrievich Butovskiy (1850-1917), General Lieutenant: Butovskiy believed that reasonable drill was required so that the soldier "does not act like Frederick's machine but is a rational person and an initiator in his small area." Officers were encouraged to drill and educate themselves first. Butovskiy sought the harmonious combination of moral and intellectual development since "fairness demands equal concern for the needs of good and bad people." He also focused on the officer's role in warfare at that time. [64]

Mikhail Vladimirovich Grulev (1853-1943), General Major: Grulev stressed the moral-ethical relationship between officers and soldiers and troop fighting spirit. He even recommended calling soldiers "Mr." He felt that the reason commanders lacked initiative in the Russo-Japanese War was in the commander-soldier system of interrelations, where "the opinions and viewpoints of the latter are beaten down and brushed off by the commander's constant challenges." [65]

Dmitriy Pavlovich Parskiy (1866-1921), General Lieutenant: [66] Parskiy wrote three works ("Why We Failed in the War with Japan. Needed Reforms in the Army," "Our Soldier's Combat Training," and "What Our Army Needs") that developed a new system of Russian officer and soldier training, education, and service.[67]

Three officers were mentioned in Lobov's introduction to the book for this period but were not mentioned elsewhere in the book. They were:

<u>Josip Gurko</u> (1828-1901), who strived to have his officers "be the first to set an example of duty performance for the lower ranks." [68]

Ignatii Petrovich Maslov (1840-?), who believed that self-respect should be fostered in the soldier because, if he loses respect for himself, he will become incapable of fighting without the necessary goodwill and energy to champion "the interests not only of his nation but also of himself

personally."[69]

Konstantin Georgievich Kuz'minskiy (1843-?), who analyzed Russia's defeat in the Russo-Japanese War and stated that the cause of the defeat was "lack of convictions." In essence, officers had not been prepared for combat operations from the standpoint of morale. They were not fearless but rather just undistinguished people. He believed that "only those who know their Fatherland's past, who feel a kinship with that past, and who know the high price paid for the country's prosperity can love their Fatherland with all their heart and defend it to the last drop of blood." [70]

Lobov summed up by stressing that these representatives of Russia's officer corps created a school of military education rich in traditions and patriotism. Without these moral qualities it is inconceivable to be a defender of the Fatherland. Reading the words of these men from different centuries makes it apparent that "the concept of duty and honor for the glory of the Russian nation was handed down from generation to generation in the Russian army." [71]

However, in spite of the progressive tendencies in the Russian army's educational system in the mid-18th century, problems remained. There were some in the officer corps, Lobov notes, who supported a different type of educational system, one based on severe punishments and a love of parades and drill. But by the late 18th century Lobov writes that the progressive education system had gained the upper hand. [72]

The supportive attitude of the people toward the military in turn fostered the following qualities in Russian soldiers: tenacious defense, resolute attack, courage, initiative, disregard for death, and mutual assistance. Soldiers serve the Russian nation, not the emperor, as Peter the Great noted. Later, Peter refused to hire mercenaries, since they were the first to surrender to the Swedes at Narva. Peter only recruited native Russians to ensure a reliable source of men for the army and navy. This increased the homogeneity (socially, nationally, religiously) of the force and improved morale. The community (peasant-commune) had deep roots as well in the Russian army, as the names of many regiments (Orlov, Kozel, Tver, etc.) represented places that sent fighters. This focus on the community was reflected in Suvorov's urging that soldiers should "die yourself, but rescue your comrade!" [73]

People outside Russia also noted this characteristic of the Russian soldier, Lobov notes. Frederick Engels, for example, explained the deep rooted base for courage and self-sacrifice in the Russian soldier this way:

The Russian soldier is indisputably very courageous. He was in his element as long as the tactical mission called for an attack by an infantry army operating in close formation. His entire life experience had taught him to hold on tight to his comrades. In the village—still a semi-communist commune, in the city—work in the cooperative association, and everywhere —krugovaja poruka, that is, comrades' mutual responsibility for each other...This trait remains in Russia in the military as well; it is virtually impossible to break up a battalion of Russians; the graver the danger, the more tightly they come together into a single compact whole. [74]

These were not the only officers that Lobov singled out in his narrative. In the section on the "18th Century and First Half of the 19th Century" he singled out the work of Fedor Fedorovich Ushakov, Admiral. In the "Second Half of the 19th Century" Lobov discussed the achievements and work of Edmund-Leopol'd Ferdinandovich Svidzinskiy, General-Lieutenant; Vladimir Ivanovich Datsevich, Colonel; Nikolay Ivanovich Mau, Colonel General; Alexander Anikitich Terekhov, Colonel General; Nikolay Yakovlevich Shneur, Colonel General; and Stepan Osipovich Makarov, Vice-Admiral. Lobov stressed that military might was dependent on how military education was progressing. In particular, he discussed how the Russian defeat in the Crimean War led to a transformation of the education system. He felt there was a direct relation between military might and soldier education. Further, Lobov stressed the importance of defending the Fatherland's cultural, historical, and spiritual values. Fighting spirit, he wrote, is present in an army only when that spirit is present in the people.

Finally, in the section on "Beginning of the 20th Century" Lobov addressed the achievements of 13 officers: Vyacheslav Evstaf'evich Borisov, General Major; Mikhail Sergeevich Galkin, Colonel General; Mikhail Dmitrievich Bonch-Bruevich, General Lieutenant; Mikhail Andreevich Uvarov, Colonel; Vladimir Alexanderovich Samonov, Lieutenant Colonel; Petr Ivanovich Izmest'ev, Colonel; Vikentiy Logginovich Raykovskiy, Colonel; Nikolay Pavlovich Biryukov, Lieutenant Colonel; Arkadiy Platonovich Skugarevskiy, General; Antoniy Mikhaylovich Dmitrevskiy, Lieutenant Colonel; Maksimilian Nikolaevich Krit, Lieutenant Colonel; Nikolay Apollonovich Morozov, Lieutenant Colonel; and D. N. Treskin (no rank provided). These officers wrote about a number of problems affecting the Russian army at the time. Just as at the end of the 18th century, the end of the 19th century also witnessed a struggle between progressive forces and officers beset with what Lobov termed ignorance, narrow-mindedness, and a bureaucratic spirit in regard to troop training and education. The context of the officer's plight at the time most likely influenced this situation, since material support of officers was low and this affected their work performance. Those who did enter the service at the time often reflected problems inherent in society, so not all new officers were worthy of their duty. Problems included lack of initiative and the passive role of command staffs. Lobov concludes this section by noting that through all of the evils of autocracy, the army always "remained a bearer of lofty honor, morality, and duty."[76]

Soviet Military Traditions

The Soviet Armed Forces developed military traditions of their own from 1917 to 1990 but they did not automatically discard their "old" Russian military past. One book written in 1960 noted that:

The Soviet Army is the worthy inheritor of the best traditions of the military past of our country's people. It has absorbed and further developed all that is best, progressive, and valuable from the combat traditions of the Russian army and navy. The heroism, fortitude, and courage of the soldiers and sailors of the Russian army and navy, and their loyalty to the combat banner, esprit de corps, and friendship in battle manifested in the fight against our Homeland's enemies have always served as an example for all Soviet soldiers. [77]

To outside observers, it appears that some of the old Russian military traditions became stagnant or were even ignored from 1950-1990. Soviet military jargon replaced Russian military traditions

with the former's focus on propaganda, socialist ideals, one-man rule, and party-political work. As a result, talk of traditions faded. For example, in a review of the contents of three books (1960, 1972, and 1989) bearing the same title, on <u>Partiyno-Politicheskaya Rabota v Sovetskoy Armii i Voenno-Morskom Flote</u> (Party-Political Work in the Soviet Army and Navy), where military traditions might arise, the topic appeared only in the 1960 book. That chapter, titled "The Education of Soviet Soldiers in the Military Traditions of the Soviet Armed Forces," did not appear in the later versions of the book.

The book's 1960 edition stated that it was the Soviet era's responsibility to "critically interpret, supplement, and expand on Russian traditions and inject in them new socialist content." [78] While this did not become apparent in later versions of the Party-Political Work book series, it is assumed that some Tsarist traditions were still taught in military institutions (Frunze Academy, General Staff Academy, etc.) as elements of Russian history, even if political commissars did not focus on them. Courses on Russian history and the great military leaders of Russia (Peter the Great, Mikhail Kutuzov, etc.) did appear in these academies along with discussions of military reform. Of course, many Tsarist military traditions were also housed in the History Institute mentioned at the start of this chapter.

In the 1960 chapter "The Education of Soviet Soldiers in the Military Traditions of the Soviet Armed Forces," combat traditions are defined as "the historically shaped moral rules and conventions that impel Soviet soldiers to exemplarily fulfill their military duty and honorably and conscientiously serve the socialist Fatherland." Combat traditions are listed as a major factor in the education of soldiers and sailors; as a guarantee of the great feats Soviet soldiers show the world; as being of enormous significance in peacetime; as being progressive, heroic, and revolutionary in nature; and as inseparable from its vanguard, the Communist Party. [79]

The character of the Soviet Army was defined as containing the following features: infinite devotion to the Homeland, loyalty to their military duty, courage and heroism, and confidence in victory.[80] These characteristics made certain that "Only our Soviet Army, raised in the great irresistible ideas of Marxism-Leninism, and the armies of other socialist countries are carriers of truly advanced and progressive combat traditions."[81] Of course, these traditions are strikingly similar to the Old Russian traditions that Lobov detailed in his book as the following list from the 1960 volume demonstrates:

- Personal loyalty to one's social and military duty. Love of country motivates Soviet soldiers to defy danger, causing one soldier to say that soldiers go to the battlefield to "defend the holy of holies—the Homeland. I want to kneel down whenever I say that word." [82]
- Mass heroism in battle. This occurred during the civil war, the revolution, and during the time of foreign intervention. Cases of heroism were particularly common during the Great Patriotic War (WWII).[83]
- Soldier's love for their unit or ship. As one solider noted, "My regiment's glory is my glory and my regiment's honor is my honor." [84]
- Loyalty to the Unit Banner or Ship Flag. Peter the Great did much to elevate the banner to a place of prominence in the eyes of the Russian serviceman, as soldiers swore in their oath

that "I will not leave the command and banner to which I belong, but will follow them as long as I am alive." [85] A 1942 "Decree on the Red Banner" was approved by the Presidium of the USSR Supreme Soviet. The decree noted that "The Banner is a symbol of military honor, valor, and glory; it is a reminder to each soldier, sergeant, officer, and general of their sacred duty to faithfully serve and bravely and capably defend the Soviet Homeland..." [86]

- Esprit de corps and solidarity in battle. These traits are based on the new, socialist relations between soldiers and the people's unity of class interests. These traits are incompatible with a lack of integrity and with any attempt to overlook a comrade's error or conceal his transgressions. Honesty in relationships is required.
- Updating military and political knowledge. There is no place for self-complacency and no marking time in the military.[87]

The chapter concludes with the comment that "such are the principal combat traditions of the Soviet Armed Forces." [88]

1990, 1991—the Years "in Between"

At the end of the Soviet era, change was definitely in the air. Gorbachev's policies had created a truly new wave of writing on every aspect of Soviet life to include the military. Increasingly military authors returned to their roots and military heritage, the works of the Imperial armed forces and renowned military leaders. Civilian writers such as Kareem Rash and Alexander Prokhanov wrote of the Russian military's past achievements in 1990 and 1991, emphasizing that Russian military tradition and the Russian state were one and the same. In this sense, they were inviting the military to take the lead and protect all that had been achieved for Russia and the USSR over the course of history. Perhaps their writings, especially Prokhanov's, were catalysts for the coup attempt against Gorbachev in 1991.

V. F. Kovalevskiy, writing in the June 1990 issue of <u>Voennaya Mysl'</u> (<u>Military Thought</u>), offered some keen insights into Soviet military thinking during the time of perestroika. It is not known, of course, whether Rash or Prokhanov influenced him or other officers during this period.

Kovalevskiy's article emphasized the need for a renewed look at military culture. First, he used the words of the Minister of Defense in 1990, Marshal of the Soviet Union Dmitriy T. Yazov, to open his piece. He quoted Yazov as stating that the deepening of *perestroika* and qualitative improvement of the armed forces "look toward the person, his inner world, and his ideological and moral makeup." [89] Further, Kovalevskiy adds that modern military technology increases the need for high technical competence, pedagogic proficiency, moral fiber, and feelings of duty and honor. All of these traits must move to the forefront. An officer's culture must reflect a mastery of knowledge, abilities, skills, and individual psychological features. [90]

The nucleus of an officer's professional military culture is his competence, which is his reliability and ability to make faultless decisions. Kovalevskiy believes culture is intertwined with competency. He notes that:

General culture includes a well-grounded knowledge of history, philosophy, political science,

and law and presumes mastery of the riches of world and domestic literature, music, painting, and the theater and the ability to distinguish genuine spiritual values from counterfeits. One can judge general culture from whether or not an officer has a need to read the classics of literature, whether or not he sees the depth in works of Homer, A. Dante, W. Shakespeare, A. S. Pushkin, L. N. Tolstoy, and F. M. Dostoyevskiy, and whether or not he experiences pleasure from the music of J. Bach, L. Beethoven, M. Mussorgsky, P. Tchaikovsky, and G. Sviridov. High technical culture and computer literacy are inalienable facets of an officer's personality in the age of scientific-technical progress.[91]

Kovalevskiy states that the majority of Russian officers were distinguished by a high general culture and that this is a national tradition. Tolstoy and Dostoyevskiy are two such examples. This intense general cultural background is then subordinated to serving the Fatherland. [92]

However, due to the development of world events and the changes affecting Russia's military policy, doctrine, and national security in 1990, it "would be more correct to speak about the need for shaping a new political culture in officers." [93] This requires that new political thinking and military reform must mix with an officer's spirit of patriotism and allegiance to "the USSR Constitution, the oath, and military duty at the center of the problems." [94] How all-encompassing this new political thinking was envisioned was expressed by Kovalevskiy as "a question of reviving the entire historically formed complex of humanitarian knowledge." [95] He goes on to add that

- An officer's legal literacy is a necessary condition and important component of professional military culture (many questions demand legal awareness of regulations, manuals, and orders).
- An officer's psychological-pedagogic preparedness is the ability to study a soldier's personality and capabilities and develop in them military skills.
- An officer's proficiency resides in accomplishing training and education tasks and teaching what is necessary in war by organizing exercises correctly.
- An officer's operational-tactical and tactical-special literacy and ability to effectively command and control a force, to include good, efficient staff work, is required.
- An officer's ergonomic and ecologic education are now important.
- An officer's task of creating a system of continuous education is required.
- An officer's moral qualities and professional ethics must be exemplary.

With respect to modern (1990) staff work, Kovalevskiy added that special education is now required. Instead of being armed with just a map, ruler, curvometer, and pencil, staff work today requires "automated equipment for combat command and control, computers, and diverse communications systems, including satellite communications." [97]

Finally, Kovalevskiy states that Soviet officers are a special community with their own traditions, customs of official and family life, and interests. An officer subculture includes a professional lexicon, folklore, holidays, and everyday signs and prejudices. He notes that Officer Meetings were one such tradition whose reestablishment continues a custom that is over 200 years old. [98]

Kovalevskiy also mentioned an officer's honor in his article, stating that it is an "acute, active feeling prompting an officer to be jealously concerned for his good name and reputation. It is incompatible with a bureaucratically indifferent attitude toward subordinates, unprincipled pushiness, and subservience." [99] Further, "an officer who possesses high professionalism and developed military ethics considers faultless performance of his official duty, expert mastery of equipment and weapons, improvement of his qualifications, and courage on the battlefield to be a matter of honor." [100]

A year later, as the Soviet Union was swept away in the grip of *perestroika*, Colonel B. L. Valeev also used the journal *Voennaya Mysl'* (Military Thought) to discuss an officer's concept of honor which was in desperate need of refurbishment. Valeev offered a pointed appraisal of the shortcomings of an officer's honor in the Russian military of 1991, criticizing both Tsarist and Soviet traditions along the way. He stated that honor means a person's perception of his value in society and society's recognition of this value. He quoted the USSR's Minister of Defense at the time, Marshal Ye. I. Shaposhnikov, who said that "honor is a kind of integral result of an organic confluence of inner nobility, decency, and dignity in a person." [101] Valeev stated that a collective definition of an officer's honor is "the set of an individual's moral qualities manifested in day-to-day activity and recognized as socially significant by public opinion, as well as the officer's attitude toward himself and toward performance of his military duty." [102]

An officer's honor is a tradition that has been passed down through the ages in the Russian armed forces. The Old Russian Army's regiments and corps had their own officer codes of honor. Even a slight breach of honor could result in expulsion from the unit. One of the first sets of military regulations emphasized "it is better...to die honorably than to live with dishonor." [103]

Valeev wrote that ethical views imposed by the Tsars crushed the honor and dignity of the Russian soldier and the progressive thoughts of officers. Suvorov, Kutuzov, Ushakov, and Nakhimov were singled out as progressive thinkers who cared about the soldier even if the Tsar did not and so they developed their own military traditions. Deviations from the officer's code did not end in reconciliation but in duels in those days.

Valeev spared no amount of criticism for Soviet era officers either. Red Army military-ethical views differed from past ones, he wrote, and often refuted the progressive ideas of an officer's honor that had formed in the old Imperial army. The revival of military honor during *perestroika* and the late 1980s, to Valeev, occurred at a December 1989 All-Service Officers Conference in Moscow. The officer's conference was expected to consider educational and moral-ethical problems to form a sense of officer honor, dignity, and pride. [104]

Such a reconsideration of training in ethics and honor was sorely needed. Valeev noted that a short course on the fundamentals of ethics was taught in only 10 of over 100 military schools at the time. Realistically, Valeev wrote that honor cannot be reproduced in oneself in a stable condition for long. When one suffers, one needs positive evaluation. Valeev believes that "moral deviations and a display of elements of dishonor also are linked directly with the Afghan tragedy... and by other disorders of life." He criticized the mass media for blackening what the military did at that time. Since an officer is a reflection of society, he has a right to count on recognition of the useful nature of

his labor, and on material, legal, and moral support of his dignity and honor. Perhaps this is the situation that influenced Marshall Akhromeev to take his own life. His dignity and honor were no longer supported by society in the early days of the 1990s.

An officer's honor had to especially be protected during perestroika when there were still serious problems in the system. For example, how can a young officer maintain his honor when his commanding officer has control of his military rank, pay, working conditions, apartment, nursery, travel orders, summer leave, honors, incentives, punishments, and more according to Valeev? In conditions of such total dependence it is hard to defend one's honor. The military requires deep democratization of relationships, the development of culture and etiquette, regulations and social standards, and rituals of the defense of honor. A Soviet Officer's Code of Honor also is needed, he wrote, which means that Valeev was unaware of the imminent change to his country's name. [105]

Quoting the words of the 98th Infantry Regiment years ago on the development of military principles, Valeev stated that "the officer's word always must be a guarantee of truth and therefore lies, bragging, and non-fulfillment of an obligation are vices undermining faith in the officer's truthfulness; they generally dishonor the officer's rank and cannot be tolerated...Faintheartedness and cowardice must be alien to the officer..."[106]

New Russian Military Traditions

After the dissolution of the USSR, the Russian military was in a quandary. What would the new Russian army look like, what uniforms would it wear, and what flag would it honor? In short, what traditions would it uphold? For starters, the Russian Federation had to eliminate the image in the mind of Russia's citizens of using troops in a coup attempt. Russian leaders had to work to bring back a sense of personal honor into the officer corps after Boris Yeltsin replaced Gorbachev as President.

However this attempt did not last long. First, in 1993 General Alexander Rutskoi, Yeltsin's Vice President, and General Eduard Makashov led a putsch against Yeltsin. This resulted in the army shooting tank rounds into the offices of Russia's Parliament known as the Russian White House. Second, only a year later, the war inside Russia (in Chechnya) unfolded, and Russian troops were exposed as participants in a "black operation," an undercover operation that supported one side against another. One officer stood his ground, however, in this chain of escalating events. General Eduard Vorobyev, deputy commander of the ground forces, declined to participate in events in Chechnya, citing the armed forces unpreparedness to enter battle. In this way he was reenergizing an old Russian military tradition of telling the commanding officer the truth he may not want to hear. While Vorobyev was dismissed from service for his decision (he was later elected to the Duma, Russia's equivalent of Congress), he was proven correct in his estimate. After the horrific start to combat operations in Chechnya in December of 1994, the armed forces were exposed as undernourished, underpaid, untrained, and impoverished. The prestige of military service diminished even further.

During the reign of Boris Yeltsin, many military traditions were laid aside. General Pavel Grachev came to be the Minister of Defense out of loyalty to Boris Yeltsin and not due to his military professionalism according to many estimates both inside and outside Russia. Several officers became members of Parliament and participated directly in political affairs while on active duty. Officers

wrote books about their political views. Still, there were signs of a return to the old military traditions of the Imperial Russian Armed Forces.

Western Group of Forces, 1992

The Western Group of Forces in 1992 under the leadership of Colonel General M. Burlakov (who recently passed away) provided one of the more interesting early looks at Russian military traditions in the post-Soviet period. The book *Istoriya I Traditsii Rossiyskoy Armii* (The History and Traditions of the Russian Military) (edited by Burlakov but with a writer's collective of seven other officers) consisted of four chapters that covered: the creation of the Russian army; the development of military art, weapons, and uniforms; traditions of the Russian army; and the renewal of the Russian army in 1992.[107]

The chapter on traditions of the Russian army discussed the need to revive some past military traditions. Russia's internal situation in 1992, according to the authors, was one in which "the social and national foundations have been shattered, morality has been shaken, ideals are crumbling, and there is no confidence in the present or future." [108] Burlakov continued that the seeds of enmity have been sown between fraternal people who worked together to create a great power and, he added, we hope that these seeds never germinate. [109] Thus there appears to have been a real split between the army and the people in 1992 in Burlakov's opinion. It was the close unity of the army and the people forged through many years that he hoped to get back on track.

Based on this situation, Burlakov attached a very important role to historical-patriotic consciousness and national traditions to nourish "the people's strength, spirit, and conscience like a life-giving source."[110] He hoped to construct a barrier to cynicism, indifference, and contempt for Russia's best national traditions. The people's spirit is the gold reserve of the nation, Burlakov wrote, noting that where there is no respect for one's own history, there are no citizens either and irreversible degeneration will set in.[111]

The cultural traits that are typical of Russians are "boundless love for the Homeland, a lofty sense of civic and military duty, infinite sacrifice in battle, an acute conscience, unassuming courage, and a fraternal attitude to other peoples." [112] The Russian Army of 1992 must become a worthy successor to these glories and traditions of the past. It must take on the traditions of the past, love of the Fatherland, and an understanding of military honor and dignity.

Burlakov reminded readers that for centuries people have tried to deprive Russia of its independence. For this reason the history of Russia is above all its military history. Several features of military history were pointed out in the book:

- Russia's richness/abundance: Russia's rich and abundant land enticed conquerors to invade Russia for centuries.
- Russia's lofty purpose: Russia has saved other nations from the Mongol yoke, to include Europe, where "our martyrdom saved Catholic Europe's robust development from all sorts of trouble."
- Russia's noble military character: Russia has fulfilled the role of the protector of small and oppressed nations.

- Russia's peaceful colonization: other countries (Ukraine, Belorussia, Georgia, Armenia, and Kazakhstan) united with Russia voluntarily for protection.
- Russia has been weak throughout history: in spite of military weakness Russia has prevailed because, once attacked, Russia will not lay down its arms until it succeeds.
- Russia's hidden enigma: Russia's national character is the hidden enigma that other nations have been unable to uncover. Russia's people rise up when called upon to fight with the professional soldiers.[113]

These features have made Russia's military history unique and distinct. However, if national character is Russia's hidden enigma, it becomes more apparent why Burlakov wanted to correct this situation because the hidden enigma was in danger of evaporating.

Burlakov wrote that traditions are historically shaped customs and rules of behavior handed down from generation to generation. They eventually become voluntarily observed rules. The most important of these combat traditions is the special attitude and unconditional service of the people and the army to their nation (which again explains why Burlakov was so upset over the 1992 break in this link). Patriotism and supreme sacrifice are powerful factors in Russia's greatness and have existed throughout Russian history. He added that

Another tradition is extreme tenacity in defensive positions. Tenacity was best exhibited in World War II during the German sieges of Leningrad and Stalingrad. Russian fanatics defended these two Russian cities in a manner that proved tenacity to be a national trait. Russians do not give up. Tenacity, perseverance and valor in battle, and sacrifice all carry on the Russian tradition of mass heroism (and not heroism as understood in the West, which is more like individual heroism or an exception to the rule). [114]

When discussing the actions of Russian soldiers at Sevastopol during the Crimean War, Leo Tolstoy noted that

They do not need effects, speeches, battle cries, songs or drums; on the contrary, they need calm, order, and no constraints. You will never see in a Russian soldier bragging, bravado, or a desire to become intoxicated or hot headed when in danger; on the contrary, modesty, humbleness, and the ability to see in danger something quite different from danger are his distinctive traits. [115]

The idea that you will never see a Russian soldier with a desire to become intoxicated, of course, could be contested!

Another important Russian military tradition emphasized in Burlakov's book is the importance of banners, for they were believed to be holy and thus able to incite bravery in troops. Russian soldiers fought over banners with glory going to the soldier who could capture an enemy banner. When unfurled in the thick of fighting, a Russian banner had the effect of blessing its soldiers and thus inciting new strength in them. (Note: The Russian military rank *praporshchik* [warrant officer] comes from the word "*prapor*" or "*praporets*," a name given to a small banner divided at the end into two triangles and signifying a military leader's caliber.) The Victory Banner raised over Berlin is an

example of what is called a "fitting crown" for the heroic accomplishments of the Russian soldiers. Burlakov adds that "the best tradition of the Russian military has always been loyalty to the combat banner." [116] This phrase was underlined and bolded in the text.

Finally, Burlakov notes that the Russian military has always paid strict attention to honor, dignity, and duty. Honor is "the supreme human value without which life is meaningless" (this phrase was also underlined and bolded) and represents the soldiers awareness of his worth and duty to society. [117] The discussion of a code of honor allowed Burlakov to take readers on a walk down Russian military history and extol the achievements of Aleksander Nevsky, Dmitriy Donskoi, Peter the Great, Aleksander Suvorov, and Mikhail Dragomirov, among other great Russian military leaders. The latter was cited for his belief that warm relationships should be established between officers and soldiers in order to gain access to a soldier's heart and conscience. The chapter ends with Burlakov citing the various aspects of a soldier's honor (accepting personal responsibility; serving under all circumstances; being truthful; and treating each other decently and with respect), thoughts that ring hollow when juxtaposed against an ordinary soldier's life of enduring the hazing ritual known as dedovshchina.

Soul of the Army, 1997

A second text of some interest for Russian military traditions after the dissolution of the USSR is <u>Dusha Armii</u> (Soul of the Army). This 1997 text was printed for the Russian Military University, indicating that it has value for the Ministry of Defense since the university is the source of military teaching in the following areas: law, psychology, socialism, linguistics, and journalism, among other topics. The university is preparing people to be qualified in sociology, to be a specialist in social work, or to be a manager or specialist in social-cultural activities associated with the armed forces. [118] The university's public face is more open now than during the Soviet period. In June of 2008, the newspaper <u>Krasnaya Zvezda</u> (Red Star) noted that the university now has its own journal, <u>Vestnik Voennogo Universiteta</u> (Military University Bulletin).[119]

The year of publication of <u>Dusha Armii</u> (<u>Soul of the Army</u>) is important. It was written and published during the early-mid years of the Yeltsin administration in Russia when it was easier to offer opinions on new or even forgotten topics that were taboo under the Soviet regime. More importantly, the book was authored by émigrés who had left Russia during the Soviet regime. Therefore their opinions are more strictly old-Russia based.

- I. Domnin, in the book's introduction, stated that while the Imperial Army ceased to exist in 1917 the spirit of the Russian army continued under the banner of the White struggle against the Reds during the country's civil war. According to his statistics, more than 70% of the General Staff did not recognize the power of Lenin. While the Whites may have lost the civil war, the soul of the Russian army did not perish but lived on in two places: in the underground within the ranks of the Red Army and in the military émigré community. The most important part of this legacy was that the spiritual dominates the material. Domnin added that "this body of work reveals Russia's distinctive military culture and the undying creative principle of the Russian Army." [120]
- S. Dobrorolsky noted that a term related to the "soul of the army" is "spirit of the army." "The mental state of the troops is the result of many complex causes and is closely associated with feelings

that have swept the entire nation...The spirit of the army can be defined as the synthesis of every aspect of the army..." However, émigrés note that "soul of the army" does not mean just the army's spirit. P. Krasnov used it to mean military psychology and equated it in one instance to the military banner. A. Popov, I. Patronov, and V. Sigarev used it to mean military discipline. Ye. Messner and A. Kersnovsky wrote that "soul of the army" meant the officer corps. Thus it is clear that a variety of terms were applied to the meaning of "soul of the army." [121] The concept of "soul of the army" thus contains: discipline as the main organizing feature; military psychology as the inner, spiritual world of the army; the qualities of the officer corps as the main 'genetic carrier' of the army's soul; and the banner as the material, visual symbol of the honor, valor, and courage of soldiers. Moral virtues comprise the spirit of the army. [122]

In the book's conclusions (with no attribution as to who wrote them), it was stated that the best way to break down the "soul of the army" into its components is to examine its moral and psychological foundations. This leads to the following components: the state-political and military consciousness of soldiers; the national character of military practice; martial spirit; military education; military psychology; military discipline; tradition; the art of command and the moral power of leaders; and the ideals of warfare and the "strategy of spirit." Four of these concepts, martial spirit, military psychology, traditions, and the ideals of battle and the strategy of the spirit, are developed further below.

Martial spirit is one of the central moral and psychological foundations of the Russian army. It is understood as the totality of the troops' moral qualities and the source of their fighting power. R. Dreiling, writing in 1925 on "Russian Military Culture," noted that

The honorable fulfillment of a citizen's duty to the Motherland, the spirit of bravery and honor, military valor, and the constant display of initiative have now been propagated within the Russian army, and under their influence it has started to improve in quality, constantly exhibiting examples of exceptional steadfastness and extraordinary military virtues. [123]

Military psychology is the scientific study or measurement of the soul of the army, an exercise in self-reflection. This requires work in individual psychology and in collective military psychology. These mental circumstances must be tied to material circumstances as well, since the latter can influence a forces' spirit on the battlefield. [124]

Traditions represent the spiritual remains and character of a nation's forefathers. It includes rituals, beliefs, and ways of reasoning and acting handed down over generations. These include self-sacrificing love of the Fatherland; love of history; dedication to the oath and the banner; and helping comrades even if it means your own death. For émigrés this understanding was expressed more through practice than theory. [125]

Finally, with regard to the ideals of battle, the émigrés note that the theater of military action has been extended beyond the land, water, and air to a large degree, moving into a fourth element—people's souls. An army must be armed both ideologically and psychologically. Ye. Messner felt that social theaters of war were just as important as military operations during the Russian civil war, where feelings, impressions, passions, enchantment, and moods ruled over detached logic and mental

calculations. Others noted that to prepare for small-scale wars politics must assist with ideological, political, propaganda, and social aspects of conducting this campaign, again a predominantly psychological way of preparation. With the soul of the army as a target, a "strategy of the spirit" was needed. [126]

Perhaps this traditional background with the focus on psychological aspects and culminating in "land, water, air, and people's souls" served as one of the traditional elements that caused Russia military leaders to examine information technology not just for its information-technical but also for its information-psychological aspects.

The book's conclusion states very well the opinion of the émigrés who participated in the development of this book:

The significance of the vast spiritual work of the Russian military emigration consists primarily in that, throughout the decades of the Soviet period of our history, the exiles carefully preserved for future generations of defenders of the Motherland the very spirit of the Russian army and its memory. In the Soviet Union there were great leaps in the development of military psychology and pedagogy in the 1920s and 1930s, in the power of the Communist Party, in atheism, and in the inculcation of internationalism into the Red Army; the military emigration in contrast supported a consistent, continuous development of the spiritual aspects of military practice, and preached a non-party, religious, national-historical formation of the soul of the future Russian armed forces. [127]

Since the Year 2000...

A number of military journals, most often the Russian <u>Voenno-Istoricheskii Zhurnal</u> (<u>Military Historical Journal</u>), <u>Armeyskiy Sbornik</u> (<u>Army Digest</u>), or <u>Voennaya Mysl'</u> (<u>Military Thought</u>), have continued to publish articles on military traditions or terms associated with it. For example, issue number 3 of 2008 of <u>Military Historical Journal</u> contained an article titled "Fatherland Traditions: Asymmetric Fighting" and issue number 4 of 2008 contained an article on "Officer Honor." Issue 5 of 2008 of <u>Army Digest</u> contains a lead article on an officer's honor. There have been other journals that focused on social issues in the military. <u>Orientir</u> (<u>Orienteer</u>) and <u>Soldat Rossii</u> (<u>Soldier of Russia</u>) are two that come immediately to mind.

Only a very limited number of sources since 2000 will be listed here. They represent components of tradition-type topics covered by the journal Military Thought. Most of the topics fit the general discussion of Russian military tradition that has been ongoing for centuries (spirit, discipline, reform, self-development, moral, patriotism, etc.). The topics and their year of publication are:

- Moral-Psychological Support of the Counterterrorist Operation in the Republic of Daghestan —2000
- Social and Spiritual Bases of Military Corporatism—2000
- Maintenance of Morale in the Military—2000
- Evaluating Soldier's Moral and Psychological State—2001
- Spiritual Foundations of Military Indoctrination—2003

- Spiritual Factor in Future Wars: How to Shape It—2003
- On the Issue of the Essence of Military Discipline—2003
- A Social Approach to Military Service Reform in Democratic Russian Society—2004
- Questions on the Formation of Military Ideology—2004
- The Military–Professional Self-Development of Officers—2005
- The Human Factor as a Basic Element of National Military Power—2006
- Army Image: Problems and Solutions—2006
- Combat Service Morale—2006
- Culturological Analysis of Military Activity—2006
- Patriotic Upbringing in Russia and in its Armed Forces—2007
- On Establishing the Institution of Military Imams in the Russian Army—2008

This list demonstrates that many of the concepts that started in the time of Peter the Great are still relevant today; and that the study of the Russian army's spirit, patriotism, morale, and culture is still ongoing.

Another source that includes military traditions is the journal <u>Vestnik Akademii Voennykh Nauk</u> (<u>Bulletin of the Academy of Military Science</u>), headed by General of the Army Makhmut A. Gareev. Issue 2, 2009 included A. A. Korabelnikov's article titled "Army and Culture" that included information on traditions. Since this article appeared in this unique publication, it will be used to look at the progress that traditions have made as Russia approached 2010.

If one were to measure progress based on this article, the answer would be "minimal." This is because the article is a throwback to many Soviet-era concepts of an older generation. For example, the point is made about young people that

The overwhelming majority of them wear jeans, raising the question as to whether this is a sign of culture or of mental lameness. Probably the latter, for there are no analogies in history of a country voluntarily and on a large scale wearing slave dress (jeans are slave dress; there is no other way to regard them).[128]

On the other hand, the article defined culture and tradition and offered some reasonable thoughts on retaining what Russia and other cultures have lost over time and with the introduction of information technology—a sense of debt to military personnel. Korabelnikov reminds the reader of Russia's noble thoughts and ideas on the military, that service is a sacred duty or a calling. He also calls for vigilance in times of political tranquility and an end to the present-day neglect of the army. In line with the traditions of Russia's Tsarist and Soviet pass, he states that commanders with combat experience and educational qualifications should be allowed to wear a general's uniform. Fancy laurels should not be chased and a commander should go about his duty bravely and resolutely.

Korabelnikov proceeded to list a series of things to eliminate from the armed forces:

We 'first name' each other, switch to slang, patter and profanity; we no longer enter but push our

way through. We do not know how to sit or stand or give way. We take liberties with the classics, with the past, with authority, and with the foundations. Our expression is one of either solemnity or the giggles. We mock all that is lofty and thereby continually destroy it, for irony is always familiar; it always watches surreptitiously, always upwards, and is always destructive...the rituals of association contain the profound meaning of protecting human dignity and the origins of the foundation. When our grandfathers called a young man or even a teenager by his name and patronymic, they were protecting, elevating, and connecting him to the adult world, preparing him, as it were, for imminent responsibilities. [129]

Korabelnikov also calls for all citizens to turn to Russian values and traditions in art and ethics. And he reminds readers of Napoleon's saying that victory is only 25% dependent on material factors, the rest is spiritual. It is thus necessary to awaken in a young man's soul the lofty feelings known as patriotism, industry, persistence, and discipline. If we cannot, he notes, then Russians like him must hold themselves accountable for the future of the nation. [130]

However, in the end, the tone of Korabelnikov's article rings as coming from another age, another time. It is everyone's fault except the armed forces. He passes over coup attempts, *dedovshchina*, corruption in the force, and other issues without mention. What is to blame is the lack of boundaries and taboos within society, the press and TV's destruction of the army's spirit, and the lack of art and culture that have destroyed the morale and spirit of unity between the people and the armed forces. [131] Serdyukov's reform effort does seem poised to counter the problems that Korabelnikov ignores and perhaps for this reason there is more reason to believe that the recasting of the Red Star will work out positively for Russia in the end.

In 2011, <u>Krasnaya Zvezda</u> (<u>Red Star</u>) published what may be the most up-to-date understanding of books and films that impact current Russian armed forces traditions. That article's main points are attached at the end of this chapter. It is titled "2011 Program of Information-Propaganda and Military-Patriotic Events in the Russian Federation Armed Forces to Strengthen Ties between the Army and Society to Raise the Stature of Military Service and Foster Social Support for Transformations in the Army." The topics will be taught to servicemen throughout the calendar year.

A Comparison of Traditions

On May 12, 1962 US General Douglas MacArthur gave his farewell speech to cadets at the US Military Academy at West Point, New York. During his address, he focused on the words "duty, honor, country," the motto of the academy.[132] As is now obvious from the discussion of Russian military traditions above, many of McArthur's words would fit the Russian military tradition. Émigré N. Kolesnikov, for example, wrote on influencing the conscience of the army, "on inculcating it with concepts of duty, honor, Motherland..."[133] These three words are as sacred to Russian officers as they are to US officers. In other areas of military traditions, Russia and the US differ. One major difference is in the Russian and US understanding of caring for the soldiers under their command. The Soviet/Russian concept of *dedovshchina* would not be permitted in the US armed forces. Disregarding years of warning signs, the tradition continues under the current regime in Russia indicating that Serdyukov still has much work ahead of him.

The analysis also demonstrated some proximity in the military traditions of the Imperial Russian

armed forces and those of the Soviet era. To demonstrate this relationship it is only necessary to compare the traditions specified by the 1960 <u>Party-Political</u> book with the words of Old Russian commanders singled out by Lobov:

- Soviet: Personal loyalty to one's social and military duty. Love of country motivates Soviet soldiers to defy danger, causing one soldier to say that soldiers go to the battlefield to "defend the holy of holies—the Homeland. I want to kneel down whenever I say that word." Old Russia: from the time of Catherine II, commanders were obliged to "explain that no fear or hardship could ever shake the Russian soldier's bravery and loyalty."
- Soviet: Mass heroism in battle. This occurred during the civil war, the revolution, and during the time of foreign intervention. Cases of heroism were particularly common during the Great Patriotic War (WWII). Old Russia: Suvorov believed that success in battle depended not so much on the number of soldiers as on their morale; he felt the Russian soldier was capable of courage and heroism and he could mobilize these characteristics in troops. Kutuzov felt Russian soldiers displayed enormous courage, heroism, and valor in the War of 1812.
- **Soviet:** Soldier's love for their unit or ship. As one solider noted, "My regiments glory is my glory and my regiment's honor is my honor." **Old Russia**: Mikhail S. Vorontsov believed that "love and loyalty to the regiment in which he serves should be instilled in the soldier."
- Soviet: Loyalty to the Unit Banner or Ship Flag. A 1942 "Decree on the Red Banner" was approved by the Presidium of the USSR Supreme Soviet. The decree noted that "The Banner is a symbol of military honor, valor, and glory; it is a reminder to each soldier, sergeant, officer, and general of their sacred duty to faithfully serve and bravely and capably defend the Soviet Homeland..." Old Russia: Peter the Great developed the banner and the concepts that enveloped its significance for generations of soldiers. Even the Soviet writers noted that Peter the Great did much to elevate the banner to a place of prominence in the eyes of the Russian serviceman, as soldiers swore to the oath "I will not leave the command and banner to which I belong, but will follow them as long as I am alive."
- **Soviet:** Esprit de corps and solidarity in battle. These traits are based on the new, socialist relations between soldiers and the people's unity of class interests. These traits are incompatible with lack of integrity and an effort to overlook a comrade's error or conceal his transgressions, requiring honesty in relationships. **Old Russia**: Dragomirov believed that the military had more to do with will than intellect and thus stressed moral education's objectives: instill fighting spirit, patriotism, and discipline. The community (peasant-commune) had deep roots in the Russian community as the names of many regiments (Orlov, Kozel, Tver, etc.) came from places that sent fighters. This focus on the community was reflected in Suvorov's urging that soldiers should "die yourself, but rescue your comrade!" which is clearly another way to talk about solidarity in battle.
- **Soviet:** Updating military and political knowledge. There is no place for self complacency and no marking time in the military. **Old Russia**: Suvorov demanded continuous and ceaseless self-education.

That brings us to the present. At this time, there appears to be renewed interest once again in an officer's honor, as several publications have recently written on this issue. Clearly missing from

today's list of old Russian traditions is the focus on the soldier that was so clearly and often stated in Lobov's book. The unfortunate tradition of *dedovshchina* lives on when it should have been extinguished in the Soviet era. *Armeyskiy Sbornik* (Army Digest) did publish one article on the topic after 2000, as did *Voennaya Mysl'* (Military Thought). A few newspapers have also covered the topic but not to the extent required to extinguish this blight on Russia's military.

Treating soldiers inhumanely goes against many Old Russian military traditions. It exposes Soviet era propaganda as hypocritical regarding the benefits of socialism. Russian society is not this way. People go out of their way to help one another, especially their fellow citizens. It is too bad the armed forces haven't inculcated this habit into their traditions as their forefathers and their citizenry have.

Conclusion

This survey of Russian military traditions has been, to be frank, brief and focused on a few select sources. It did not encompass a host of authors and opinions, and readers should take that point away—this is an analysis that only scratches the surface of what is happening in the Russian armed forces as it picks its way into the 21st century. The Russian army is handling a host of problems that require its attention—housing, contract service, reforms, the war in Chechnya, modernizing its information age force, and developing a military doctrine consistent with an ever-changing global environment. As a result the military has other issues to handle in the immediate future. Traditions will develop over time.

When Vladimir Putin emerged as Russia's new President, things did begin to change and these changes have continued under President Medvedev. The military began to experience some success in Chechnya and pay and housing issues received priority. Some officers were appointed as representatives of the president to oversee huge administrative regions as general-governors did during the Tsarist's time. Tactically, strategically, and organizationally, the Russian military appeared to be on track. The military-industrial complex, which had been in disarray in the 1990s, began to function again. However, this does not mean all is well. It is still not certain, from the standpoint of traditions, what shape the armed forces will finally take.

What is obvious is that there is something old and something new in the traditions that have been picked up and these traditions are helping to form the military culture of this generation of Russian officers. There is a mix of informal and formal traditions. If the Russian military abides by the guidance set by generations that have gone before them, they will be talented and savvy officers capable of confronting any challenge. However, if Russia's military leaders ignore some of the more important lessons of the past, as it seems to have done in certain select areas, the Russian armed forces are inviting the development of low morale and its unintended consequences on its fighting capacity.

Or are we asking the wrong question? Are very few things lacking, and what we are witnessing is simply a union of Old Russian and Soviet Russian traditions? Regardless, there still appears to be a tilt in tradition toward the Soviet direction. For example, Old Russian units (Pavlovskiy, etc.) and banners did not come back into vogue and new Russian military units still appear to use numbers and regimental banners that are Soviet in style. New Russian medals almost look the same as Soviet medals. The "old" Russian military's NCO corps did not make a comeback (although change may be

afoot in that area). The glorious past is still recognized as the Soviet past, focusing heavily on World War II achievements. "Old" Russian military experiences remain less positive than Soviet military experiences. This is not really that unexpected, as we are always most interested in either our immediate past or the past in which we participated. This atmosphere will last at least into the next two decades in Russia.

It will be of interest to Russian experts to follow the progression of military traditions in the coming years and see which ones the officer corps will choose to follow, especially as World War II veterans pass into eternity (an excerpt from *Krasnaya Zvezda* [Red Star] on the traditions and military books/movies of cultural importance that are being taught to soliders in 2011 is listed at the end of this chapter). The officers involved in the Afghanistan, Chechen, and Georgian conflicts are bound to exert their own imprint on Russian military tradition. It is highly likely, however, that they will follow the definition of "tradition" offered in the 2007 *Voennyy Entsiklopedicheskiy Slovar*' (Military Encyclopedic Dictionary) of Russia and many of the other refined traditions of those who have gone before them:

TRADITIONS—the observance of the rules, customs, and standards of conduct of servicemen related to combat missions and military service that have formed historically in the army and navy and are handed down from generation to generation. The central combat traditions in the Russian Armed Forces are: fidelity to the military oath and military duty, allegiance to the Homeland, courage and heroism in its defense, *esprit de corps*, defense of the commander in battle, and others. Along with those that are common to the Armed Forces, there are combat traditions for branches and arms of the service, forces, units, and ships. Combat traditions serve the goal of, and are a key tool for, fostering high moral and combat quality in the military. [134]

2011 Program

of Information-Propaganda and Military-Patriotic Events in the Russian Federation Armed Forces to Strengthen Ties between the Army and Society, Raise the Stature of Military Service, and Foster Social Support for the Transformation of the Army

Event

Stage I (January-May) under the slogan "Army of Victory"

- 1. **Social and civic training (OGP) classes** with drafted and contract servicemen on:
 - "A.V. Suvorov's 'The science of winning.' The capture of the Turkish fortress of Ismail" (1790)
 - "The liberation of Leningrad from the enemy blockade" (January 27, 1944)
 - "The Battle of Stalingrad and its historical significance" (February 2, 1943 – day of the German fascist troops' defeat in the Battle of Stalingrad)
 - "February 23 Defender of the Fatherland Day"
 - "Development of the branches and arms of modern Russia's Armed

- Forces. Soldier, be proud of serving in your branch, arm, force or unit!"
- "The military collective a family of fighters. It is a duty and obligation of the Russian serviceman to sacredly preserve and grow the traditions of friendship and esprit de corps"
- "Russia is a space power. On the 50th anniversary of man's (Yuri Gagarin's) first space flight" (April 12, 1961)
- "Rebuffing aggression from the West. The Battle of the Neva of 1240 and the Battle on the Ice of 1242"
- "The Berlin operation. Fascist Germany's unconditional surrender" (April 16 May 9, 1945)
- The great victory of the army and people (66th anniversary of the Soviet people's victory in the Great Patriotic War of 1941-1945)

2. **Informing** drafted and contract **servicemen** on:

- "The Vistula-Oder offensive of the 1st Belorussian and 1st Ukrainian fronts" (January 12 February 3, 1945)
- "The liberation of the Polish capital of Warsaw by troops of the 1St Belorussian front" (January 17, 1945)
- "Eradication of the German fascist troops' Korsun-Shevchenkovsky force" (January 24 February 17, 1944)
- "Crimea (Yalta) conference of the heads of government of the USSR, the USA and Great Britain" (February 4-11, 1945)
- "The liberation of the Hungarian capital of Budapest" (February 13, 1945)
- "Private A. Matrosov's immortal act of courage" (February 27, 1943)
- "On the establishment of the category I and II Order of Ushakov and the Ushakov and Nakhimov medals" (March 3, 1944)
- "The German fascist invaders' monstrous crimes against civilians: killing of the Katyn villagers of Belorussia" (March 22, 1943)
- "Baptism by fire of the Normandy air squadron of French airmen" (April 1, 1943)
- "Capture of the Konigsberg fortress city by troops of the 3rd Belorussian front" (April 9, 1945)
- "Liberation of the Austrian capital of Vienna by troops of the 3rd and 2nd Ukrainian fronts" (April 13, 1945)
- "On the Russian Orthodox Church's contribution to the militarypatriotic education of citizens and material support of the front and rear in the years of the Great Patriotic War 1941-1945"
- 3. **Reader conferences, reviews, and discussions** of books from the "Library of patriotic literature" series on:
 - The Leningrad blockade: V. Ardamatsky "Leningrad Winter"
 - The Battle of Stalingrad: M. Alekseyev "My Stalingrad," V. Nekrasov

- "In the Stalingrad Trenches," Yu. Bondaryev "Hot Snow," B. Vasilyev "One-Two, Soldiers Were Going"
- *The navy:* V. Bulatov "Admiral Kuznetsov," V. Pikul "Requiem for the PQ-17 Convoy"
- The 200th anniversary of the 1812 Patriotic War: S.V. Golubov "Bagration"
- The heroic deeds of Soviet soldiers in the years of the Great Patriotic War:
- G. Baklanov "Forever 19"
- V. Rasputin "Live and remember"
- N. Leonov "Russian forest"
- G. Zhukov "Recollections and thoughts"
- 4. Exhibitions of fiction and memoirs devoted to the key events of the 1941-1945 Great Patriotic War at **unit and garrison libraries**
- 5. **Viewing and discussion of films** from the "100 Russian films for army and navy servicemen" series:
 - "Hot snow"
 - "Liberation"
 - "Torpedo carriers"
 - "PQ-17 Convoy"
 - "Second wind"
 - "Great Patriotic War"
 - "They fought for the Homeland"
 - "Only the old ones are going into battle"
 - "Officers"
 - "The dawns are quiet here"
 - "No one wanted to die"
 - "Spring on the Oder"
 - "Father of a soldier"
- 6. Ceremonial presentation of the Colors (new design) to formations and units of the Russian Federation Armed Forces
- 7. Opening of the Victory Hall at the Central Museum of the Armed Forces with exhibition of original Banners of Victory: completion of the installation of special display cases with climate control; ceremonial opening of the exposition.
- 8. Events marking the 22nd anniversary of the withdrawal of the Limited Contingent of Soviet Troops from Afghanistan
- 9. Gala evening dedicated to Defender of the Fatherland Day at the Central Academic Theater of the Russian Army.
 - Defender of the Fatherland Day ceremonies in forces, formations, and units

Ceremonies marking the 50th anniversary of Yuri Gagarin's orbital flight around the Earth

- 11. "Under the banner of victory!" information-propaganda campaign. Including events on Moscow's Suvorov Square under the auspices of the Ministry of Defense's central cultural organizations:
 - Russian Federation Ministry of Defense reception for veteran commanders
 - Opening of a Hall and Gallery of Military Leaders at the Armed Forces Cultural Center
 - Gala evening at the Russian Army's Central Academic Theater;
 - Celebratory concert of the A.V. Aleksandrov Russian Army Academic Song and Dance Ensemble
 - Performances of military orchestras in Ekaterina Park
 - Similar events under the auspices of federal military cultural authorities in cities where military districts, fleets, and formations are headquartered
- 12. Military-patriotic events with participants in the military parade on Moscow's Red Square and military parades in other cities where military districts, fleets, and formations are headquartered
- 13. Information-propaganda events marking the 40th anniversary of the premier of the movie "Officers" in Russia
- 14. "All-Russia Draftee Day" all-Russia patriotic youth event
- 15. Weekly publication of radio newspapers by unit broadcasting centers with information on events of the Great Patriotic War and the participation of the force (unit) in combat operations, and reading of excerpts from books on the Great Patriotic War and recollections of veterans
- 16. Amateur performer competitions **in formations (units)** with a final concert marking Victory Day in the 1941-1945 Great Patriotic War
- 17. **Organization of a** "1941-1945 Great Patriotic War" **mobile photo exhibition** in formations (units) of military arms and branches, Logistic Services of the Russian Federation Armed Forces, central units and authorities, and Ministry of Defense tertiary institutions (under a separate program schedule)
- 18. **Organization of the clean-up of monuments**, commemorative signs, and burial sites of soldiers who perished in fighting and battles of the Great Patriotic War
- 19. **Wrap-up of Stage I** of the information-propaganda and military-patriotic events in the Russian Federation Armed Forces to mark the 66th anniversary of Victory in the 1941-1945 Great Patriotic War
 - Stage II (June-November) under the slogan: "Army and Society"
- 20. **Social and civic training (OGP) classes** with drafted and contract servicemen on:

- "Russia's national symbols"
- "The Armed Forces are a guarantee of Russia's peace and security. Lessons and conclusions from the start of the 1941-1945 Great Patriotic War" (to mark the 70th anniversary of the start of the 1941-1945 Great Patriotic War)
- "Defense of the Fatherland and service in the Armed Forces are a duty and obligation of Russian Federation citizens"
- "Peter the Great's military reforms and strengthening of Russian statehood. The Battle of Poltava" (1709)
- "The Russian fleet's victory at Gangut" (1714)
- "The Battle of Kursk. Its role and significance during the Great Patriotic War"
- "The Russian fleet's victory under the command of F.F. Ushakov over a Turkish squadron off Tendra" (1790)
- "State structure of the Russian Federation. The Federal Assembly (Federation Council and State Duma) is Russia's supreme legislative body"
- "The army during the revolutionary events of 1917 and the civil war"
- "Russia's Armed Forces in the national government structure"
- "On the 70th anniversary of the battle for Moscow. Soviet troops' counteroffensive and the start of the defeat of the German fascist troops near Moscow" (December 5-6, 1941)

21. **Informing** drafted and contract **servicemen** on:

- "Russia's great poet"—on Russia's Pushkin Day
- "Russia a great multinational country"—on Russia Day
- "The people's great feat". On the Day of Memory and Sorrow
- "Russia and its Armed Forces on the way to modernization"
- "The offensive operation of the troops of the South-West front in 1916".

 On the 95th anniversary of the start of the Brusilov breakthrough
- "Day of the Russian army's victory over the Swedes in the Battle of Poltava" (1709)
- "On the 75th anniversary of the nonstop flight of airmen V.P. Chkalov, G.F. Baidukov and A.V. Belyakov across the Arctic Ocean"
- "Russia's naval might and glory"—on Navy Day
- "The valor and glory of the air infantry"—on Airborne Forces Day
- "The wings of the Homeland"—on Air Force Day
- "The fiery arc". On the day of victory of Soviet troops in the Battle of Kursk
- "The Russian guards"
- "The Battle of Borodino (1812) Russia's Day of Military Glory"

- "Day of victory of Russian regiments in the Battle of Kulikovo" 1380
- "Russia's ground forces"—on Ground Forces Day
- "Russia's space shield"—on Space Forces Day
- "The material basis of troop command and control." On Signal Operator Day
- "Liberation of the Ukraine SSR's capital of Kiev by troops of the 1St Ukrainian front" (November 6, 1943)
- "On the 70th anniversary of the parade of Soviet troops in Moscow's Red Square on November 7, 1941"
- "Start of the Soviet troops' counteroffensive near Stalingrad" (November 19-20, 1942)
- "Immortal exploit of scout Zoya Kosmodemyanskaya (executed by the fascists on November 29, 1941)
- 22. **Reader conferences, reviews, and discussions** of books from the "100 best national works of literature on defense of the Fatherland" series:
 - On the 70th anniversary of the start of the Great Patriotic War:
 - V.M. Kozhevnikov "Shield and sword"
 - V.N. Kondratyev "Sashka"
 - B.V. Polevoi "Tale of a real man"
 - G.I. Sviridov "Summer of forty-one"
 - On the 70th anniversary of the defense of the Brest Fortress:
 - B.L. Vasilyev "His name was not listed"
 - On the 95^{th} anniversary of the Brusilov breakthrough (1916):
 - S.A. Sergeyev-Tsensky "The Brusilov Breakthrough"
 - On the Battle of Kursk:
 - A.V. Ananyev "The tanks are moving in diamond formation"
 - \bullet On the 15th anniversary of the counterterrorist operation in the Chechen Republic:
 - N.F. Ivanov "The Chechen boomerang"
 - V.P. Kiselev "Reconnaissance battalion"
 - On the 70th anniversary of the battle for Moscow (1941):
 - K.M. Simonov "The living and the dead"
 - A.A. Bek "Volokolamsk Highway"
 - P.A. Belov "Moscow is behind us"
 - M.A. Sholokhov "They fought for the Homeland"
- 23. **Viewing and discussion of films** from the "100 Russian films for army and navy servicemen" series:
 - "Stronger than fire"
 - "The Brest Fortress"

- "The living and the dead"
- "Belorussian railway station"
- "The war in the west"
- Denisov's documentary film "Special ops priests"
- "In August '44"
- "Admiral Ushakov"
- "Kutuzov"
- "War and peace"
- "Roadblock"
- "Admiral Nakhimov"
- "Saboteur"
- "Counterstrike"
- 24. **Organization of the clean-up of monuments**, commemorative signs, and burial sites of soldiers who perished in fighting and battles of the Great Patriotic War
- Ceremonial mourning to mark the 70th anniversary of the start of the 1941-1945 Great Patriotic War, including:
 - Attendance at a joint meeting of the Russian Federation Federal Assembly and Government and the Moscow city administration
 - Laying of wreaths and flowers at the Tomb of the Unknown Soldier in Alexander Garden, as well as at memorials and monuments at military bases
 - Visit to Moscow's Manezh Central Exhibition Hall's International Exhibition of the practical results of the work to immortalize the memory of those who died defending the Fatherland, as well as similar exhibitions in administrative centers where military districts and fleets are headquartered
- 26. **Information-propaganda events** marking the 95th anniversary of the offensive of the South-West front of Russian troops in World War One (the Brusilov breakthrough, 1916), including:
 - Research and historical conferences with officers in formations, command echelons and tertiary institutions: "The Brusilov breakthrough: lessons and conclusions for today"
 - Film-lectures for personnel
- 27. **Military-patriotic events** marking the 70th anniversary of the Battle of Moscow (1941)
- 28. "First in the Army" information-patriotic event
- 29. "Soldiers of the Community" **competition of military-patriotic excellence** among CIS armed forces servicemen
- 30. **Display and competition of children's drawings** of the feats of the peoples of Russia in the 1812 Patriotic War under the slogan "Forever in the peoples'

- memory" at the Suvorov (Nakhimov) military academies, Ministry of Defense schools, and garrisons
- 31. Amateur performer competitions in large units, military districts (fleets), and arms and branches of the Armed Forces with presentation of the winners at the "Katyusha" All-Russia Competition
- 32. **Final of the** "Katyusha" **All-Russia Festival** of Popular Art of the Armed Forces, other defense and law enforcement agencies, war and military service veterans, and their families
- 33. **Research and application conference**: "Work with religious servicemen of the Russian Federation Armed Forces: evolving practice, experience and prospects"
- Columns in the weekly <u>Krasnaya Zvezda</u> newspaper on the 70th anniversary of events at the fronts of the Great Patriotic War (1941)
- 35. **"Army and Society" exhibition and forum** in Moscow's Manezh Central Exhibition Hall.

To include:

- Expositions of the progress in combat training and daily activity of the Armed Forces
- Roundtables led by Deputy Defense Ministers
- Sessions of the Defense Ministry's Public Council and the Armed Forces Council of Veterans
- Similar exhibitions in large administrative centers where military districts and fleets are headquartered
- 36. **Joint patriotic events with Zvezda TV station** with servicemen to mark the 70th anniversary of the military parade in Red Square in 1941
- 37. **Wrap-up** of the 2011 information-propaganda and military-patriotic events in the Russian Federation Armed Forces[135]

CHAPTER THREE: MILITARY THOUGHT: RUSSIA'S INHERITANCE FROM THE SOVIET PERIOD

The culture of an officer's military thinking is inseparable from the general culture of his intellectual activity. [136]

Introduction

It is clear from the writings of Soviet and now Russian military strategists that the influence of Marx and Lenin on military thought has been profound. It is highly doubtful that this influence will ever be totally erased from Russian military thinking. Even in the late 1980s, while then President Mikhail Gorbachev's perestroika and glasnost issues were under discussion and military authors were exploring new thinking in military affairs for the first time in decades, thought processes still maintained a strong Marxist-Leninist dialectical bias.

It is thus imperative that this work include a few samples from the Soviet era archives of military thought. These works offer clues as to what is influencing the current thought processes of Russia's military strategists. This chapter examines two examples of these works. They are *Kul'tura Voennogo Myshleniya* (The Culture of Military Thought) by F. F. Gaivoronsky and M. I. Galkin; and *Istoriya Sovetskoy Voennoy Mysli* (The History of Soviet Military Thought) by I. A. Korotkov.

The Culture of Military Thought

Two Russian military officers published the book <u>The Culture of Military Thought</u> in 1991. Parts of it were most likely written during the Soviet period. The book explains in detail the theory and development of military thought from Soviet times up to 1991. Since this book was written during Secretary General Mikhail Gorbachev's perestroika and glasnost movement, the authors commented on these issues as well. The officers, Colonel General F. F. Gaivoronsky and Colonel M. I. Galkin, also did not fail to describe Gorbachev's movement in Marxist-Leninist terms as a revolutionary transformation in society bringing to the fore contradictions between, on the one hand, the need for renewal, creativity, and creative initiatives and, on the other hand, conservatism, inertia, and self-interest. This necessitated

a much more active, creative search in developing strategy, tactics, and command and control; improving methods for political and combat training of military forces, units, and ships; making ideological and political-educational work more effectual; and strengthening military discipline, that is, everything that makes our defense qualitatively more effective. [137]

The authors underscored that military people must possess the skill to use Marxist-Leninist ideological and methodological principles in order to look into the future, forecast military events, and creatively implement military theory's new postulations. Problems must be solved without a direct reliance on practical experience gained in warfare. Military leaders must make judgments based on field tests of some weapons. The 1979-1989 war against Afghan insurgents was their most recent experience and it was not a high-tech versus high-tech type of conflict. [138] However, the conclusions reached by Russia's band of educated military professionals absolutely remains worthy of our consideration.

Gaivoronsky and Galkin's work offers a general introduction to other topics covered in <u>Recasting</u> the <u>Red Star</u>. These topics include future war, military traditions, and high-technology applications to military affairs.

Military Thought

The authors define thought as "the purposive, indirect, generalized reflection in human consciousness of the essential links and relationships of reality, an 'instrument' for forecasting events and actions. It immeasurably expands human cognitive abilities and ensures that knowledge is received about the qualities of an object that are not accessible to sensory perception."[139] Theoretical thought, then, is used to visualize operations, strategy, and other areas of military science. The actual tool of thought is made up of concepts and judgments expressed as language instead of sensory or perception images.[140] Thought involves processing the results of sensory perception and produces knowledge. Cogitation enables a human to view battle as a complex, organized, managed process thanks to the speed and accuracy of our perceptive processes.[141] An officer must have the ability to recreate a picture of reality (an engagement or other type of military activity) based on separate, fragmentary, and written or oral reports which at times may be contradictory. The dynamics of a situation must also be envisioned.[142]

A specific feature of Russian military thought is the unity of the military's political and military-technical thinking. The political aspect refers to the precise appraisal of the state's policy on war and peace, military posture, and the preparation of its Armed Forces personnel. The military-technical content of military thought reflects the firing and tactical aspects of weapons and material and the nature of the military operations that derive from them.[143] These two factors (political and military-technical issues) are also the two factors that compose military doctrine in Russia. [Note: "Doctrine" in the Russian language is nearly equivalent to "national military policy" in US terminology.]

Since the goal of a military operation is to disorganize an opponent's operation, military thought must include knowledge of both friendly and adversarial forces. It also encourages creative thought, good morale, psychological preparedness, and the desire to fight under extreme conditions. This includes placing commanders in dangerous situations in peacetime training to form psychological readiness for any test before them in real battle. Creativity is required since military operations are dynamic, include abrupt and sometimes unexpected situations, require independent and proactive decisions and a knack for risk taking, and possess potential communications disruptions and other critical junctures. [144] In determining what information to use, a commander must: rely on objective facts and actual conditions; quantitatively and qualitatively evaluate them; consider them in close interconnection and as constantly changing and developing; unearth the contradictions of that development; find the main link; and identify the primary factors that decisively affect the troops' success in accomplishing their mission. The objectives that are set by the senior commander determine the direction of a commander's cognitive activity when assessing a situation. [145] The ability to creatively apply knowledge in peacetime to real situations must be developed.

Military art is defined as the fusion of creative thinking and effective practical activity. In this sense a commander's decision is nothing more than the mental image of the ways and means for

accomplishing the objectives of an impending engagement. Creativity produces something qualitatively new and non-existent to meet man's needs, to include the creation of new weapons or substances with preset properties or energy that do not directly occur in nature. [146] It is the procurement of new knowledge outside the framework of existing ideas and the production of new, previously unknown methods. [147] Something new can only be created by relying on knowledge already developed, to include the forms and methods of mental activity. What is required is the unity of the logical and the unconscious, of the exact calculation and the epiphany. The creative process is the "synthesis of the cognitive, emotional, and volitional spheres of human consciousness. It is inseparably linked to an individual's character, abilities, and interests." [148]

Objective and Subjective Thought Factors

Thought occurs due to the interaction of objective and subjective factors. The authors note that the surrounding reality is the objective factor of thought while knowledge and a thinking person's attitude to it are the subjective factors. Thus defense budgets or levels of science and technology are objective factors while their manipulation in favor of friendly forces would be the subjective application of knowledge. Objective factors have undergone serious disruptions with the introduction of new weapons. The initial period of war, military engagements, the expansion of electronic warfare capabilities, and other factors have all affected military theory's view of objectivity. The authors note that "a new military method can only be effective if it does not contradict the objective patterns in the development of military science and corresponds to the concrete conditions in which these patterns are manifested." [149]

The development of subjective thought is closely related to creativity according to Gaivoronsky and Galkin. Creative thought requires a certain amount of knowledge about the reality of a situation, personal experience in resolving similar issues, a desire to get to the truth, and some intuition (such as sudden or conceptual insight, a premonition, special hunch, revelation, epiphany, etc.); and it requires receptivity to new ideas, the ability to overcome conservatism and inertia, independent judgment, a critical nature and daring, and tenacity and persistence in pursuing an objective. A creative imagination is a prerequisite for developing new thought or images of what does not exist in reality.[150] The purpose of thought becomes the ability to reveal the unknown not provided by direct perception or measurement. This requires analysis, synthesis, generalization, and other thought processes as the logical means to realize the interaction of the objective and subjective.[151]

The authors directed special attention toward the concept of intuition. They noted that thought is linked to practice and interacts with the laws of the objective world. This in turn produces intuition which is the brain's capacity to receive and reprocess a larger volume of information than is registered by consciousness. Intuition is expressed as sudden analogies, associations, and fantasy in instantaneous recognition of objects and processes and a hunch about their future. [152]

Premonition in battle is a crucial component of a commander's decision-making. The ability to foresee events prevents catastrophic outcomes and invisible consequences. For foresight to become a reality, both objective and subjective criteria must be understood. The laws and cause-effect links of military activity, the weaponry and organization, capabilities, and modus operandi of one's troops and those of the adversary must be understood. Knowledge of the concrete and general patterns of armed combat and military art must be understood. Situations with which a commander must deal are

divided into two groups: natural and technical factors, and human factors. Foresight also includes how conventionally the contending sides act and the extent to which they use stratagem, operational and tactical camouflage, and disinformation.[153]

The Laws of Formal Logic and Military Thought

Formal logic is a science of the laws of correct thought and the demands made of consistent and evidentiary discourse. Unlike dialectical logic, formal logic is limited to formulating the laws and rules by which ideas follow each other logically. There are four laws that the authors identified: the law of identity, the law of contradiction, the law of the excluded middle, and the law of sufficient grounds. [154]

- Law of Identity: notions and judgments about an object must be precisely defined and unambiguous if they are to be used in the same sense, meaning, and relation throughout a discourse. The law is intended to counter pointless and nebulous discourse. It is necessary to redefine an object as it changes, shifts to a new quality, is found to have new properties, or deepens our knowledge of an object. [155]
- Law of Contradiction: this law ensures that the properties of an object or phenomenon cannot, at one and the same time, pertain and not pertain to it. There is no contradiction if varying times in development or such other properties, links, or relations are used. [156]
- Law of the Excluded Middle: this law aims to exclude contradictions in thought about the same object taken into consideration at the same time and in the same relation.[157]
- Law of Sufficient Grounds: this law notes that any correct (and objectively true) idea must be reasoned and based on sufficient grounds. The law requires that all assertions about a phenomenon be proven. Both the thesis and the reasons must be fully substantiated. Dialectical and formal logic act in unity in which dialectical logic plays the leading role. [158]

Gaivoronsky and Galkin wrote that a culture of military thought also requires that an officer must master concepts (the essence of objects) from the general to the specific. The issue of concept includes the content, scope, features, ideas, and judgments contained in military thought. A concept's content includes the essential features of an object, while a concept's scope is the concrete totality of objects possessing similar features. Establishing essential features means comparing the concept with objective reality.

An idea is expressed in the form of a combination of concepts, thereby expressing knowledge about properties and relationships between objects and military reality. The combination of concepts about the phenomena of military affairs is called judgment.[159] A judgment combines and compares concepts, where some property or relationship is affirmed or negated. It reflects whether a feature does or does not belong to the object of an idea.[160]

There are also types of inferences or indirect thought where knowledge is deduced from inductive or deductive methods or from analogy. Induction involves inference from the particular to the general. Scientific induction is based on finding internal causation that necessitates a preliminary analysis of objects to find essential features of certain conditions. Conclusions are formulated on the basis of one's knowledge of essential features common to a certain class of objects or phenomena. Deduction

involves inference from the general to the particular. Syllogism, the authors note, is the most common form of deductive military thought. It reviews two judgment premises linked by a general term and derives from them a conclusion. For example, "all types of maneuvers combine fire, movement, and strike. An enveloping attack combines fire, rapid movement, and deep strike. An enveloping attack is therefore a type of maneuver." An analogy is the transfer of knowledge from one object to another. It is a condition based on the establishment of similarity. Lenin called analogies slipshod and demanded careful study of all the pros and cons used with this method. [161]

Mathematical Modeling and the Principles of Military Art

There are several reasons why modeling is so important at the present time. Combat action takes place in time and space, it is true Gaivoronsky and Galkin note, but these are constantly changing situations. Combat is a two-sided process and involves more than smooth, continuous change. Change is also abrupt and there can be drastic changes in conditions (the introduction of weapons of mass destruction to a conventional fight, for example). Combat is also random and possesses a great degree of uncertainty (losses, pace of advance, time to reach targets, etc.). It is virtually impossible to take all of these instances into account in a normal field exercise, but on a computer countless initiatives (logistics, weather, terrain, time of year, etc.) can be injected at will. [162]

For participants, modeling facilitates gaining insight into cognitive processes and helps us discover patterns intrinsic to them. It also, of course, enhances the quality of a commander's decision-making, and it helps a commander's staff to prepare better analysis and evaluation of options. Modeling also enhances creativity, responsiveness, and confidence in running multiple engagement options. [163]

With regard to the principles of military art, the authors suggest that the role of military-historical thought is to "unearth the objective laws of war, discover the mechanism of their operation, and reflect them in the laws of military science." Such thought enables the recognition of objective laws by officers and the creation of the means to develop foresight and the principles of modern military art. The objective laws of war are actually military trends that develop during a particular historical context. Each law reflects links and relationships in seclusion from the rest. The first law of correspondence is between the objectives of war and the means of waging it. The second law of correspondence is between the material resources of war and the methods of conducting military actions. The third law is the balance of forces on opposing sides that determines victory or defeat. [164] It is necessary

To define the elements that make up combat power, the effectiveness of using each of them and their interaction, calculate the possible change of this balance during military operations, and determine the ways to create and maintain a balance of forces that would ensure victory. It is quite clear that this problem necessitates a thorough study of the experience of past wars. [165]

The principles of military art, on the other hand, are general demands made of the conduct of military operations at a given stage of military science's development. Gaivoronsky and Galkin state that the principles consolidate the level of development of military knowledge reached through the generalization of war experience. However, now the principles of military art can no longer be based on empirical (observation or experience) evidence alone. Theoretical studies and mathematical

modeling now impact on the principles of military art. Activity is subordinated to subjective goals which determine the methods and the nature of actions that are chosen. The principles of military art reflect both the requirements of the objective laws of war and the goals of each of the opposing sides. The principles are more fluid than the laws of military science. However, the laws of military science and the principles of military art together determine the general direction of military activity. [166]

The History of Soviet Military Thought

I.A. Korotkov's work canvassed the years 1917 to June of 1941. In the introduction to his book, he noted how Friedrich Engels had stressed not simply drawing conclusions but rather stressed that "study is what we need most of all: conclusions—they are nothing without the development of that which has come to us..."[167] Korotkov underscored the utility of the study of history and, not unexpectedly, Russian officers today are following this precedent. Whether it be the newspaper Krasnaya Zvezda (Red Star) or the journals Voennaya Mysl' (Military Thought) or Voenno-Istoricheskiy Zhurnal (Military Historical Journal), the lessons of history (especially World War II) are continually used as examples and templates for thought and assessing the contemporary environment. Lenin believed in the study of historical events from any category of international affairs. He stated that the entire sum of wealth accumulated under capitalism, to include achievements in knowledge, culture, and technology, should be turned from a weapon of capitalism to a weapon of socialism. [168] That is, learn from the past and from others.

Soviet thought was further guided by the Leninist principle of "the necessity of taking into account the struggle of ideas and views."[169] It is the role of the history of military thought to uncover the nature of the struggle of ideas as well as the trends associated with every period of its development. These trends should lead to the discovery of historical truth and the exact determination of "its place in the development of military thought during a given period."[170] Lenin was adamant that historical worth is judged by what was new in comparison with that offered by prior historical analysis; and that the sum of facts, not individual facts, mattered most since the latter can lead to subjective concoctions in place of objective discovery.[171]

Marxist-Leninist Thought

Korotkov gives full credit to Karl Marx and Friedrich Engels for creating the theoretical and methodological bases for Soviet military thought and to Lenin for expanding on their concepts. With regard to revolutionary thought, Marx and Engels warned that once a revolt begins it is necessary to act decisively and go on the offensive. [172] New methods of waging war are dependent on new weapons and on the change in soldier morale inspired by the revolution. [173] Lenin noted that strategic plans must be firmly rooted in objective conditions and that defensive operations in and of themselves are not enough for obtaining victory. One must know how to attack but also how to retreat when necessary. War enlarges the direction of politics that were in place before the war according to Lenin. [174]

Internal battles took shape within the Red Army at the time of the Russian revolution, however. Lenin felt that "old specialists" were still inspired by a bourgeois world view and made too many generalizations and conclusions which went against Engel's strong reliance on study. The old specialists thus, in Lenin's opinion, made many serious errors by not relying on a Marxist-Leninist methodology. Beginning in 1917 this error was eliminated as military science became firmly based on

Marxist-Leninist teachings about war and society.

Military Doctrine

In Chapter Three of his book, Korotkov outlines what is now the most prominent and important aspect of Soviet military history today—military doctrine. Korotkov relies on the testimony of the instigator and proponent of military doctrine, Mikhail V. Frunze, often in his work. Frunze believed that the communist party had to adopt a unified view on the defense of the country. He stated that

The State must determine ahead of time the character of general, and in particular, military policy...it must work out and establish a specific plan of general government activities, which takes into account future confrontations and ensures in advance their success by expediently using the nation's energy.[175]

Doctrine was tasked to provide common views on the nature of the mission of military activities and how to accomplish them. It was the responsibility of the political leadership to develop both general and military policy and thereby establish a single national defense plan. Frunze defined a unified military doctrine in the following way:

The doctrine, adopted by the army of a given state, which establishes the character of the development of the Armed Forces of the country, the methods of military training of the force, their leadership based on prevailing national views concerning the nature of the missions that lay before them, and the methods to accomplish them, which stem from the class nature of the state and are determined by the level of development of the productive forces of the country. [176]

Korotkov notes that Frunze's principles have kept their value and that the political leadership even today provides a general direction to military doctrine. From these doctrinal principles the problems associated with military theory are examined as well as an investigation of new developments in military affairs. New adversaries, new developments in science and technology, and changes in international affairs (for example, new economic developments in some countries) all threatened the Soviet Union at the time. These same issues are confronted today.

One of the reasons that military doctrine continues to thrive is the importance attached to it by Russian officers. Perhaps doctrine's major proponent is General of the Army Makhmut A. Gareev. His work <u>M. V. Frunze: Voenny Teoretik</u> (M. V. Frunze: Military Theoretician) was a classic Soviet book of the mid-1980s. Gareev clearly has followed the thoughts of Frunze. He lectures and writes often on the importance of military science, history, and military doctrine (Gareev truly believes in the veracity of military science. Trotsky's belief that there "is no such thing as military science and there never was" undoubtedly drove Gareev even closer to Frunze's way of thinking). Undoubtedly he remains an important intellectual figure in Russia even though he is in his mid-80s. One of Gareev's recent articles in <u>Voennaya Mysl'</u> (Military Thought) discussed three issues, the relationship between politics and military strategy (the essence of a unified military doctrine), the importance of forecasting the nature of future war, and the importance of the proper use of history, all aspects of Korotkov's work.

Value of the General Staff, Noted Soviet Theoreticians Criticized

Korotkov wrote that V. M. Shaposhnikov's work <u>The Brain of the Army</u> promoted the unification of training for the country's defense, the development of an organization dedicated to military-scientific work, and a focus on understanding of military history. The organization in question here dedicated to military-scientific work was the Soviet General Staff. Korotkov wrote that this was the correct decision to make since such a military organization could develop a wide range of questions for the government regarding the preparation of the state for defensive activities.

Korotkov also criticized some of the Soviet era's most prominent theoreticians. Foremost among them is the noted strategist A. A. Svechin. Svechin was severely chastised for using the works of Germans L. Ranke and G. Delbruck for his study of history and military history. Never once did he mention the works of Friedrich Engels, Vladimir I. Lenin, or F. Mering regarding military history or military art. Nor was there any mention of the historical works of Marx or any criticism of the methodology of bourgeois historical science. Svechin was further criticized for not investigating the question of the class nature of an army, its origin, its social character, and the contradictions inside the army. [177]

Conclusion

It is not unusual to find many of the items discussed above reflected in the contemporary writings of Russian military officers. For example, historical lessons learned, foresight, the initial period of war, and other such issues are regularly discussed. General of the Army Makhmut Gareev is perhaps the most well-known Russian officer who integrates historical and contemporary lessons learned into forecasts of future war that are laced with warning signs. The military newspaper *Krasnaya Zvezda* (Red Star) and the journal *Voennaya Mysl'* (Military Thought) are two publications that often contain such thoughts from Gareev. Colonel S. G. Chekinov, writing in issue seven of the 2010 series of *Voennaya Mysl'* (Military Thought), offered an excellent example of military thinking that took into consideration several items from the culture of military thought. His article on "Forecasting Tendencies in Military Art at the Initial Period of the Twenty-First Century" discussed cognition, foresight and forecasting, and the art of war among other issues.

The Culture of Military Thought noted that practical and cognitive experiences are required for an officer to be a good leader and commander. The authors stated strongly that

The most important prerequisite of the culture of a thought process is knowing the essence of the processes of that reality in which both practical and cognitive activity take place. Experience-based knowledge usually answers the question how should one act, while success also calls for knowledge of why that way and not otherwise. It is theory that must make up for this limitation of experience. [178]

For a Russian officer, military activity is based on knowledge, biological and social attributes, and physical and spiritual capabilities. However, Russian officers only now are beginning to develop and simulate human science. This endeavor is creating the material and spiritual prerequisites that will influence the initiative and activity of officer cadres. Man acts out of military honor and military duty as motivating factors but he also acts in keeping with his personal interests. It is necessary for Russian scientists to provide the conditions that allow for harmoniously combining personal interest

with those of the collective. In this manner an officer's culture is formed and perfected in accordance with the social and military challenges confronting Russia and its Armed Forces.[179]

Many of the ideas that Gaivoronsky and Galkin expressed are important for the new generation of officers in Russia. They adequately express Russia's desire to create officers who think on their feet and are adept at viewing a situation from new angles. The discussion in The Culture of Military Thought is indicative of this with its focus on creativity, initiative, foresight, concepts, objective-subjective considerations, and the unification of logic and the unconscious that hopefully results in an epiphany of some sort.

The History of Military Thought suggests that constant study is of the utmost importance to Russian officers. Soviet authors were directed to study historical lessons learned and remain vigilant. The study of history was listed as a priority for understanding what is required of an officer if the latter is to understand his or her operational environment. Soviet officers, as are officers today, were asked to focus on military doctrine as the vehicle for understanding the close connection between military policy and military theory. Officers were also reminded of the necessity to learn the principles of Marxism-Leninism in order to have the capability to peer into the future.

Soviet officers were instructed that a close study of military technology was a requirement. Only through such study can officers understand the importance of technology's impact on military affairs and correctly predict future tendencies and potential consequences (both good and bad). Once the means and methods of present day struggles are understood, politicians can then rely on officers to help define the direction of the application of technology as well as its possible use in war.

In short, these two books offer an interesting glimpse into the thought processes of Soviet and most likely now Russian officers. These thoughts resemble those of their US counterparts but differ in degrees of emphasis and of course context. Russian officers have more time to contemplate various ways to apply new technologies and theories in modern warfare than US officers mainly due to the persistent deployments of the latter. The culture of military thought associated with Russian military theory promises to deliver new and varied applications of the use of force in the future.

CHAPTER FOUR: RUSSIA'S OPERATIONAL ENVIRONMENT

Geopolitical status: a nation's place in the system of international relations based on its geopolitical position and ability to actualize its national interests. [180]

Geostrategy: the future path to be taken by a government to actualize a country's geopolitical interests in the world space. [181]

Introduction

The United State's Army's Training and Doctrine Command defines the operational environment as the "composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decision of commanders." [182]

Russia does not use the term "operating environment" in its military lexicon. However, Russia's national security strategy and military doctrine present plenty of clues that offer a picture of this concept "by implication" for Westerners. The discussion in these documents of the trends, dangers, and threats to Russia's security comprise the key components that appear to shape the conditions, circumstances, and influences affecting the employment of Russia's military power. For the most part, this employment of power is applied regionally. Russia is gaining strength through its international alliances such as the Shanghai Cooperation Organization but it still lacks the power to assert itself globally. In fact, some Russians consider Russia a regional power.

This chapter first examines Russia's concept of military policy and the functions it is designed to perform. It then examines Russia's national security strategy and military doctrine plus the writings of several Russian military experts who project the form of the future military environment. The chapter exposes some crucial elements of concern to Russia about its future operational environment, an environment that the Russians classify as geostrategic or geopolitical. The chapter closes by examining a specific area of concern to Russian security specialists, the Arctic.

Russia's Military Policy

According to the 1986 <u>Voennyy Entsiklopedicheskiy Slovar</u>' (Military Encyclopedic Dictionary), military policy is based on: an evaluation of one's own assets and resources and those of potential adversaries; the potential that comprises a country's military might; and the factors determining the course and outcome of war. Military policy is embodied in a country's military doctrine, military strategy, and military organizational development.[183] The term did not appear in the 2007 <u>Voennyy Entsiklopedicheskiy Slovar</u>' (Military Encyclopedic Dictionary).

However, it is apparent that the term is still in use. In a 2008 article in <u>Vestnik Akademii Voennykh Nauk</u> (<u>Bulletin of the Academy of Military Science</u>), Lieutenant General V. S. Voloshko (retired) and Colonel V. I. Lutovinov, wrote that Russian Federation military policy is designed to perform two basic functions. The first function includes elaborating the National Security Concept, Military Doctrine, and the Fundamentals of Russian Federation State Policy for Military Development to establish: the principles of Armed Forces development; plans to equip the army and navy, and training and rational use of personnel; greater mobilization capability of the state; better reserve

training and mobilization deployment; the guidelines for military reform; ongoing analysis and forecast of the military-political situation; drawing up of military policy proposals for the military-political leadership; and information support of plans and decisions. [184]

The second function includes: managing military development as a whole and Armed Forces development in particular; developing military-economic, social, political, demographic and spiritual potential for the good of the country's defense; managing military-political relations with other states (coalitions), armies and subjects of military policy; directing military-political actions using military force within and outside the country; coordinating the activity of all military institutions; fostering in the Armed Forces and the entire population a spirit of patriotism and fidelity to duty, and reliably defending the country's territorial integrity and sovereignty. [185]

The following comprise Russia's chief military policy objectives:

- Substantiate and work up military-political solutions and prepare concrete plans for the functioning and development of the military system since the external and domestic military-political situation is subject to continual changes that affect national interests and require a timely decision and response;
- Manage military-political relations with other countries, coalitions, and blocs, primarily through diplomacy over border issues, arms reduction talks, military cooperation, and dialog with military-political blocs (alliances)/countries;
- Frame a military doctrine that defines the bases of the country's military and political activity;
- Organize information support for decision making, plans, and military actions;
- Safeguard Russia's independence, ensure its security and sovereignty, the inviolability of its borders and territorial integrity, and deter wars;
- Maintain the country's defense potential at a level adequate to existing and potential military threats, to include socio-economic and financial capabilities.[186]

Exactly who performs the function of writing military policy is unknown. Perhaps the function is performed by a host of analysts within the Kremlin, supported by the collective research effort of several think tanks in Russia. It is clear, however, that military policy is the leading document that guides Russia's national security strategy and military doctrine from the political level.

The Russian Federation's National Security Strategy until 2020[187]

The Russian National Security Strategy of May 2009 offers a forecast of the elements of concern to Russia's future operating environment. A list of national priorities is the main item shaping this forecast. These priorities help define the emerging political, social, military, and economic transformation of Russia, a transformation designed to ensure the country's security, stable development, and preservation of its territory and sovereignty. The list is short and predictable: ensure that the constitutional rights and freedoms of Russia's citizens can be exercised; and ensure that the stable socioeconomic development of the country, the defense of Russia's sovereignty, and the independence and territorial integrity of Russia are realized. The strategy lists these priorities in more detail as follows:

- The enhancement of Russian citizens' quality of life by providing guarantees of individual security and also high standards of sustenance
- The assurance of economic growth, achieved first of all through the development of a national innovation system and investments in human capital
- The development of science, technology, education, healthcare, and culture, designed by strengthening the state's role and improving the state-private partnership
- The development of the ecology of living systems and rational environmental management, maintained through balanced consumption, the development of advanced technologies, and the efficient reproduction of the country's natural resource potential
- The maintenance of strategic stability and equal strategic partnership, consolidated on the basis of Russia's active participation in the development of a multipolar world order model

The strategy's primary task is to form and maintain domestic and foreign conditions favorable to the implementation of these national priorities. The tools to form foreign conditions include technologies used in the national security system such as software and telecommunication channels; and linguistic, legal, and organizational elements. These tools help shape foreign conditions.

The security strategy identified numerous trends of significance. Primary among them was global competition over "values and models of development." These models attempt to exploit the slow pace of development in some areas of the world (that is, they try to take advantage of contradictions related to the uneven progress being made in some countries due to lack of infrastructure, etc.). A second trend is the search for "resolving problems and settling crisis situations on a regional basis" without the participation of non-regional forces. A third trend is the "threat to international security from the inadequacy of the existing global and regional architecture" which is oriented only on the North Atlantic Treaty Organization (NATO). A fourth trend is, in the opinion of Russian security specialists, the "increase in the vulnerability of all members of the international community to new challenges and threats." A final trend is the "transition from block confrontation to multi-vector diplomacy."

Some rather significant areas are discernable in these five trends for Russia's national security strategy. These areas include the following:

- A negative impact on Russia's national interests will be caused by (1) the probable recurrence of unilateral approaches involving the use of force in international relations, (2) contradictions among the primary participants in world politics, (3) the threat of the proliferation of weapons of mass destruction and the possibility that they will end up in the hands of terrorists, and (4) sophisticated forms of illegal activity in the cybernetic and biological spheres and in high technology spheres.
- The global information confrontation will increase.
- Threats to the stability of the world's industrialized and developing states and to their socioeconomic development and democratic institutions will grow. A financial-economic crisis could prove to be as damaging as a large-scale deployment of military force.
- Nationalist sentiments, xenophobia, separatism, and violent extremism (notably employing

- the slogans of religious radicalism) will increase.
- The world's demographic situation and environmental problems will worsen and the threats associated with uncontrolled and illegal migration, drug and human trafficking, and other forms of transnational organized crime will increase.
- The proliferation of epidemics caused by previously unknown viruses is probable. Fresh water shortages will grow.
- The longer-term focus of international politics will concentrate on the possession of energy resources, notably in the Middle East, on the Barents Sea shelf and other areas of the Arctic, in the Caspian Sea Basin, and in Central Asia.
- The crucial state of the physical safekeeping of dangerous materials and facilities in areas with unstable political situations must be continuously monitored.
- The competitive search for resources does not exclude the use of force.
- Stability will be lessened if US missiles are deployed in Europe.

To counter these trends, Russia intends to work closely with a host of organizations. The strategy states that Russia will increase its cooperation with the Group of Eight, the Group of Twenty, the RIC (Russia-India-China), and the BRIC (Brazil-Russia-India-China). It will promote the strengthening of the Eurasian Economic Community and it will rely on the Collective Security Treaty Organization to serve as a main firewall to combat illegal drug trafficking. Russia will work to strengthen the political potential of the Shanghai Cooperation Organization and the mechanisms of cooperation with the European Union. Finally, the national security strategy states that Russia will "strive to establish an equal and full-fledged strategic partnership with the United States of America." Russia's work in cooperation with NATO over the past fifteen years was not mentioned.

The primary task for strengthening Russia's national defense was defined as the transition to a qualitatively 'new look' for the Russian armed forces. This force must be able to adhere to a strategic goal of preventing global and regional wars, apparently through the use of two principles: strategic deterrence and rational sufficiency. Strategic deterrence would be implemented via an integrated set of political, diplomatic, military, economic, information, and other measures that deter aggressors. Rational sufficiency and effectiveness would be implemented via the use of methods of non-military responses, the use of public diplomacy and peacekeeping, and international military cooperation. Defense Minister Anatoliy Serdyukov's reform efforts appear to be following these principles.

Threats to military security in the national security strategy included the following:

- The policy of some foreign countries to achieve overwhelming supremacy in the military sphere, especially in strategic nuclear forces; the development of precision-guided weapons; information; and other high-tech means.
- Strategic weapons with non-nuclear warheads.
- Unilateral deployments of a global missile defense system.
- The militarization of near-Earth space.
- The proliferation of nuclear, chemical, and biological technologies and their delivery systems.

There is also a fear expressed in the national security strategy that certain issues (loss of resources, crises in the financial world, etc.) could increase Russia's dependence on external factors. Such dependence would increase Russia's strategic risks and cause uncertainty and perhaps even temporary instability in the Russian system.

Diplomatically, the strategy notes that Russian foreign policy aims to create conditions of equal security for all nations. This policy will ensure stability, predictability, nonmilitary methods, and other positive security enhancements. The government, on the other hand, will draw up a system of strategic planning documents to help defend national interests. These documents include The Russian Federation Long-Term Socioeconomic Development Blueprint; development strategies for individual sectors of the economy and federal districts; and development strategies and federally targeted programs for the state defense order, blueprints, doctrines, and primary directions of state policy in the national security sphere.

Russia's 2010 Military Doctrine [188]

Russia's military doctrine was published closely on the heels of the country's national security strategy, appearing just nine months later in February of 2010. It used many of the concepts found in the national security strategy. For example, the doctrine noted that "the existing international security architecture...does not ensure equal security for all states."

TRADOC's analysis of the operational environment until 2025 contained an analysis of drivers and trends. The eight trends were globalization and economics; culture and ideology; information; demographics; weapons of mass destruction; science and technology; resources; and military. Russia's military doctrine examined dangers and threats that, in some cases, are very similar to TRADOC's trends.

Operational environment "dangers" (an aggregate of factors capable under certain conditions of leading to a military threat) included the following:

- · An expansion of NATO closer to Russia's border
- · Attempts to undermine strategic stability
- Deploying troops in states contiguous to Russia's borders
- Deploying strategic missile defense systems that violate the correlation of forces in the nuclear-missile sphere
- · Territorial claims against Russia
- · Proliferation of weapons of mass destruction
- · Violation of international accords by individual states
- · Use of military force on territories contiguous with Russia
- · Presence of seats of armed conflict on territories contiguous with Russia
- · Spread of international terrorism
- Emergence of interethnic tension on Russia's borders and the growth of separatism and violent extremism in the world

Border issues were either mentioned or implied in at least five of the eleven categories. Perhaps

for this reason Russia decided to implement a system of four military districts and four strategic commands instead of six military districts.

Operational environment "threats" (real possibility of the outbreak of a military conflict between opposing sides involving the use of military force) include the following:

- Drastic decline in the military-political situation and the creation of conditions for the use of military force
- · Attempts to impede the operation of systems of state and military command and control of the Russian Federation
- A show of military force with provocative objectives in the course of exercises on areas contiguous with Russia's borders
- The partial or complete mobilization and transitioning of the organs of individual states and their military's command and control to wartime operating conditions

A discussion of the features of modern day military conflicts was included in the 2010 military doctrine. It offered another look at the conditions affecting the employment of military force. The doctrine noted that military conflicts are unpredictable, include a broad range of military-political and other objectives, involve highly effective weapon systems, and are marked by the use of information warfare means that seek to achieve political objectives without the utilization of military force. Decisive factors in the doctrine that are bound to impact a commander's decisions include the new-found speed of high level target destruction, the importance of possessing the strategic initiative, the requirement to preserve both the state's and the military's command and control apparatus, and the ability to secure supremacy in all warfare domains.

Russia's military doctrine stated that the structure, composition, and strength of its armed forces would be brought into line with several factors. These factors included military threats that can be predicted; the projected content and nature of military conflicts; and the planning mechanisms for current and long-term tasks (peacetime, times of the direct threat of aggression, and wartime).

One indication of this organizational change is that the existing six military districts were merged into four military districts and four joint strategic commands. This action was signed by President Medvedev on 14 July 2010. The same decree created a unified logistical system as well. Commanders will exercise control over all forces (Navy, Air Force, Air Defense, Army) under their strategic command. The new strategic command headquarters will be located in St. Petersburg (Western Operational Strategic Command), Yekaterinburg (Central Operational Strategic Command), Rostov-on-Don (Southern Operational Strategic Command), and Khabarovsk (Eastern Operational Strategic Command). Russia's strategic nuclear forces were left under central control. Commanders of the four districts in July 2010 were: Western Military District, Colonel-General Arkady Bakhin; Southern Military District, Lieutenant-General Alexander Galkin; Eastern Military District, Admiral Konstantin Sidenko; and the Central Military District, Lieutenant-General Vladimir Chirkin. [189]

It is clear how these commands are arranged. The Western Command is oriented against NATO and, due to its basing in St. Petersburg, is probably oriented to enhance Russia's position and influence in the Arctic (discussed in detail below). The Southern Command is oriented against the

Caucasus, Iran, and perhaps Georgia. The Central Command is oriented against Central Asia and the drug trafficking and extremism there. The Eastern Command is oriented against China, Japan, and Korea. Those elements that remain subordinate to the Defense Ministry (strategic nuclear forces, space troops, strategic aviation, etc.) are oriented more globally. It is somewhat strange that these components are not consolidated into a fifth strategic command (call it Space Command) with a headquarters in Moscow. Air Force Commander Colonel General Alexander Zelin noted in August 2010 that Russia is developing an aircraft for use in outer space. Thus it should come as no surprise if the space above Russia someday becomes another operational strategic command with global implications. [190]

Command and control appears to have been enhanced with the operational strategic command arrangement. Now all security forces in a region (border troops, Internal Affairs troops, etc.) are under the same commanders.

(See Regional Military Command map below)



**This image was taken from the RIA-NOVOSTI website, Russia's official news agency.

Examples of Russian Thought on the Geostrategic Environment

In a late 2010 interview, General Staff Chief Nikolay Makarov noted that the main vector of concern to Russia is now the southeast, as the near East and Central Asia are the most dangerous and conflict-prone regions near Russia. [191] Earlier in 2010, in a speech at the Academy of Military Science,

Makarov provided a diagram of the main threats that are shaping Russia's geostrategic environment (Figure 1 follows. This image was taken from the No. 2 2010 issue of <u>Vestnik Akademii Voyennykh</u> <u>Nauk</u> [Bulletin of the Academy of Military Sciences], p. 18):

Principal Security Threats to the Russian Federation

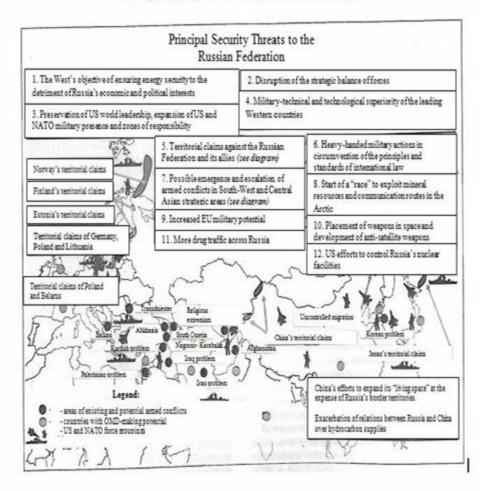


Fig. 1.

Makarov did not provide any special commentary directed toward the diagram.

Russian Colonel A. Yu. Maruyev provided another example of Russia's interest in the geostrategic environment. Writing in a 2009 edition of the <u>Bulletin of the Academy of Military Sciences</u>, he discussed the concepts of geopolitics, geostrategy, and geoadversaries. His thoughts are anti-US. It is not clear if Maruyev speaks for the majority of the members of the Academy nor if his thoughts are indicative of the way in which Russia's leadership thinks. However, his article is insightful since several Russian military and diplomatic analysts (retired General Leonid Ivashov, Diplomatic Dean Igor Panarin, etc.) have similar anti-US thoughts.

Maruyev defined geopolitical status as "a nation's place in the system of international relations based on its geopolitical position and ability to actualize its national interests." [192] Russia is now a regional power in Maruyev's opinion since it has not yet attained a substantial position in the world. This ranking implies that Russia must formulate a geostrategy to enable it to compete in the international arena in all fields while defending its core interests. [193]

Geostrategy is defined as "the future path to be taken by a government to actualize a country's geopolitical interests in the world space." [194] Several variants for framing a geostrategy were offered:

- 1. The revenge concept. Under this concept, Russia supports anti-Western states and forces the CIS into rapprochement with Russia.
- 2. The "new isolationist" school. This concept advocates greater authoritarianism.
- 3. The "voluntary submission" school. This concept advocates Russia following the West unquestioningly.
- 4. The "balance" proposal. This concept proposes shaping Russia's geostrategy through the selective choice of its partners on a particular issue.
- 5. The "strategic deterrence" proposal. This concept, supported by Army General Makhmut Gareev, President of the Academy of Military Science, supports a strategy composed of a series of interconnected political, diplomatic, information, economic, military, and other measures aimed at deterring, reducing, and preventing threats and aggressive actions by other states.
- 6. The "multipolar" proposal. This concept is the official policy of Russia at the present time and envisions Russia pursuing a strategy of shaping a multipolar system of international relations.[195]

Maruyev then goes on to advocates the development of Russian "geopolitical focus principles," principles that focus on the US as the primary adversary (although the US is a country that Russia can work with, he adds!). Geopolitical adversaries are "foreign political regimes and international entities whose goal is to weaken the Russian Federation's position in the world arena and which also pursue a policy of determining the political, economic, cultural, and other bases of the Russian state and its allies." [196]

Maruyev states that Russia's strategic directions of Russia's policy must be able to defend its interests and be actualized through strategic management of its geopolitical interests. Russia's strategy determines first what path the political leadership chooses to accomplish its objectives; second, what limitations result from the organizational features that delineate strategic choices; and finally what kind of state the political elite and citizens what to have. [197]

Cooperation is possible if the US takes into consideration Russia's interests. Maruyev, however, simultaneously shows another side of Russian strategy in the article, a side that has always resulted in mistrust and trouble for Russia among the US and its partners. Maruyev states the following:

For Russia a good scenario is for Moscow to officially cooperate with Washington in areas of mutual interest, while in reality pursuing a policy of preventing a further major strengthening of the United States in the world arena and neutralizing security threats to Russia on the part of the US.[198]

Maruyev then proposes adopting the "vector principle" for neutralizing national security threats to Russia emanating from the US. These vectors line up with Russia's regional commands highlighted above. He advocates westerly, easterly, northern, and southern vector directions. Russia's western geostrategy should prevent a stronger united Western front that can weaken Russia. Russia should seek out European countries (on a bilateral basis) whose interests differ from those of the US and exacerbate conflicts over the future of NATO.[199]

In the easterly direction, Russia should counter the US's penetration into Central Asian republics that threaten Russia's national security. The US's plan is to join the Central Asian region to Afghanistan and then integrate all of this space with the Middle East through the Caucasus-Caspian region. In this case Maruyev's focus on the US seems to be fostering some truly unrealistic scenarios. [200]

In the northerly direction, Maruyev believes the Arctic is now a zone of conflict for strategic interests (see section below, "Russia's Arctic Policy," for a description of Russia's interest in the Arctic). Energy deficits and global warming make this an area of intense interest for resources and transportation routes. Infrastructure projects also have great potential. Here Russia must modernize its economic and military infrastructure to safeguard Russia's geopolitical interests. Maruyev notes that President Medvedev stated that turning the Arctic into a resource base for twenty-first century Russia is "our first and chief objective." Russia must take off the table any plans to redraw Russia's borders or removing Russian forces from the area. It must also prevent foreign nations from strengthening its position to the detriment of Russia's economic interests. [201]

Finally, in the southerly direction, Russia again is faced with US plans to capture energy projects in the Caspian region. Russia for its part must improve relations with Armenia and warn Azerbaijan that Baku's Western orientation is not going to pay dividends in the future since the US and its Western partners are only pursuing their own objective in the region. Maruyev closed his article noting that "the USA's desire to preserve its sole superpower status, and Russia's intention to champion its geopolitical interests, portend a complicated period in Russian-American relations."[202]

Russia's Arctic Policy

Russian leaders appear to consider the Arctic region to be of major importance in their assessment of the operational environment. They are making an all-out rush to gain influence if not control over the region.

Prime Minister Vladimir Putin has demonstrated his personal interest in the region by taking part in an International Arctic Forum in Moscow in September 2010 (Putin also participated in the Interregional Conference "The Development of the Far East, 2010-2012" in December 2010). He is not the only Russian leader with an interest in the Arctic. Foreign Ministry officials in September 2008 developed the "Basic Principles of the Russian Federation's State Policy in the Arctic for the Period Up to 2020 and Beyond." The policy is designed to support other organizations and agreements already in place, such as the Arctic Council (the Arctic Five are Russia, Canada, Denmark, Norway, and the United States), the Barents Euro-Arctic Council (BEAC), the Barents Regional Council (BRC), and the Arctic Economic Forum. The military has not been left in the wake of these diplomatic maneuvers either, keeping pace with numerous articles in their journals. The military-industrial complex's journal <u>Voenno-Promyshlennyy Kur'er</u> (<u>Military-Industrial Courier</u>), the army's Krasnaya Zvezda (Red Star) and Voennaya Mysl' (Military Thought), and the Navy's Morskoy Sbornik (Naval Digest) all have carried several articles on the topic. Perhaps of even greater importance, a special Arctic satellite monitoring system known as Arktika Space System is under development according to the Federal Space Agency of Russia. The system will help ensure safe flight operations, effective navigation, and precise weather information for the Arctic.

Prime Minister Putin outlined Russia's priorities in the Arctic in his address in September 2010 at the Arctic Forum in Moscow. He stated that the creation of decent living conditions for people of the Arctic, to include taking into consideration their traditions and economic realities, is his first priority. His second priority is to support new zones of economic growth and to attract to the region new sectors of business and investment, both foreign and domestic. Finally, he saw as another priority a major investment in the scientific nature of the region's conservation infrastructure. [203]

The Foreign Ministry's September document titled "Basic Principles of the Russian Federation's State Policy in the Arctic for the Period Up to 2020 and Beyond" served as an example of how Russia is adapting to its emerging operational environment. Specifically, the document describes the conditions, circumstances, and influences that are calling for the deployment of military capabilities to the region. The document noted that a national interest was at stake, namely the use of the Arctic zone as a strategic resource base of the Russian Federation in support of accomplishing socioeconomic tasks of the country. In that regard, a chief objective of the policy was noted as follows:

In the sphere of military security and protection and security of the state border of the Russian Federation lying in the Arctic zone of the Russian Federation [a priority is] providing favorable operational conditions in the Arctic zone of the Russian Federation, to include maintaining the necessary combat potential of groupings of general-purpose troops (forces) of the Armed Forces of the Russian Federation, other troops, military force elements, and agencies in this region.[204]

The policy's principal military and security tasks to be accomplished include the following: the establishment and provision military security under various conditions; the optimization of a system of integrated environmental monitoring in the Arctic; the development of border agency capabilities in line with the threats and challenges of the Arctic; the creation of an actively functioning coast guard system to fight terrorism at sea, stop smuggling, and guard aquatic biological resources; the development of a border infrastructure and the technical equipping of border agencies; and the creation of a system of integrated surface monitoring. [205]

For the military, the journal <u>Morskoy Sbornik</u> (<u>Naval Digest</u>) has been particularly focused on the region and the number of articles the journal carries has gradually increased. For example, the July 2010 edition published articles on "The Restoration of Control over the Air and Surface Situation in the Arctic—The Most Important Mission of Russia" and "The Arctic 2010: Military, Political, Transport, and Other Arctic Factors."[206] The August 2010 edition of <u>Morskoy Sbornik</u> (<u>Naval Digest</u>) carried three articles. They were "Ensuring the National Security of Russia Near the Border Space of the Arctic;" "The Arctic as an Important Direction for Russia's Naval Activity;" and "The Strategic Development of Russia's Arctic Zone."[207] The September 2010 issue of <u>Morskoy Sbornik</u> (<u>Naval Digest</u>) carried five articles on the topic. They were:

- "It is Time to Revive an Interest in the Arctic in Russia" (lead article)
- "The Geopolitical Foundations of Russia's Regional Presence in the Arctic"
- "The Strengthening of Russia's Economic Position in the Aquatic Region of the Arctic under Conditions of Growing Global Contradictions"

- "The Hydrocarbon Riches of the Arctic and Russia's Geophysical Fleet: Its State and Perspectives"
- "The Modernization of Russia and the Preparation of Personnel for Work in the Arctic" [208]

Two of these articles (the July issue's "Arctic 2010: Military, Political, Transport, and Other Arctic Factors" and the August issue's "The Strategic Development of Russia's Arctic Zone") will be examined in more detail.

In the July 2010 article, author A. Smolovsky writes that global climate change has caused more interest in the area as sea lanes have opened and energy resources have become more accessible. President Dmitriy Medvedev has stated "No one (no matter who) is allowed to restrict Russia's access to mining in the Arctic, where more than 25% of the world's oil and gas reserves are located"[209] indicating Russia's focus on this area is profound. Smolovsky adds that the Russian Security Council's Arctic Policy's key point is "creating a general purpose force of the armed forces, other troops, military units, and bodies in Russia's Arctic zone capable of assuring military security in the fluid military and political situation."[210] Simultaneously, Smolovsky writes that the Deputy Secretary of Russia's Security Council, Vladimir Nazarov, says Russia is against militarization of the Arctic and for delimiting the area pursuant to the 1982 United Nations Convention on the Law of the Sea.[211] It is hard to understand how these two concepts will not be in constant tension with one another.

The second article, by A. Konovalov, opens with a short paragraph describing the importance of the Arctic from a resource standpoint. The author notes:

The Russian Federation's Arctic Zone (RFAZ) has enormous reserves of platinum group metals, nickel, cobalt, copper, and virtually all explored Russian deposits of titanium, tin, kohl, apatite, phlogopite, vermiculite, barite, and others. The region contains 90% of Russian reserves of gold, diamonds, and many other minerals that are strategically important for the country. [212]

Konovalov adds that the area produces 80% of Russia's natural gas and the areas bio-resources place it only behind the Far East for food products. It is in the Arctic that "national security and socio economic development are linked." [213] It is an area of undeveloped transport routes that must be developed to increase the ability to increase Russian business and infrastructure development. This will allow for more diversification of Russian products and will result in an increase in Russian shipbuilding and perhaps even in tourism and summertime recreation. *Morskoy Sbornik's* (Naval Digest) interest in the topic is not diminishing. The lead article of the journal's first edition in 2011 is titled "National Maritime Policy in the Arctic and Military Security."

The Army also has written on Russia's Arctic policy. Major General V. I. Sosnin, for example, described the Arctic as a complex knot of interstate differences. He states that the Northern Sea Route or NSR is Russia's strategic water lane. It supplies the country's northernmost areas with what they need throughout the year and is operated to develop the region's natural resources. Building modernized icebreakers would enable navigation and defense prospects. Russia recently announced

the development of an atomic icebreaker, perhaps with the Arctic in mind.[214] Sosnin, in his conclusions, states that Russia will be forced to make "real moves, including moves of a military nature, to back up its serious intentions to protect its national interests" in the Arctic.[215]

Alexander Khramchikhin, a deputy director of the Institute for Political and Military Analysis, wrote that the military balance in the Arctic is represented by the Arctic Five: Russia, Canada, Norway, Denmark, and the US. He discussed the different manner in which each nation wants to divide up the Arctic region. For Russia he stated the following:

Moscow advocates running the borders of Arctic holdings of polar states along meridians from the outermost points of their coastlines to the "top" of the Earth, where the borders of all sectors converge. With that version a large part of the Arctic Ocean ends up being Russian. The Russian Federation considers the Northern Sea Route to be its own internal waters. [216]

If this concept eventually becomes the Russian position, then the international community will strongly contest Russia's plans for the region. Today, various countries are conducting naval aviation patrols of the region and there is talk of establishing an armed forces grouping in the region. These unresolved issues may turn out to be very contentious or even dangerous for the Arctic in general.

Meanwhile, Russia continues its exploration of the Arctic. A marine expedition returned to Russia on 14 October 2010 after 90 days at sea. Seventy-five days were spent substantiating outside boundaries of the Russian continental shelf. Their research indicated that at the end of 2013 Russia will be ready to submit an application requesting the expansion of its continental shelf in the Arctic. [217] Russia's first application was rejected by the UN due to insufficient evidence which the latest expedition seems intent on supplying. Simultaneously Russia is working on an Antarctic strategy for its development. [218]

The Thoughts of Russian Military Experts on the OE

In 2008 Dr. Vitaliy Shlykov served as the Chairman of the Commission on Security Policy and Evaluation of Defense Legislation for the Public Council of the Russian Ministry of Defense. Dr. Shlykov is a renowned expert on Russian military matters, especially the military-industrial complex. Writing on the military-political situation in and around Russian until 2025 he noted:

Of course, this environment is not cloudless. There exists a possibility of armed conflicts breaking out near Russian borders and the danger of getting involved in them. Failure to resolve the problem of 'unrecognized states' can provoke crises around them, especially in the North Caucasus and may even force Russian troops into the territories of these 'states.' Amidst the ongoing rise of Islamic extremism Russia could witness serious instability in Central Asia. NATO's further eastward expansion to Ukraine, Moldova, and Georgia may provoke a new Cold War and prod Russia to start reorienting its military-industrial complex to confrontation with the West again.[219]

Russian experts also focus on other areas of concern: Pakistan due to its rogue character; North Korea due to its apparent desire to use missiles; Iranian attempts to get the bomb, which could cause an Israeli preemptive move against Iran; the increasing difficulty associated with deterring Beijing;

and other experts still envision a potential conflict with the US. Due to China's proximity to Russia, however, many military experts still think that a conflict with China is more likely than war with the US. Perhaps most important, many Russian experts believe that the era of US domination is over and that the world is returning to great power rivalries and the consequent struggle for influence.

Conclusions

Russia does not have an operational environment concept. However, elements extracted from its national security strategy and military doctrine somewhat fit nicely into the US concept and understanding of an operational environment. They offer a fairly accurate glimpse into the concerns and focus of the Russian military in the years ahead.

It is apparent from the documents that NATO remains a concern for Russia. This reluctance to partner with NATO remains even after years of working together to include the basing of a Russian contingent at Supreme Headquarters Allied Powers Europe (SHAPE) in Mons, Belgium, for the purpose of coordinating efforts involving Russian military participation in Stabilization Force (SFOR) and Kosovo Force (KFOR) operations; and the basing of a Russian diplomat at NATO headquarters. Instead, based on understandable historical border concerns, Russia worries that "NATO creep" to its borders endangers instead of lessening its security and continues to minimize Russia's influence in the global strategic security arena. As long as Russia continues to be suspicious of NATO's rational for existing, Russian anxiety will continue to evolve and push back at every NATO (read US-backed) endeavor. Russia also believes that NATO influence blocks their arms export opportunities.

Unilateral actions of the US are a concern to Russia. The primary concern remains the potential deployment of US missiles in Poland. US activities in space, however, are becoming equally as disconcerting. The issue at stake is that the US is a global power interested in securing its own priorities and interests while Russia, at the moment, is more focused on regional concerns. Hopefully both sides will talk through these issues.

The focus of the security strategy of Russia and much of its military doctrine remain entrenched in the wording and concepts that are carry-overs from the Soviet era. These terms include equal security, strategic deterrence, rational sufficiency, and even correlation of forces. These are not necessarily negatives but rather the method through which the Russian national security establishment appears to measure its strategic stability. US should keep these concepts in mind as they weigh Russian concerns for these may be the very goals Russia is trying to achieve.

A point of concern in this regard (strategic stability) is the reference to external factors beyond the control of Russia that could affect Russia's operational environment. Such issues as the loss of access to key energy or material resources or unpredicted crises in the financial world could increase Russia's strategic risks and introduce the uncertainty and perhaps even temporary instability that Russian planners attempt to avoid.

Regardless, the national security strategy and military doctrine of Russia serve as key components in establishing the outline of the operational environment before Russia as it strives to regain its former place in the world system. Russia's national security system is composed of critical and



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PART TWO: Technology

PART TWO: TECHNOLOGY

CHAPTER FIVE: RUSSIA AND MILITARY DECEPTION

In today's conditions the armies of the world's leading states stand on the threshold of a qualitative leap in the use of military cunning. It derives above all from the development and implementation of advanced space, aviation, computer, and other technologies and the capabilities in transmitting and receiving information, which have increased many times over.

[220]

Introduction

Military cunning (*voennaya khitrost'*), according to a former Soviet Chief of the General Staff, is a term used to describe actions designed to deceive or obtain a specific benefit. It's essence lies in operational surprise achieved through secret preparations and the misleading of enemy actions about those operations. Most important of all, cunning is a "coefficient of strength"—it increases the strength or power of a person or armed force that uses it, especially if the two sides have equal capabilities or if one side is much weaker than the other side.[221]

Russian military authors today seldom use the term military cunning to describe deception. They have preferred, over the years, the terms *maskirovka* (concealment), *obman* (deception), *dezinformatsiya* (disinformation), and *vvedenie v zabluzhdenie* (mislead). Many US analysts prefer to use the term *maskirovka* (camouflage) to describe Russia's concept of deception. This preference is understandable for two reasons. First, this is the term most often encountered in reading older military journals. There was even a *maskirovka* school in Russia in 1904. Second, Soviet and now Russian authors often attribute several meanings to this term such as camouflage, disinformation, feints, "hide the real situation," and deceit. With so many definitions attributed to it, *maskirovka* appeared to be the proper overall term to use for discussions of deception.

However, the deception concept in Russia has undergone a change. A closer look at publications such as the journal Military Thought from 1993-2008 indicates that the two Russian terms that dominate discussions of deception these days are *obman* (deception) and *vvedenie v zabluzhdenie* (mislead). They appear to have replaced the term *maskirovka*, with the latter now understood to be an aspect of these two terms. The actual use or application of deception measures is understood to be "*voennaya khitrost*" (military cunning or stratagem)." Yet another popular Russian term that has both civilian and military use as a manipulator of thought processes is reflexive control. The term continues to be used for a variety of issues. For example, in the past five years reflexive control has been involved in discussions of network-centric warfare, information weapons, deterrence theory, and 21st century tactics.

The US military uses fewer terms to define deception. In its <u>Dictionary of Military and Associated Terms (JP 1-02)</u> deception is defined as follows: "Those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce the enemy to react in a manner prejudicial to the enemy's interests. See also counterdeception; military deception."[222] Other deception-related words in JP 1-02 are deception-action; -concept; -course of action; -event; -means; -objective; -story; and -target.[223] One receives the impression that the Russian term *vvedenie v zabluzhdenie* (mislead) is closest to the US definition. However, the US term does not imply that

deception is a coefficient of strength. The US term perception management comes closest to the Russian concept of reflexive control, although management is a softer term than control.

This chapter will explore the Russian use of deception terminology and techniques, using practical examples from several conflicts. The discussion begins with a short background explanation of the term *maskirovka* from V. A. Matsulenko's 1975 book titled *Operativnaya Maskirovka Voysk* (The Operational Deception of Troops). This short review provides a foundation for the reader as to *maskirovka*'s former importance and to the term's meaning. The discussion then will examine more recent changes in terminology (the use of *obman* and *vvedenie v zabluzhdenie*) through a look at articles in Military Thought and the views of a former Soviet Chief of the General Staff, General of the Army Vladimir Nikolaevich Lobov.

The chapter then discusses reflexive control in more detail; examines Russian views on high-tech camouflage; and concludes with a few examples of deception used in Afghanistan and Chechnya by Russian forces. A more extensive dictionary examination utilizing Russian and Western sources of the terms associated with deception is located at Appendix Four.

The overall conclusion one reaches is that deception has undergone a rejuvenation in Russian military thinking and will be used in an updated form (most likely associated with an information-related concept) more often as the 21st century proceeds. The goal, however, remains the same—to mislead the decision-making of potential opponents or enemies.

The Works of V. A. Matsulenko and US Colonel (Retired) David Glantz

V. A. Matsulenko's 1975 book titled <u>Operativnaya Maskirovka Voysk</u> (<u>The Operational Deception of Troops</u>) is about the use of deception in World War II. However, the book's introduction and conclusion discuss a definition of deception that is built around the term maskirovka. The lessons one should draw from the use of deception in WWII are also included.

Matsulenko defined *maskirovka* as follows:

Maskirovka [deception] is a type of support for combat operations that is designed to conceal troops and military facilities from enemy intelligence and to mislead him regarding the location, amount, and composition of forces and the actions and intentions of the troops. It is achieved through the use of natural and artificial masks, equipment, and periodic changes in the areas where troops (or naval forces) and command centers are deployed, through feigned movements and maskirovka actions by units, combined-arms forces and formations, the concealment of authentic and creation of fake facilities, and the destruction or modification of some of their external features and characteristics. [224]

Maskirovka is divided into tactical (actions that are carried out among troops by the command and staffs of combined-arms forces, units and subunits); operational (actions involving the use of combined-arms forces and units of ground troops, the air force, anti-aircraft defense, and, in maritime areas, naval forces); and strategic (activities that surreptitiously prepare a strategic operation or campaign to disorient the enemy regarding the true intentions and actions of the armed forces) actions. [225]

Matsulenko focused on operational *maskirovka* in his work. He wrote that operational *maskirovka* is used to achieve operational surprise; is designed to disorient the enemy regarding the nature, concept, scale, and timing of impending combat operations; and is designed to conceal the attack force of the front and the army from the enemy. *Maskirovka* methods include providing disinformation to the enemy and preserving military secrecy and the covert command of troops. A successful *maskirovka* operation depends on proper planning that fits a specific situation, implementing the plan in a timely and efficient manner, having troops adhere to *maskirovka* measures, and monitoring the operation continuously. [226]

In World War II, Soviet actions were directed by the 1939 Field Regulations of the RKKA [Workers' and Peasants' Red Army] which required commanders to take every measure in any situation to camouflage unit activities. The regulations required the concealment of real facilities from reconnaissance and surveillance, the modification of a facility's appearance, the utilization of disinformation (fake movements, dissemination of various rumors), and so on.[227]

The Soviet's World War II experience was that *maskirovka* contributed to the successful fulfillment of combat missions in defensive and offensive operations, reduced losses of personnel and military equipment, and caused the enemy to make erroneous decisions that led him to defeat. To be effective, *maskirovka* required efficient organization and planning along with surreptitious actions that were timely and diverse. Successful *maskirovka* also required strict adherence to troop-camouflage measures and continuous monitoring on land and from the air. In order to disorient the enemy, Soviet actions included mimicking the direction of the main attack; creating fake forces and equipment moving in secondary directions; having fake forces move toward the enemy's flanks and rears; creating a fake encirclement of the enemy to demoralize him; demonstrating a movement of fake columns and forces in order to increase the scale of pursuit and to convince the enemy that his main forces had been outflanked; concealing authentic and constructing fake facilities; widely using various *maskirovka* equipment and topographic features; and carrying out actions to preserve military secrecy. [228]

With regard to the command and control of *maskirovka*, the Headquarters of the Supreme Command and the General Staff offered the centralized direction of operational *maskirovka*. Headquarters defined the concept and the front commander decided when and where operational *maskirovka* would be conducted. Operational *maskirovka* in the armies was conducted on orders from the front commander to a small group of individuals. The front commander's decision included: the *maskirovka* concept of maneuver, the amount of forces and equipment required, the timing for carrying out the plan, and the procedure for monitoring performance. Combat experience showed that success in conducting operational *maskirovka* depended on the initiative and creativity of the commanders.[229]

The dean of US military writers on Soviet actions in World War II, Colonel (retired) David Glantz, published a book in 1989 titled Soviet Military Deception in the Second World War. He also used the term *maskirovka* to convey the concept of deception and defined it in the following way:

The means of securing combat operations and the daily activities of forces; a complexity of

measures, directed to mislead the enemy regarding the presence and disposition of forces, various military objectives, their condition, combat readiness and operations, and also the plans of the command...maskirovka contributes to the achievement of surprise for the actions of forces, the preservation of combat readiness, and the increased survivability of objectives. [230]

Glantz's work remains the best US compendium on the topic of Soviet deception in World War II. His emphasis on the term *maskirovka* was standard for the period and mirrors the emphasis the term received from the work of Matsulenko.

The Journal Military Thought

Several articles that discussed the topic of deception appeared in Military Thought from 1993 to 2008. In each case, the Russian's also produced an English translation which is important because the translation renders, from a Russian perspective, an associated English term. For the Russian terms *obman* and *vvedenie v zabluzhdenie*, English translations used the terms deception, deceive, or mislead in nearly every case while *voennaya khitrost*' (military cunning or strategy) was used on two occasions for the word "deception."

For example, in 1993 Colonel Yu. V. Ignatov published an article titled "Surprise Actions and Deception: the Foundation of a Successful Operation." He used both *obman* and *vvedenie v zabluzhdenie* liberally in his article and each time they were translated as deception, deceive, or mislead. Successful deception is accomplished by convincing the enemy that "the version it is being persuaded to believe is not disinformation, but the result of analytical studies of its own intelligence reports."[231] To view the situation from the enemy's perspective, one must be aware of his military doctrine, how it uses the services and branches, historical precedents, principles for using men and equipment during operations, and so on. To be successful, enemy forces should view the deception activities as a logical course of events.[232]

In 1999 a few Russian officers wrote an article for <u>Voennaya Mysl'</u> (<u>Military Thought</u>) that basically called into question any further use of the term <u>maskirovka</u> as an equivalent for the term deception. Titled "Deception of the Enemy in Operations (Combat): Theory and Practice," the authors offered a diagram and accompanying explanation that placed *obman* as the new word for deception and *vvedenie v zabluzhdenie* as the term for "to mislead." [233] The officers wrote that

It is hard to say today when and who introduced the contradictory term of "operational (tactical) camouflage" and the use of which over decades sparked further contradictions. This is not accidental because the improper definition of a general (fundamental) notion, naturally, leads to an even greater departure from logic with regard to details.[234]

The authors added that concealment is only part of the concept of "misleading," with the latter incorporating the former. In many diagrams and thoughts of the mid 70s and 80s, the former incorporated the latter. The officers found this order of understanding to be wrong, resulting in "the absence of a theoretical basis for tackling matters pertaining to deceiving the enemy in planning operations." [235] As a result, "no due attention is paid among the troops to deceiving the enemy, the planning and implementation of these measures is perfunctory, and it often lacks originality,

imagination, and so on."[236] The diagram the authors included in their article implied that the existing explanation would be replaced by the proposed explanation, one that cited *obman* as the term best defining deception and not *maskirovka*.

However, the argument over terminology did not go away. In 2003, the journal printed an article by two officers that was titled "Information Warfare and the *Maskirovka* of Forces." The authors argued that the Russian use of the term *maskirovka* was still relevant as a way to understand deception. They defined *maskirovka* as follows:

Maskirovka is a variety of support of combat operations and everyday activities of troops (forces); a set of interconnected organizational, operational-tactical, and engineer-technical measures, carried out with the purpose of concealing from the adversary the troops (naval forces) and objects and misleading him as to the presence, disposition, composition, state, actions, and intentions of the troops (naval forces), as well as the command's plans.[237]

The authors noted that *maskirovka* can be characterized as a system of deceptive measures and control activities on the command and control organs of an enemy force with the goal of having them make decisions favorable to friendly forces.[238]

The authors then proposed comparing Russia's definition of *maskirovka* with NATO's definition for deception. The officers stated that the NATO term for *vvedenie v zabluzhdenie* (mislead—interesting that the Russian translators did not use the term *maskirovka!*) was "*voennaya khitrost.*" A US definition for the latter term is generally military cunning or stratagem. The Russian's placed the term "military deception" in parentheses after *voennaya khitrost.*'[239] NATO's AAP-6 of 2010 defines deception as "Those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce him to react in a manner prejudicial to his interests."[240] There was no entry for military deception so it is uncertain where the Russian officers found the definition to which they refer.

Almost immediately (two issues of <u>Voennaya Mysl'</u> (<u>Military Thought</u>) later), there was a critique to Limno and Krysanov's article, written by V. I. Orlyanskiy, one of the authors who in 1999 had recommended a new way to interpret and define deception. Orlayanskiy notes in his opening paragraph that "this journal" (meaning <u>Military Thought</u>) had already written that the term <u>maskirovka</u> was an incorrect way to define deception. He further noted that the term had still not been incorporated in manuals and regulations since his co-authored 1999 article. Noting that terms like <u>maskirovka</u> are vague and contradictory from the perspective of plain logic, he stated that the further development of the theory and practice of misleading an enemy is hampered by the continuous use of the term <u>maskirovka</u>. [241] Orlyanskiy states his precise rejection of <u>maskirovka</u> as follows:

It is no secret that the absence of clear definitions and disruptions of logical relationships between them are serious causes of disorientation in thinking resulting in a lack of understanding between people, organizational errors, and it reduces possibilities to develop theory and achieve success in practical activities. Therefore the abstract and extremely provisional notion 'operational concealment [maskirovka]' coupled with other incorrect terms connected with it are not as harmless as they may seem at first glance. [242]

Orlyanskiy writes that concealment should be subordinate to the term deception and not vice versa. He states that "concealment, as a set of deliberate measures to mislead the enemy, is one of the methods of deception"[243] and that "deception (obman) of the enemy should constitute a type of operational support whose missions under modern conditions are: measures against enemy reconnaissance, imitation, disinformation, and decoy actions."[244] These actions mislead and thus deceive an enemy force which allows for the use of surprise. Orlyanskiy ended his article stating that not only maneuver along with coordinated strikes and fires must be carried out, but they must be coordinated with deception measures without which the required effectiveness of combat operations cannot be achieved.[245]

In 2006, V. N. Karankevich, at the time one of the editors of the journal <u>Voennaya Mysl'</u> (<u>Military Thought</u>), entered into the deception discussion with a long article in support of the term *obman* for the concept of deception. In his opening paragraph, he wrote that the ability to deceive (*obman*) the enemy was the most important quality of military leaders. He noted that it is possible to deceive an enemy force by means (use of new warfare methods, use of nontraditional combat formations that disagree with existing rules of military art, drawing the enemy into kill zones, etc.) that have little or nothing to do with *maskirovka* (concealment). He stressed that concealment is of a supportive and ancillary nature and thus only a part of deception. [246]

Karankevich noted that deception became important again once it was realized that, as the Soviet experience in Afghanistan demonstrated, nuclear weapons can't be used in local conflict. Soviet documents in 1989 stated that commanders must define measures for enemy deception. Russian documents in 2004 stated that in devising the operation plan, "separately, the commander determines the idea of enemy deception, which shall be distributed to a limited number of persons." [247] Karankevich notes that the idea of enemy deception should consist of the goals, methods, and main measures for enemy deception during the preparation for battle, during a battle's course, and when battle is completed. Developing techniques and methods is much more difficult than developing the goals. [248]

Karankevich states that deception is important today to reduce losses, to protect one from precision-guided munitions, and to lure terrorist leaders out of hiding. More importantly, for the first time in the entire discussion of deception, he introduces readers to the concept of reflexive control, noting that "the question must be not so much about counter actions and deceiving enemy reconnaissance as about the reflexive control of the person making decisions about the actions of the other side" by influencing him through the release of fake information.[249] New information technologies are used to promote the further development of reflexive control activities. Here Karankevich mentions the opportunity to enter computer networks, filter out information flows, limit or forbid access to legitimate users, arranging "information roadblocks" and traps, and distorting true information. Perhaps for this reason he also mentions that deception operations are the most important aspect of information operations. [250] An entire section on reflexive control follows later in this chapter.

Perhaps the highlight of Karankevich's article is his statement that command cadres, if they wish to command troops in any environment, must become experts in deception. The entire training system

must incorporate deception training into the curriculum at academies and especially into the leadership of the Russian armed forces, to include the Minister of Defense. This may require the development of a special guidance manual for the rules, practices, and operations for developing deception techniques. Deception operations must also become the critical, obligatory element of exercises at the strategic and operational levels, prepared as special information operations. [251]

Lobov's Book Voennaya Khitrost'

Vladimir Lobov, a former Chief of the Russian General Staff, has written two books on the topic of <u>Voennaya Khitrost'</u> (<u>Military Cunning</u>), first in 1992 and then in 2001. The latter book included sections on the use of deception in local conflicts. Lobov used two terms, *vvedenie v zabluzhdenie* (mislead) and *maskirovka* (camouflage), in his 1992 book to describe how khitrost' (cunning or stratagem) is applied on the battlefield. Lobov also included the concept of surprise in his discussion of stratagem. By 2001, however, he also was using the term *obman* to discuss deception.

The concept of *voennaya khitrost*' (hereafter cunning or stratagem) is important to Lobov, for he considers it the art of achieving victory over an opponent. Military stratagem includes the entire system of views on concealing one's own actions and deceiving the enemy.[252] Lobov notes that "cunning in the military becomes 'military stratagem,' which is essentially surprise military operations accomplished by concealing their preparation and deceiving the enemy."[253] In his 1992 explanation, Lobov uses these three terms exclusively. The first two terms, concealment (*skrytnost*') and deceiving the enemy (*vvedenie v zabluzhdenie*), are the forms of military stratagem according to Lobov. These forms of military stratagem make the third term, surprise (*vnezapnost*'), possible.

Lobov defines concealment as a set of measures that help erase or reduce the presence of troops and their activities so as to ease their movement, hide them from enemy forces, and create conditions for a surprise engagement. Plans, decisions, and intent must all be kept secret. Camouflage or *maskirovka* is key to concealment. It eliminates or reduces signs of the presence of troops or their movement. Keeping information confidential or maintaining secrecy are other concealment methods. [254]

Military deception or *vvedeniya v zabluzdenie* can be achieved through disinformation, demonstration, simulation, or deformation. The latter is the deliberate distortion of a facility, material, or weapons.[255]

Lobov makes several points with regard to surprise, the latter a concept perceived by the other side as "the unexpected." [256] This is a group's or person's unpreparedness to perceive events as they develop due to "subjective disorientation (that is, one does not understand how they are being manipulated)." Lobov's points with regard to surprise are:

- Military stratagem is determined by how long it takes an opponent to implement countermeasures, regroup, and recoup.
- Military stratagem is a sine qua non for surprise in troop operations and for effective and unexpected use of new materiel and weapons.
- Surprise is not an end in itself. It occupies a place in the creation of the conditions that result in surprise.
- Surprise is the sum total of general and specialized knowledge (morale, combat techniques, terrain, time, and weather, ability of commanders and staff to forecast the likely course of developments).[257]
- Knowledge, skill, and expertise can be reduced to the concept of subjective orientation. The higher the level of subjective orientation, the better the chances for surprise being

achieved. A lack of knowledge can be termed subjective disorientation. [258]

Lobov concludes his discussion of terms noting that surprise is at the front and center of military-political and military-technical issues. Military stratagem (*voennaya khitrost*') is the chief weapon in attaining surprise and gaining the initiative.

Reflexive Control 259

One of the prime goals for a commander in warfare, mentioned in the discussion above, is to interfere with the decision-making process of an enemy commander. This goal is often accomplished by the use of disinformation, camouflage, or some other stratagem or application of military cunning. For Russia, one of the primary methods is through the use of the theory of reflexive control (RC). This principle can be used against either human-mental or computer-based decision-making processors. The theory is similar to the US concept of perception management, except that it attempts to control more than manage a subject.

Reflexive control is defined as a means of conveying to a partner or an opponent specially prepared information to incline him to voluntarily make the predetermined decision desired by the initiator of the action. Even though the theory was developed long ago in Russia, it is still undergoing further refinement. For example, in the past five years there have been articles about the use of reflexive control in network-centric warfare, in information weapons, in deterrence theory, and in 21^{St} century tactics.

A 2001 product of the Russian PIR center noted in a chapter on "Information Weapons as a New Means of Warfare" that the goal of an information offensive is reflexive control of the enemy actions. RC makes enemy actions forced, predictable, and advantageous to one's own side. [260] A 2003 edition of Strategiskava Stabilnost (Strategic Stability) noted that RC's use in deterrence theory is to control an opponent's decision-making during a conflict. RC's purpose here is to convince an opponent that nuclear blackmail and military pressure won't work. [261] A 2005 article in *Voennava* Mysl' (Military Thought) by Colonels A. V. Raskin and V. S. Pelyak noted that in order to control an opponent's network-centric organization, it is necessary to affect the main people in an opponent's leadership who make decisions. This is accomplished by transmitting to them certain types of information that they use to make decisions. Here the objective of RC is to create a condition favorable to friendly forces and one's own combat mission by affecting the other side's decisionmaking.[262] Finally, Major General Ivan Vorobyev and Colonel Valeriy Kiselev, regular contributors to several military journals in Russia, noted in 2008 that commanders and staffs must master the "art of reflexive control" of enemy actions using robotized equipment, precision-guided munitions, and weapons based on new physical principles. This must be accomplished due to the intensification of information-psychological operations and the potential wider use of deception operations. Key elements of deception include "double deception (make opponents believe that true intentions are false)," "protection of key information," "embedded concepts (generate an opponent's misbelief in data that contains the deception plan)," and "false luck (create a situation for successful enemy actions that actually lead them to a trap)."[263]

There are many examples, from a Russian perspective, of the use of reflexive control theory during conflicts. An excellent example of Soviet use of reflexive control theory during the Cold War was the

method the Soviet military chose to alter US perceptions of the nuclear balance. The aim of this reflexive control operation was to convince the West that its missile capabilities were far more formidable than they actually were. To do so, Soviet military authorities paraded fake ICBMs to deceive the West. The Soviets developed the fake missiles so as to make the warheads appear huge and to imply that the missile carried "multiple warheads." In this case, the Soviets understood their opponent's "reflexes." Soviet authorities realized that foreign attachés regularly attended these shows, since this was one of the few opportunities to obtain military information legally. Moreover, since the Soviet Union did not even participate in arms control fairs, the parade held special significance for intelligence officers. After observing the parade, the Soviets knew that the attachés would then report their findings in great detail to Western intelligence organs. In addition, the Soviets knew that members of the Western military-industrial complex also studied the parades closely. [264]

However, the deception did not end here. The Soviets also prepared other disinformation measures so that when Western intelligence services began to investigate the fake ICBMs, they would find collateral proof of their existence and would be led further astray. Ultimately, the aim was to prompt foreign scientists, who desired to copy the advanced technology, down a dead-end street, thereby wasting precious time and money.[265]

Another RC incident that gained international notoriety was the bombing of the market square in Sarajevo in 1995. Within minutes of the bombing, CNN and other news outlets were reporting that a Serbian mortar attack had killed many innocent people in the square. Later, crater analysis of the shells that exploded in the square, along with other supporting evidence, indicated that the incident did not happen as originally reported. This evidence also threw into doubt the identities of the perpetrators of the attack. One individual close to the investigation, Russian Colonel Andrei Demurenko, Chief of Staff of Sector Sarajevo at the time, stated, "I am not saying the Serbs didn't commit this atrocity. I am saying that it didn't happen the way it was originally reported." A US and Canadian officer soon backed this position. Demurenko believed that the incident was an excellent example of reflexive control, in that the incident was made to look like it had happened in a certain way to confuse decision-makers. This is a method of deception that should not be overlooked by students of Russian affairs, as it lies at the heart of many deception activities either directly or intuitively.

The concept of reflexive control (RC) has existed much longer than the concepts of information warfare and information operations; in fact, it appeared in Soviet military literature 30 years ago. At that time, V. A. Lefebvre, who was working within the context and logic of a reflexive game, defined reflexive control as "a process by which one enemy transmits the reasons or bases for making decisions to another." [266]

The concept of reflexive control is still somewhat alien to US audiences. However, the Russians employ it not only on the strategic and tactical levels in war but also on the strategic level in association with internal and external politics. Equally significant, the concept has not always benefited the Soviet Union and Russia. For example, some Russians consider that the Strategic Defense Initiative (SDI) is a classic example of US use of reflexive control. In this case, the US "compelled the enemy to act according to a plan favorable to the US." By doing so, it forced the Soviet Union to try to keep pace with America' achievements in the SDI arena (or at least what we

said were our achievements) and ultimately exhausted the Soviet Union economically as it spent money to develop corresponding equipment.

The Soviet and Russian armed forces have long studied the use of reflexive control theory, particularly at the tactical and operational levels, both for deception and disinformation purposes and, potentially, to control the enemy's decision-making processes. [267] For example, the Russian Army had a military *maskirovka* school as early as 1904 that was later disbanded in 1929. This school, the Higher School of *Maskirovka*, provided the bases for *maskirovka* concepts and created manuals for future generations. [268]

The foremost reflexive control theorists in the military sector include V. V. Druzhinin, M. D. Ionov, D. S. Kontorov, S. Leonenko, and several others. RC is also considered an information warfare means. For example, Major General N.I. Turko, an instructor at the Russian Federation's General Staff Academy, has established a direct connection between IW/IO and reflexive control. He noted:

The most dangerous manifestation in the tendency to rely on military power relates more to the possible impact of the use of reflexive control by the opposing side through developments in the theory and practice of information war rather than to the direct use of the means of armed combat. [269]

In Turko's judgment, RC is an information weapon that is more important in achieving military objectives than traditional firepower. In this regard, Turko's understanding is most likely influenced by his belief that American use of information weapons during the Cold War did more to defeat the Soviet Union and cause its demise than any other weapon. An excellent example was the Strategic Defense Initiative discussed above. Finally, Turko has mentioned reflexive control as a method for achieving geopolitical superiority and as a means for arms control negotiations. The latter area should be one of heightened awareness for countries entering such negotiations with the Russians.

Reflexive control theory does indeed have geopolitical significance, according to Turko. For example, he and a colleague described a new containment theory under development that portrayed new means for coping with confrontation between new large-scale geopolitical groupings.[270] This theory involves information warfare means; specifically, the threat of inflicting unacceptable levels of damage against a state or group of states by attacking their information resources. Turko wrote in 1996 about RC. Interestingly, Karankevich's article (noted above) stated ten years later that RC was a component part of information operations. Thus, the theory remains intact.

One of the most complex ways to influence a state's information resources is by use of reflexive control measures against the state's decision-making processes. This aim is best accomplished by formulating certain information or disinformation designed to affect a specific information resource best. In this context an information resource is defined as:

- Information and transmitters of information, to include the method or technology of obtaining, conveying, gathering, accumulating, processing, storing, and exploiting that information;
- · Infrastructure, including information centers, means for automating information

- processes, switchboard communications, and data transfer networks;
- · Programming and mathematical means for managing information; and
- Administrative and organizational bodies that manage information processes, scientific
 personnel, creators of databases and knowledge, as well as personnel who service the
 means of <u>informatizatsiya</u> (informatization).[271]

Russia's political elite also employs RC in analytical methodologies used to assess contemporary situations. For example, during a recent conference in Moscow, a representative from President Yeltsin's administration noted that, when making decisions, the Kremlin pays attention to reflexive processes. Thus, Turko's revelation about the central role of Reflexive Control in Russian concepts of information warfare, and RC's potential use against information resources to destabilize the geopolitical balance, are two important points to consider when analyzing intent.

By definition, "reflexive control" occurs when the controlling organ conveys (to the objective system) motives and reasons that cause it to reach the desired decision, [272] according to S. Leonenko, the nature of which is maintained in strict secrecy. The decision itself must be made independently. A "reflex" itself involves the specific process of imitating the enemy's reasoning or imitating the enemy's possible behavior and causes him to make a decision unfavorable to himself.

In fact, the enemy comes up with a decision based on the idea of the situation which he has formed, to include the disposition of our troops and installations and the command element's intentions known to him. Such an idea is shaped above all by intelligence and other factors, which rest on a stable set of concepts, knowledge, ideas and, finally, experience. This set usually is called the "filter," which helps a commander separate necessary from useless information, true data from false and so on.[273]

The *chief task of reflexive control* is to locate the weak link of the filter and exploit it.

According to the concept of reflexive control, during a serious conflict, the two opposing actors (countries) analyze their own and perceived enemy ideas and then attempt to influence one another by means of reflexive control. A "reflex" refers to the creation of certain model behavioral in the system it seeks to control (the objective system). It takes into account the fact that the objective system has a model of the situation and assumes that it will also attempt to influence the controlling organ or system. Reflexive control exploits moral, psychological, and other factors, as well as the personal characteristics of commanders. In the latter case, biographical data, habits, and psychological deficiencies could be used in deception operations. [274] In a war in which reflexive control is being employed, the side with the highest degree of reflex (the side best able to imitate the other side's thoughts or predict its behavior) will have the best chances of winning. The degree of reflex depends on many factors, the most important of which are analytical capability, general erudition and experience, and the scope of knowledge about the enemy. Military author Colonel S. Leonenko added that, in the past, stratagems were the principal tool of reflexive control, but today camouflage and deception [maskirovka] have replaced stratagems, a conclusion disputed by many. For example, the Chinese have demonstrated that electrons can be used as stratagems and operate as effectively as camouflage and deception in the traditional sense.

Although no formal or official reflexive control terminology existed in the past, opposing sides actually employed it intuitively as they attempted to identify and interfere with each other's thoughts and plans and alter impressions of one, thereby prompting an erroneous decision.[275] Leonenko's theories about varying degrees of reflexive control can be explained as follows. If two sides in a serious conflict – "A" and "B" – have opposing goals, one will seek to destroy the other's goals. Accordingly, if side A acts independently of the behavior of side B, then his degree of reflex relative to side B is equal to zero (0). On the other hand, if side A makes assumptions about side B's behavior (that is, he models side B) based on the thesis that side B is not taking side A's behavior into account, then side A's degree of reflex is one (1). If side B also has a first degree reflex, and side A takes this fact into account, then side A's reflex is two (2), and so on.

If successfully achieved, reflexive control over the enemy makes it possible to influence his combat plans, his view of the situation, and how he fights. In other words, one side can impose its will on the enemy and cause him to make a decision inappropriate to a given situation. Reflexive control methods are varied and include camouflage (at all levels), disinformation, encouragement, blackmail by force, and the compromising of various officials and officers. Thus, the central focus of reflexive control is on the less tangible element of "military art" rather than more objective "military science." Achieving successful reflexive control requires in-depth study of the enemy's inner nature, his ideas and concepts, which Leonenko referred to as the "filter," through which passes all data about the external world. Successful RC represents the culmination point of an information operation.

So defined, a filter is a collective image (termed "set") of the enemy's favorite combat techniques and methods for organizing combat actions, plus a psychological portrait of the enemy. Thus, reflex requires study of someone else's filter and the exploitation of it for one's own ends. In the Information Age, this filter is represented by human and machine (computer) data processors. The most important question then becomes, "How does one side achieve this higher degree of reflex and, hence, more effective reflexive control over the enemy?" It does so primarily by employing a broader range of means for achieving surprise. In turn, it achieves surprise by means of stealth, disinformation, and avoidance of stereotypes [shablon].[276]

Major General (ret.) M. D. Ionov, one of the military specialists mentioned earlier, wrote several articles on the subject of reflexive control in <u>Voennaya mysl'</u> (<u>Military Thought</u>). In many of his initial articles, Ionov simply spoke about "control" of the enemy rather than reflexive control. At the same time, Ionov also realized the close link between advertising and reflexive control ("sell the holes, not the drill" and "temptation by benefit" were two of the techniques he recognized) and the combined use of various reflexive methods for waging different types of conflicts (low-intensity, etc.).[277]

Given his advanced thinking about reflexive control, it is instructive to analyze one of his articles from 1995. In it Ionov noted that the objective of reflexive control is to force an enemy into making objective decisions that lead to his defeat by influencing or controlling his decision-making process. Ionov considers this a form of high art founded of necessity on an intimate knowledge of human thinking and psychology, military history, the roots of the particular conflict, and the capabilities of competing combat assets. In this instance, control over the enemy is realized by undertaking a series of measures, related by time, aim, and place, which force enemy decision-makers to abandon their

original plan, make disadvantageous decisions, or react incorrectly to their ultimate disadvantage (for example, when facing a counter-offensive). The successful use of reflexive control becomes all the more likely if the enemy's original plan is known. This makes it easier for the controlling side to force the enemy into making wrong decisions by employing reflexive control techniques such as intimidation, enticement, disinformation, deception, concealment, and other measures designed to shorten his decision-making time by surprising his decision-making algorithms. [278]

Ionov also stated that the content and methods employed must accord with the interrelationship between the enemy's thought processes and basic psychology. They also had to be realistic, and newly-created methods had to be considered within the context of new technologies. Furthermore, he recognized that any coalition of enemy forces represents a far more complex system, the stability of which changes depending upon the nature of the situation in each individual state and the condition of the coalition. Finally, because sharp differences exist in thinking, aims, politics, and ethical approaches of each state, each side must conduct an internal appraisal to determine the possible results of any action conducted in accordance with complex criteria reflecting the nature of the confrontation. [279]

Ionov identified four basic methods for assisting in the transfer of information to the enemy to promote control over him. These methods, which serve as a checklist for commanders at all levels, include:

- Power pressure, which includes: the use of superior force, force demonstrations, psychological attacks, ultimatums, threats of sanctions, threats of risk (developed by focusing attention on irrational behavior or conduct, or delegating powers to an irresponsible person), combat reconnaissance, provocative maneuvers, weapons tests, denying enemy access to or isolating certain areas, increasing the alert status of forces, forming coalitions, officially declaring war, support for internal forces, destabilizing the situation in the enemy rear, limited strikes to put some forces out of action, exploiting and playing up victory, demonstrating ruthless actions, and showing mercy toward an enemy ally that has stopped fighting. [280]
- Measures to present false information about the situation, which includes: concealment (displaying weakness in a strong place), creation of mock installations (to show force in a weak place), abandoning one position to reinforce another, leaving dangerous objects at a given position (the Trojan Horse), concealing true relationships between units or creating false ones, maintaining the secrecy of new weapons, weapons bluffing, changing a mode of operation, or deliberately losing critical documents. The enemy can be forced to find a new target by conflict escalation or de-escalation, deliberate demonstration of a particular chain of actions, striking an enemy base when the enemy is not there, acts of subversion and provocation, leaving a route open for an enemy to withdraw from encirclement, and forcing the enemy to take retaliatory actions involving an expenditure of forces, assets, and time. [281]
- Influencing the enemy's decision-making algorithm, which includes: the systematic conduct of games according to what is perceived as routine plans, publishing a deliberately distorted doctrine, striking control system elements and key figures, transmitting false background data, operating in a standby mode, and taking actions to neutralize the enemy's

- operational thinking.[282]
- Altering the decision-making time, which can be done by unexpectedly starting combat actions, transferring information about the background of an analogous conflict so that the enemy, when working out what seems feasible and predictable, makes a hasty decision that changes the mode and character of its operation. [283]

In another article entitled "Control of the Enemy," which appeared in Morskoy Sbornik (Naval Digest) in July 1995, Ionov argued that information is needed on the status of enemy forces, the nature of their actions, and their capabilities in order to control him and, simultaneously, to halt or to retard his counter-control efforts. [284] Ionov advanced several distinct principles necessary for control of the enemy. First, he underscored the reflexive nature of the desired response, stating that commanders must visualize the possible enemy response to the conditions one desires to impose. Second, the response will be problematic, since the enemy may discover the activity and undertake his own counter-control measures. Third, the level of technical development of combat weapons, and especially reconnaissance, is of growing importance. This makes the exposure of an action aimed at misinforming the enemy more likely. The final principle is the use of harsh forms of pressure on the enemy, specifically those that consider social elements and intellectual, psychological, ethical, and ideological factors. Deliberate cruelty toward the civilian population or prisoners of war in a combat region, a declaration of unrestricted submarine warfare (to sink any vessels to include those of neutral countries), and so on serve as excellent examples of the latter. [285] In short, in Ionov's view, reflexive control is a specific, yet traditional, Soviet and—now Russian—form of an informational or psychological (PSYOP) attack.

Colonel S. Leonenko integrated information technologies and reflexive control theory in his writings. He noted that the use of computers could hinder the use of reflexive control by making it easier to process data and calculate options. This is so since an opponent can more easily "see through" a reflexive control measure by an opposing force by simply using a computer. The computer's speed and accuracy in processing information can detect the reflexive control measure. On the other hand, in some cases, this may actually improve the chances for successful reflexive control, since a computer lacks the intuitive reasoning of a human being. [286]

Computer technology increases the effectiveness of reflexive control by offering new methods adaptable to the modern era that can serve the same ends. Writing in 1995 from a military perspective, Colonel S. Leonenko defined reflexive control as follows:

RC [reflexive control] consists of transmitting motives and grounds from the controlling entity to the controlled system that stimulate the desired decision. The goal of RC is to prompt the enemy to make a decision unfavorable to him. Naturally, one must have an idea about how he thinks.[287]

Leonenko then assessed the new opportunities that the use of computer technology afforded to reflexive control, stating:

In present conditions, there is a need to act not only against people but also against technical reconnaissance assets and especially weapons guidance systems, which are

impassive in assessing what is occurring and do not perceive to what a person reacts. [288]

If an IW or IO operation system cannot perceive what a person reacts to and is unable to assess what is occurring, does this mean that it provides only insignificant data? Or does it mean that there are two layers to reflexively control? The first layer consists of the "eyes, nose, and ears" of sensors, satellites, and radars. The second layer is the "brain software" of humans, which gathers, processes, and produces knowledge from the information or makes decisions based on it. But what happens if the "eyes, ears, and nose" are manipulated? How does that affect the input into decisions and knowledge? The recent use of such military activity by Yugoslav forces in the Balkans fooled NATO sensors over Kosovo and resulted in NATO shooting at targets that were fakes.

Yet, in the end, we do leave some decisions to computers. This indicates to Leonenko that we live in a much more frightening existence than we care to believe if, in fact, decisions are in the hands of machines that are "incapable of assessing what is occurring and do not perceive what a person reacts to."

Further, Leonenko noted that "how the enemy thinks" is shaped by combat intelligence and a collective image (set) made up of concepts, knowledge, ideas, and experience. This set, which he calls a filter, helps a commander separate necessary from useless information. Then, the chief task of reflexive control is to locate the weak link in the filter and find an opportunity to exploit it.

Leonenko's definition of reflexive control fits well with Russian Major Sergei Markov's understanding of an information weapon. Like Markov, Leonenko defines an information weapon as a "specially selected piece of information capable of causing changes in the information processes of information systems (physical, biological, social, etc., in this case, decision-making information) in accordance with the intent of the entity using the weapon." Accordingly, it causes change in the information processes of an opponent by persuading them to make decisions according to the design of the controller, and it affords the information weapon a methodology for controlling an opponent. So defined, reflexive control can be applied in the modeling and decision-making contexts of various types of conflicts (international, military, etc.). It can also be used in social processes and systems.

Another Russian military theorist who wrote on the information impact on RC was Colonel S. A. Komov, who was perhaps the most prolific Russian military writer on information warfare topics in the 1990s. Writing in the journal *Voennaya Mysl'* (Military Thought), Komov supported Ionov's emphasis on reflexive control. He renamed reflexive control over the enemy as "intellectual" methods of information warfare. He then listed the basic elements of an intellectual approach to information warfare, which he described as:

- **Distraction,** by creating a real or imaginary threat to one of the enemy's most vital locations [flanks, rear, etc.] during the preparatory stages of combat operations, thereby forcing him to reconsider the wisdom of his decisions to operate along this or that axis;
- Overload, by frequently sending the enemy a large amount of conflicting information;
- Paralysis, by creating the perception of a specific threat to a vital interest or weak spot;
- Exhaustion, by compelling the enemy to carry out useless operations, thereby entering

- combat with reduced resources;
- **Deception,** by forcing the enemy to reallocate forces to a threatened region during the preparatory stages of combat operations;
- **Division**, by convincing the enemy that he must operate in opposition to coalition interests;
- **Pacification**, by leading the enemy to believe that pre-planned operational training is occurring rather than offensive preparations, thus reducing his vigilance;
- **Deterrence**, by creating the perception of insurmountable superiority;
- **Provocation**, by forcing him into taking action advantageous to your side;
- **Overload**, by dispatching an excessively large number of messages to the enemy during the preparatory period;
- **Suggestion**, by offering information that affects the enemy legally, morally, ideologically, or in other areas; and
- **Pressure**, by offering information that discredits the government in the eyes of its population.[289]

Finally, an article by Russian Captain First Rank F. Chausov continued the discussion of reflexive control. He defined RC as "the process of intentionally conveying to an opposing side of a certain aggregate information (attributes) which will cause that side to make a decision appropriate to that information."[290] More important, Chausov discussed the risk involved with using RC:

To justify the methods of using force while taking risk into account, the numerical measure R_0 is introduced as the difference between the assessments of guaranteed effectiveness, or E_g , and the projected (situational) effectiveness, E_s . The estimate of the guaranteed effectiveness represents the lower limit of the effectiveness indicator, given any type of enemy action and fixed actions by our own forces. Situational effectiveness refers to the effectiveness of a force's action which is achieved through a certain type of action based on a commander's decision. Ordering or establishing preference among the values of the risk looks like this: $R_{0,1} > R_{0,1+1}$. [291]

Chausov listed the principles of RC as: (1) a goal-oriented process requiring a complete picture of all RC measures needed; (2) an "actualization" of plans, that is providing a sufficiently complete picture of the intellectual potential of commanders and staff officers (based on their reality), especially when conditions are determined by global information space; (3) the conformity of goals, missions, place, time and methods for RC's conduct; (4) the modeling or forecasting of the condition of a side at the time actions are being implemented; and (5) the anticipation of events.

High-Tech Camouflage

In today's conditions the armies of the world's leading states stand on the threshold of a qualitative leap in the use of military cunning. It derives above all from the development and implementation of advanced space, aviation, computer, and other technologies and the capabilities in transmitting and receiving information, which have increased many times over. [292]

Military theorists recognize that sensors and electromagnetic spectrum intrusions are making it

more difficult for forces to hide on the battlefield. Further, precision guided weapons have turned detection into annihilation. One analyst wrote that a return to "non-transparency" methods is required for survival in today's conflicts. A method for doing so is through the use of high-tech *maskirovka* (camouflage or concealment) developments for mockups and through the wider application of holograms. That is, not only must targets be hidden but decoys developed to deflect enemy weaponry and attention. Russia's modern models "reproduce radar and infrared bands and the simulation of the radio-technical range is planned."[293]

Another article on *maskirovka* indicated that demonstrations of force and disinformation could enhance a *maskirovka* effort. The actual number of decoys needed for a *maskirovka* effort in a regiment's defensive sector was estimated at 25 percent of the total number of vehicles in a regiment. Setting up this number of decoys requires approximately 12 percent of a regiment's personnel for 4-5 hours. For artillery batteries, the number of decoys rises to 50 percent of the number of real pieces of artillery. [294]

Offensively, virtual attacks employing drones could reveal the position of enemy air defense emplacements that are well-hidden. Holograms are also being developed for future use. Not only can they confuse the human eye and perception but also infrared optics and target acquisition capabilities. A holographic curtain of virtual smoke is also anticipated in the near future. [295]

Examples of Deception's Use in Afghanistan and Chechnya

The journal <u>Armeyskiy Sbornik</u> (<u>Army Digest</u>) noted that in Afghanistan there were times when artillery strikes and superiority in strength did not produce the required result. As a result, deception issues rose to the top of the operational list and were employed. [296]

First and foremost, the number of people engaged in the deception activity was limited, both during preparations and during the actual operation. Second, attempts were made to give the enemy a false impression of what was planned, arranging fake departures from assembly areas and secretive departures for actual patrols.

In one instance, platoons moved out in the opposite direction of an upcoming operation to give the enemy a false impression of a planned operation. Meanwhile, an armored personnel carrier that made five or six runs every day to a town (in the direction from which an enemy attack was expected) was used to transport troops under cover of dusk. These troops secretly departed the vehicle and hid in an area where they could ambush an approaching enemy force. At the same time, number of armored vehicles had departed and appeared to head toward Kabul, from where a column of vehicles had arrived the previous day. The armored vehicles actually hid at a pass. When the enemy force arrived as expected on foot, the ambush was sprung by the friendly forces in hiding and the armored force was used as a mobile reserve in support of the infantry platoon's ambush.

Another interesting use of deception occurred in January 2000. Russian forces had encircled the famed terrorist Shamil Basayev in Chechnya's capital, Grozny. Basayev was led to believe that his safety out of the city could be guaranteed with a payment of a large sum of money in cash (some say \$100,000) to a military officer responsible for that sector of the city.[297] The night before the departure of Basayev's men, a member of his group exited the city and made the walk to the village of

Alkhan-Kala. Everything seemed to be in order.

The following night, unknown to Basayev and his men, they walked into a trap. Four minefield strips had been laid and a firing system set up. The first group of terrorists, which included Basayev, ran into the minefields. Then they came under intense artillery fire, multiple-launch rocket systems, direct fire from tanks, and air strikes. It is estimated that 1700 terrorists died in the attack. Basayev was wounded in the process and soon had his foot amputated above the ankle. Russia had named the operation "Wolf Hunt." [298]

The Russian commander of the operation, Gennady Troshev, tells the story this way in his book *Moya Voyna* (My War):

To lure them out of the besieged city, an original plan was developed at the Combined Forces Group. Let us say that the plan was called "Wolf Hole [a different name than Lobov used to describe the operation]." As a part of this plan, disinformation was broadcast over the airwaves. Using false information on the radio the bandits were given the idea that there were gaps in the cordon around the city, gaps that they would be able to pass through. Activity was reduced to a minimum at meeting junctures between the regiments. Human intelligence agents were also put to work "tipping off" the field commanders as to exits through the cordon. While we were taking these measures we also prepared unique "corridors" for the enemy in several directions. The bandits took the bait. On the night of 29 January into the morning of 30 January the remainder of the combat-ready detachments attempted to breach through Staraya Sunzha, at the juncture between the 15th and 276th Motorized Rifle Regiments. More than 600 insurgents attempted the breach. They had animals and prisoners moving in front of them. Many of the bandits died in the mine fields, many were badly wounded, including well-known field commanders -- Basayev among them... In addition to all the injuries, about 300 insurgents died that night. Most of the survivors surrendered. Only a few of them managed to break out of the city.[299]

Thus, while the name of the operation and the number of combatants varies to a significant degree, the integrating factor of the two versions of the story is that deception played the key role in eliminating the terrorists.

Conclusions

Successful deception is accomplished by convincing the enemy that "the version it is being persuaded to believe is not disinformation, but the result of analytical studies of its own intelligence reports."[300] This requires an in-depth understanding of the thought processes of any potential enemy to include the personality of commanders that are targeted. To view the situation from the enemy's perspective, one must be aware of his military doctrine, how leaders are taught to use the services and branches, historical precedents, the nation's principles for using men and equipment during operations, and so on. To be successful, enemy forces must view the deception activities as a logical course of events.[301]

Implementing this goal will require a readjustment of the educational and training system of the Russian armed forces. V. N. Karankevich wrote that command cadres, if they wish to command troops

in any environment, must become experts in deception. The entire training system must incorporate deception training into the curriculum at academies and especially into the leadership of the Russian armed forces, to include the Minister of Defense. This may require the development of a special guidance manual for the rules, practices, and operations for developing deception techniques. Deception operations must also become the critical, obligatory element of exercises at the strategic and operational levels, prepared as special information operations. [302]

Russian civilian and military theorists will undoubtedly continue to study the problem of reflexive control and the associated tools of manipulation and deception. For example, the Russian Academy of Science's Institute of Psychology has a Psychology of Reflexive Processes Laboratory that studies elements and applications of the "reflex" in considerable detail. It is studying not only ways to use the concept, but ways to keep the concept under control through international discussions and awareness. The most complex and dangerous application of reflexive control will remain its employment to affect a state's decision-making process by use of carefully tailored information or disinformation.

States must be protected against both deliberate and unintentional actions that can lead to the disruption in the functioning of state and military command-and-control. The most significant of those threatening actions is disinformation that seeks to exert an effect on public opinion or on decision-makers.[303] Perhaps for this reason theorists and planners in Moscow believe that a detailed information security doctrine is one of the most important deterrents or defenses against an enemy's use of reflexive control or similar processes against Russia. Russia's September 2000 "Information Security Doctrine" is a step in this direction as are several other information-related documents over the past ten years. Russia will continue to stress the importance of using deception as a "coefficient of force" against an opponent while maintaining vigilance against another nation or a terrorist's use of such operations against Russia.

CHAPTER SIX: RUSSIA INFORMATIZES ITS MILITARY

Today's computer is a weapon, which is of no smaller importance than a rifle or a tank. To be serious, a computer is more important. [304]

Introduction

Modernizing the military is a priority issue for the leadership of Russia. President Dmitriy Medvedev and Prime Minister Vladimir Putin both stand solidly behind the reform effort. They are fully aware of the impact of the information age on technology and on humans. Two of Medvedev and Putin's goals are to "informatize" the Russian armed forces weaponry (the information-technical aspect of Russia's information warfare [IW] concept) and to ensure that the digital information the populace receives is Russian-based and not destabilizing (the information-psychological aspect of Russia's IW concept). President Medvedev has gone so far as to state that he believes the contemporary Russian state and its armed forces are being controlled by computers. He noted that "today's computer is a weapon, which is of no smaller importance than a rifle or a tank. To be serious, a computer is more important." [305] Medvedev also stressed how important modern communications are for Russia's national security agencies since without them, Russia will not be fully protected.

Prime Minister Vladimir Putin has focused on ensuring that the communications and automatic command and control systems, among others, are updated. In the past decade, despite adequate planning, there has been inadequate follow-up by local bosses and administrators. Putin stressed that this will no longer be the case. [306]

The influence of Medvedev and Putin offer one motivator behind Russia's movement into the information technology arena. Another motivator/influence is the philosophical, economic, cultural, historical, and scientific background of both the Soviet and Russian armed forces. They greatly impact just how Russia perceives its approach to informatizing its armed forces. As one Russian military analyst explained years ago:

It is false to presume that we can expediently interpret and accept for our own use, foreign ideas about IW and their terminology in order to avoid confusion and misunderstanding at international discussions, during information exchanges, or during contact between specialists. Quite the opposite, **it makes no sense to copy just any IW concept**. Into the IW concept for the Ministry of Defense of the Russian Federation (RF) must be incorporated the constitutional requirements of the RF, its basic laws, specifics of the present economic situation in the RF, and the missions of our Armed Forces.[307]

This chapter will examine some contemporary Russian IW definitions; the input of Russia's General Staff regarding the informationization process; the network-centric warfare concept of Russia; Prime Minister Putin's influence on the defense industry; and the various information-technological developments that are shaping the future of the Russian armed forces.

How Do the Russians Define Information War?

Russia's contextual situation and dialectical Marxist-Leninist cognitive process result in an IW theory much different than that utilized in the US. A general survey of information warfare definitions created by various Russian security organizations over the past fifteen years underscores a standard division of labor in the IW arena into information-technical (the software and hardware aspect) and information-psychological (the cognitive aspect) areas.

The last US definition of IW appeared in the 1998 <u>Joint Pub 3-13</u>, <u>Joint Doctrine for Information Operations</u>. In this publication IW is defined as "information operations conducted during time of crisis or conflict to achieve or promote specific objectives over a specific adversary or adversaries."[308] Information operations at the time were defined as "actions taken to affect adversary information and information systems while defending one's own information and information systems."[309] <u>Joint Publication 1-02</u>, <u>Department of Defense Dictionary of Military and Related Terms</u> (as amended through 30 September 2010) defines information operations as

The integrated employment of the core capabilities of electronic warfare, computer network operations, psychological operations, military deception, and operations security, in concert with specified supporting and related capabilities, to influence, disrupt, corrupt or usurp adversarial human and automated decision making while protecting our own. Also called IO. See also computer network operations; electronic warfare; military deception; operations security; psychological operations. [310]

Russian authors still use the term information war frequently. Further, Russia's two IW subdivisions (information-technical and information-psychological) overlap at times. For example, computers are information-technical devices that can have an information-psychological impact. Another peculiarity is that different authors use different combinations of words that many translators describe as "information war." Among them are information struggle (*borba*), information confrontation (*protivoborstvo*), and information war (*voyna*). In the examples that follow, each particular use by an author will be highlighted in italics. Many authors, however, use the term *protivoborstvo* or confrontation to refer to war.

Four recent definitions will be examined here. They are a 2009 definition offered by Colonel-General Anatoliy Nogovitsyn, a deputy chief of the General Staff of the Russian Federation; a 2009 definition offered by two authors from the Russian Academy of Military Science; a definition developed by A. A. Strel'tsov, an author of the 2000 Information Security Doctrine of Russia; and a 2010 definition offered by a former Scientific Advisor to the Security Council of the Yeltsin administration, Vladimir Semenovich Pirumov.

Colonel-General Nogovitsyn discussed threats to Russia's information security in a lengthy 2009 interview in *Krasnaya Zvezda* (Red Star). He defined information security as the "degree of protection of our country's national interests in the information sphere, which is defined by the totality of a balance of interests of the individual, society, and the state, ensuring their formation, use, and development in the information environment."[311]

He defined informatsionnaya voyna (information war) (IW) as

Conflict among states in the information space with the objective of inflicting damage on information systems, processes, and resources and on critically important structures, undermining the political and social system, and massively brainwashing troops and the population with the objective of destabilizing enemy society and the state as a whole. [312]

Nogovitsyn stated that the main task of IW is to "destroy the foundations of national self-awareness and type of life of the opposing side's state." [313]

He added that in wars of the future, primary missions for Russia's armed forced will be "the disorganization of functioning of key military, industrial, and administrative facilities and systems of the enemy and also the information-psychological effect on his military-political leadership, troops, and population with the use of modern information technologies and means." [314] Under the conditions he laid out, he added

An information-psychological effect with the objective of shaping public attitudes in society and society's reaction to ongoing processes is acquiring ever greater importance in the political sphere. In the economic sphere there is a growing vulnerability of economic structures to the unreliability, delay, and illegal use of economic data. In the sphere of spiritual life and with the help of electronic mass media, the danger arises of society developing an aggressive consumer ideology, of the proliferation of ideas of violence and intolerance, and of other negative effects on a person's consciousness and mind. [315]

Nogovitsyn stated that the information weapon provides states with a method of gaining advantages without a declaration of war. The human mind becomes the objective and it is affected by information technologies and not force. However, in the military sphere, a war's outcome will now depend to a greater extent on systems that control reconnaissance, electronic warfare, command and control, and precision-guided weapons.[316] These are the dangers to Russia in the information-psychological and information-technical arenas.

Without information security, Russia will face many problems. These include: equal cooperation with other countries; difficulties in making decisions; a loss of credibility in state authority and in the international arena; creation of an atmosphere of tension and instability in society; an imbalance in the interests of the individual, society, and state; the provocation of social, ethnic, and religious conflicts; the initiation of strikes and mass disorder for no apparent reason; and the disruption of command and control, military systems, and facilities.[317]

In another 2009 example, M. M. Taraskin and S. A. Cheshuin wrote an article for the journal *Vestnik Akademii Voyennykh Nauk* (Bulletin of the Academy of Military Sciences) that offered a rather strange combination of US and Russian definitions to define IW (authors used the term, *informatsionnoe protivoborstvo*). The authors began by describing the breakneck speed of computerization and informatization that is creating, in their opinion, a single world information space in which all the means of gathering, collecting, processing, exchanging and storing information will be accumulated. The authors worry over unauthorized outsider access and destructive actions that can create major problems for the information infrastructure and for information security. Further the authors note that the cyber systems of the Russian Federation and its allies are currently being

actively targeted.[318]

Taraskin and Cheshuin note that Russia has adopted a number of key conceptual documents in which specific information threats to national security can be found. These documents are the National Security Concept of the Russian Federation, the Military Doctrine of the Russian Federation, and the Information Security Doctrine of the Russian Federation.

The National Security Concept clearly identifies the information threats to the country as the ambition of some countries to dominate information space and exclude Russia from the external and domestic information markets; the application of information warfare concept by a number of countries to build the means to compromise other countries' information spheres; and the disruption of information and telecommunication systems and information security breaches and unauthorized access to those systems and information.[319]

There is much study underway in Russia on the issue. Those engaged in the study include Academy of Military Sciences scholars Army General M.A. Gareev; retired (now deceased) Major General V.I. Slipchenko; Doctor of Military Sciences S.A. Komov; Professor V.N. Tsygichko, Member of the Russian Academy of Natural Sciences and Doctor of Technical Sciences; and Professor V.V. Krysanov, Doctor of Military Sciences. Reality itself makes this area of study a priority not only in the immediate future but also today and forces Russia to consider developmental options for its Armed Forces.[320]

The authors define information warfare as a "struggle in the information sphere to impact the opposing side's information objects and protect one's own information objects from such impact."[321] This definition is almost identical to a US definition from a few years ago. Further, the authors note that information warfare uses information weapons which are defined as "all the means and methods of impacting information, information-psychological, and information-technological objects and information resources to achieve the objectives of the attacking side."[322] This breakdown is exactly how IW has been described in Russia over the past ten years.

However, Taraskin and Cheshuin then state that "the US Armed Forces Information Operations doctrine encompasses and is being realized in two main areas (aspects) – psychological and technical (technological)."[323] No US definition breaks IW into these two areas. Thus the authors not only offer a Western definition of IW but then try to explain the Western model through a Russian paradigm (information-technical and information-psychological).

The authors state that the psychological aspect of information warfare involves "wide use of the media (the electronic media first and foremost) to impact the consciousness of social objects, which include individuals, different size social groups, the population of various countries, and the world community as a whole."[324] The technical aspect involves "using specific software and various information technologies to disrupt the mass media, automated command and control systems, communication links, and military and civilian information networks."[325] In short, this is an explanation of US IW via the Russian model.

In 2010 one of the authors of Russia's 2000 Information Security Doctrine wrote a pamphlet titled

Gosudarstvennaya Informatsionnaya Politika: Osnovy Teorii (Government Information Policy: Basic Theory). Author A. A. Strel'tsov's work had three sections. The first section discussed the struggle for the right to use public authority resources for solving the most acute social development problems based on two measurements of government information policy and its nature—social and subjective. Strel'tsov writes that the nature of government policy in social measurement lies in the legitimate use of public authority resources to unite people for the public good, which includes preserving the cohesiveness of society and ensuring its effective development. Further, the nature of government policy in subjective measurement lies in the use of legal and organizational mechanisms of public authority to realize the ideological visions of the policy agent holding public authority on rational mechanisms for resolving the sharpest social development conflicts. [326]

The second section offered methodological approaches to explain government information policy through its goals, tasks, principles, and trends (the latter being the formation of a value system for social development, information support of government policy, and methods of information warfare against provocations and threats related to both subjective and objective factors of social existence and development). The third section explains legal and organizational forms of government information policy. Appendices list high-priority scientific problems related to government information policy and basic terms used in this text.[327]

Strel'tsov defined several terms and used *informatsionnoe protivoborstvo* to state information war (or more literally information confrontation). He stated that military-technical information warfare is waged with the use of specialized information and communications technologies (called "information weapons") to breach the stability and security of the operations of a national information infrastructure. The main objective of warfare is manipulating the integrity of information and communications systems and network systems of the opposing side. What is occurring is an arms race in the field of "information weapons." [328]

The majority of Strel'tsov's focus, however, was political information warfare (again, *informatsionnoe protivoborstvo*). It is waged as "soft power." Activities of legitimate policy agents are aimed at countering threats of illegitimate political forces infringing upon policy independence. These activities are designed to influence the development and outcome of a political struggle to help one side either take control of public authority or use this authority to resolve specific political tasks. The main objective of this kind of warfare is public support.[329] It follows from this that "the task of political information warfare lies in neutralizing or reducing the danger of threats from the spread of harmful ideologies and religious teachings, as well as from the spread of disinformation throughout national and international communities on issues related to implementing government policy."[330]

Strel'tsov defined a few other terms as well. He stated that an information operation was "activities coordinated in terms of time, efforts, and objectives performed by agents to implement government information policy over a relatively long period of time that are directed at carrying out mid-term or short-term political tasks." [331] This form is used to neutralize the threat of information actions taken by foreign states and extremist organizations to discredit government policy measures. Information warfare (*informatsionnoe protivoborstvo*) was defined as "conflict interaction in the information sphere between legitimate (acting in accordance with the norms of national law) and illegitimate (acting outside the national legal framework) policy agents; activities of government

agencies related to neutralizing or reducing the danger of threats from the spread of harmful ideologies and religious teachings, as well as from the spread of disinformation throughout national and international communities on issues related to implementing government policy."[332] Strel'tsov also listed what he termed "high-priority scientific issues related to government information policy." They are listed at Appendix One.

Vladimir Pirumov took a more comprehensive approach to the concept of IW. Pirumov is truly a renowned information security specialist in Russia. Born in Armenia in 1926, his biography notes that he "has expended, at public expense, fourteen years in satisfying his curiosity in discovering the truth about military-naval science and art, during which time he came to understand that the primary work of his life was cybernetics and even more, its applied aspects."[333]

Admiral Pirumov served 39 years in the Soviet armed forces, starting his service in 1941. As a Department Chief of "Radio-Electronic Warfare-Navy" he developed the electronic-fire concept of naval forces during sea battles. For eleven years he served on the Navy's General Staff as the Chief of Radio-Electronic War (REW); and for eleven years he served as the head of the REW department of the General Staff Academy. During this time he developed the methodology for coordinating REW activities among the branches of the Armed Forces. [334]

In 1990, he was elected as a corresponding member of the Section on Information and Cybernetics (in the theory of decision-making) at the Russian Academy of Natural Sciences. In 1992 he became the Chairman of the Geopolitics and Security Section of the Academy; and on 1 November 1993 he was appointed as the Chairman of the Scientific Committee of the Security Committee of the Russian Federation by then President Boris Yeltsin.

His scientific writings have included work on parity, defensive sufficiency, geopolitics, national security research methodologies, electronic warfare, command and control warfare, non-lethal weapons, and numerous other information-related topics. He was one of the most authoritative persons initially to define the term *informatsionnaya voyna* (information warfare), which he defined as:

a new form of battle of two or more sides which consists of the goal-oriented use of special means and methods of influencing the enemy's information resource, and also of protecting one's own information resource, in order to achieve assigned goals.[335]

For strict wartime scenarios, Pirumov offered a definition of information warfare that aimed at gaining an information advantage on the battlefield:

Information warfare in operations (combat actions) is the aggregate of all the coordinated measures and actions of troops conducted according to a single plan in order to **gain or maintain an information advantage** over the enemy during the preparation or conduct of operations (combat actions). An information advantage assumes that one's own troop and weapon command and control components are informed to a greater degree than are those of the enemy; that they possess more complete, detailed, accurate, and timely information than does the enemy; and that the condition and capabilities of one's own command and control system

make it possible to actualize this advantage in the combat actions of troops (forces).[336]

Admiral Pirumov played a major part in developing his academy's dictionary of geo-political terms. The dictionary was edited by Colonel General Valeriy Manilov, at the time the first deputy to the Minister of Defense of Russia. The dictionary defines IW as:

An inter- or intra-state information struggle that involves methods which damage or completely destroy the information environment of the opposing side. It is an information influence on various spheres of societal and governmental activity, a system of measures to capture the information resources of a state and key positions in the informatization sphere.[337]

Most recently, in 2010, Admiral Pirumov wrote a volume titled <u>Informatsionnoe Protivoborstvo</u> (<u>Information Confrontation</u>) that deserves more focused attention due to its contemporary nature. In this volume he still used the Russian *informatsionnaya voyna* for information war. General of the Army (retired) and former Chief of the General Staff, Vladimir N. Lobov, wrote the Forward to the book. He noted that the volume addresses

the variety of information confrontation aspects to be involved in conflict situations of the future, the interrelations between information security on the one hand and geopolitics and national security on the other, as well as the capabilities of the individual, society, and the state to respond to the challenges of information crises and information terrorism...[338]

Pirumov defined information war, information confrontation, information struggle, and information resources (among several other information-related terms such as information weapons) in his work. These four are defined as follows:

- Informatsionnaya voyna (information war) means actions and measures used both in preparations for and during war to achieve strategic supremacy over an enemy in the information sphere by influencing its information and communication means, as well as state and military control systems and objects, given the arrangements to be made to protect one's own information objects against similar enemy arrangements.[339]
- Informatsionnaya bor'ba (information struggle) is a set of information confrontation and information protection measures and actions carried out to a single scheme or plan to gain and hold possession of information superiority over the enemy in preparing for or conducting combat in an armed conflict and in the specified information space.[340]
- Informatsionnoe protivoborstvo (information confrontation) means struggle in an information sphere that suggests integrated destructive influence on the opposing side's information, information systems, and information infrastructure with simultaneous protection of one's own information, information systems, and information infrastructure against such influence. Here the objective is to gain and keep information superiority over the opposing side.[341]

• *Informatsionnyy resurs* (information resource) is an array of topically purposeful information that is arranged to specific principles. Such information is acquired and built up in the process of scientific development, practical human activities, and the operation of special data acquisition, processing, and storage devices, recorded on various media that enables information transmission to users in time and space for solving different tasks.[342]

Pirumov divided his book into three sections. Section One discusses the ideological aspects of information confrontation. He begins his volume with a discussion of the historical aspects and background of information confrontation. He traces the concept from the time of Sun Tzu through the Russo-Japanese War of 1904-1905. He next discusses the general and applied aspects of the topic as well as a host of related topics: information confrontation's types and forms, means and goals, laws and principles, and categories. He also discusses information weapons and non-lethal weapons. Section One closes with a discussion of technical and psychological means of information influence.

Section Two is the most important section of the book since it is here that the topics of information war and information struggle are discussed in more detail. Also covered are information crime and information terrorism but not to the same extent as the other two topics. Admiral Pirumov writes that information is a decisive factor of modern geopolitical rivalry both for its destructive power and its ability to serve as an "influence weapon."[343] Information war means "a combination of activities and measures aimed at gaining information advantages over the potential or real enemy."[344] Information war consists in

Securing national policy objectives both in peacetime and wartime through means and techniques of influencing the information resources of the opposing side, as well as through the protection and effective use of one's own information resources.[345]

Information war's content consists of information support, influences on an enemy's information system or psychic condition, and protection of one's own information systems and the psychics of the population against enemy influences in the social psychosphere.[346] It is organized and conducted "against a particular information object that ensures control of decision-making in a specific area of the opposing side's activities."[347] This focus on the psychosphere is a very Russian approach to the element of IW. The topic faces far less scrutiny and interest in US military and governmental circles.

Admiral Pirumov then focuses attention on the following elements: the transformation of the human subconscious; the increased density of information influences on human subconscious; the ability to reproduce an individual's action that are stereotypes of their conscious actions; and the reflexive control (a Russian term similar in meaning to the US term "perception management") of the behavioral reactions of an individual to cause desired actions.[348] Pirumov describes psychological information influence techniques as disinformation (deception), manipulation (situational or societal), propaganda (conversion, separation, demoralization, desertion, or captivity), lobbying, crisis control, and blackmail.[349]

When discussing the modern content of an information struggle, Admiral Pirumov states it is "seeking to secure in as short a time as possible access to required and reliable information and its

comprehensive use while simultaneously seeking to hamper to the maximum extent an enemy's access to such information and thereby break down enemy information systems, as well as force the enemy into using fake data leading to mistakes in decision-making."[350] During peacetime the information struggle is hidden while in wartime it is conducted full scale without any restrictions. Task-solving information struggle techniques are accomplished by force, by intellectual means, and by combined techniques while methods of influencing military information systems include physical elimination or the interdiction of functions, electronic suppression, software/hardware influences, distortion of information, and psychological influence on top officials and operators. With regard to the technical aspect of the information confrontation, the saturation of weapons with information components helps integrate reconnaissance-strike and reconnaissance-fire systems, to include real-time detection and identification of enemy targets, target-designation support of weapons, and the delivery of precision strikes.[351]

Section Three concludes the book with a description of the future of information confrontation. Admiral Pirumov notes that future wars will be characterized by changing laws of geopolitical competition and changing structures of armed forces and thus armed struggle.[352] At one point he notes that "wars of the future may be started and practically ended in a protracted air and space operation conducted in parallel with an operation of strike and naval forces and information confrontation operations." The offensive operation will take 10-15 days for phase one (strikes on retaliatory systems, destruction of critical military and defense industry facilities, etc.) and the second phase 50-70 days with targets being economic, government, and control systems among others. Other activities include electronic strike disinformation, activities in support of information operations (especially special psychological information operations), and so on. Air and space operations will be conducted in conjunction with psychological operations.[353]

In the book's conclusion, Admiral Pirumov notes that information confrontations will witness an increase in the struggle for access to control systems, the enforcement of one's own warfare rules on the enemy, and a reliance on superiority in military technology. The so-called apex of information confrontation will culminate in "the erection of a global combat strike information system of the country and armed forces capable of controlling the status and activities of friendly troops and reducing the efficiency of enemy armed forces operations." [354] Perhaps this is the goal of the information-strike complex that other Russian scientists are describing in recent works.

For historians, Pirumov's book offers several important snapshots in time regarding the progression of the IW concept. For practitioners, the work is full of insights as to the importance and value of information confrontation. A truly Russian methodology of thought on the topic is presented with the types, forms, categories, and applied science approaches integrated into the discussion.

2008-2009: Military Generals Speak at Public Forums

Press reports in early 2008 indicated that Russia was ready to put a more public face on its information operations concept. An unattributed Internet commentary stated that General Alexander Burutin, the assistant chief of the Russian Federation's general staff, implied Russia's armed forces had begun developing conceptual solutions, elements, and techniques for the conduct of information operations in wartime and peacetime. Other nations are doing so and Russia cannot afford to be left behind, the general noted, adding "It [an information weapon] does not destroy the enemy, it does not

require the creation of complex structures, and in the process there is no need to cross borders."[355] Targets of information weapons include telecommunications equipment and "people and their world view."[356] Burutin believes that non-governmental organizations are using these weapons to form a negative image of Russia around the world.[357]

ITAR-TASS, on the same day, also quoted Burutin, this time as saying "In the foreseeable future, the final aims of wars and armed conflicts will be achieved not so much by destroying the troops and forces of an adversary, as by suppressing its state and military command, navigation and communications systems, and influencing other information facilities on which the stable government of a state depends." [358] In other words a key method to destabilize a state is through the use of information technology. In addition, organizational weapons such as creating an enemy image of Russia and constructing counter-propaganda against Russia's citizenry are being attempted. Russia must construct counters to these principles that are designed to divide and conquer Russia's citizenry and influence them to enjoy another way of life. [359]

A year later and some five months after Russia defeated Georgia in the 2008 conflict, Burutin stated that the Russian general staff recommended the development of an international mechanism to make states responsible for unleashing "information war." Obviously, this would be a very difficult mechanism to develop since each state has differing concepts of what information war does and does not include. Making states responsible for developments in their information space, in an age of anonymous attacks and the ability of actors in one state to use servers in other states, appears to be a non-starter until technology advances to a point where the origin of attacks can be pinpointed. Burutin's statement that it is necessary "to move from the analysis of challenges and threats in information security to response and prevention" may not be possible. [360]

A month after Burutin's statement, deputy chief of the General Staff Colonel General Anatoliy Nogovitsyn stated that it was necessary to develop a strategy of information defense for Russia since all countries are developing such capabilities. Russia must provide for its information security or the country will not be prepared to counter future threats. Nogovitsyn noted that

The main tasks in information warfare will be destroying the functioning of key military, industrial, and administrative sites and systems of the enemy, as well as inflicting information and psychological damage to his military and political leadership, troops, and population, primarily using modern information technologies and tools. [361]

Independent journalists drew many of the same conclusions and then some. Dmitriy Litovkin, writing in *Izvestiya* (News) in February 2009, stated that Russia may be drawn into an information war in two or three years. He wrote that Nogovitsyn believed the General Staff can create a warning system for detecting and identifying problems with the work of information networks and software-programming issues. This is why Russia is drawing up a plan for information defense. [362]

Another agency, the Federal Security Service (FSB), had problems with the statements of these generals. In what appeared to outsiders to be a turf war, the FSB asked how the General Staff can make such statements about information defense. For the FSB, cyber issues are the purview of several departments and not just the General Staff, especially as these decisions pertain to those made in the

Security Council. Further, the FSB has already created some information-protection mechanisms. [363]

Network-Centric Warfare (NCW)

The network-centric warfare concept has undergone discussion for several years in the Russian military press. The journal <u>Voennaya Mysl'</u> (<u>Military Thought</u>), for example, produced nine articles on the topic or on ideas closely aligned with it. These were:

- 10/2004: A. Yu. Samarin and G. E. Knauer, "The Question about the Formation of a Single Information Space in the Armed Forces"
- 3/2005: A. V. Raskin and V. S. Pelyak, "On Network-Centric Warfare"
- 1/2006: Yu. E. Gorbachev, "Network-Centric War: Myth or Reality?"
- 7/2006: M. M. Khamzatov, "The Network-Centric War Concept and Its Impact on the Character of Modern Operations"
- 9/2008: B. F. Cheltsov, "Approaches to the Creation of a National Aerospace Defense System under Conditions of Future Network-Centric Wars"
- 4/2008: A. V. Raskin and V. S. Pelyak, "Military Art: On the Question of Net Warfare"
- 12/2008: A. E. Kondrat'ev, "General Characteristics of Net Architecture, Used to Realize the Perspective of the Netcentric Concept of Major Foreign Countries"
- 11/2009: A. E. Kondrat'ev, "Difficult Questions Regarding the Research of the New Network-Centric Concept of the Armed Forces in Major Foreign Countries"
- 2/2010: B. I. Kazar'yan, "Operations, Military Activity, and Network-Centric War"

The ongoing debate over the concept has both advocates and protagonists. Essentially, the current Russian military elite (to include the President and Prime Minister) are the advocates. They recognize that in contemporary (and future) warfare speed and integration of effort matter in all aspects: uncovering an enemy, reacting to a threat, and recovering from the expenditure of resources. Some of the protagonists are the older military elite who are not convinced that NCW is a useful concept.

Two figures stand out as advocates: Lieutenant Colonel A. E. Kondrat'ev and Professor Vasiliy Burenok. Kondrat'ev writes primarily for two audiences: those who want to know how NCW has worked and helped the US, China, and other nations (with the majority of these articles appearing in *Zarubezhnoe Voennoe Obozrenie* [Foreign Military Review] and *Voenno-Promyshlennyy Kur'er* [Military-Industrial Courier]); and those who want to know how NCW might help Russia. He also discusses problems associated with the informationization of the armed forces (and NCW) for Russia.

Kondrat'ev notes that Soviet style command and control involved a low level of information exchange. Perhaps for this reason Prime Minister Putin is so personally interested in modernizing Russia's command and control assets to improve this area. Kondrat'ev also stated that in the US and Chinese armed forces, a move to NCW preceded a move to a brigade structure. In this sense, the Russian armed forces are doing things in reverse order, struggling as they are to create a NCW concept to fit a brigade structure already in place.[364]

Kondrat'ev states, however, that just because NCW is painful and protracted does not make it any less important. This is a revolutionary concept that reduces the cycle of battle management in operations. All combatants must be integrated via information space as this allows intelligence and knowledge to be shared. Further the time phase of the observation-orientation aspect of an event is shortened due to the digital circuitry of NCW, allowing commanders to make decisions more quickly. The kinetic aspect of future war also would be strongly influenced by lasers and nanotechnologies (see Chapter Eight for a further discussion of the impact of these variables on future war).[365] In other works, Kondrat'ev wrote that Russia must keep pace or fall behind the advances made by foreign armies in the NCW concept. He offered as an example the inability of Russia to produce domestic unmanned aerial vehicles (UAVs) and concluded that Russia must rely on foreign purchases to catch up with other nations in the short term. His 11/2009 article in *Voennaya Mysl'* (Military Thought) discussed US NCW doctrine at length, especially the concept of a center of gravity on the network.

Burenok, on the other hand, writes directly that Russia needs NCW as a priority development if Russia is to remain competitive in the information age. He is upset that so many people try to confuse Russia's leadership and direct funding away from NCW. He regards the appearance of these mixed emotions about NCW for two reasons: that Russia lacks proper theory in this area and that Russia has little practical experience with warfare other than Chechnya over the past twenty years. For Burenok, NCW is a war of intellects (both human and computer codes) that involves acting faster than the enemy and making decisions before the enemy (based on accumulated evidence from sensors and other resources). This fits with his definition of information superiority, a "game of staying a step ahead of the other guy." The technological components of NCW, which includes automated command and control systems, must be integrated if the concept is to be truly useful. This appears to be happening if one is to consider the development of Russia's C4ISR complex into a complex designed to deliver an information-strike (see Chapter Seven on Russia's C4ISR concept for details). The weakness in the NCW system, Burenok adds, is whether information streams can be interdicted. [366]

Colonel Yury Gorbachev wrote that NCW is a reality. However, he added that "only a combat command and control system of one or another military unit can be represented as such [here he means as a model of a war]. It is all the more so for the fact that a war is not 'a ramified network of well-informed but geographically dispersed forces;' rather it is their combat employment and information support for them in a campaign or operation."[367] Therefore his opinion lay somewhere between an advocate and a protagonist.

Gorbachev noted that a qualitative transformation in information technologies is causing a fundamental change that is affecting weapon systems, combat equipment, and control systems. This in turn leads to changes in military affairs as a whole and to new forms and methods of combat operations. These operations are directly affected by the new amounts of information that are used in making fast and precise decisions. Real-time information reflecting the operational situation at a given moment is now crucial to success or failure. Contemporary problems affecting a commander's decision process include:

- The growing dynamics of combat operations
- The growing chance of waging "stand-off wars"

- The growing chance of control systems becoming disabled
- The chance of information becoming distorted or disrupted
- The decreased reliability of separate platforms along with low carrying capacity
- Inadequate mobility
- The tension between centralized command and lower level initiative
- The brevity of instructions versus portraying a complex situation
- The issue of prioritizing objectives versus choosing ways and means. [368]

These problems can be reduced if not alleviated in some instances by the use of command and control techniques. Gorbachev writes that NCW is a reality, not a myth, but it is really a new form and method of command and control using integrated information space formed in near-real time.

In closing Gorbachev asks how Russia can disorganize the command and control assets of a potential adversary who uses this concept. In answering his own question he notes that it is necessary

To adopt measures in order to improve the systems and assets of reconnaissance, electronic warfare, communications, command and control, and weapons and to develop information weapons and directed energy weapons capable of disrupting the operation of automated databases and computer networks and disabling the main enemy command and control and reconnaissance components.[369]

Protagonists within Russian military circles debated whether the NCW concept could be realizable before lasers or nanotechnologies become the next big element in the ongoing revolution in military affairs. If leaders gamble and wait for the latter to appear, the interim period of stability must be filled with some type of asymmetric (unexpected) response to offset the NCW advantage. For the short term, the asymmetric response appears to be a combination of electronic warfare and inserting disinformation into information flows, causing enemy forces to make decisions based on bad information. Otherwise competing nations will continue to get just that much further ahead of Russia.

One NCW protagonist who wrote for *Voennaya Mysl'* (Military Thought) in 2010 is Colonel B. I. Kazar'yan. He writes that war is "not a network phenomenon. It is impossible to embrace military actions of the warring sides by a uniform network; it does not correspond to the essence of war."[370] Kazar'yan believes NCW emasculates the essence of armed adversary engagement.[371] The interdependence of processes, conventions, and the use of probability, correlation, and other assessments of events are not taken into consideration. As a result the subjective factor is belittled[372] since NCW is almost "unmanned." The concept regarding the forms and essence of control is not included, and data content is fragmentary and superficial.[373] Kazar'yan offered several new definitions and concepts: network-centric warfare, network-centric operations, network-centric military actions, fire and strike net-centric contour, the network-centric principle "located—crushed," network-centric control, network-centric planning, and network-centric specific feature. Kazar'yan concluded his article with this paragraph:

Philosophers and experts on informatics assert that the concept of NCW is a new philosophy of war. Philosophical views on war alone are not enough for preparing and waging military

actions: the knowledge of the laws and principles of waging armed struggle is necessary. And this is a subject of military science. This is why network-centrism in new conditions will become a new specific feature of work of commanders and headquarters on organizing the use of forces in operations. But emphasis on it will not exceed the significance of organizing command and control, interaction, and the conduct of combat actions as a whole.[374]

Kazar'yan thus does not exclude the NCW concept completely but minimizes its importance.

Work is proceeding on command and control issues. A significant number of articles were published on the topic over the past ten years, indicating that this topic was more germane to correcting shortcomings in the Russian military. Of course, the latter topic is a key element of NCW and should occupy a central place among theoreticians and decision-makers. General Nikolay Makarov, Chief of the General Staff, wants Russia to have a new command and control system in 2011 that is a part of the network-centric concept. The military complex responsible for the system is the Sozvezdiye concern.[375] Seven months later, President Medvedev offered a more realistic timeframe for developing a new command and control system, noting that before 2012 Russia's armed forces must replace its analog communications with digital means.[376] The switch to a true network-centric system where command and control assets are integrated into a single information space will not occur until 2015 according to Makarov.[377]

Some analysts believe that NCW was a major part of Defense Minister Serdyukov's reform effort, tying the abandonment of the division structure and development of brigades to NCW as the US has done. This argument makes a lot of sense to the current generation of leaders and may well be the case as to why Russia is emphasizing this concept for its current leadership. The concept is opposed by many of the officers of the generation who served in the 1980s and 1990s. Chief of the General Staff Nikolay Makarov, in early 2010, stated in a speech at the Academy of Military Science that the network-centric warfare concept is a new means of command and control using a single integrated information-communication space formed in near real-time. NCW makes it possible "to shift away from a war of attrition to fast moving and more effective military operations characterized by rapid and flexible troop actions, rapid fire damage and self-synchronizing actions of troops and their command and control." [378]

Makarov listed three aspects of network-centric warfare. First, that troops quickly achieve information superiority via the reception of relevant information, through an understanding of the battlefield situation, and through the identification of friendly advantages and the adversary's disadvantages. Information superiority in technological terms is achieved through the adoption of new command and control, monitoring, intelligence gathering, reconnaissance, computer simulation, and information warfare systems. Second, it is necessary to implement the "massing of results rather than forces" principle thanks to information superiority. Finally, an information attack denies the adversary the opportunity to conduct successful operations and sends him into a state of shock. During the period under consideration, combat will therefore differ significantly from the military operations of past wars and from classic front operations. [379]

However, research continues in this area. In October 2009 at the Ladoga-2009 exercise, journalist Olga Bozhyeva noted that the exercises were held to "study the transition to a new system of Armed

Forces command and control based above all on a transition to the system of netcentric warfare."[380] In mid October 2010, Russia tested its automatic command and control system with maneuvers designed to "help assess the command's ability to control the brigade's units using a new unified command system."[381] The exercise was conducted a day after Communicator's Day, which falls on 19 October. On this holiday journalists were shown the First Communications Node of the Russian Federation's General Staff, a part of the command and control system of the armed forces. It ensures the exchange of information between the Defense Ministry leadership and the General Staff. The node has a 24-hour watch system that monitors command calls and issues written instructions. [382]

In addition, the Russian armed forces expect to have in place a satellite group with advanced signal processing capabilities by 2020, a plan to replace all radio stations by 2011-2014, and a plan to have mobile communication centers in military districts and special troops by 2013.[383] Again, the implementation dates for these updates indicate that Russia has a long way to go to implement Serdyukov's reform effort. But Prime Minister Putin is vocal in his support of implementing a true overhaul in the command, control, and reconnaissance systems of the Russian military. His support, especially the financial aspect, may be the most important push behind the success or failure of the project. Regardless, the NCW concept appears a few years away from complete implementation.

The Impact of Putin

One of the clear motivators for Russia's military to develop new technologies and equipment has been the personal involvement of Prime Minister Vladimir Putin. Putin has chaired conferences and meetings on modernizing the force. Space, reconnaissance assets, information technologies, command and control equipment, and Russia's Global Navigation Satellite System (GLONASS) have all been areas of concern to Putin. His attention to detail in this regard even includes examining closely the defense sector's research and development results.

Another motivator has been the focus of Defense Minister Anatoliy Serdyukov on the same issues. Serdyukov obtained an advisor with the status of deputy minister for information and telecommunications technologies. That advisor was Dmitriy Chushkin. Chushkin is responsible for "increasing the effectiveness of the command and control system as well as supporting and developing the basis of the command-and-control system." [384]

Putin's interest in rejuvenating Russia's military-industrial complex began, of course, while he was President. At one point he formed a high-technology council composed of leading designers, scientists, and other experts. Council tasks included analyzing and formulating recommendations for structural, innovational, and scientific technical policy; and for using Russia's industrial potential to develop the economy. The council also reviews technical, investment, and other programs, drafts, and proposals of the government. [385]

One area where Putin has recently made a serious impact is in automated troop command and control systems. The Prime Minister visited Voronezh in January 2010 to take part in a special conference designed to provide the armed forces with new technologies and equipment. He was in a serious mood as he had initially signed a directive to develop such systems in 2000 and very little work had transpired in the ensuing years. It was reported that he met with researchers at the

communications scientific research institute, an enterprise associated with the Sozvezdiye (Constellation) concern. It contracts orders for the development of unified troop command and control systems which enables the control flow of reconnaissance, command, geospatial, and target designation information.

Command and control equipment was identified as a major deficiency during the short August 2008 conflict with neighboring Georgia. The defense ministry immediately went to work to correct problems associated with this equipment. The modified equipment's first real test occurred during the exercise known as Kavkaz-2009 which took place in July 2009. Initial reports indicated that the tests did not go well since the system designated *Akatsiya* had persistent failures (of 280 computers and palm pilots, there were 140 equipment failures and only 12 were operator errors). *Akatsiya* (based on the 1998 vintage *Akveduk* satellite radio station) was the follow-on to the 1983 *Manevr* command and control system and the 2000 *Polet-K*.[386].

It was reported that the command and control system is composed of two parts: the *Akatsiya* automatic control system (it processes information from intelligence personnel and commanders) and the Sozvezdiye unified tactical command and control system (it sends out orders to units). The components display battlefield events in real time from unmanned aerial reconnaissance vehicles, reconnaissance teams, forward air controllers, and others. The system is designed to integrate intelligence. Currently each branch and combat arm has its own command and control system. Experimental field operations are also underway for the unified tactical-link command and control system or ESU TZ, created by Sozvezdiye. [387] It is the hope of engineers that the ESU TZ will double or triple a unit's capabilities and will reduce the time required to find and hit a target by a factor of 40. The system uses fifth generation ultra-short wave digital radio stations that oscillate 100 times per second, making it difficult to detect. [388]

Perhaps the most intriguing aspect of Putin's command and control modernization effort is the amount of money allocated to the project. General Staff Chief Nikolay Makarov stated in late December 2010 that the armed forces intended to spend R300 billion (a little more than 10 billion dollars) on a phased command and control system update to be completed by the year 2020.[389]

The Development of Information-Based Weaponry

Russian military leaders plan on providing the armed forces with high-technology weaponry. This means equipping missile, artillery, and tank complexes with precision armaments or with new friend or foe identification systems. Prime Minister Putin went a step further in 2009, stating that Russia should develop offensive strike systems as well.

Chief of the General Staff Nikolay Makarov discussed one crucial area of interest. He noted in September of 2010 that Russia continues its efforts to develop laser weaponry. Intended for mounting on an Ilyushin IL-76 aircraft, this device is designed to counter adversarial reconnaissance systems. The system has undergone successful testing according to Makarov.[390] Such pronouncements indicate Russia is not only interested in laser research but turning research efforts into actual products. In Soviet days the Almaz, Altair, and Raduga design bureaus were famous for their work on combat lasers and that interest and expertise has continued up to today. Ruslan Pukhov, director of the Moscow-based Center for the Analysis of Strategies and Technology, noted that it would be foolish to

abandon technologies where potential adversaries rate you highly.[391]

It should be remembered that the USSR had instituted its high frequency active auroral research program (HAARP) in 1981 at its Sura facility. With Russia's current fear of US advances in HAARP technology, it would not be surprising to find ongoing research dedicated to developing similar technologies. Russian suspicion of US programs has evolved to the point where some writers have accused the US of using its X-37B unmanned spaceship to start the forest fires in Russia in 2010. [392]

Another area worthy of further watch is unmanned aerial vehicles (UAVs). Vladimir Putin signed a directive in 2009 establishing the Vega concern which was to develop UAVs. Reports indicate that over twenty Russian-made drones were tested at a range recently.[393] Usually Russian drones fall into one of three categories: tactical, strategic-operational (reconnaissance), or attack. They may conduct reconnaissance or attack missions during conflict or monitor gas or oil pipelines or Russia's borders during peacetime.

The Istra Experimental Mechanical Works is building an electronic warfare UAV[394] while several design bureaus are involved in the process of developing drones for the monitoring and attack missions. The Luch Design Bureau produces the *Tipchak* reconnaissance system. The Kulon Scientific Research Institute is producing the *Aist* UAV, a system upon which the *Yuliya-E* UAV is supposedly based (the latter being the designated transmitter for the *Iskander* missile complex). The Tranzas Company produces the *Dozor-600* UAV, which is often compared to the US Predator. The Bespilotney Sistemy Company is the designer of the *Zala* UAV. Several other companies in Russia are also in the design business, so UAVs at the moment are a growth industry. The *Pchela*, *BLA-07*, and *Story-PD*, among others, are also well-known Russian UAVs. However, from time to time Russia either buys or attempts to buy Israeli produced UAVs so all is clearly not well within the industry. The most advertised purchase was the sale of the Israeli *Machatz-1* UAV.

Conclusions

Russia is in the process of integrating information technologies into its policies and doctrines. Evidence of this fact is reflected in the content of national security documents and in the discussions that military leaders are conducting on the pages of military publications. A closer look at the term information warfare is also underway. Russia's leaders recognize that future wars will be characterized by changes in geopolitical competition and in the developing structures of armed forces around the globe.

Network-centric warfare and command and control technologies are two areas in which Russia is devoting focused attention. Russia's leadership recognizes that these issues are key to maintaining parity in the technological development of not just Russia but for any country. Prime Minister Putin went a step further in 2009, stating that Russia should also develop offensive strike systems.

Russia has stated that the federal budget on defense will rise by 41% between 2011 and 2013. [395] Much of this increase is expected to be spent on informatizing the military, whether it be through command and control allocations or through money spent on protecting the space above Russia (atmosphere, ionosphere, and magnetosphere). Russia needs the investment in defense

according to its leaders. President Medvedev has indicated as much as 85% of military communications technology is outdated.

Other areas of investment will be command and control capabilities, UAVs, precision-guided weaponry, and the GLONASS system of satellites, upon which much of the infrastructure depends. These are not easy fixes. It will take time to implement Medvedev and Putin's plan. But the plan is at least underway with Defense Minister Serdyukov's push.

Finally, some analysts believe that information space has become a theater of military operations which is influenced by all of these developments. Whether Russia writes more on this topic remains to be seen.[396] Regardless, progress is being made in informatizing the military but a long road appears to be ahead of Serdyukov and his cohorts in the Defense Ministry even with the military-industrial complex operating at full speed.

CHAPTER SEVEN: RUSSIA'S NEW C4ISR: THE INFORMATION-STRIKE SYSTEM

All other things being equal, victory will be won by the side which has the greatest deep reconnaissance capabilities and advantages in long-range weapons systems with information links to reconnaissance, target designation, guidance, and command and control systems forming precision weapons systems.[397]

Introduction

Evidence accumulated from a survey of Russian military periodicals indicates that the Russian General Staff has worked feverishly on new-generation weaponry concepts for the past two decades. One of the focal points of their research was the reconnaissance-strike complex, close in approach to the US concept of command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR). The reconnaissance-strike complex conducts operational and perhaps even strategic missions. For example, a former chief of the Main Operations Directorate of the Russian General Staff, Colonel General Viktor Mikhaylovich Barynkin, wrote in 1996 that operational goals are now achievable just by the use of reconnaissance-fire operations (battles).[398] His comments acknowledged that Desert Storm and other recent military operations demonstrated to Russian theorists a cardinal revision of battlefield priorities. These included changes in the structure and importance of the services of the armed forces, their technical equipment, questions of command and control and personnel training, and the forms and methods of fire engagement. These changes enable the further development of precision-guided weapons.

Russian Major General (retired, now deceased) Vladimir Ivanovich Slipchenko, writing on future war in 1999, noted that any state unprepared to wage "new-generation" [399] war will be forced to absorb the impact of an integrated precision weapon strike and electronic warfare operation. The precision strike represents a combination of reconnaissance and command and control weapons whose target kill effectiveness, according to Slipchenko, sometimes can surpass even that of tactical nuclear weapons. [400]

These observations reflect the evolution of Russia's reconnaissance-strike and fire planning. In the past, this activity was called either the reconnaissance-strike complex (razvedyvatel'no-udarnnyy kompleks or RUK) or the reconnaissance-fire complex (razvedyvatel'no-ognevoy kompleks or ROK). At the start of the new century Russian theorists added the reconnaissance-strike system (razvedyvatel'no-udarnaya sistema or RUS), the reconnaissance-fire system (razvedyvatel'no-ognevaya operatsiya or ROO)[401] to the RUK and ROK concepts. In 2009 two new concepts, the information-strike system (informatsionno-udarnaya sistema or IUS) and the information-strike operation (informatsionno-udarnaya operatsiya or IUO), were added to the inventory.

The discussion below explores the steady development of these concepts and serves as a reflection of contemporary military-technical changes and their resulting impact on military art. The polemic underscores Russia's interest in developing effective reconnaissance- and information-strike concepts to help them wage "new-generation" wars. The really significant section of this chapter is the discussion of the information-strike and information-operation in the section titled "The Information-Strike System or IUS." Readers interested in the future of C4ISR in Russia should pay particular attention to this section.

Background: Shifting from Complexes to Systems

One early definition of RUK and ROK is found in a 1985 Soviet-era issue of the journal <u>Voyennyy Vestnik</u> (<u>Military Bulletin</u>). Information in the article was attributed to foreign sources, a common Soviet practice to avoid revealing tactical-technical characteristics of their own systems. Authors M. Belov and V. Shchukin defined these terms in the following manner:

If the strike element destroys the target by fire (for example with conventional or rocket artillery), the complex is called a reconnaissance-fire complex (*razvedyvatel'no-ognevoy kompleks* or ROK), while if it does so by a missile strike (tactical or army aviation, tactical or operational-tactical missile launchers), it is called a reconnaissance-strike complex (*razvedyvatel'no-udarnyy kompleks* or RUK). Therefore reconnaissance-fire complexes are more of a tactical command resource while reconnaissance-strike complexes are operational command resources.[402]

A strike as used by the Russian military refers to a massive, simultaneous attack that is like a hammer and carries strong psychological overtones due to its destructive nature. Fire, on the other hand, is more rhythmic and takes place over a period of time. Thus ROK appears as a conceptual stepchild to RUK, with the latter much more mature and massive in nature.

One of the earliest formal definitions of RUK is located in the 1986 Soviet <u>Military Encyclopedic Dictionary</u>. It served for many years as the Soviet and then Russian official definition of the term. RUK was defined as:

A foreign term, abbreviated 'RUK'. An integrated system that combines in a single system both long-range precision weaponry and the combat assets that support it (reconnaissance, target designation, navigation, information processing and imaging, communications, and commands).

Two types of RUKs are being developed in the United States, the Position Location Strike System (PLSS), and the Assault Breaker (named after a program). The PLSS RUK is intended primarily for reconnoitering and destroying enemy air-defense radar stations in a band about 300-360 miles wide. It is also used to combat other electronic assets and non-radiant targets... The RUK Assault Breaker is intended primarily for engaging two echelons of enemy tank groups at a depth of up to 120 miles from the line of troop contact and for guiding strike aircraft and operational-tactical missiles to hit moving and non-moving group targets (each target may contain up to 10-12 armored vehicles).[403]

Colonel V. G. Reznichenko, in the 1987 Soviet book <u>Taktika</u> (<u>Tactics</u>), pointed out that foreign specialists considered RUK as the most effective way to employ high precision weapons tactically. These complexes could detect, track, and destroy targets in real or near real time. [404] Reznichenko indicated that RUK was intended for use against radio wave emitting targets (objectives), and it was capable of destroying 150-180 targets in one hour. He wrote that the U.S. Armed Forces' Assault Breaker, the first practical attempt to create a precision weapon system in the US military, improved that capability. It could destroy and annihilate a group of armored targets at a rate of 150-300 per hour.

RUK subsystems usually included four integrated components according to Reznichenko: an automated reconnaissance and guidance system; a mobile ground control center; high precision weapons; and a system for precise determination of the locations of the system's components. A mobile ground control center for a RUK contained automated equipment that gathered and processed reconnaissance data and generated commands to guide the warhead (missiles) to the target. The fire control point used automated systems to generate fire information for artillery and rocket batteries. High precision weapons included in reconnaissance-strike complexes were homing and guided surface-to-surface and surface-to-air rockets and guided cluster bombs containing homing devices. [405]

In a January 2000 article in *Morskoy Sbornik* (Naval Digest), Captains First Rank (equivalent of a US Navy Captain) O. Berezin and B. Antonenko offered a more detailed discussion of reconnaissance-strike definitions, defining both complexes and systems associated with reconnaissance-strike activities. They defined a weapons complex as "a single combat module with a specified purpose; an asset for the equipping, supporting, and training of personnel: a class of armaments." A weapon system was defined as "an aggregate of several combat modules of a single or various specified purposes and consisting of the following: a part or nucleus common to all modules; components that serve each type of weapon; the means for equipping, supporting, and training personnel: a class of armaments." [406]

Berezin and Antonenko did not define any "fire" related terms, focusing on only "strike" terms: a reconnaissance-strike (defense) weapons complex and a reconnaissance defense/strike weapon (s) system. The former was defined as follows:

Reconnaissance-strike (defense) weapons complex (*razvedyvatel'no-udarnyy [oboronitel'ni]* compleks vooruzheniya)—an integrated weapons system consisting of precision weapons that are either offensive or defensive and are combined into a single automated system; the system

uses information-guidance means to seek, detect, target and strike an enemy in real time: a subclass of armaments. Examples include the US Position Location Strike System (PLSS), the Assault Breaker, and several kinds of anti-aircraft missile systems.[407]

This RUK concept appears capable of performing almost every mission for the Navy from surface to surface attacks to surface to air missiles (SAM) and anti-submarine warfare (ASW) defense.

The reconnaissance-strike system was defined in a slightly different manner:

Reconnaissance defense-strike weapon(s) system (*razvedyvatel'naya oboronitel'no-udarnaya sistema vooruzheniya*)—a weapons system with precision and non-precision weapons that are defensive or offensive in nature and consisting of several types; similar in its organization and construction to a reconnaissance-strike (defense) system: a sub-class of armaments. For example, the weapons system of a large-capacity combat ship. Their defensive and strike weapons can wage effective combat against air, underwater, surface, or coastal targets.[408]

This concept does not appear to have a surface to surface role, only air defense artillery (ADA) and ASW.

As can be surmised from the discussion above, Russians debate the actual wording of these concepts. The reason for that debate is highlighted in the next section.

The RUK/ROK to RUS/ROS Evolution: Was it due to the Gulf War?

The rapid technological development and integration of precision weapons, reconnaissance assets, and command and control systems forced armies worldwide to reexamine many of their operating concepts. One of the catalysts for this reexamination was the Gulf War. Russia's analysis of this conflict found that the RUK (reconnaissance-strike complex) concept had been "intellectualized" (or *informationized*) due to advancements in automated control systems and combat support systems which assisted the multinational force fighting against Iraq. First, these advancements helped the force make decisions almost in real time. Second, advancements allowed the force to integrate these systems into a single reconnaissance, command, and engagement system which encouraged the development of the RUS (reconnaissance-strike system) concept.

There are two methods of conducting a fire engagement, the selected-target engagement (engaging targets of one or more vital combat systems) and the area-point engagement (engaging targets by reconnaissance-fire systems at each troop level in its zone of responsibility). Russian experts presumed that the precision fire engagement (*vysokotochnyye sredstva ognevogo porazheniya or VSOP*) would represent the evolution of these concepts. It would have an operational-strategic or even strategic character.[409]

Another catalyst that catapulted the RUS ahead of the RUK was the revolution in military affairs (RMA) under discussion at the time. Russian analysts saw the revolution as transforming warfare from a struggle of forces and means into a contest between systems. The term military systemology, in wide use among Russian military systems analysts, describes the super-large, dynamic, complex systems under consideration. The method of systemology, in fact, stands traditional analysis on its

head, emphasizing complexity and the need for models based on dynamic, evolving, self-organizing systems and emphasizes a shift from modeling combat as force-on-force to system vs. system.[410]

The RMA's influence was most apparent in new means of automated control of weapons systems due to reconnaissance and electronic advancements. The combination of advanced automated command and control systems and reconnaissance fire and strike systems negated conventional correlation of forces methodologies (a force on force comparison of numbers) of the Soviet era by making possible precision fire throughout the depth of enemy dispositions across a theater of military actions. This change also was reflected in the literature of the time. For example, one source described the tactical-technical characteristics of precision weapon complexes and the means and methods to combat them. The discussion centered on how to use active and passive means to confuse, disrupt, and destroy the aiming system of the weapon, that is, how to reduce the weapon system's accuracy.[411] General Slipchenko added another reason for the development of the ROS/RUS concept—the appearance of strategic non-nuclear forces in a number of states. The weapons of these forces include UAVs and long, medium, and short-range precision cruise missiles according to Slipchenko.[412]

Discussions in the 1990s

Advancements in the systems approach was also reflected in military journals of the mid 1990s. In a 1995 *Voennaya Mysl'* (Military Thought) article, Major General V. A. Denisenko, Colonel Ye. I. Suvorin, and Major P. S. Romanov defined RUS as "carrying out in-depth effective engagement and broad maneuvers of strikes, which is the main factor between success and failure in the struggle for gaining and maintaining fire superiority over the enemy." The Missile and Artillery Troops of the Russian Ground Forces believed that such a mission would be assigned to integrated reconnaissance-strike complexes (RUK) to ensure autonomous reconnaissance of targets, among other issues.[413] This could imply that the "complex" is a sub-component or element of a system since a weapon system is defined as "an aggregate of weapons (complexes)..." (see footnote below)[414] Thus more than one RUK may be located within the RUS, and the RUKs can retarget. Maneuver by ground forces is replaced by maneuver by fire throughout the depth of deployment under such a concept.

There were RUK challenges to overcome in 1995. First was the ability to identify targets accurately, quickly, and reliably. This requires high-resolution radar and a missile equipped with an intelligence guidance system (*intelektual'naya sistema upravleniya* or ISU). A second problem was the time to prepare and launch such missiles. Third, to engage moving targets, the missile's artificial intelligence control system must make optimum decisions to destroy a target. [415] To strike highly mobile targets the ISU must make in-flight corrections.

The RUK had three parts to its integrated intelligence command and control system in 1995. First was the command post that classifies targets (forces, weapons, and combat units armed with precision guided munitions or PGMs) for destruction based on data from various reconnaissance platforms. The second part was the integrated intelligence control of the high-precision missile system of the RUK, which has two subcomponents: an intellectual launcher control system and an intelligence guidance system located on the high-precision missile. The former is responsible for the preparatory technical diagnosis of the launcher, and the latter is responsible for missions while in flight (control over the ISU's subsystems of flight control, target identification, and missile guidance

near the target). The third part of the RUK was the combat support operation section. [416]

The intelligence guidance system (ISU) subsystem enabled RUK to initiate an algorithmic antimissile maneuver sequence should an enemy attempt to shoot down the missile. When a target is identified, the missile's flight path is adjusted. If a target is not spotted, the ISU will search for another target in the area and retarget the missile, selecting the most important target. The integrated reconnaissance-strike complex thus allows decisions to be made in real time, the quality of command and control is increased, and all means of reconnaissance, engagement, and other factors are integrated into a single system. It ensures the move from automation to "intellectualization." [417]

In 1998 Colonel General M. I. Karatuyev, commander in chief of the Russian Missile and Artillery Forces of the Russian Federation, discussed the RUS concept. He stated that the timely communication of reconnaissance target data is key to engaging targets effectively. This will require the organization of reconnaissance, strike, and EW assets (and their effective interaction) in a reconnaissance-EW and strike system within a combined arms formation. The point of the system, Karatuyev noted, is to make optimal decisions on engaging targets effectively.

Slipchenko noted that

Reconnaissance-strike combat systems (RUS) based on space reconnaissance/information systems as well as on ground, sea, air, and space-based precision weapons will find wide use in future armed warfare. They will deliver effective strikes to the full depth of enemy territory against fixed radio-frequency-emitting and heat-emitting economic installations, aerospace defense assets, as well as targets clearly visible on radar. [418]

There were other opinions offered on varying aspects of reconnaissance issues. For example, asked to mathematically demonstrate the integration of complex and system processes that lead from "detection to kill" in near real time, one Russian scientist offered the following:

Destruction capability = exposure of an object (via satellite or reconnaissance asset) x strike assets precision and speed of its components [419]

Acquiring and fixing the enemy in a manner compatible with this formula is a priority item. Even a cursory look at Russian military writings underscores the importance placed on the acquisition of the enemy's location, followed by fixing the enemy through fire means. As one analyst noted:

The increase in fire capabilities of the troops, the appearance of high-precision weapons, and the development of various types of guided missiles are objectively increasing the role of reconnaissance and command and control systems. In conditions when the likelihood of hitting targets with the first shot or salvo is approaching 1, reaction speed is becoming a paramount factor. The main targets of battlefield reconnaissance are enemy artillery and armored equipment. [420]

The Reconnaissance-Fire Operation (ROO)

Colonel General Barynkin noted that based on the importance of the ROS, future fire engagements

may take on an operational-strategic or even strategic significance. The large-scale employment of PGMs will be coordinated by automated command and control systems that use artificial intelligence. This allows for the introduction of the reconnaissance-fire operation (*razvedyvatel'no-ognevaya operatsiya* or ROO). The ROO is the "aggregate of simultaneous and successive air, air defense, and fire battles, engagements, and strikes coordinated and interrelated in terms of goals, missions, place, and time and conducted jointly under a common concept and plan by groupings of reconnaissance, fire engagement, and EW personnel and assets on one or several strategic axes for purposes of crushing the enemy by fire."[421] The most important goal in the reconnaissance-fire operation will be to crush or to weaken groupings poised for combat especially in the initial period of war. Precision weapon capabilities indicate that fire engagement methods will shift from successive engagements to simultaneous, continuous engagement throughout the full depth of the enemy. Strategic and operational-tactical means of long-range fire engagement and maneuver by fire will play the leading role in the defeat of enemy forces while maneuver tactics of ground forces will play a secondary role. [422]

Fire Destruction of the Enemy

The Russian concept "fire destruction of the enemy" (*ognevoya porazheniya protivnika* or OPP) is a special topic of Russian military thought closely associated with the reconnaissance-fire and strike systems. Russian theoretical research in fire destruction norms and capabilities has focused on raising the effectiveness of control during the course of military activities. This focus is necessary due to the increased volume of impromptu fire missions; the rigid time limit allotted for decision-making and mission clarification; the increased intensity of information flows among various troop command and control elements; the dynamically changing situation; and the limited amount of assets allocated for addressing OPP missions.[423]

The OPP concept received much attention on the pages of the Russian journal *Voennaya Mysl'* (Military Thought) in the mid 1990s. The journal carried seven articles on OPP from 1994 through 1996. The discussion covered such aspects as whether fires should be zonal or target oriented and how they can be integrated into successful combined arms combat. One article noted that effective OPP "mainly depends on how quickly information from reconnaissance agencies is transformed into command and control decisions that impact on OPP assets." [424] Another article noted that OPP can be used on many levels, from the strategic to the tactical. For example, where there is superiority in long range weapon assets and time to achieve specific military-political objectives, OPP can target an enemy's military-economic potential, as well as combat systems underlying its operational stability. The reconnaissance-strike operation (ROO) would be used to accomplish this objective. It was developed for a large-scale war as a form of employing a prototype combined-arms reconnaissance-strike system. The ROO could last from a few weeks to a month or longer. [425]

General Colonel N.M. Dimidyuk, Commander in Chief of the Missile Forces and Artillery of the Ground Forces, concluded the OPP discussion in <u>Voennaya Mysl'</u> (<u>Military Thought</u>). He cited the importance of OPP by drawing attention to its essence and content, noting that "under present conditions OPP cannot be separated from the EW suppression of enemy command and control, information, and reconnaissance systems and networks." [426] This has led to the emergence of OPP as "one decisive factor determining the course and outcome of an operation and often times of war as

a whole..."[427]; and to the use of OPP assets to "disrupt enemy troops and weapon command and control systems at the very start of an operation, to inflict a decisive defeat on the main enemy forces and logistical installations, and to seize and maintain fire superiority..."[428] through their coordinated and massed use while attaining surprise. The main task is

coordination of the OPP plan with the operation's objective, concept, and design, which can be achieved only in the event that OPP planning is carried out by an operational (combined-arms) staff command and control agency: the OPP planning and coordination group (OPP PCG)...This will shift the center of gravity in OPP planning to the operational level...[429]

Dimidyuk concluded that "it is appropriate to use a single indicator that has a graphic physical interpretation and is easily integrated into the operational criterion used in operation planning: the force incapacitation rate expectation. It should objectively reflect strike, reconnaissance, maneuver, and other capabilities of the forces in question that characterize their striking power in an offensive and their operational sustainability in defense." [430] In this sense not enough has been done to substantiate the requisite correlation of the sides' forces in operations of various types and scale, when the combat capabilities of the forces are expressed through their combat potentials.[431]

The OPP discussion indicates that the most important targets identified through a study of military art are those battlefield systems that work in tandem to first uncover and then destroy an object, the reconnaissance-strike and reconnaissance-fire complexes and systems that make up the ROO.

Interestingly no stand-alone reference to a reconnaissance-strike operation (RUO) was discovered in the literature search. A RUO would indicate an operational-strategic strike operation (perhaps against a nation's economic infrastructure) as compared to a ROO, a tactical-operational fire operation. Instead, the RUO appeared to be integrated into the ROO concept. The latter concept states that the ROO is the aggregate of fire battles and strikes.

The 2000-2010 Debate on the Evolving Nature of the RUS and ROO

In 2003 a few Russian officers began to discuss the necessity of compiling a better information collection system for the RUS. Without such information effective strikes could not be delivered. The following discussion is based on their proposal.

The proposed system was deemed the "reconnaissance-information field" and was defined as "the sum total of reconnaissance information in an area of responsibility of a specific system (subsystem) of reconnaissance forces and assets. The essence and content of a reconnaissance-information field are either cue- or object-based."[432] Output from a strike oriented reconnaissance system is used for decision-making on the conduct of strikes against target locations. Missions, tasks and capabilities, geographic and climatic features, operational-tactical standards of friendly and enemy troops, views on the conduct of modern operations, and the current concept of organizing and carrying out strike-oriented reconnaissance help determine the content of a reconnaissance-information field. [433] These issues also indicate the rationale behind the operational strength and organizational structure of such reconnaissance units.

Cue-based reconnaissance-information fields are forecasted based on modeling a potential

opponent's combat operations. The model should

determine the location, condition, and nature of the operation of the adversary's targets in time and space down to a single item of materiel or a single weapon by taking into account the adversary's organizational structure, operational-tactical standards, and functioning and deployment principles for forces and assets and the physical-geographical reconnaissance conditions. [434]

Information compatibility issues arose as a significant problem area. For this reason in 2004 Colonel V. L. Komoltsev and Colonel P. I. Mikheyev discussed the requirement to create a reconnaissance-fire system (*razvedyvatel'no-ognevoy sistemy* or ROS) absent of information compatibility issues. They proposed an automated control system that would support internal information integration. This would require an information service that would exchange data on a planned basis; the replacement of existing manuals for ensuring information compatibility; an analysis of the software created by Defense Ministry research establishments and defense complex enterprises; the research and development of information-linguistic software for data exchange inside systems; and the equipping of designers with modern certified software. [435]

In 2005, Colonel S. I. Matveyev discussed the transformation from the RUK/ROK organization to the RUS/ROS. Reconnaissance-fire systems (ROS) will have high mobility and will be capable of attacking targets three to seven minutes after detection with a fifty percent destruction potential. In future operations, an *obshchevoyskovoy razvedyvatel'no-ognevoy sisteme* (combined-arms reconnaissance-fire system or OROS) will be developed. The delivery of fires will be simultaneous and not sequential and planning and target engagement will be continuous. [436]

In 2006, a specific set of tasks were offered as the main methods for improving the reconnaissance-fire operations of missile and rocket forces. They were to develop digital processing of reconnaissance data; to introduce new information technologies; to develop reconnaissance assets to employ several detection channels; and to increase the secrecy of reconnaissance operations. [437]

In 2007, Colonel General Vladimir Zaritskiy, chief of the Missile Troops and Artillery, noted that in the future his troops will meld with reconnaissance-fire systems and create a reconnaissance-fire-system configuration that includes all combined-arms levels from battalion to joint formations. This will lead to new principles such as the reconnaissance-strike-maneuver as well as the reexamination of topics such as exhaustion and suppression when destroying targets. [438]

In 2009, Major General Andrey Glinskiy, the Missile Troop and Artillery Commander of the Far Eastern Military District, stated in an interview that the most serious task for his troops remained obtaining and integrating modern reconnaissance and command and control systems into weaponry. He hoped that unmanned aerial vehicles (UAVs) such as the Tipchak, first introduced in 2008, would significantly increase the size and accuracy of his zone of reconnaissance. Glinskiy noted that since conflicts are changing from strictly contact to favor non-contact activities, that reconnaissance-fire methods featuring deep strikes have become more important. Reconnaissance-fire systems will encompass all combined-arms levels, from battalion to combined formations, and will include such principles as reconnaissance strike-maneuver and salvo-target destruction. These systems will

increase a commander's independence and initiative within their areas of reconnaissance and may enable the operational centralization of all forces, weaponry, and equipment to resolve tasks in their areas of operation.[439]

Movement also occurred in 2009 in the development of new concepts and terminology. This move was influenced by the proposed nature of the use of armed forces in a future war, a move based on the preemptive possession of information, planning, and real-time control that would enable measured precision strikes and other activities. In early 2008, for example, four military officers wrote about a concept known as the operating contours of reconnaissance-strike activities (*operativnyy kontur razvedyvatel'no-udarnykh deystviy* or OKRUD). OKRUD is defined as

The integrated totality of various reconnaissance, software, strike, and countermeasure forces and hardware that are covered by a common, uninterrupted, automated control in close-to-real time. Integration creates continuity between the processes of reconnaissance of important enemy facilities; the transmission, processing, and presentation of intelligence data; and the identification, target indication, precision, and autonomous homing of guided weapons to top-priority targets. [440]

However, it was noted by the authors that OKRUD may not be called a network-centric or self-synchronizing system since its functions of target recognition and strike decision-making remained with representatives of reconnaissance and control bodies. [441] That is, they were not yet properly integrated into a complete system.

The four authors of the OKRUD article added that the components of OKRUD are attack weapons, software systems, planning complexes, and combat control, communications, and countermeasure systems and hardware. OKRUD identifies targets, determines the advisability and procedure for attacking them, assesses the conditions and capabilities of systems of attack, chooses an attack complex, and inputs data into a missile's onboard system. [442] Thus, OKRUD "can be viewed as a form of organization of joint action by various weapons for attacking important targets in conditions when initial information is not complete or precise enough and it must be refined in the course of the attacks." [443]

The Information-Strike System or IUS

Finally in 2009 three Russian military specialists discussed the progressive modernization of the reconnaissance-strike complex. They noted that the topics of range and accuracy were visible in the development of the following chain-like advancements: the reconnaissance-fire complex, the reconnaissance-strike complex, the reconnaissance-strike system, and, most notably, the information-strike system (IUS).[444] The latter was the result of the reconnaissance-strike complex acquiring a "new quality." Each of the elements of the chain was defined as follows:

- The reconnaissance-fire complex (ROK, range up to 30-40 kilometers, in the tactical zone) is a fast reaction, standalone, artillery complex where reconnaissance, weapons, automated fire control, and fire support complexes are integrated (for example, they are integrated in the unmanned aerial vehicle Pchela-1 and the Smerch multiple rocket launcher system).
- The reconnaissance-strike complex (RUK, range up to 200 kilometers, in the "operational

- zone") is an automated weapons complex designed for the timely detection and fire destruction of important enemy ground-based targets that use strike systems.
- The reconnaissance-strike system (RUS, range up to 500 kilometers [sometimes greater], in the operational-strategic zone) is the aggregate of strike and support automated weapons and military equipment complexes.
- The information-strike system (IUS, range over 500 kilometers, in the strategic zone) is an automated weapon system designed for the highly-effective destruction of one, several, or many facilities/targets using precision-guided strike weapons at great distances in accordance with the operations plan or its concept of operations. [445]

These changes in range and accuracy are made possible by the availability of satellites and other means of information-space support. This support allows for accurate target acquisition while Russian units remain outside of the kill zone of the enemy's traditional weapons. It also minimizes the importance of the old concept of theaters of military operations that were carved out under geographic considerations. Further, the interface between missiles and space-based systems that improves range and accuracy is not restricted in any manner by existing treaties. Past arms control treaties have only addressed the number of missiles, their flight range, and speed. [446]

The three military officers who wrote the article on IUS noted that the sequence of operations in future wars will start with a preemptive information war to gain supremacy in political, legal, psychological, and other non-military measures. Space operations will then precede air, naval, and land offensive operations directed at gaining supremacy in near-Earth space to ensure the functioning of Russia's orbital constellations. The main missions of space operations will be to destroy an enemy's space infrastructure and to disrupt their command and control. Once the supremacy of space information systems and independent military operations is assured in strategic space (meaning offensive missions will predominate to gain the initiative in war), it is then possible to consider defensive operations to defend information resources.[447]

These missions will be accomplished through the information-strike operation (IUO). The IUO is

The sum total of interrelated and coordinated operations based upon goals, missions, location, time, and techniques for the conduct of information strike battles, information-weapon engagements, and information strikes which are being conducted with the goal of disrupting the enemy troops command and control and weapon control systems and the destruction of his information resource. This is a new form of armed combat, the characteristic elements of which are information strikes which transition in combination with fire impact into information-weapon engagements and information-strike battles. [448]

The IUO will be important in helping Russian forces gain the initiative in the information sphere. This ensures troop and weapon complex command and control as well as reflexive command and control of the enemy. The latter concept enables the management and control of adversary battlefield perceptions.

The striking importance of this concept should not be overlooked. The Russian military may be considering operational-strategic strike operations against the information infrastructure and

resources of potential adversaries. Russia's desire to use the IUO as a reflexive control mechanism that manages the perceptions of enemy forces is another issue worthy of future study.

Conclusions

The preceding discussion indicates the thorough manner in which the Russian military is examining its C4ISR equivalent. It is composed of a series of confusing and overlapping terms, to include RUK, ROK, RUS, ROS, ROO, OPP, OKRUD, OROS, ISU, IUO, and IUS.

Over the past two decades there has occurred a steady evolution from the ROK/RUK to the ROS/RUS concept. The simple explanation for this progression is tied to two developments. The first was the development and adaptation of new technologies and concepts in the Russian system of military science. The second was the different situational context of the 1990s versus the 1970s. The RUK concept was initially introduced during the time that the Soviet military leadership envisioned nuclear combat even at the tactical level. This belief in the eventuality of a nuclear confrontation lasted until the mid 1970s, when the Soviet military decided that conventional battle was more likely. However, the chance of going nuclear remained. ROK was introduced to conduct the tactical fight at the conventional breakthrough level. RUK was still needed to deal with the operational-strategic fight and with the "conventional war under nuclear conditions" corollary.

With the introduction of a new type of weaponry, precision guided weapons, the ROS and RUS were introduced. Precision-guided munitions were conceived as possible counters to nukes. Whole battles between PGMs were envisioned in the 1990s when there was a desire to exploit new high technology systems and the digitized conditions of future war. Precision weapons enable strategic or strategic-operational results without troops ever crossing a border, as exhibited by the recent conflict over Kosovo. This motivated Russia to develop higher-level technical systems for use at the operational level of war. RUS and ROS appear to fit this requirement.

During the war in Chechnya, Russian troops experimented with reconnaissance-strike systems. As one analyst noted about the Chechen test range for new weaponry:

A qualitative leap was the appearance of the ability for automated, real-time determination of radio emission sources' coordinates, and [the ability] to use them for target reconnaissance and supplying targeting data for the artillery. In this way on the tactical and operational levels, in essence for the first time, prototypes of reconnaissance-strike systems were activated, significantly increasing the effectiveness of the fire destruction of the enemy. [449]

By 2009, however, a new system, the information-strike system, had been introduced along with the information-strike operation. Some Russian authors believe that "in the future, a space strike echelon which will independently accomplish combat missions and carry out combat support of the operations of a land-based troop grouping from space, could become a new element of the operational formation in a precision-guided battle." [450] For these and other reasons, Russia will continue to seek space and information supremacy. Information will become a topic of an independent military type of comprehensive support in the sphere of military activity. [451]

Clearly the information-strike system and information-strike operation are concepts worthy of

closer examination. They offer glimpses into future war countermeasures and control systems as well as theoretical insights into Russia's understanding of the evolution of military art. Also worthy of future study is the Russian concept of the reconnaissance-strike maneuver.

Other areas of consideration that Western analysts should seriously consider (repeated from the discussion above for emphasis) include the following:

- 1. The importance of the old concept of theaters of military operations that were carved out under geographic considerations has been minimized since targets can be acquired outside of kill zones. Further, the development of an information-strike operation indicates that Russian military planners are considering operational-strategic strikes against a potential adversary's information resources or infrastructure.
- 2. The interface between missiles and space-based systems that improves range and accuracy is not restricted in any manner by existing treaties. Past arms control treaties have only addressed the number of missiles, their flight range, and speed.
- 3. The sequence of operations in future wars will start with a preemptive information war to gain supremacy in political, legal, psychological, and other non-military measures. Space operations (perhaps the space strike echelon that can independently accomplish combat support and combat missions as part of an operational formation in a precision-guided battle) will then precede air, naval, and land offensive operations to ensure the functioning of Russia's orbital constellations. The main missions of space operations will be to destroy an enemy's space infrastructure and to disrupt their command and control. After the supremacy of space information systems is assured, it is then possible to consider defensive operations to defend information resources.

Thus, the conceptualization of future war by the Russian military involves interdicting and degrading precision weapons and their digitized navigation processes while continuing to increase the capabilities of Russian PGM systems. Maintaining space and information supremacy ensures that strategic deterrence will remain an important component of strategic stability as the years progress. It appears that Russia's system of military science is methodically moving the military forward and preparing it for future challenges and opportunities.

CHAPTER EIGHT: FROM RUSSIA, WITH ASYMMETRY: FUTURE WAR AND NANOTECHNOLOGY BATTLES

In our time we should add the third measurement to "Napoleon's Square"—informatics or computer science (which is based on the army and weapons automation support and control systems). Informatics is bound to sharply enhance intelligent and strong-willed activity capabilities. Thus, the square turns into a cube...[452]

Introduction

One of the most important aspects of Russian military science is its tradition of predicting the nature of future war. Future war predictions help determine the organization of Russia's armed forces and the types of weapons the organization will require.

This trend has continued after the fall of the Soviet Union. Russian scientists recognize that the forms and methods of armed struggles continue to change. It is now important to examine how new technologies have impacted war's conduct and duration; and how these technologies are affecting future war capabilities of potential opponents. For example, information technologies (IT) can temporally interfere with an adversary's coordinated moves over time as well as territory, presenting military leaders with new challenges and consequences to consider. [453]

The following chapter examines the past decade for Russian writings on future war forecasts. First the chapter examines the future war thoughts of several prominent Russian military scientists. Second, some asymmetric concepts that are being floated in the Russian press are examined. These concepts underscore Russia's methodology for confronting superior foes when they feel they are clearly inferior in terms of equipment and technology in future war scenarios. Finally, the chapter examines the emerging Russian concepts for the use of nanotechnologies, an area of specific interest to Russian futurologists. Asymmetrical approaches and nanotechnologies are important backdrop issues that influence a Russian military scientist's future war methods of operation, especially since the Russian military still considers itself weaker than China and the US in the military sphere.

A Look at the Thoughts of Prominent Military Theorists

Russian military scientists' are responsible for forecasting and projecting future threats to the country and for developing Russia's ensuing response. The examination in this chapter begins in 2002 and ends in 2010, covering a few selected works during this time span.

The background to Russian forecasting was discussed in a 2008 article in <u>Voennaya Mysl'</u> (<u>Military Thought</u>). Major General (retired) I. N. Vorobyov, one of Russia's most prominent military theorists, discussed work by Soviet authors from the 1960s into the 1980s on the topic of forecasting. He listed the following as the most prominent Soviet-era publications (articles and books) on the topic:

- "Forecasting Science and Technology" by G. M. Dobrov in 1969
- A Window into the Future by I. V. Bestuzhev-Lada in 1970
- "Scientific Technical Forecasting in Industry" by V. V. Kosolapov in 1971

- "A Theory of Forecasting and Decision-Making" by S. A. Sarkisyan in 1977
- "The Theory and Practice of Military Forecasting" by M. I. Cherednichenko (no date provided)
- Military Forecasting by Yu. V. Chuyev (no date provided)
- "A Methodology of Military Scientific Research" by Yu. B. Mikhaylov (no date provided)
- And Speed, Space, Time by I. G. Zavyalov (no date provided).[454]

Vorobyov called for the creation of a "workbook on forecasting methodology." In his opinion the forecasting methodologies developed to date are limited in their long-term forecasting ability. An advanced methodology is required to correlate the interrelations and coordination of the various elements required to produce an objective assessment of the future. He closed noting that futurology arises from the principles of dialectics and is designed to unite theory and practice. [455]

Several well-known Russian theorists preceded Vorobyov's thoughts on future war. After the fall of the USSR, the impact of information technologies began to weigh heavily on analysts' forecasts and thinking about future war. Major General (retired, now deceased) Vladimir Slipchenko wrote often on future war, starting soon after the coalition victory in Desert Storm in 1991. Slipchenko immediately grasped the significance of the impact of information technology on the coalition's victory, on future war, and on the requirement for future forces to become highly mobile. Without mobility, forces would be unable to avoid precision-guided weapons of the future. As a result he wrote a book titled *Beskontaktnyye Voyny* (Non-Contact Wars) in 2001. In a 2002 article for the Russian military journal *Armeyskiy Sbornik* (Army Digest), he summarized some of the main points of the book:

- Non-contact (which Slipchenko terms "sixth generation warfare") war will acquire an independent nature.
- The information weapon will have the ability to disable entire combat, economic, or social systems.
- The possession of information resources will be the essential attribute of future wars.
- Information countermeasures will become a new strategic form of warfare, conducted during periods of both peace and war.
- Information countermeasures will be closely associated with reconnaissance systems.
- Information countermeasure warfare will be conducted now and information war ("seventh generation warfare" according to Slipchenko) will not be conducted for several decades.
- Wars will emerge to be not only operational and strategic but also planetary.
- Man will not be the primary target of destruction but an indirect target. The primary target will be the destruction of structures and systems that support man's lifestyle.
- Defensive components of non-contact war are operational and strategic camouflage; the physical defense of information facilities; disinformation; and electronic warfare. Strike (offensive) components include concepts such as information impact, information intrusion, information aggression, and attacks on computer networks.
- Cyber war may acquire an independent character (separate but integrated into air, land, sea, and electromagnetic forms of war).

• Electronic suppression remains the most important component of non-contact war and it will become an independent type of countermeasure that may include new electronic models of intelligence and the development of molecular computers based on organic materials. [456]

General of the Army Makhmut Akhmetovich Gareev, a former Deputy Chief of the General Staff of the Soviet Union's armed forces and currently the President of the Academy of Military Sciences, is one of Russia's greatest living military theoreticians. He has written or lectured often on the topic of future war. Some of his most well-known works in the US are his 1994 lecture titled "Future Armed Conflict" and his 1998 book If War Comes Tomorrow? The Contours of Future Armed Conflict.

Writing in <u>Voennaya Mysl'(Military Thought)</u> in 2003, Gareev updated his book with what he termed the evolving characteristics of future war. He stated that Russia

- Should be ready to fight local wars and armed conflicts and, under certain circumstances, a regional war
- Should focus on the initial period of war since a war's beginning now may decide its outcome
- Should be ready to use and confront indirect actions as much as direct actions due to the enhanced nature of the information struggle that can subvert nations from within
- Should focus on the air and space theater of war as it is capable of striking deep inside a nation and hitting all targets simultaneously (Gareev also warned not to forget the importance of land forces)
- Should work to achieve control and coordination over all elements of its armed force
- Should realize that high-precision weapons change the nature of hostilities to a great extent
- Should place special attention on the antiterrorist struggle. [457]

Gareev was writing shortly after the US intervention in Iraq, a war that reinforced (as Desert Storm had initially demonstrated) the prominent role of new precision technologies in completely overwhelming an opponent.

As mentioned at the start of this chapter, the nature of future war is a very important aspect of Russian military science, helping to determine the organization of Russia's armed forces and the types of weapons the organization will require. Gareev summarized the goal of military science in forecasting future war in the following manner:

The main problem is to forecast the nature of future wars since correct forecasts alone can help determine which armed forces and which troops will be required. It is not enough to merely outline the nature of a typical war; there are many types of armed conflicts each of them with unique features of its own. It is within the power of military futurologists to use extrapolation and expert-heuristic approaches combined with forecasting and simulation of all sorts of warfare to identify the general trends in which the nature of armed struggle is developing. One should always bear in mind that there are objective laws according to which the art of warfare is developing; and that each war while producing many new elements inevitably preserves

much from the past, what occurred in past conflicts. [458]

These tasks and laws, as well as Gareev's focus on the initial period of war and on Russia's internal, moral-psychological state, were stressed by other writers as well in the years to come.

In 2005, Colonel P. A. Dulnev and Colonel (retired) E. A. Bryuzgin, writing in the authoritative *Vestnik Akademii Voennykh Nauk* (Bulletin of the Academy of Military Science), stated that in the past two decades, several factors had become apparent in warfare. First, wars are now asymmetrical, that is, fought by adversaries with different technologies and different stages of development of their armed forces in terms of weapons, forms, and methods of fighting. Second, while fought within one theater of operations, wars are now utilizing assets from outside the theater. Third, the authors noted that future wars will "not be caused by a single, even very weighty factor" but rather by a complex set of issues. Finally, supporting Gareev's conviction, Dulnev and Bryuzgin stated that future wars will be influenced heavily by the seizure of the strategic initiative in the initial period of war when resources will be brought into play. These resources include precision-guided weapons, information warfare assets, and air assets. The goal will be to achieve objectives in a short period of time. Military objectives have expanded to include a country's economy, infrastructure, and civilian population.[459]

Dulnev and Bryuzgin believe that future war will be determined by confrontations in aerospace and information space, citing a growing interdependence of strategic, operational, and tactical combat. It will be imperative to strike the enemy's long-range weapons. Reconnaissance and guerilla warfare will be considered as "conventional war" in the future. The four main stages of future war will be:

- Seizing the initiative and superiority in the information sphere (to include the ability to influence public opinion as well as troop and weapon command and control)
- Controlling aerospace
- Gaining superiority on land and sea
- Consolidating gains and creating conditions for achieving objectives.[460]

The authors write that the availability of assets to conduct information and propaganda work among enemy troops and the population; and the ethical-psychological stability of top commanders will also be very important.

Dulnev and Bryuzgin concluded that new principles in the art of war must be applied. They are, first, that maneuver and the concentration of troops will be replaced with long-range weapon "trajectory" maneuvers that deliver massive strikes against specific forces. Second, the armed forces will be conducting extremely complicated strategic, operational, and tactical tasks simultaneously. Third, offensive and defensive operations (to include fires and electronic attacks from the defense) will further converge. Fourth, air assault troops will play a key role. Fifth, damage will be inflicted on an enemy long before coming into contact with them. Sixth, it is more important than ever to rapidly incapacitate an enemy's political and economic system and infrastructure (as well as its communication and electronic warfare systems). Seventh, the construction of a secure jam-proof air

defense system is vital to success. Eighth, the concealment of the onset and character of preparations for an attack is necessary (such as through the use of an elaborate deception or disinformation operation to mislead an opponent in regard to one's real intent); and ninth, the massive use of ground troops will still be necessary. These characteristics indicate that for the immediate future, war will be a combination of traditional warfare and remote warfare. [461] Finally, the authors noted that enemy use of non-lethal weapons and unknown methods, especially at the operational and tactical levels, will be likely. [462]

In 2008, Lieutenant General S. A. Bogdanov and Colonel V. N. Gorbunov wrote a lengthy article in <u>Voennaya Mysl'</u> (<u>Military Thought</u>) that identified future war trends. First, the authors stated that the requirements of military science still need to be fulfilled, reiterating Gareev's statement. These requirements include identifying the conditions and factors affecting warfare and the patterns and laws governing war's origins, course, and outcome. A potential opponent's political aims, military potential, and the specifics of a theater of operations all influence the general character of future war. Time has not affected the importance of these characteristics.[463]

Second, the authors believe that the exact character of future war is still not known since a new world order and security system model have not been completed. There is still an ongoing fight for spheres of influence, regional domination, and natural resources. This imprecise character of future war includes the unknown final impact of information technologies on warfare. [464] These technologies continue to inspire a new generation of weapons and ways they can be utilized. Finally, future war also depends on a nation's economic and military potential, on its international position and the popularity of its policies, and on its plans for future war. These factors are still undergoing development and change.

Some factors, however, have become identifiable to Bogdanov and Gorbunov. They listed six:

- Wars will use more artificial intelligence, nanotechnology, robot-controlled, and new physical principle weapons, some comparable to the efficiency of nuclear weapons.
- The role of troops, forces, and weapons operating in aerospace will grow significantly, where even the planet may be a theater of operations.
- The information component of war will grow in weight, where information superiority will become a principal condition for successful military operations.
- Time frames of operations will change, with preparation time shortened and operations carried out faster.
- Mobile operations will shift from rigid vertical control to automated global network systems that control troops and weapons.
- The use of Special Forces will rise. [465]

There are few surprises in this list. The author's stress on multi-dimensional actions involving electronic, physical, and information warfare is expected in future struggles as is an increase in intensity over time and space. However, it is the non-military forms of armed struggle that the authors stress below that are of special interest. These forms of warfare may result in some armed forces conducting no operational actions at all or playing a secondary role.

Non-military forms of actions may involve the internal weakening of a state through information, psychological, moral, climatic (causing natural disasters, obstructing the movement of troops through floods and other means, dispersing clouds to inhibit/enable [depending on the purpose] the proper functioning of precision-guided weapons, etc.), and organizational measures; setting up an opposition; or fomenting ethnic strife. Non-military forms of armed struggle could also be used to weaken the external position of a state by ruining its international relations through political, economic, legal, information, and other means. [466] Other new forms of warfare include psychotronic, biological, and genetic weapons that do not rely on explosive power. [467]

Bogdanov and Gorbunov note that "future wars will definitely be influenced by the way events develop in a country...a reliable forecast of future wars is impossible to make unless we have a profound understanding about the exact relationship between peace and war in the twenty-first century." [468] Wars in the twenty-first century may be the result of geopolitical powers carving up the globalized world by armed force and compelling countries to accept political and economic terms dictated to them. Most likely, "the main objectives of future wars will be achieved in the opening phase and that will become the turning point determining the fate of the war." [469] Thus, like Gareev, Dulnev, and Bryuzgin, Bogdanov and Gorbunov highlight success in the initial period of war as the strongest indicator of who will achieve victory in future war.

If a conventional war unfolds, then the authors foresee the initial period of war focusing on the destruction of military and government control centers, the disruption of the system for controlling a country, and the targeting of the military-industrial infrastructure. Air, fire, and electronic attacks will be followed by paratroopers, Special Forces, and then land forces in the final stage. Also included will be strikes against the economy and civilian population. The nuclear deterrent is envisioned to be used against an opponent who only has conventional weapons at their disposal. [470]

Finally, there is the perspective of Major General (retired) V. D. Ryabchuk. Viktor Dmitrievich Ryabchuk is a respected military scientist who has written on control theory, deception, and systemology, among other topics. In 2008, writing for <u>Voennaya Mysl'</u> (<u>Military Thought</u>), he discussed the concept of the ongoing intellectual-information confrontation.

Ryabchuk's primary focus was on the fact that "thought" is the first issue or thing to join a battle. In this sense, he added, the main thing is still intellectual confrontation aimed at confronting the enemy's thought and at protecting friendly ideas and designs. That is why the intellectual-information confrontation is so important today. Commanders must understand the components of battle control and how to win against smart, powerful enemies. He stated that a long time ago Napoleon compared a commander's talent with a square, with its base being the commander's will and its height being the commander's brains. If base exceeded height, then the commander operated more courageously. If height exceeded base, then the commander operated smartly. [471] Ryabchuk then noted:

In our time we should add the third measurement to "Napoleon's Square"—informatics or computer science (which is based on the army and weapons automation support and control systems). Informatics is bound to sharply enhance intelligent and strong-willed activity capabilities. Thus, the square turns into a cube...[472]

Informatics allows for better management and perhaps the achievement of superiority over an enemy. The management "vehicle" is a high-performance reconnaissance system that ensures the side with the better system will achieve control over the situation during an information confrontation. [473] Information is the "nourishment" that provides life to reconnaissance, command and control, support, and strike systems.[474]

These six perspectives (Vorobyov, Slipchenko, Gareev, Bogdanov and Gorbunov, Dulnev and Bryuzgin, and Ryabchuk) are among the literally hundreds of projections for future war in Russia. However, their thoughts are among the most important.

Chief of the General Staff Nikolay Makarov

In a speech at the Academy of Military Science in early 2010, Makarov stated that the distinguishing feature of warfare in the coming decades will be new forms of military operations that are multifacited, with electronic, force, and information attacks carried out with increasing intensity in time and space. He added that the potential for conflict is growing due to economic instability and the expansion of activities involving international terrorist organizations and could unpredictably lead to a large-scale war involving unforeseen adversaries. [475]

The armed forces of many countries are "preparing for military action in multiple concurrent regional conflicts in separate theaters of operation" and these countries could operate within temporary "coalitions of interested states."

Strategic deployments will utilize enhanced strategic mobility and long-range strike capabilities from frontline military bases, aerospace, and the world's oceans.[476] In Makarov's opinion, the use of artificial intelligence, nanotechnologies, robotized systems, and weapons based on new physical principles could become comparable to the use of nuclear weapons in terms of combat effectiveness. Complete mobilization will not be required in future war due to the impact of time-cutting measures such as high-speed intelligence, communications, electronic warfare, and automated control systems that gather, process, and communicate information on the adversary. Further, aerospace assets will increase in use and be used for target designation and guidance of precision weapons, turning the entire planet into a theater of operations.[477]

Makarov adds that several factors dictate the tight deadlines for converting Russia's armed forces to a future-oriented organizational makeup. These challenges include not just the military-political situation in the world but especially those situations along the Russian Federation's borders. Other factors include the rate of development of the leading countries' armies and the emergence and universal adoption of new forms and methods of conducting military operations. These new forms and methods of conducting military operations include the use of non-standard asymmetric (indirect) actions which can accomplish objectives more economically than direct clashes. They also include the use of combining different uniformed services that are able to operate autonomously in isolated areas with no close fire support and the use of raids and maneuvers deep in the adversary's territory to seize and destroy critical facilities. In this regard, Makarov recommends the extensive use of special operations forces to set up a permanent front deep in the rear area of an adversary. [478] In this regard, the arrest of twelve Russian spies in the US in 2010 could conceivably have been the planned development of the civilian equivalent of this deep cover force according to such thinking.

Makarov adds that the emphasis in combat is shifting to the use of political, economic, and information pressure and subversive actions followed by the unleashing of armed conflicts or local wars, actions that result in the loss of relatively little bloodshed. He adds that the direct initiation of hostilities will be preceded by information warfare activities that will continue for the duration of the conflict until it is resolved. Simultaneously, information warfare activities will be directed at other key infrastructure facilities of the opposing state (coalition). The destruction of critical adversary infrastructure facilities is becoming a key component of combat since destruction can destabilize an adversary's domestic political situation, disorganize its government and military administration, and disrupt its economy. The direct use of military force will seek to decisively accomplish these objectives as early as the start of a military campaign.[479]

General of the Army Makhmut Gareev addressed future war concepts in a March 2010 presentation. He noted that the contours of future armed combat have not yet been precisely defined and, at least in the military press, they are being examined in a lopsided manner. NATO and US operations conducted in Iraq, Yugoslavia, and Afghanistan were essentially unilateral in nature. It is unclear what will happen when these high-technology forces are engaged by like forces that employ more active, decisive operations. Russia, Gareev noted, must create its own precision-guided munitions and the technological base for the conduct of netcentric warfare. These capabilities are lacking at the present time. Russia must also develop more active, decisive methods of strategic and operational-tactical operations to include contact operations, which enemy forces want to avoid at all costs. [480]

S. A. Modestov on the "Space of Future War" and Theaters of Information War

Sergei Modestov, a prominent Russian author on many military-related issues, shed light on the concept of the space of future war in an article he wrote for the <u>Vestnik Akademii Voennykh Nauk</u> (<u>Bulletin of the Academy of Military Science</u>). He noted that the space of future war is directly linked to the way that nations forecast the nature of future war from their national perspective. For the US, the space of future war is "any place where they have interests" according to Modestov. For Islam it is "any country with non-Islamic rule." [481]

Modestov notes that it is difficult to build defenses against opponents such as non-state actors (terrorists) and large-scale adversaries such as the United States. The space of future war in the case of the US, for example, includes the latter's focus on information space in order to assure "quantitative superiority, a developed deployment infrastructure, and superiority in its transportation capability to rapidly regroup." Such developments increase Russia's "spatial uncertainty" and make mandatory a flexible response to all threats. Thus, not only intelligence, topographic-geodesic, navigation, and other tools must be in the Russian inventory to confront challenges in the space of future war, but also tools such as electronic warfare strike weapons; light, laser, ultra-and infrasound weapons; and electromagnetic pulse weapons. [482] The sophistication of using such tools increases

When electromagnetic fields carry meaningful information that can strike or reallocate an adversary's information resource objects, and safeguard and build up one's own information resources. These objects could be technical systems or they could be individuals, social (ethnic) groups, or society as a whole. In the first instance, we mean information-technological

impact, and in the second instance—information-psychological. Both constitute the essence of information warfare. [483]

"Information space" (the environment in which information resource objects are located and information processes occur)[484] is thus a place of competition over information resources. The US is the only country currently possessing information superiority and the ability to significantly manipulate this space. Due to this situation, Modestov recommends a differentiated approach to the essence of information warfare. Armed conflict should utilize the ability to exert a special software-technical impact (software and hardware bugs, combat viruses, and other destructive software products) on an adversary's information resource objects. These weapons impact the size, configuration, morphology, and structure of the space of future war. The strike capability of information weapons must be taken into account, making the quality of control, communication, intelligence, and combat strike systems (such as reconnaissance-strike systems) the main criteria for operating in information space.[485]

Information space must be managed in such a way as to reduce and disorganize it for the adversary while expanding and improving friendly control over it. This may include such aspects as operational-strategic and tactical camouflage and disinformation activities. Such thinking leads to the development of the "theater of information warfare" concept, a way in which these information resource goals can be controlled and manipulated on a larger scale and for a larger purpose.

In 2008, Modestov advocated specifically for the concept of strategic deterrence in a theater of information warfare. He discussed information resources (IR) as the target of strategic deterrence. In particular he noted the importance for Russia to develop "military-theoretical views on the forms of deployment of forces and assets for the targeted impact on an adversary's IR for strategic deterrence purposes."[486] Operational tasks supporting this goal include disorganizing governmental and military administrations of an adversary; damaging economic potential, especially military-economic potential; and conducting intelligence operations.[487] From Modestov's point of view, a strategic operation in the "theater of information warfare" includes the sum total of the following information-supported actions:

- Operations to rebuff an aerospace attack
- Strategic nuclear forces operations
- Operations in a continental theater of war
- Operations in a maritime theater of war
- An aerial operation in a theater of war. [488]

Russia's Asymmetric Gambit

For the past several years, Russian military theorists have made arguments in support of developing asymmetric military and civilian approaches to confront the West's information superiority. For example, Gaivoronsky and Galkin's book, discussed in Chapter Three, noted that Russia's military problems must be solved without reliance on direct practical experience and that leaders must make judgments based on field tests alone of some weapons. The implication is that asymmetric measures are required to offset this lack of practical experience. Naturally, this judgment

is no longer entirely true since these authors were writing before Russia began fighting its decade long war in Chechnya and its short 2008 local war conflict with Georgia. However, Russia has not conducted any military operations on the scale of US military deployments since the Soviet Union's operations in Afghanistan in the 1980s. Thus asymmetric actions are appealing.

This lack of combat experience and an inability to field a military-industrial complex equal to other countries in the initial decade of the twenty-first century has had two consequences. First, Russia is forced to work with a force that has not stressed its logistic and airlift capabilities with a world-wide deployment. Second, this situation forces Russia to keep nuclear, nanotechnology, and asymmetric responses on the table to counter potential threats from foreign weaponry.

Russia's military is studying asymmetric warfare issues thoroughly. [489] This point is reflected in their military and civilian writings. Over ten years ago, Russian Major General I. G. Korotchenko (the Chair of Military Art at the time at the General Staff Academy) noted that Russia must "depart from the principle of opposing force with force and move to the principle of asymmetrical responses..." [490]

Shortly after Russia's 1999 draft military doctrine was released, Russia's Minister of Defense at the time, Marshal Igor Sergeyev, discussed the importance of asymmetry to the military-technical aspect of doctrine. He noted that

In the coming years, Russia will not be able to support military-strategic and military-technical parity with the leading military powers of the West on a "symmetrical" basis, especially in the area of non-nuclear armaments...it is necessary to search for a reasonable combination of evolutionary and "revolutionary" paths and **more effective asymmetrical directions** for the development of weapons and military technology and the technological outfitting of Russia's Armed Forces.[491]

Sergeyev noted that the Russian Armed Forces should seek

compensation for avoiding direct military-technical competition with the most developed countries by means of creating "asymmetrical" means for armed conflict, allowing for the destruction of the most vulnerable functional elements of the main systems and key targets of the enemy's infrastructure, and in this way significantly devaluing their military-technological superiority.[492]

According to Webster's dictionary, asymmetry is defined as "not symmetrical." [493] Russia's premier dictionary, written by S. I. Ozhegov, defines asymmetry as "the absence or destruction of symmetry." This implies a more active role in changing symmetry's parameters than the US definition. This intimates (correctly) that different cultures define like terms with varying degrees of conformity. When attempting to understand the Russian military approach to any issue it is necessary to understand their terms in context.

In a 2007 article, Russian Mikhail Rastopshin discussed the asymmetric approach. He related the problems facing Russia in utilizing such a concept. First is the issue of falling behind in technology.

Rastopshin wrote sarcastically that the term "asymmetric weapon" is actually used in Russia to cover up the unsatisfactory state of the Russian rearmament process, one that is not keeping pace with perceived threats. He added that the Russian concept of asymmetry "consists in abandoning a direct counterforce standoff with the militarily developed states by exposing and exploiting the existing vulnerabilities of a potential adversary's current and new armament." [494]

In addition to a different understanding of like terms, Russians use a philosophical thought pattern that is different from US logic. A process known as the dialectic guides Russian thinking while US thinking is guided by deductive and empirical logic. Former Soviet officer Oleg Penkovskiy, in the papers provided as part of his espionage work for the West in the early 1960s, described what this means for decision-making processes. Penkovskiy noted that if American, English, and Soviet generals were provided with the same data and asked to conduct an analysis, the American and English generals might come to similar answers. But the Soviet officer's response would be quite different because:

He begins from a completely different set of basic premises and preconceived ideas, namely the Marxian concepts of the structure of society and the course of history. Second, the logical process in his mind is totally unlike that of his Western counterparts, because he uses **Marxist dialectics**, whereas they will use some form of deductive reasoning. Third, a different set of moral laws governs and restricts the behavior of the Soviet. Fourth, the Soviet general's aims will be radically different from those of the American and the Englishman. [495]

The dialectic is an engrained thought process that survived the end of the USSR. It was at the core of the educational process of a Soviet officer and remains alive in the minds of officers today. The dialectic is defined by Ozhegov as "a philosophical doctrine about the general laws of the movement and development of nature, human society, and thinking; the scientific method of knowledge of the eternally moving and changing phenomena of nature and society by revealing internal contradictions and a struggle of opposites, resulting in an uneven transition from one quality to another."[496] The dialectic introduces asymmetry into any counteraction taken by Russia from the inception of an idea. The counter to a tank may be an anti-tank weapon or some other asymmetric response and the counter to an anti-tank weapon may be add on armor ("up armor" in today's lingo).

Russia's asymmetric point of view has resulted in increased emphasis on indirect strategies, on attempting to disorganize the information infrastructure of a potential opponent, and on the information-psychological threat to Russia (among other things) to counter their information-technological deficiencies. The information-psychological threat refers to attempts to influence the thinking of Russian citizens. Some Russians still believe that the Soviet Union fell apart because a silent information-psychological "World War III" was fought and won for the minds of the USSR's citizens.

All of these asymmetric methods depend, however, on first uncovering vulnerabilities in Western thinking and technologies. In the following discussion not only information but also other types of asymmetries will be discussed.

(1) Indirect Strategies

Russian military specialists note with concern the growing influence of non-military actions (to include political, economic, information, moral-psychological, and others) on international relations. For example, a sharp change in the information confrontation/struggle was described by a Russian security specialist in the following manner:

It penetrates all other forms of struggle and at the same time has a relatively independent character. How can you successfully wage an information struggle if during the [conflict with] Chechnya a significant part of the mass media is taking the side of the separatists? We need a law on information security. [497]

In short, a new asymmetric form of war can be waged when information is moved to the forefront. The battle to influence the mind takes on as much importance as battles to inflict damage on one another via physical means.

An increase in these types of actions began a few years ago when nations realized that the precise destructiveness of targets by high-technology weapons or the total annihilation of targets by nuclear weapons made total reliance on them costly in the first sense and unreasonable in the second. As a result, theorists began to reexamine the impact and importance of indirect operations such as the extended use of the media and information technologies. If battles could be won without resorting to the use of weapons or with only the use of digital devices, then such a strategy should be used.

Legal issues are another important means to use in an information struggle. The most obvious peacetime use of a legal issue (an indirect approach) was a proposal that Russia made at the United Nations in the early 1990s. The proposal aimed at harnessing Western technological developments with strict definitions that limited their further expansion. This proposal was designed as much too slow down the US and other information-technology rich nations as it was to open a dialogue on information issues.

Other indirect asymmetric approaches include the development of techniques, technologies, and systems that destroy or disable the eyes and ears of information-technology based equipment. Further, Russia has learned other asymmetric methods of confronting an information-technology superior opponent from observing the actions of US opponents in recent conflicts. For example, during the NATO bombing of Kosovo, smoke deflected precision-guided missiles away from their intended targets and bad weather hindered information-based operations. Turning on radars briefly or only at the last minute was a Serbian asymmetric survival and engagement technique. Russian V. V. Kruglov, in a 1998 *Voennaya Mysl'* (Military Thought) article, wrote that "controlled" armed conflict (conflict organized in real time with information technology assets) is a further development of an "indirect action" strategy.[498]

Russian General of the Army Makmut Gareev, noted earlier, listed other asymmetric offsets in his work If War Comes Tomorrow. Gareev listed "methods to influence human psychology," achievements of genetic engineering and molecular biology, electromagnetic and infra-sound waves, and lasers, microwaves, microorganisms, and other means as potential methods of attack utilizing the indirect effect. [499] The Academy of Military Science, of which Gareev is President, called for an "integration of efforts of a number of sectors of social, natural, and engineering sciences for research

and development of problems of information warfare" as a component part of their research effort as long ago as 1999. [500] Undoubtedly, under Gareev's influence, asymmetric developments were sought out in earnest.

Finally, Russian scientists are making do in the absence of a high technology computer industrial base and financial backing by relying on the capabilities of the plethora of quality mathematicians and scientists that the country regularly produces. The computer age, particularly writing computer software, strikes right at the heart of a Soviet and now Russian strength—the mathematical ability to write the algorithms that either stable software, creative programs, or hacking requires. With hacker assets, countries can steal secrets through the asymmetrical approach of entering a computer's back door. Russia and other countries can save millions if not billions of dollars on research and development through such thefts if actuated.

The recognition by Russia and other technologically-weak nations that indirect strategies might save the day may have a boomerang effect, however. Many Russian authors (to include some ministry and agency chiefs) note in particular that the US's conflicts have "changed the whole world's attitude about nuclear weapons...many nations have come to the conclusion that it is no longer possible to defend their independence without nuclear weapons."[501] Thus while indirect strategies initially appealed to many as an answer to nuclear weapons, lately just the opposite opinion has arisen—that nuclear weapons, especially in the hands of terrorists, can be an indirect strategy! This is a particularly disturbing "asymmetric answer" that several Russian officials have alluded to in the past few years. Not surprisingly, the 2010 Military Doctrine of Russia continues to underscore the importance of nuclear deterrence concepts, especially keeping these weapons out of the hands of terrorists.

(2) The Disorganization Weapon

A few years ago at an international conference in Moscow a Russian scientist was asked how the Russian approach to IW fundamentally differed from the US approach. He answered that the drive for total information dominance or superiority was presently not possible in Russia. Lacking an efficient information-age military-industrial complex, it is simply not possible to produce the equipment to support such an effort. Unable to meet force with force, the predominant Russian IW principle is to find all methods and means to disorganize an opponent while reducing uncertainty on the Russian side. Interestingly, some years later the word "disorganize" has appeared often in Russian security policies. It is listed as an internal information threat to be monitored as well.

The January 1999 edition of <u>Voennaya Mysl'</u> (<u>Military Thought</u>) published a lengthy article on disorganization. In "On the Problem of the Organization Weapon," Colonels N. A. Sergeyev and D. A. Lovtsov (the latter a long time command and control specialist) discussed the types of organization weapons applicable to the information age. The very first line of their article stated that "historical experience shows that fighting an enemy can be more effective if conditions have been created for making it 'disorganized' or 'disoriented." [502] Measures to accomplish this goal include the coordination of a set of pressures (with regard to objectives, place and time, propaganda, psychological issues, and information) to channel an enemy in a desired direction. These pressures might lead the enemy into dead-end decisions, exhaust the economy, slow down or arrest weapon developments, distort national culture, or create a 'fifth column' among intellectuals. These

developments could result in internal political chaos (and perhaps for that reason 'disorganization' was listed as the greatest internal threat in some security documents).[503]

Organizations can be upset or disorganized externally by a controlled ecological disaster; by inciting ethnic strife or economic crisis; by managing the sale of obsolete, harmful, or inferior-quality products; by promoting patterns of behavior which clash with national traditions; or by recommending organizational forms or structures that generate unsolvable conflicts.[504] All of these methods could be considered as asymmetric in approach.

To prevent Russia from succumbing to adversary disorganization techniques, the authors recommended a simulation-game model of a mutual security system of organizational systems (coalitions, corporations, alliances, etc.) to study the problem and develop solutions. The model must contain an organization systems information domain; models of the information domains of coalitions; and models of information relationships between organizational systems, including models of information-psychological pressure of different systems on one another, among other factors.[505] It is apparent that "disorganization" will be a method that Russians will study closely to see if it can be used to attack the complex, self-organizing "system of systems" approach of the US.

In Russia's absence of information superiority, Army Colonel Sergei Modestov offered a related asymmetric method to offset adversary advantages on both the strategic and operational levels (to include how to disorganize an adversary). He suggested the construction of an information "deep defense." Modestov's concern is Russia's current inability to thwart military actions directed against her information-resources (IR). An information resource, according to IW specialist Admiral (retired) V. S. Pirumov, is

information which is gathered and stored during the development of science, practical human activity, and the operation of special organizations or devices for the collection, processing, and presentation of information saved magnetically or in any other form which assures its delivery in time and space to its consumers in order to solve scientific, manufacturing, or management tasks.[506]

The intent of the deep defense plan is to provide a durable information resource capable of confronting attempts by adversary's to exert special influence on an IR of Russia; and, more troubling for US planners, to create the threat of a full-scale deep-echelon grouping of virus measures put in place ahead of time. According to Modestov, problems associated with constructing a deep defense include:

- 1. Defending Russia—discovering in a timely manner an adversary's complete plan for launching a massive program strike, first and foremost determining the directions (objectives) of his primary and other strikes;
- 2. Attacking an adversary—creating a defensive grouping of special-influence forces and means deep inside the adversary's operational structure, with deployment of the forward Russian echelon (the fixed programming and hardware devices being managed) directed against the facilities of the adversary's IR;
- 3. Defending Russia—creating multiple concentric defense lines that cover the facility at the

users' work stations, at network servers, and at connection points between agencies' local-area networks and the Internet;

- 4. Defending Russia—restoring a disrupted information infrastructure through timely duplication of the asset disrupted (while holding key facilities in reserve) and linking them with communication lines;
- 5. Defending Russia—seeking optimal forms and means of conducting asymmetrical defensive actions in defending one's own IR;
- 6. Defending Russia—using a pro-active approach in protecting IR facilities, making this one of the primary conditions for maintaining its stability; and
- 7. Attacking an adversary—organizing and supporting an uninterrupted operational-strategic coordination and C2 of the forces and means for carrying out a virus attack against an adversary IR.[507]

In order to exert control over a potential enemy's information-resource, Modestov states that efforts must begin in peacetime. On the strategic level, this includes group and individual mathematical-program (virus) strikes; special operations and systematic actions to identify data regarding an enemy's most important IR objectives; and timely establishment of surreptitious control over adversary IR components in order to redistribute it and/or strike it. The minimum goal would be to create a threat to prevent an adversary from taking similar actions against Russian IR objectives. On the operational level, special influences can be exerted on an adversary's IR by causing disorganization in the government and military command and control systems; undermining economic and/or military-economic potential; and carrying out intelligence activities. [508]

Another asymmetric method that Modestov recommended to offset US superiority in virus production is something mentioned earlier, international legal regulation. In a somewhat caustic approach to legal norms, Modestov noted that mutual deterrence mechanisms could help Russia exert special influences on IRs and put a final touch on the "deep defense plan." He added that "foreign" experts cite the control systems of information-computer resources of energy, communications, transport, and finance as the most likely IR objectives. [509] Thus, a UN legal proposal would fit nicely with Modestov's "deep defense plan."

(3) The Information-Psychological Asymmetric Challenge

It is worth noting that for years Soviet and now Russian theorists have searched for a way to influence the mental state of troop formations and the public. Books were written during the Soviet and now Russian periods on psychotronic weapons; on the use of remote viewing techniques and parapsychology; and on the use of subliminal and psycho-linguistic technologies. This effort has continued in various forms over the years in other areas such as infrasonic-vibration weapons. Russian theorists do not discount the fact that the use of these and other non-traditional weapons could achieve a country's strategic and political goals without conflict.

Russia's focus on the brain as an IW target (in addition to hardware/software) began long ago. Entire books are written on the subject. In 1998-99, for example, two books were released on the topic. One was titled, appropriately enough, *Informatsionnaya Voyna* Information War. Author Sergey Rastorguev thanked the Administration of the Security Council of the Russian Federation, the Center for Public Communications of the Federal Security Agency (FSB), and others for their

assistance in putting the book together. That is, Rastorguev had the support of some very high-level organizations in the government for his work. Rastorguev examined how to manipulate the mind with real and latent threats and how to model the algorithms that define human behavior. Humans, the author noted, like computers, can have a "virus" inserted in their information system (reasoning process) if the proper algorithms are manipulated. According to mathematical formulas developed by the author, a human information virus dubbed a "psycho virus" may be inserted as a "suggestive influence" to alter or mask objective reasoning. The other book, endorsed by the Information Security Committee of the State Duma, is titled <u>Psychotronic Weapons and Security. [510]</u> These books indicate that information-psychological concerns are both a civilian and military matter, something to be studied for their benefits and harmful effects in both peacetime and wartime.

At the Institute of the Human Brain in St. Petersburg, Russian scientists studied how to manipulate the synaptic firings of neurons in the brain. This research has focused on the use of various frequencies to excite or depress various areas of the brain. If successful, such research could lead to the creation of weapons that cause lethargic (near zombified) attitudes in soldiers on the battlefield according to Russian scientists.

In addition to these books and studies of the brain, Russia has focused on the informationpsychological stability of individuals and society for a host of reasons, not the least of which is Russia's change in ideologies. For example, Dr. Igor Panarin, who recently attained Western attention for his 2009 prediction of the near-term fracturing of the US, noted in 1999 that Russia must develop strategic and operational measures (which he calls the strategy of psychological defense) to prevent or neutralize attempts to control the psyche of Russian society. Panarin (see Chapter Eleven for Panarin's focus on information-psychological issues after the Russia-Georgia conflict of August 2008) also noted the need to work with the Main Directorate in Support of Psychological Security to ensure that the psychological component of Russian national security is addressed in the Security Council. [511] Less attention is paid to this subject in the West since it did not undergo an ideological transformation such as the one that took place in Russia. Recent IT developments, however, have caused Americans to review some of these issues. For example, there have been studies conducted in the US on the influence of CD games and the Internet on the youth of America. This has become a subject of serious attention for law makers, parents, and national security personnel among others. The current work of US academicians Sharon Begley, Clay Shirky, and Nicholas Carr underscore US interest concerning the impact of information technologies on the brain.

The Russian military has excelled in the study of the information-psychological aspect of IW, to include the information-psychological components of an information operation. For such an operation, the armed forces look at an information model of the psyche of a person (the target); at the information interaction among people, social groups, etc. (activity); and at information activities according to mission, place, and time (operations). The Russian armed forces study not only the ability of IW to affect the values, emotions, and beliefs of target audiences (traditional PSYWAR theory), but also methods to affect their objective reasoning process. Former Security Council Chairman Andrei Kokoshin stressed the need for Russians to study the psychological-behavioral sciences. Russia is interested in ascertaining how to affect not only the data-processing capability of hardware and software, but also the data-processing capability of the human mind.

Non-lethal effect weapons form the final part of the information-psychological approach. These weapons were defined as "a complex of weapons developed in order to disrupt the functioning process and (or) destroy technogenic objects, equipment, and materials."[512] Elements of the technosphere subject to destruction include construction and expendable operating materials, industrial facilities and communications, military equipment, and the human physiological condition. [513] One analyst noted that

a combination of precision weapons more sophisticated than now, an information control system as well as diverse kinds of non-lethal weapons (those developed and still under development) with precision means of delivery will lead to the creation of a powerful conventional weapon system which will become equivalent to nuclear weapons in terms of the capability of deterrence and destruction, and will surpass them in terms of flexibility of use. [514]

"Non-lethal effect means" could include aerosol bombs to spray debilitating gas over an armored column to halt it, acoustic weapons to create a defensive zone against enemy aircraft or to guarantee a safe corridor for friendly troops, and biotechnological weapons to contaminate fuel, slow movement, or eat wires. Of course, this is not new to Westerners, who are also preparing a host of non-lethal technologies but of another nature. The Russians, however, may be more intent on using theirs as a counter or asymmetric offset against an information dominant opponent.

(4) Reflexive Control Theory

Reflexive control (RC) is a theory closely related to the information-psychological component or deception measures discussed earlier. However, the topic is listed separately to provide it the necessary attention since it lies at the heart of many Russian activities. Writing in 1995, Colonel S. Leonenko defined reflexive control in the following manner:

RC consists of transmitting motives and grounds from the controlling entity to the controlled system that stimulate the desired decision. The goal of RC is to prompt the enemy to make a decision unfavorable to himself. Naturally, one must have an idea about how he thinks.[515]

In this sense, RC is very closely related to the Chinese concept of stratagems and the US concept of perception management. A former instructor at the General Staff Academy of the Russian Federation, retired Major General N. I. Turko, makes a direct link between IW/IO and reflexive control. Turko noted that

The most dangerous manifestation of the tendency to rely on military power relates not so much to the direct use of the means of armed combat as to the possible results of the use of reflexive control by the opposing side via developments in the theory and practice of information war. [516]

To Turko, the RC weapon is potentially more important than firepower in achieving objectives. His understanding most likely is based on the belief that the use of the information weapon during the Cold War did more to defeat the USSR and bring about its demise than any weapon's use. Reflexive control of the geopolitical process is an achievement often referred to by Russians as "the Third

World Information-Psychological War." Another RC example that Russians like to note is the Strategic Defense Initiative (SDI) of the US, which many Russian's believe was a reflexive control operation designed to make the military-industrial complex of the USSR redirect money to curtail or counter SDI, thus leading to the financial exhaustion of the USSR. Turko listed RC as a method for achieving not only geopolitical superiority but also superiority in arms control negotiations. [517]

Computer technology enhances the effectiveness of reflexive control theory in the opinion of some Russians. Leonenko offered his assessment of the new opportunities afforded RC by the use of computer technology:

Under present conditions a need arises to act not only on people, but also on technical reconnaissance assets and especially weapon guidance systems, which are impassive in assessing what is occurring and do not perceive what a person reacts to.[518]

This assessment is important because it indicates that if equipment responds differently than a human being to the same input, it can be manipulated or controlled in a far different manner. Thus the importance of maintaining a functioning and innovative military-industrial complex capable of producing equipment meeting such criteria is of extreme value to Russia.

(5) Some Current Asymmetric Thoughts

The Russian military-industrial complex was not always in demise, as anyone associated with the USSR's complex surely is aware. During the Soviet period, their military-industrial complex was comparable to any in the world. And the system produced some truly outstanding scientists. For example, one of Russia's leading missile designers is Sergei Pavlovich Nepobedimyy (his last name means invincible). Born in 1921, he developed the antitank guided missile systems *Shmel*, *Malyutka*, *Shturn*, *Ataka*, and *Krizantema*; the portable missile launchers *Strela-2* and *Igla*; and the tactical missile launchers *Tochka*, *Tochka-U*, *Oka*, *Oka-U*, and *Iskander*.[519] This is an astounding array of weaponry for any one individual to develop. Nepobedimyy is now retired but in a 1993 interview with *Armeyskiy Sbornik* (Army Digest) he noted that future weapon developments would focus on three areas: smart, super-precise weapons; information weapons; and instruments that can see through camouflage and see up to three meters underground.[520]

In hindsight, Nepobedimyy's 1993 thoughts on future weapons only scratch the surface of asymmetric Russian thinking in the future war arena. Other 1990s suggestions on asymmetric approaches included the use of electromagnetic pulse weaponry, meteorological weapons that cause earthquakes and flooding, genetic weapons, blinding weapons, and hypersonic unmanned aerial vehicles (UAVs), among other suggestions. Journal and newspaper articles focused on nanotechnologies and information and space (laser and high-frequency) technologies. There are many asymmetric ways in which these technologies could be used.

Russia is preparing, of course, for more traditional forms of warfare as well. Trillions of rubles are being invested in new weapon programs. This is difficult work, as all nations are finding out. Scientists and theorists must consider not only who might be a future threat for Russia but also what type of weaponry they might face. From this assessment, symmetric threat counters can be created if the money and technology are available. Asymmetric threat counters are developed for situations in

which money and technology are not available or for situations where simpler solutions predominate. Asymmetric counters also are mandatory if Russia feels new systems will bankrupt Russia's military. Such situations require the development and study of various scenarios for new concepts and uses for items such as drugs, sensors, and nanotechnologies.

Georgiy Gennadievich Malenetsky, a historian and mathematician, provided an interview with <u>Krasnaya Zvezda</u> (Red Star) in June 2008, in which he discussed some of these potential developments. Among other things, he noted

- Russian scientists think that in 10-15 years humans may be created possessing new organs and improvements to existing organs. This will enable them to sense magnetic fields or radioactivity.
- Nanosatellites will replace large orbiting stations and hundreds of thousands of such satellites will be deployed, capable of disabling any modern space apparatus.
- Bio-robots or zombies will be created in the form of humans or animals (Malenetsky imagines a biochemistry-altered rat whose speed of reaction is 20 times faster than normal).
- Scientists are working to extract atoms from water and air to create a new type of nuclear synthesis reaction that makes possible not thousands but millions of nuclear warheads. Thus the idea of a nuclear martyr's belt cannot be ruled out.
- Miniature UAVs will be developed that can take pictures, emit poison, or eavesdrop.
- Immuno-modulators are being developed that can activate or suppress certain body systems. [521]

Malentsky's potential projects are similar in concept to those of many scientists around the world who are working on comparable ventures. And his musings are now three years old!

The Russian journal *Voenno-Promyshlennyy Kur'er* (Military-Industrial Courier) offered another asymmetric-type suggestion. An article by Israeli Vladimir Shenk noted that meteorological weapons are being researched around the globe not only to reduce an adversary's agricultural output or cause economic havoc but also to play a leading role during large-scale wars. Militarily, these weapons can do the following: create floods to hinder troop movement; dissipate clouds over targets designated for precision-targeting; and alter the atmosphere in combat areas. With regard to Russia, Shenk stated that KGB defector Oleg Kalugin underscored Russia's investigation into the use of geophysical weapons. These developments weren't always kept secret. For example, Vladimir Zhirinovskiy, leader of Russia's Liberal Democratic Party, stated some years ago that Russian scientists would alter the earth's gravitational field which would put the USA under the Atlantic and Pacific oceans. Russia's defense committee considered the issue of experimenting to disturb the ionosphere and magnetosphere. [522] Thus the issue of such weaponry has a long history that will extend into the future as new scientific discoveries are made. What claims are true and what claims are false are for the reader to decide as no conclusive evidence was ever produced.

Space, of course, may easily become a future theater of war (TVD) and asymmetric options abound here as well. Future war may include the use of hypersonic aircraft or weapons using new physical principles. [523] Or Russia may opt to combine its expertise with that of another country

with which relations develop cordially in the coming years. One such possibility is China. President Dmitriy Medvedev recently noted with respect to China that "we plan to pay priority attention to high-tech industries, such as civil aircraft manufacturing, nuclear energy, space, information, and nanotechnologies." [524] The latter topic will be considered separately in this chapter. Nanotechnologies are clearly the modern day equivalent of the 1990s focus on information technologies.

The development of an asymmetric approach requires a thorough study of the vulnerabilities of a target, its "robustness," according to Mikhail Rastopshin, mentioned earlier. The unsatisfactory development of these parameters impacts negatively on Russia's ability to develop symmetrical or asymmetrical counters in the event of a future war. The identification of vulnerabilities often invokes the use of sophisticated intelligence efforts to obtain such information.

A main goal in any future war scenario remains the elimination of an opponent's satellite system. Rastopshin noted that this might require the determination of the vulnerabilities of a group of objectives united by a common operating algorithm.[525] Thus it is clear that the development of an asymmetric set of options is not an easy chore. It requires research, intelligence, and development of ways to take advantage of threat vulnerabilities.

In addition, some asymmetric responses are not only technological, but also operational-strategic and operational-tactical. This implies an asymmetry in strategic thought and the use of forces on the battlefield. One Russian source listed several asymmetric responses that are purely geopolitical or strategic. These included:

- Get Cuba back as an ally
- Develop a friendship with another Latin American country, such as Nicaragua
- Establish a support port for the Russian Navy in Syria
- Continue to support Iran
- Reestablish Russia's links with all nations of the Caucasus
- Form up again the Mediterranean Sea Operational Squadron. [526]

In 2008, retired General of the Army Makhmut Gareev stated that Russia must confront threats with flexible and asymmetric measures united by a common goal and concept of actions. To achieve this goal, Gareev introduced the concept of strategic deterrence. He defined this asymmetric approach as part of a set of interrelated political, diplomatic, information, economic, military, and other measures that deter, reduce, or avert threats and aggressive actions by any state or coalition of states with threats of unacceptable consequences as a result of retaliatory actions. [527] He offered two other areas of focus that could be termed asymmetrical. First, that Russia's main effort will not be directed at the destruction of every weapon but rather at the destruction of their unified information space, sources of intelligence, navigation and guidance systems, and communications and command and control systems. Second, he stated that only peaceful development will enable Russia to achieve its main goal of the country's "economic, nanotechnological, and sociopolitical modernization." [528] It is the nanotechnological threat that may give Russia an advantage in a future war and is the topic of the next section.

Nanotechnology Weapons

In 2007, the Russian State Duma (on July 4!) established the Russian Corporation of Nanotechnologies (abbreviated name is Rosnanotekh or RCNT). The establishment of this corporation strongly endorses Russian futurologists focus on nanotechnology developments for both society and the military. For society the introduction of nanotechnologies makes it possible to create new materials. These include materials with special properties; new semiconductor, magnetic, and optical materials; miniature sensors of chemical substances and biological agents; and computers that are tens of times more efficient than current models. For the military nanotechnologies mean the development of new firearms, uniforms, and complex military systems, among other issues. Together, these developments are expected to change the world's military-political landscape in the 2025-2030 timeframe. Perhaps a nanotechnology arms race will precede this five year period. [529]

Another 2007 article on nanotechnologies indicated that the military would be the first to use nanotechnologies. The Moscow Energy Institute and the Russian Kurchatov Institute have both indicated that the defense sector would receive priority development of nanotechnologies. The initial defense focus would be to protect Russia's borders and to protect against technological disasters. However, the article also mentioned Russian progress in military robotics—and the fact that the only way to defend against nano weaponry (small insect devices that inject people with poison, nano remote control of unmanned military equipment and guided mortar shells, etc.) is with nano defense. [530] Nanotechnologies will radically change the nature of combat with more speed and destructive power.

From a layman's perspective, one of the most frightening yet interesting articles on nanotechnologies was written by Ivan Chichikov in *Krasnaya Zvezda* (Red Star). According to this article, manipulations at the atomic and molecular levels are dubbed "molecular nanotechnologies."[531] Chichikov predicted that "the acquisition of molecular nanotechnologies by an individual state can change the geopolitical distribution of power on the planet in its favor more radically than the acquisition of nuclear weapons by the USA."[532] The following predictions were made:

- The combat unit of the future will be a nanoarmy that employs hive tactics and acts according to the principles of teletropism.
- Nano armaments will be able to annihilate the earth's biosphere up to bacteria and viruses.
- The nature of war and its causes will change.
- Nanomachines will make nuclear weapons obsolete because they can detect them and make them non-operational.
- In the nanotechnology era the preventive strike will be the only acceptable strategy for war. The first to attack will win.
- Man will be the target of nanorobots, who aim to enter a human body and kill it.
- Nanotechnologies may block or cake the face, nasopharynx, and eyes or block fingers, arms, or legs; or be used as a genetic weapon targeting specific DNA of an organism to exterminate a population.
- Nanotechnologies will contain the ability to assemble into weapons while moving toward a target. [533]

Professor Georgiy Malinetskiy, a Deputy Director of Science Research at the M. V. Keldysh Institute of Applied Mathematics, Russian Academy of Sciences, offered other nanotechnology prophesies. He stated that the combat dragonfly (smaller than the palm of your hand) will be capable of photographing, poisoning, and eavesdropping. Further, hundreds of thousands of nano-satellites will be capable of being put into space to destroy modern spacecraft. [534] Some nanosatellite precursors are already being launched into space but with different missions. It was reported on 24 March that Russian cosmonauts from the International Space Station will hand launch the ARISSat-1 microsatellite (larger than a nanosatellite). Other microsatellites have been launched over the past year. [535]

As noted in the preceding section, Russia likes to focus on cognition. Nanotechnology use did not escape notice in this area. Russia's military can be expected to develop nano-psychotropic weapons "of mass control of people's minds, which is created by combining molecular nanotechnologies and achievements of neurological technologies." [536]

Russia's emphasis on nanotechnologies indicates that research on this topic will continue well into the next decade. For example, Russian Deputy Prime Minister Sergei Ivanov has stressed that nanotechnologies are a current focus of the defense industry, especially in the areas of military clothing and medicine. The Defense Ministry's Concept for the Organizational Development of the Russian Armed Forces discussed the important role to be played by information, space, and nanotechnologies in the future.

Conclusions

This short analysis of future war from a Russian perspective highlights several points of interest for Western analysts. First and most important, Russian experts predict that the initial period of war will be key to winning a future war. This implies that Russian preparations for war are underway now as it will be too late if Russia waits until war breaks out. Second, it is imperative at the present time for Russia to develop asymmetric counters to US digital superiority. The chapter explained a number of ways that Russia hopes to do this. Finally, the chapter listed some of the key components of Russia's increased focus on developing nanotechnologies and their many uses, some of which are truly frightening. Also of note is Sergei Modestov's suggestion that Russia focus on information theaters of war; and V. D. Ryabchuk's suggestion that contemporary armed struggle is now a process involving combat system countermeasures such as the intellectual-information confrontation.

In all cases, "thinking" is the primary criteria for advancing the Russian cause. Russia must be creative in its approach since it is limited by resources and technology at the moment. But Russia is rapidly regaining its footing as a major power with which to contend. And, due to their different thought process and way of understanding and approaching future war, they will produce some truly unexpected methods and forms for fighting.



PART THREE:

Georgia-Russia

CHAPTER NINE: THE BEAR WENT THROUGH THE MOUNTAIN—RUSSIA APPRAISES ITS FIVE-DAY WAR IN SOUTH OSSETIA[537]

Introduction

From 8-12 August 2008 Georgia engaged in open conflict with Russian and South Ossetian forces. Provocations on both sides in July and early August had driven the potential combatants to the verge of war over the status of South Ossetia (see Appendix Five for South Ossetia maps). Georgia initiated combat activities in South Ossetia, according to the Russian press, and in the process killed fifty or so Russian peacekeepers. Perhaps Georgia's leaders may have felt that under the cover of the Olympic Games there existed a chance to move more aggressively to regain control over its territory (South Ossetia), viewing the situation as a now or never proposition. Or perhaps, as the Georgian press states, they had intercepted South Ossetian communications indicating that the Russians were about to move in and thwart any future plans of the Georgians. [538] In any event, the Georgian attempt failed.

This chapter looks at the August conflict solely from the vantage point of the Russian press.[539] The findings are instructive especially for how the Russians used the media. The press served as a signaling or warning device, as a medium for official pronouncements, and as a forum for criticism and praise among other issues. Russia clearly warned Georgia not to act. When Georgia did, Russia moved in and succeeded in avenging the deaths of their peacekeepers and in fixing control over South Ossetia, an activity it had surreptitiously carried on for the past ten years (passing out Russian passports to residents of South Ossetia, etc.). Russia's leaders later decided to recognize the areas of South Ossetia and Abkhazia. Some outside sources supported Russia's interpretation of who caused the conflict. For example, the President of the Czech Republic, Vaclav Klaus, placed blame on the Georgians for the conflict. He added that presenting Russia in too negative a light would again divide the world in two. Russia is not the Soviet Union, he noted.[540] That is the good news for Russia.

The bad news is that Russia's military performance was marred by inadequate equipment and organization. This point was underscored many times in the press to include by some prominent military figures. Electronic warfare systems did not work well, command and control was hampered by radios that performed poorly, and operations were disjointed due to an inadequate Global Satellite Navigation System (GLONASS). Night operations remained weak. In short, many of the same problems affecting the Russian armed forces in Chechnya were once again evident. Further, Russia's heavy-handed approach both during and after the conflict ended did not endear it to the international community.

Russia claimed that it used Western rules to intervene in South Ossetia. Does this imply that Russia will now utilize a new intervention model to fight for territory it decides it properly owns and that it will act more aggressively beyond its borders than ever before? Is the Russian recognition of South Ossetia and Abkhazia part of a larger geo-political gambit? There is much to consider in these and other issues related to Russia's handling of this crisis. This review of the Russian press provides insights into some of these issues. Specific areas highlighted are:

Russia's clear warnings to Georgia that it was practicing a peace enforcement operation in July

due to the evolving conflict in South Ossetia

Russia's criticism of its military operations, especially in regard to its lack of a unified command and control system, its poor communications equipment, its misdirected subordination of army aviation to the air force, and its current lack of responsibility among all of the agencies responsible for the defense industry

Russia's lack of a single information directorate on a state scale that enables the entire direction of state policy

Russia's reasons for supporting South Ossetia (expressed most factually as "if Georgia can break away from the Soviet Union, why can't South Ossetia break away from Georgia?")

Other background issues include the 1992 agreement establishing peacekeepers in the area; Russia's use of Western rules for intervening; accusations against the US; Russian cyber operations; consequences of the fighting for the region and the world; and conclusions.

Background

A pro-Russian Look at the Conflict

As the situation worsened in June and July 2008 between Georgia and its independence-minded region known as South Ossetia, the Russians could not have been more frank and forward about their potential plans. Georgia and the "rest of the West" just couldn't read the tea leaves or did and ignored them.

As early as 10 July Russian authorities stated that Russia's armed forces were prepared to help peacekeepers in South Ossetia. Then, in a 17 July 2008 Red Star article on Kavkaz-2008, an exercise run in Russia at the same time that, across the border, the Georgian-American exercise Immediate Response 2008 was being conducted at the Vaziani Military Base, author Alexander Tikhonov wrote:

According to Colonel Konashenkov, in connection with the deterioration of the situation in the zones of the Georgia-Abkhazia and Georgia-Ossetia conflicts, the Kavkaz-2008 exercise will rehearse the issues of participation in special peace enforcement operations in armed conflict zones [italics added]. Incidentally, the inclusion in the combat training program for North Caucasus Military District separate formations and military units of issues associated with the performance of peacekeeping missions is one of the distinctive features of the district troops' training in the new instruction period.[541]

Two days earlier, on 15 July, Moscow's <u>Agentstvo Voyennykh Novostey</u> had also stated that a special peace enforcement operation would be practiced.[542] When Russian military units entered Georgia, a Russian embassy spokesperson in London stated that "there is no Russian attack. There is peace enforcement in South Ossetia."[543] Such prior planning and warnings nullify completely Russian President Dmitriy Medvedev's statement in September that the Georgian attack on South Ossetia was Russia's 9/11. There is no basis in fact or circumstances for his comparison since Russia had monitored the situation and prepared a response.

In Georgia on 15 July, US, Georgian, Armenian, Azerbaijanian, and Ukrainian forces gathered to open exercise "Immediate Response 2008." Its goals were, according to Georgian deputy defense chief LTC Alexander Osepaishvili, to strengthen friendship and cooperation and to share experiences

among participating states. The exercise is an annual bilateral security cooperation exercise conducted by the US with its coalition partners that focuses on interoperability and is designed to promote understanding and cooperation.[544] Thus the US announcement of its exercise's goals was quite different than the goals of the Russian exercise on the other side of the border.

However, Russia's leaders believe that US intelligence knew about Georgian plans to attack South Ossetia and for good reason. US Ambassador to Russia John Beyrle reportedly noted in September, nearly a month after the conflict ended, that the US tried unsuccessfully to talk Georgian President Mikhail Saakashvili out of conducting the operation.

Russian operations to "enforce the peace" require United Nations (UN) authorization. Sergey Karaganov, deputy director of the European Institute of the Academy of Sciences in Russia, thinks that Georgia knew this and that they provoked Russia to send in its troops and to put Russia in an awkward international legal position. From Russia's (and the West's) point of view, of course, killing Russian peacekeepers goes well beyond a provocation.

Retired Colonel-General Leonid Ivashov, former chief of the Main Directorate for International Military Cooperation of the Russian Defense Ministry, noted that the Russian leadership did not need UN authorization but instead utilized Article 51 of the UN Charter as the grounds for its decision to send the 58th Army to South Ossetia. The article notes that nothing in the charter shall impair an individual or group to the right of collective self defense if an attack occurs against a member of the United Nations until the UN has time to step in and restore peace and security. The peacekeeping contingent in South Ossetia, Ivashov noted, was unable to defend itself against the Georgian onslaught.[545]

When up to 50 of these soldiers, according to the Russian press, were killed in early August 2008 the Russians went in—in full battle armor—to conduct peace enforcement. Russia has had peacekeepers in Georgia since 1992[546] and they were not as impartial as one would expect a peacekeeper to be. Georgia has tried to unilaterally denounce the 1992 resolutions and accuse the Russians of being occupiers. Russian politicians noted that Georgia cannot legally denounce these resolutions by itself.[547] Efforts to bring all sides to the negotiating table by the UN, the European Union (EU), and the Organization for Security and Cooperation in Europe (OSCE) yielded no results.

An Anti-Russian Look at the Conflict by a Russian

While a pro-Russian look at the conflict is quite convincing that a warning was given and Russia had reason to enter South Ossetia, another Russian journalist leads the reader to a different conclusion, at least initially. Russian opposition journalist Yuliya Latynina posted an article to this end on the anti-Kremlin current affairs website <u>Yezhednevnyy Zhurnal</u> (Daily Journal) on 8 August. She noted that South Ossetia is neither a country, a territory, nor a regime but a joint venture of KGB generals and Ossetian bandits trying to make money from fighting Georgia. Moscow has no strategic goal except perhaps to extend its gas pipeline through the mountains to provide gas for citizens of South Ossetia in case Georgia cuts off its supply. The citizens of South Ossetia are nothing more than militarized refugees that form a quasi-state. [548]

Once militants in Tskhinvali began to shell Georgian villages, South Ossetia and Russia accused

Georgia of aggression. Latynina believed Georgia would win the conflict because it had a strategic goal whereas, she wrote, Russia believed that war is won by the one who lies the most. The latest events show that Russia is not even in control of South Ossetian President Eduard Kokoity. When Georgian Minister of State for Reintegration Temur Yakobashvili arrived in Tskhinvali for negotiations and the Russian Ministry of Foreign Affairs did all it could to set the meeting up, Kokoity simply left Tskhinvali for Abkhazia. [549]

Latynina wrote that Georgian President Mikhail Saakashvili announced a unilateral ceasefire at ten in the evening (date not provided) when the deployment of Georgian equipment was almost complete. In response South Ossetia started shelling the Georgian villages of Prisi and Tamarasheni. This provided Saakashvili with a future agenda free of constraints. Georgian troops razed Tskhinvali while Kokoity called the retaliatory strike a provocation. So at that time the local population was stuck between Saakashvili and Kokoity and the situation in the Caucuses had become destabilized. [550]

Writing on 16 August, after combat actions had ceased, Latynina changed her tune. She stated that even though Georgia had been provoked many times, Saakashvili must bear responsibility for starting the conflict. The fact that he launched an attack is, in her words, "a big problem for me and a great tragedy for Georgia." She went on to add that Saakashvili is a man who wants to solve problems while Putin is a man who wants to create them, and here she sees a huge difference between the two. Finally, she noted that Lithuania, Latvia, Estonia, and Poland responded almost immediately to Georgia's troubles and supported Saakashvili. Thus the latter did achieve something: he has created a circle of young democracies around Russia and partially isolated it. [551]

The 1992 Peacekeeping Agreement and the 2008 Increase in Tensions

There are two issues that defined the geographical and legal background to this conflict. The first issue is the disintegration of the Union of Soviet Socialist Republics (USSR) and the development of the legal status of peacekeepers in the area, which began in 1992. The second issue is the development of increasing tension between South Ossetian and Georgian forces in July 2008 over both of these issues.

When the Soviet Union disintegrated in 1991 and Georgia broke away from the USSR, Russian interest in Georgia remained high. Georgia has strategic borders with Turkey and Azerbaijan, key infrastructure roads (and now pipelines!), access to the Black Sea, and economic interests such as access to resorts on the Black Sea and plenty of fresh fruits and vegetables. However, Georgian nationalism ran high at the time and President Zviad Gamsakhurdia wanted a "Georgia for the Georgians." Unfortunately, his regime discriminated against ethnic minorities. Relations between South Ossetia, an area incorporated into Georgia in the 1930s, and Georgia's capital of Tbilisi broke down when the Georgian Parliament decided to make Georgian the national language in 1989 and thus "confronted the people's sense of nationality" in South Ossetia. In August 1990 South Ossetia proclaimed its independence. In December 1990 Gamsakhurdia's coalition won the parliamentary election and "abolished South Ossetia's status as an autonomous oblast," thereby blocking its independence bid. This buildup in tension eventually led to a conflict in January 1991 when Georgian forces entered South Ossetia's capital of Tskhinvali. That led to a civil war with Georgian government forces and militias on one side and South Ossetian secessionists and North Ossetian (that is, Russian since North Ossetia is in Russia) volunteers on the other [552]

In June 1992, the Head of the State Council of Georgia, Eduard Shevardnadze and Russian President Boris Yeltsin met and agreed to a ceasefire. On 24 June 1992 the Sochi Agreement on the Settlement of the Georgian-Ossetian Conflict was signed. Both parties were to withdraw their forces and form a corridor separating the two sides. As a result of the Sochi process the Joint Control Commission (JCC) was formed to guarantee the cease-fire, withdraw armed forces, disband self-defense units, and ensure a security regime in the conflict zone. The JCC became the political mechanism to supervise the peacekeeping forces. [553] Thus, there had been trouble brewing between the two sides for over 15 years.

Following the 1992 conflict South Ossetia created a president and parliament but the international community did not recognize them. The JCC was the body that led the peace process and attempted to solve the political and economic problems of the area. Russian, Georgian, South Ossetian, and OSCE representatives participated. While the Sochi Agreement defined the principles of the conflict resolution process the "Regulations in Joint Forces on Safeguarding Peace and Maintenance of Law and Order in the Area of Conflict" set out the structure of the subordination of the peacekeeping forces, to include their financing and powers. [554] The commander of the joint peacekeeping forces (JPKF) was responsible for: planning for peace and stability; organizing JPKF activities; keeping in touch with local legal bodies; coordinating between battalions; liaisoning with local forces; and organizing training for JPKF battalions. [555]

For several years the peacekeepers kept events under control. However, as time progressed, tensions continued to increase and some would say Russia's impartiality began to evaporate to the favor of South Ossetia, leading to the second issue defining the conflict. The size of the South Ossetian and Georgian peacekeeping contingents dwindled but the Russian contingent of 500 or so peacekeepers remained intact. The number of random attacks did not decrease, however, and the situation finally reached the breaking point after a series of events in July 2008. Russia's press eventually reported that the reason for Georgia's aggression was their leaders desire to enter NATO, for which there is a mandatory condition to resolve all territorial problems. [556]

The following lengthy list provides some headlines demonstrating the rise in tension in the last month before the fighting:

- 3 July—Georgia criticizes Russian peacekeepers after an attack on a pro-Tbilisi leader
- 4 July—two people are killed and up to 10 wounded after intensive shelling of Tskhinvali and some other villages in the conflict zone. South Ossetia accuses Georgia of launching a planned military operation while Georgia says it was responding to Ossetian provocations
- 7 July—Russian President Dmitriy Medvedev says Russia is ready to normalize relations with Georgia; Georgia's Foreign Minister says no concrete peace proposals received from Medvedev
- 8 July—detained Georgian officers were accused of organizing artillery observers; Georgia decides to take "unilateral steps" unless Russian peacekeepers are replaced
- 9 July—Georgia's Foreign Minister accuses Moscow of provocations in the conflict zone and accuses Russian warplanes of breaching airspace over South Ossetia; Russia calls Georgia a "threat to peace and security" in the South Caucasus
- 10 July—Russia says its warplanes flew "briefly" over South Ossetia on 9 July to prevent a Georgian

- invasion threat; Russian troops stand ready to help peacekeepers in Georgia's breakaway republics; Russia's OSCE envoy urges Georgia to stop provocations against South Ossetia
- 11 July—Georgia recalls its ambassador to Russia after Russia admits that four of its planes had flown over South Ossetia on 8 July; Georgia threatens to shoot down planes if they enter Georgian territory again; the EU calls for international mediation
- 12 July—Georgia's Parliament calls for international support in its standoff with Russia; Russia says Georgia's appeal to the UN is "pure propaganda"
- 14 July—a Russian paper views prospects for a Russo-Georgian war; the US embassy in Georgia blames Russia for provocations; Moscow tells Tbilisi to stop "undermining" JCC mechanism over South Ossetia
- 15 July—Russia says NATO expansion in Georgia, Ukraine unacceptable; US, Georgia, Armenia, Azerbaijan, and Ukraine begin exercise "Immediate Response" at the Vaziani training area
- 16 July—South Ossetian official accuses Georgia of rejecting peace talks; Tbilisi protests Russia's military exercises
- 19 July—South Ossetia rejects EU-proposed talks with Georgia in Brussels
- 21 July—UN Security Council holds closed session to review the situation in Georgia; South Ossetian authorities accuse Georgian police of taking four Ossetian men hostage
- 22 July—Georgian envoy says UN Condemns Russia's "military aggression" (concerning the 9 July over flights by Russia of South Ossetia); Russian UN envoy slams "pro-Georgian bias" of West at UNSC session
- 23 July—Georgia's Foreign Ministry "seriously concerned" at Russian military exercises
- 29 July—South Ossetia accuses Georgia of shelling and firing on villages of Andisi and Sarabuki near Tskhinvali and of firing on a Joint Peacekeeping Force monitoring group that arrived on the scene. Georgia accuses South Ossetia of attacking the monitoring groups and of trying to seize the strategic Sarabuki heights under control of Georgian peacekeepers where the Georgian flag was hoisted on 28 July; Georgia to take radical measures if separatists repeat shooting; attack on peacekeepers in South Ossetia "preplanned" according to the JPF command
- 31 July—South Ossetia confirms setting up military fortifications in the conflict zone
- 1 August—Georgian official says remote-controlled bombs that injured Georgian policemen involved an Ossetian peacekeeping checkpoint
- 2-4 August—six people are killed and more than 20 injured in one of the most serious clashes in the conflict zone in many years and both sides blame the other; Georgia says Russian peacekeepers involved which Russia terms a "dirty provocation;" President Kokoity of South Ossetia says he is ready to announce mobilization and threatens to strike Georgian cities
- 7 August—South Ossetia accuses Georgia of attacking Tskhinvali and Georgian President Saakashvili calls for an immediate end to the "frenzy"
- 8 August—the Georgian-South Ossetian conflict begins [557]

From 8-12 August the conflict spread, with Russia quickly restoring its control over South Ossetia and then driving south into Georgian territory beyond South Ossetia's borders. By 13 August Russian President Dmitriy Medvedev had halted the peace enforcement operation once it reached its objectives. In his opinion, Russia had produced a prompt and efficient response to Georgia's aggression. [558]

Playing by Western Rules

Vladislav Inozemtsev, director of the Center for the Study of Post-Industrial Society, was one of the first Russians to describe his country's rational for intervening in the South Ossetian conflict. He noted that Russia learned several lessons from watching Western powers intervene in conflicts around the world and applied many of these lessons to the conflict in Georgia.

First, Inozemtsev notes, the Kremlin recognized that the world is tolerant of defending minorities oppressed by the majority, a situation resembling that in regard to South Ossetia and Georgia. Second, Moscow officials practiced humanitarian intervention for the first time, using this "Western doctrine" to their advantage. Third, Russia acted within the confines of the doctrine of preemptive action which is so revered by Americans, attacking those targets that might have attacked Russian forces. The United States, Inozemtsev added, will now have to look again at its favorite assertion that democratic countries are never the aggressor. [559]

An ITAR-TASS report noted that Western rules also take into account a proportional use of force and the desires of the people in the region. Russia played on both of these themes as well, stating that Russia was on the right side of both issues while Georgia was not. Russia's permanent representative to NATO, Dmitriy Rogozin, stated that Russia had used force in a manner more proportionately during its peace enforcement operation than NATO did in the former Yugoslavia (the reference must be to Kosovo).[560] Russian President Dmitriy Medvedev supported the theme of going along with the desires of the people in the region. He stated that Russia is not against the insertion of international peacekeepers in the zones of the Georgian-South Ossetian and Georgian-Abkhazian conflicts as long as one takes into consideration the views of the affected parties. Whereas Georgia wants international peacekeepers, the people of South Ossetia and Abkhazia believe only Russian peacekeepers can properly reflect their interests.[561]

Russia's Armed Forces: What Went Wrong

Not surprisingly, discussions of the conflict by active military and government officials and by retired or non-government officials differed in their views on the armed forces role and performance. The former were much more positive in their assessments and conclusions than the latter. Russian President Dmitriy Medvedey, for example, has appropriately covered the positive aspects of the conflict. He awarded Russian soldiers for their achievements in semi-private ceremonies and praised troop actions during the conflict. Medvedey noted in somewhat of an overstatement that this operation would be written about as one of the most glorious chapters in the history of the armed forces.

It is the latter (retired or non-government journalists) that will receive the focus of this section and includes some of the Russian armed forces greatest critics. One person, retired Colonel Anatoliy Tsyganok, listed both strengths and weaknesses of the armed forces actions. Strength-wise, he wrote that the armed forces solved three problems: the Roki Pass Tunnel, the limited throughput capacity of the Vladikavkaz (the capital of North Ossetia in Russia, where movement began) to Tskhinvali (the capital of South Ossetia) road, some 167 kilometers, and the mustering of various forces throughout Russia. Within 24 hours the number of Russian troops in South Ossetia had doubled. Tsyganok stated that troop actions deserved "all possible praise." [562]

However, Tsyganok was quite adamant that there were operational and combat support issues that left room for improvement. First, a lack of satellite support left the troops in an information deficit.

The main problem was noted as "the lack of the requisite space grouping and GLONASS receivers." [563] Electronic warfare systems were not used to suppress Georgia's air defense systems and there was an absence of aircraft controllers. This caused armored columns to advance without the proper cover. Second, traditionally weak areas for the Russian army, such as nighttime actions, reconnaissance, communications, and logistical support, remain weaknesses. Night sighting devices are blinded by gunfire flashes and old tanks did not have global navigation systems or friend or foe systems. Third, it was rare to see vehicles fitted with shields or additional armor and, as a result, soldiers still prefer to ride on the outside of these vehicles where, if thrown off, they have a chance of surviving. There was poor interaction between tanks and motorized infantry units and, on occasion, units sometimes fired on one another. Fourth, there was a shortage of modern precision weapons in the Russian air force and virtually a total lack of drones. Pehela drones used in Chechnya are practically worn out. Finally, a 1998 decision to remove helicopters from the ground force has turned out to be a problem. There are no experts in army air aviation in the air force that know how to support ground troops. [564]

Recommendations by Tsyganok included creating information troops that take into account state and military media, modernizing forces by the end of 2015, reconstituting army aviation in the combined-arms armies and corps, and equipping aircraft and helicopter gunships with modern systems. It is also necessary to put more satellites in orbit (24 are needed but only 13 are in orbit) and procure more GLONASS receivers, to develop friend or foe systems, and to develop new radar stations. [565]

Journalist Mikhail Lukanin wrote that insufficient use was made of ground attack and tactical aviation. Other errors on the part of Russia's armed forces were a lack of unmanned aerial vehicle (UAV) use, inadequate organization of communications, inadequate personal gear and equipment, and the absence of precision weapons. [566]

On 19 August the Presidium of the Globalization Problems Institute talked about South Ossetia and the question of information. They concluded that the Russian political and military leadership experienced indescribable panic and confusion when they realized Georgia was actually invading South Ossetia. They also wrote that the Russian military command acted with incompetence. Soldiers in many cases had no knowledge of how to counter Georgian guidance systems which were searching for Russian signals from radios and mobile telephones. They concluded that the main goal of the war was to draw the Russian army into military operations. [567]

Olga Bozhevya, a writer for <u>Moskovskiy Komsomolets</u> (<u>Moscow Komsomol Member</u>), used many of the same arguments as Tsyganok. She noted that the West is accusing Russia of the use of excessive force. She fixed blame for the accusation on the lack of modern precision systems in the Russian armed forces. Without the proper digital systems, how can fires be precise? Thus high-tech satellite reconnaissance systems and precision weaponry did not win the conflict for Russia. Rather, it took the heroism and blood of the common soldiers who relied on weapons of the 1960s. Russian forces were not able to fight in a non-contact style as the US does but rather only in contact style.

Russia was able to obtain several "trophies" from the conflict (Osa air-defense systems, BMP-2s, Czech-made self-propelled artillery, US Hummer vehicles). Further, Bozhevya quotes the reliable and intelligent Vitaliy Shlykov, a member of the Foreign and Defense Policy Council and Chairman of

the Commission for Security Policy and Expert Appraisal of Military Legislation of the Ministry of Defense Public Council, who believes a major problem in the Russian armed forces is its lack of unified commands. Shlykov stated that "With the current system of leadership it could not have been otherwise not only for the armed forces but for the country's defense as a whole."[568] Perhaps Georgian President Saakashvili knew this in advance and planned the operation to demonstrate Russia's resort to blood spilling among peaceful people, Bozhevya added. Finally she asks who is responsible for these operations, the military or the politicians who do not provide the armed forces with the equipment it needs?

Author Viktor Baranets, an outspoken critic of the military and former officer who writes often on military affairs, listed eight lessons that the Russians should have learned. They are:

- Underestimating the enemy's equipping with Israeli and Ukrainian equipment
- The delayed maneuver of the peace keepers after Georgian peacekeepers left their positions
- Sleepy control from Moscow which allowed the Georgians to set up ambushes along the road leading to the tunnel and mining the road.
- Intelligence failures of all types in the first stage of the operation
- Tactical illiteracy on the part of air defense systems
- Old weapons and tank radios didn't work well
- Deafness in regard to communications forced troops to use their own cellular phones to contact staffs and command posts (one general reportedly used a satellite phone from a <u>Komsomolskaya Pravda</u> correspondent)
- Passiveness of aviation to Georgia's air defense threat resulted in the loss of four aircraft[569]

Baranets also discussed Georgian "myths" such as how many troops they killed, how they set a trap for Russia's forces, and so on.[570]

Reformer journalist Alexander Goltz, who has continuously criticized Russia's lack of reform in the armed forces, wrote that Russia intends to leave more tanks and artillery behind once it withdraws to Russia because Georgia now understands that its most important goal is to find a way to block the Roki Tunnel and Russia must be able to counter any such attempt. Goltz also wrote that no one really "won" this conflict, stating that

One can at a minimum claim that Moscow was unable to diplomatically reinforce its "victory." And this forces one to think about whether this was a victory at all. The winner Russia is in factual isolation. No one supported it: not China, not Venezuela, not Father Lukashenko [the President of Belarus]. Only Fidel remained true. As far as Moscow's Western "partners" go, then the main topic of discussion of the diplomats of the United States and Western Europe is how to force Moscow to "pay" for its actions.[571]

Another criticism was leveled by former chief of the Main Tank-Automotive Directorate of the Russian Defense Ministry, Colonel-General Vladislav Polonskiy, who noted that units went into action without reactive armor and that this shortcoming must be corrected at once in light of improved

anti-tank weapons. Some tanks covered in reactive armor, as seen on TV, were actually reactive armor tiles that were empty, he stated.[572] The Commander-in-Chief of Ground Troops, General Vladimir Boldyrev, stated that it will take radical measures to "update the communication equipment of the tank troops and drastically improve their command and control system."[573]

With regard to equipment, even the Russian spokesman for this conflict, the deputy chief of the General Staff of Russia Colonel General Anatoliy Nogovitsyn, stated that the General Staff will draw serious conclusions from the use of radio-electronic measures in light of losses from the operation in Georgia. He noted that the Georgians had been armed by Ukraine and that it was difficult to suppress the Tor and Buk systems since Ukraine knows the strong and weak points of Russian fighters. Nogovitsyn added that Russia's radio-electronic systems are also "Soviet made" from which the proper conclusions can be drawn. [574]

With regard to the success of the Georgian Buk surface-to-air missiles, Nogovitsyn stated that these Ukrainian systems were successful against Russian aircraft because they were deployed to Georgia just before the attack and this surprised Russian analysts. Further, the Buk system can change its location rapidly, and the Russian and Georgian units are armed with identical air defense systems from Soviet times. Georgian operators were informed by "foreign colleagues" Nogovitsyn noted, adding that the IFF signal receivers on these missiles are designed to change bands. In this way, when adjustments are made, these systems can be used to fire against Russian aircraft. [575]

Colonel General (retired) Sergey Mayev, head of the Main Armor Directorate from 1996-2004, former Minister of Defense (1992-1996) Pavel Grachev, and former Chief of the General Staff (1988-1991) Mikhail Moiseyev also weighed in on equipment problems. Mayev said a combat vehicle equipped with "nine channels of firepower" (anti-tank missiles, heavy machine guns, automatic grenade launchers, and air defense systems, etc.) was created back during the Afghan war years but has still not been fielded today. Mayev noted that generals also need more unmanned aerial vehicles and that armored vehicles should only advance with information-laden helicopters flying above them. Grachev called for radio-technical reconnaissance and mobile communications systems, and Moiseyev called for combat control systems, starting with army and regional command posts. [576]

Finally, Russia's Ministry of Defense was satisfied overall with the campaign in South Ossetia. Chief of the Russian General Staff, General of the Army Nikolay Makarov stated that shortcomings could be eliminated if more money was allocated for high-precision weapons, an orbital space grouping, air defense, and aviation improvements. All Duma members were not as certain that all had gone well. Deputies wanted to know why all types of reconnaissance had failed, why there were serious organizational shortcomings, why there were such tangible losses in heavy equipment (helicopters, jet aircraft, etc.) against such a haphazard army, and why so much equipment broke down while the world was watching. Viktor Ilyukhin, vice-chairman of the Duma's State Construction Committee, went so far as to state, with regard to Minister of Defense Anatoliy Serdyukov, that "after such a war you as an honorable man should submit your resignation." [577]

Accusations against the United States and Other Organizations

The US waited nearly a month before openly admitting that Georgia had initiated combat

operations in South Ossetia, according to the Russian press. One of the first articles on this statement was an ITAR-TASS report devoted to a meeting of the US Senate's Armed Services Committee devoted to the Georgian-Russian conflict. US Under Secretary of Defense for Policy, Eric Edelman, stated that Tbilisi's actions were the reason for the movement of Russian troops to Georgia. He noted that "the Georgian leadership's decision to employ force in the conflict zone was unwise." [578] Edelman felt that Georgia's leadership thought they could conduct a limited military operation that would result in the restoration of Georgian sovereignty over South Ossetia, an operation that was hastily planned and implemented. Edelman added that the Bush Administration does not condone the use of artillery and multiple rocket launchers into urban areas and into areas where Russian peacekeepers were stationed. The Bush Administration, however, also does not condone Russia's aggressive response which will not be tolerated and will not be cost free. He also stated that the US does not seek a new Cold War either. [579]

Another report in the Russian press implied that the US certainly knew of Georgia's plan ahead of time. Interfax reported that US Ambassador to Russia, John Beyrle, stated that he personally knows how serious the US tried to deter Georgian authorities from such a move. Beyrle added that just because the US supplied equipment and training to the Georgian military does not imply that it gave a "green light" to the Georgian operation. Georgian soldiers serve with the US in Iraq and Afghanistan and that was the reason for the trainers and equipment in Georgia. Countering Russian claims that the US was complicit in the attack by airlifting Georgian troops from Iraq back to Georgia, Beyrle stated that when the Georgian side asked for help there was a threat that Russian troops would continue moving to Tbilisi. [580]

However, on 16 September, Russia's permanent representative to NATO, Dmitriy Rogozin, reenergized the issue of who attacked first. He was responding to a US State Department claim that Russia started the conflict. The International Herald Tribune, ITAR-TASS reported, claimed Georgia had made public a transcript of intercepted verbal messages between Ossetian border guards regarding attack plans on the eve of the August 7-8 events. The paper claimed that Russian military forces had entered the Roki tunnel late on the night of August 6 or in the first hours of August 7, or 24 hours before the start of hostilities. The <u>Tribune</u> stated that on the evening of 7 August US Deputy Assistant Secretary of State Matthew Bryza had spoken with Georgia's foreign minister, Eka Tkeshelashvili, who appeared to believe in the content of the recorded Ossetian conversations according to Bryza. Soon thereafter President Saakashvili issued his order to attack. Rogozin claimed that the tapes, if they exist, were manufactured by Georgian or US Secret Services. He demanded space reconnaissance data that would unambiguously prove there were no Russian troops moving though the Roki tunnel before 8 August. [581] On the same day Russia's foreign ministry spokesman Andrei Nesterenko also requested satellite information on the operation.[582] Thus Russia wanted to call the US on this charge. It appeared, however, that Russia may have over responded to the content of this article.

In an interview with the Spanish press, Rogozin stated that according to information in Russia, the US, since they gave weapons to Georgia, was a direct participant in the conflict. The US and not NATO is responsible for the fighting as part of their geopolitical game. In particular, he stated

I think the problem is that Washington is jealous. The US wants a monopoly and we are

applying an anti-monopoly policy. We want to live in a world with many poles, with a balanced system, but the Americans believe that their young democracy is the most important thing. That kind of thinking is very naïve. The US history is shorter than the history of a horse farm near my house in Moscow. [583]

There were many statements in the Russian press that indicated the US was involved in training and planning the Georgian operation. Marianna Grishina, writing in *Krasnaya Zvezda* (Red Star) on 19 August, leveled one of the most poignant attacks. She stated that the US government is as responsible for genocide as Georgia and should be held accountable. She added that even though there is no way to prove US involvement in the invasion, the US has de facto begun a policy of acting as an advocate of genocide. Grishina then turned her spotlight on all of the incursions involving the US over the past fifteen years, concluding her article with the comment that today US soldiers are "accidentally" shooting subunits of the Afghan police. [584]

Dmitriy Shalkov delivered another accusation against the US and its coalition partners. He noted that Russia had found satellite reconnaissance data had been found abandoned by the Georgian staff as they moved away from the fighting. Since Georgia does not have a satellite constellation of its own, Shalkov's implication was that a Western nation must have supplied the data to the Georgians. [585] Adding his own personal weight to the issue, on 11 September Russian Prime Minister Vladimir Putin also stated that the US had pushed Georgia into attacking South Ossetia by training and funding Georgia's armed forces. [586]

Colonel General Nogovitsyn stated that the US had trained Georgian officers and men, supplied the Georgian side with weapons, and outfitted the Georgian army with equipment and arms. He said that over 120 Pentagon representatives engaged in this activity for a lengthy time period (Nogovitsyn did not, however, specify how much time was spent on partnership activities nor did he state how much time was spent training Georgian forces for operations in Iraq. His clear implication was that US forces were in Georgia to assist in planning the intervention into South Ossetia). He also stated that the presence of NATO warships in the Black Sea for alleged humanitarian purposes was a ruse to deliver other types of cargo. He stated that "spending enormous resources to convey humanitarian help to Georgia is at the very least not inherent to Americans." [587] Most Americans, knowledgeable of hundreds of such actions on the part of the US, would consider that Nogovitsyn had lost much of his credibility with this statement.

Other Russian reports supported Nogovitsyn's view on NATO warships. An RIA-Novosti report, for example, also stated that the US ships in the Black Sea were there on a pseudo-humanitarian mission. The ships were accused of performing reconnaissance functions and were under suspicion of supplying arms to Georgia. [588]

Rossiya TV reported in early September that US weapons "were used to kill Russian citizens." That, quite obviously, is an inflammatory phrase. The TV report itself was designed to be sensational or enticing for its lack of detail. It is unclear which one was the actual goal of the program. After setting the stage by stating that US weapons are "already near our borders," the Russian TV correspondent noted that an automatic Bushmaster rifle, a telephone intercept system "based-on" American equipment, a vehicle made in the US in the 1960s, "American combat stress medicines" in

the pockets of dead Georgian soldiers, a high-resolution satellite imaging map and mobile telephone (with a male voice from the US National System for Geospatial Intelligence), and Hummers were captured by Russian forces during the conflict. [589] These are not the type of weapons that would worry Lichtenstein, let alone Russia.

Interfax also reported that the Russian General Staff had accused OSCE observers in the conflict zone of not warning Russian peacekeepers about Georgia's plans. "They were notified by Georgia that there would be an attack but they did not warn the Russian peacekeepers," Colonel General Nogovitsyn stated. [590] He offered no proof to support his accusation, a common Russian press technique that even Russian journalists criticized.

Media Operations

Russian media outlets used state run agencies like ITAR-TASS and RIA-Novosti and <u>Krasnaya Zvezda</u> (Red Star), the military's newspaper, to deliver a point of view from the President, the Minister of Foreign Affairs, Russia's Representative to NATO, the Ministry of Defense's Public Relations representative, and the Prime Minister. Russia used a Deputy Chief of the General Staff, Colonel General Anatoliy Nogovitsyn, to serve as its official public relations spokesman. He eventually gained some notoriety as a calm, level-headed yet firm representative of the opinion of the Ministry of Defense. Criticism of the Russian media was most pronounced by independent journalists and some retired military officers who used the national news media, although some positive stories also appeared here.

Overcoming a Slow IW Start...

A media, public relations, or information war (all of these terms were used interchangeably) was reported in the Russian press. Initially Russia appeared to be on the "information defensive" at the beginning of the conflict. On 8 August, just as the fighting started, <u>Agentura</u> reported that the Georgians had established a press center in Gori, a city about 30 kilometers from South Ossetia. Operating from the Trialeti regional television company, computers were installed for journalists that provided Internet access. The journalists were instructed how to behave during conflicts. <u>Agentura</u> accused the Georgian side of launching the Os-inform.com website, which was close to the South Ossetian news agency site of osinform.ru. The Georgian website reportedly carried a fake message by South Ossetian President Eduard Kokoity.[591]

On 9 August Russia reported the deaths of 12 to 13 peacekeepers in the past 24 hours. Russian Foreign Minister Sergei Lavrov accused Georgia of attacking civilians, residential buildings, finishing off the wounded, and violating humanitarian laws. Lavrov said that "Russia's responsibility as a peacekeeper amounts to a response to this aggression."[592] Both Russian Defense Ministry spokesmen and Russian President Dmitriy Medvedev declared that Russia is not in a state of war with Georgia but was imposing a peace enforcement operation.[593]

On 11 August, Federation Council Speaker Sergei Mironov reproached Western media outlets for not covering Georgia's bombing of South Ossetia at the start of the conflict. He accused the Western media of biased coverage. [594] A Russian TV presenter stated that Tbilisi (and by implication Georgian President Mikhail Saakashvili) was "starting to deny the obvious, trying to conduct an information war and thus provoke the peacekeeping forces." [595] TV stations quoted the Russian

Ministry of Defense as stating that the Georgian military was "killing off wounded Russian peacekeepers and local inhabitants at captured posts" [596] much as Lavrov had done two days earlier. The article ended with the statement that "the war has started, and the information war is, unfortunately, at its height." [597] On 12 August the state-controlled Russian TV station Channel One showed footage of captured Georgian saboteurs testifying that they were agents of Georgia's special services caught preparing terrorist acts. [598]

On 13 August Colonel General Nogovitsyn reported that Russia had countered what he termed many of the lies and misrepresentations in the West's information war. He stated that he considered this a media confrontation while others referred to it as an information war. He also stated that Georgian President Mikhail Saakashvili had lied when he said he had been in South Ossetia and had personally witnessed Russia destroying Tskhinvali. [599] Thus Russia appeared to be growing stronger in the IW area and moving toward an "information offensive" mindset.

On 14 August, in a report intended to serve as a summary of information warfare activities to date, journalist Valeriy Vyzhutovich wrote how Georgia was initially more active in the information arena, announcing Georgian successes every hour, describing Russia as the aggressor country, and showing Georgian President Mikhail Saakashvili on TV. Georgia blocked all information from Russia, to include TV, radio, print publications, and the Internet, all of which are seen as a Georgian "information expansion" act that poses a threat to Georgia's national security. A second information front was created by Western press agencies, he adds. Russia's IW offensive was domestic based. Russian bloggers, for example, suspected Reuters news agency of utilizing faked pictures from in and around Gori and reported this to the Russian public. [600]

On 15 August Russian UN representative Vitaliy Churkin expressed regret that the West had launched a "propagandist campaign" in connection with the Caucasus situation. In particular he blamed the New York Times and London's Financial Times, waving them in the air and quoting reports about Russian attacks on Gori. Churkin claimed that all Russia had done was to guard an abandoned ammunition dump that contained 15 tanks and some armored personnel carriers, securing them from someone taking them and driving in any direction. [601]

As Russian journalists moved on the information offensive they covered the following points: that firing on civilians is a violation of international law and subject to international justice; that a humanitarian crisis was afoot and Russia needed to strengthen its peacekeeping contingent to keep it from spreading; that Russian troops were to protect its citizens in South Ossetia in compliance with the peacekeeping mandate; and that legally Russia's actions were legitimate and just. Valeriy Vyzhutovich recommended that Russia increase its information openness and expand the volume of information it needed. Russia must insure that a lack of information doesn't turn into a lack of support.

[602]

On 17 August Colonel General Nogovitsyn stated that Georgia had falsely accused Russia of starting a fire near Borjomi, taking the settlements of Khashuri and Akhalgori, blowing up a railway bridge on the approaches to Tbilisi, and sending tanks to Senaki. None of this has taken place, he stated, accusing the Georgians of disinformation in order to erect a smoke screen and cover their planned large scale act of provocation in Gori. The Georgians, he noted, planned to use Georgians,

Ukrainians, and Chechen terrorists dressed in Russian uniforms to conduct a raid on the city and blame it on the Russians. However, Russian peacekeepers will not fall for this provocation. [603]

On 23 August Nogovitsyn stated that the Russian military was regularly holding news conferences to provide relevant information as quickly and fully as possible, because Russia understands the importance of media relations. He noted that Georgia had set the tone by appealing to the world community from the beginning of hostilities; and had switched off all Russian broadcasting capabilities in Tbilisi so that only the Georgian position was available to listeners. Russia is learning from this situation, Nogovitsyn added, and will be more adept at information confrontation in the future since information globalization is so prominent today. [604]

A 3 September summary of the information war by the paper <u>Rossiyskiye Vesti</u> indicated that initially Russia was very envious of the attention the West gave to Georgian President Mikhail Saakashvili. The paper wrote that anti-Russian propaganda dominated the media space until Georgian troops began to suffer a crushing defeat, at which time CNN showed Colonel General Nogovitsyn briefing reporters live for the first time. His presentations over the next few weeks enabled Russia to win the information war because Nogovitsyn had mastered information technologies and because the "truth" was on his side. His style was also an issue, as he appeared to be a lecturing professor who methodically and calmly addressed the media and its questions according to the report. [605]

On 9 September Nogovitsyn stated that "information wars are even more formidable than war itself." He wrote, somewhat ironically it turns out, that "brainwashing people with propaganda has been given the status of official state policy in that country [Georgia]." He added that groups of people, not local residents, are transported to South Ossetia by bus (most likely Nogovitsyn is talking about the pre-war period) with anti-Russian banners in English. These people insult the Russian peacekeepers and call them occupiers. Western journalists in the bus record all of this. [606]

Prime Minister Vladimir Putin continued bashing the Western press when on 11 September he stated that "the media's coverage was utterly preposterous, yet they managed to get away with it. This can be possible only in a situation where people are very persuadable, where the man in the street does not keep track of events, and eagerly accepts other's point of view." [607] Or perhaps Putin underestimates how much people still distrust the Russian press.

Some Russian Journalists Think Russia Lost the IW...

There were several Russian journalists who stated that Russia had lost the information war and had done things improperly. On 11 August William Dunbar, a Russian correspondent in Georgia for the English-state channel Russia Today, stated that Russia was bombing Georgia. Dunbar did not return to the air. He told Moscow News later hat his satellite feeds had been cancelled by Russia Today. Unable to tell the "real news" which didn't conform to what Russia Today wanted, he said he had no choice but to resign. [608]

Other criticisms were slower in appearing. On 22 August journalist Vladimir Shcherbakov criticized the Ministry of Defense for its inept information warfare operations. He stated that IW is generally understood as "a set of measures for preventing the enemy from collecting any information, for influencing his ability to exercise command and control at a state (public) level and on the

battlefield, and for totally destroying such capabilities as well as preventing the enemy from doing the same thing."[609] IW has focused of late, Shcherbakov added, on special-propaganda effects on the mass consciousness to change the behavior of a wide range of people while imposing on them goals useful to the one using the information weapon. Methods include both constant information noise and an information vacuum. Dissemination "means" range from military special-propaganda teams (that is, psychological operations teams) to the public mass media. Quoting Russian Lieutenant General Alexander Burutin, a Russian information operations proponent, Shcherbakov added that the military is currently working on drafting concept designs, elements, and methods of conducting information operations. [610]

Shcherbakov's criticism focused in particular on the military's lack of even creating a separate section on the war on South Ossetia on its website. At the same time, he added, the Pentagon's website was full of news from the "Caucasus Front." The military and special services also did little in Shcherbakov's opinion to block the blogs and articles in the mass media with a negative impact and did little to create blogs and articles with a positive direction to counter them. The military made accusations (a black soldier was found in Tskhinvali) but there was never any proof of his existence. Much was made of the fact that foreign equipment was captured from the Georgian forces, but the world knows that for the past several years various arms and equipment had been sent to Georgia. The equipment doesn't imply that forces were there. And worst of all, much was made of a name badge found on a Georgian soldier that indicated that the person had trained at a center controlled by the Americans. From this simple fact the Russian Federation spokesman concluded direct responsibility of the American military for initiating the war. Such circumstantial evidence isn't enough, Shcherbakov added. We have to present real proof. [611]

Sheherbakov concluded his article with this admonition of the military for losing the information war:

The answer is rather simple—the military department has practically no professionals with high qualifications capable of competently conducting the information operations which form information warfare. There are specialists in special propaganda but this is not one and the same. But experts in the sphere of information warfare in Russia are nowhere to be gotten: everything the mass media and PR services in our country have worked on was the leaking of damaging information on each other to the press. Such methods do not work in real information warfare—they are ineffective and did not produce the desired effect. [612]

In another critical report on information warfare, journalist Ilya Barabanov gave away her point of view with the title "Union of Soviet Socialist Mass Media." She believes Russia lost the international information war. This was because Georgia allowed interviews with anyone whereas Russia used only the President, the Minister of Foreign Affairs, Russia's United Nations representative, and the First Deputy of the General Staff. Further, Georgia created an international news center in Gori which is something Russia failed to do.

Meanwhile journalists in Russia faced different circumstances. They were not allowed to cross into Georgia via the Roki tunnel and as the war drew closer to a conclusion even Russian journalists were suddenly required to have special accreditation from the Ministry of Foreign Affairs and the

Federal Security Service. Russia's only victory, in Barabanov's opinion, came from Kremlin public relation experts who used the Internet. They produced news from the front and exposed fabricated interviews and photos. Their domestic information victory must now be extended to the international information front in the future. [613]

In mid-September another information warfare deficiency was discussed. Journalist Pavel Gutiontov expressed his sorrow that Russia always laments that "their" propagandists prove to be more effective than "ours" due to the west being more cunning and unprincipled. Gutiontov stated that it is through Russian lies that the west wins and not through cunning. He noted how various explanations were given for the sinking of the Kursk before the truth was known; how Russian generals misinformed the public at the start of the Chechen war; and now how General Nogovitsyn stated that Russian troops "are not, never were, nor will be in Gori" only to have Nogovitsyn state two days later that troops had entered Gori since the Georgian administration had fled from there. He concluded his argument with a throwback reference to how, in Soviet times, the press would state that the Soviet Sputnik razor was better than the American Gillette because its steel was better. The latter produced a smoother shave only because the West coated their blades with a polymer compound of some type. Old traditions die hard.[614]

Cyber Operations

There seem to be three separate categories of information operations in Russia and all three were discussed during the conflict. There is the information-psychological aspect which covers the use of the media and press; the information-technological aspect, which handles the equipping of the force with digital products; and the cyber aspect which includes the use of military and surrogate computers to disrupt command and control in countries Russia enters.

Since the first two issues have been addressed, only the cyber issue remains. The cyber issue took on added importance for western analysts due to Russia's 2007 cyber attack on Estonia that still has not faded in the memory of many states bordering Russia. However, the cyber attack employed against Georgia was not as debilitating.

The cyber attacks started slowly. Weeks before the conflict a security researcher in Massachusetts watched an attack against a country in cyberspace. A stream of data was directed at Georgian sites with the message "win+love+in+Rusia." On 20 July other Internet experts in the US said attacks against Georgia's Internet infrastructure began at that time as DDOS attacks. Shadowserver tracked some attacks. Were these attacks dress rehearsals for the actual intervention?

But these reports came from western sources and there were many more beyond the few reports sited here. For example, much was written in the western press on the Russian Business Network's cyber warfare and the website stopgeorgia.ru which was hosted by AS36351 Softlayer in Plano Texas.

The Russian press, on the other hand, focused its cyber reporting almost solely on Georgia's use of the Internet and bloggers who supported or attacked Russia. One of the few exceptions to this rule was a mid-September article. In it, Interfax reported that NATO experts would help protect Georgian web pages on the Internet from hacker attacks. Reports said that hacker attacks were organized in

Russia.[615]

A set of three articles by Maksim Zharov titled "Russia versus Georgia: War on the Net" provided the best description of Russia's view on cyber issues during the conflict. Journalist Zharov works for the Effective Policy Foundation. He wrote at Pravda.ru that the main topic of 9 August on Runet, the Russian Internet, was the attack on South Ossetia. Particular attention was being paid to shaping public opinion on the Internet. A fierce battle over truth and lies was taking shape. South Ossetian sites such as http://osinform.ru and http://osradio.ru did excellent work according to Zharov. Georgia attempted to block these sites through DDoS attacks and fake sites which forced South Ossetia to open a new site at tskhinval.ru. Georgia opened a fake site that mimicked South Ossetian site http://osinform.ru at http://www.os-inform.com.[616]

Blogging also began immediately, according to Zharov, who stated that Ukrainian Russophobe bloggers defended Georgian fascists. The Ru_politics community was flooded with Ukrainian and Azerbaijani disinformation. The virtual "boris-kogatov" and the Ukrainian blogger "ultrasun" were other anti-Russian bloggers (capitalization of blogger names is according to their use in Open Source documents). One Russian blogger who said they were not for war (not for Russia or Georgia) was termed a degenerate by other Russians. Russia's Young Russia movement provided a spark of pro-Russian blogging, even setting up a newsreel on ZhZh (*Zhivoy Zhurnal* or Live Journal) that reported about the situation in South Ossetia as did blogger "alexbred." Zharov ended his critique of Day One by stating that in regard to Russian bloggers this was a war of extremes. As an example, blogger "eriklobakh" stated that Russia had won the Internet war but the military was lagging a little behind the Internet, whereas blogger "Chukcheev" wrote that Georgia, based on the frequency of appearances, was winning the information war.[617]

Day Two reporting by Zharov included more salvos fired back and forth from Russian and Georgian bloggers. Russian S. Stillavin stated that he attempted to upload Beijing Olympic photos at odnoklassniki.ru but instead had to view people with Georgian flags in place of their faces. Lenta.ru, a Russian site, noted that someone had placed Mikhail Saakashvili and Adolf Hitler on the main page of the Georgian foreign ministry's web site, and morphed the images together. More dastardly, blogger "Gastarbeiter" wrote that one of Russia's pilots who was captured, Igor Zinov, had the label "occupier" hung on him on the website odnoklassniki. Worse, this link was posted on Zinov's daughter's homepage. The Ukrainian blogger involved later removed this posting. [618]

Photo evidence was also presented. Video clips of the Russian bombing of Gori were taken from Western and Georgian TV and disseminated in blogs. Russia, in return, created http://war.avkhv.net/, a collection of news reports from Russian TV about South Ossetia. Two pro-Russian bloggers, "plutovstvo007" and "tarlith-history" turned their diaries into mini news agencies. Photos from Reuters News Agency became the focus of attention as well. On "forum.for-ua.com" Russian bloggers "exposed" the fact that several Reuters photos were faked or staged.[619]

Many Russian bloggers became consumed over whether Russia was winning or losing the information war to western public opinion. Russian blogger "3-rome" wrote that too much space was devoted to strip clubs and porno at the expense of real news. Blogger "borko" had a spate with reporters in the conflict zone, noting that Russian reporters were not showing the burning houses, the

dead children, and the burning Georgian tanks about which people had read. "Borko" asked to see the reason for the war. "Le9" summed up the discussion, noting that Russia does not have its own CNN and this is felt. Further, "Medvedev needs to give an interview to the foreign media explaining the position and further actions concerning Georgia. It would not be a bad thing if officials from South Ossetia appeared in news and photo agencies, and also on air quickly." [620]

The impact of Georgia shutting off all access to Russian news was also discussed. Blogger "liza-valieva" wrote that "I have just been called by relatives from Tbilisi. They were totally convinced that South Ossetia had started the war. I managed to dissuade them of this. They were in shock when they found out about the number of dead and wounded in South Ossetia." [621]

On Day Three Zharov reported that Runet (the Russian Internet) activity had died down. Allegedly the reason for this was that several sources, such as the blogger "pro-kurator," had reported that monetary support for Georgia on the Internet had been suspended. But this did not mean that there were no attacks at all. Elissa, the leader of *RIA Novosti's* Internet projects wrote that a DDoS attack on www.rian.ru had taken place. A commentator for the Net publication Vebplaneta.ru stated that it is evident that Georgia must have others helping them.[622]

Runet users think it is important to explain Russia's position to foreigners and refute Georgian assertions. Zharov explained how Russian bloggers began to analyze western presentations on the war. VIF forum presented and analysis of CNN video clips, the blogger "liquid-alco" analyzed British press articles on events, and the "luberblog" blog offered foreign bloggers' opinions about the war. Blogger "merzavec" stated that it is more important to win the information war inside the country than outside it.[623]

Another site covering cyber operations, which Zharov did not mention in his reporting, was the Russian website http://www.vesti.ru. It discussed Georgia's attempts to block all access to Russian TV and Internet assets during the same three day time period as Zharov. The website stated that the motivation behind the information blockade was to instigate an information war with Russia. It was not possible to open a website in Georgia with the ru signature, according to *Vesti*, unless it contained only non-news content such as "Hunting and Fishing." This was based on a decision by the Georgian leadership on 9 August. [624]

On 22 August the presidium of the Union of Journalists of Moscow called on the Georgian government to lift the information blockade. It accused Georgia of not allowing its citizens to get truthful "first hand" information. The Union wanted to present to Georgians the impressions of Moscow journalists who were among the first in the zone of hostilities and were fired upon by Georgian troops. [625]

Consequences

There were significant consequences from the fighting. The two major groups that are highlighted here are the changes to the conflict area after the peace enforcement operation; and the changes in the thinking of Russia and the international community in their views of one another. Although the list appears long, these are only a few examples of the many developments and thoughts that countries began to explore. Some of the consequences may turn out to be bluff or bluster while others may turn

out to encourage cardinal changes in the geopolitical landscape of the region. Commentators on the crisis ranged from the President of the Czech Republic to the Al-Jazeera news network.

Changes to the conflict area were:

- On 15 August Russian Defense representative Lieutenant-General Nikolay Uvarov stated that the Russian peacekeeping group in South Ossetia will be increased and include tanks; and that Georgian peacekeepers will not be allowed to return to South Ossetia. [626]
- On 17 August Russian troops took control over a power plant on the Georgian-Abkhaz border. The Ingurskaya power plant provides thousands of Georgians and Abkhazians with power. [627] It is not known how long peacekeeping forces will remain there.
- On 18 August Russian General Staff Deputy Chief Anatoliy Nogovitsyn stated that he knows when the New Year will come but he does not know when Russian troops will withdraw from the conflict area. [628] Fears that they will remain in Georgia for a long time begin to take shape.
- On 18 August Federation Council speaker Sergei Mironov said Russia should insist on the demilitarization of Georgia under international control. Further, Mironov advocated the construction of a buffer zone along the border of South Ossetia as in Nagorno-Karabakh. A ten-fifteen kilometer zone controlled by motorized infantry and air force units would help to stifle the concentration of Georgian troops near the border of South Ossetia and prevent shooting into this territory. [629] Also on 18 August Nogovitsyn noted that Russia's peacekeepers will never leave Abkhazia and South Ossetia. [630]
- On 19 August Russian Foreign Minister Sergey Lavrov noted that, unlike what the European Union (EU) intends to do in Kosovo, that is establish a new state, Russia's only mission in South Ossetia is to ensure that hostilities are not resumed. He added that the agreement on the peacekeeping status in South Ossetia does not determine the numerical strength of the peacekeeping contingent. Further, referring to the six principles brokered by French President Nicolas Sarkozy between Russia and Georgia that ended the fighting in August, one principle states that Russian peacekeepers will determine the security zone, in particular the width of the strip and the number of peacekeepers [631] (apparently Lavrov is referring to Principle Five, which states that "prior to the establishment of international mechanisms the Russian peacekeeping forces will take additional security measures" or Principle Six, which notes that "an international debate on the future status of South Ossetia and Abkhazia and ways to ensure their lasting security will take place").[632]
- On 19 August South Ossetian President Eduard Kokoity stated that he will ask Russia to station a military base on its territory. This will require Russia to take "an active stance" in regard to unrecognized republics.[633]
- On 20 August Russian news outlets state that Russia may recognize South Ossetian

independence. Gleb Pavlovsky, head of the Effective Policy Foundation, said recognizing the independence of the two territories would facilitate building a pan-Caucasus security system.[634]

• On 20 August Interfax reported that Russia had established eight new peacekeeping outposts. There should be 270 servicemen deployed at them. A second line of outposts will be set up later along the administrative border of South Ossetia. [635] These eight outposts would be 40 kilometers from Gori according to Colonel General Anatoliy Nogovitsyn. [636]

Changes to the international realm:

- On 12 August Russian Aleksey Arbatov wrote that Russian attacks can cause it to lose its moral supremacy in the region. The attacks will hasten Georgia's path to NATO.[637]
- On 13 August it was announced that Russian-NATO relations would change after the South Ossetian crisis. Not a word has been said by NATO to denounce Georgia's aggression. Russia's envoy to NATO, Dmitriy Rogozin, stated that "this is a war for oil, no matter how strange it may seem." Rogozin said the US's plans were to use Georgia to destabilize the situation in the region, control oil deliveries, and deprive Russia of ways to really cooperate with Europe. He added that Georgia left the Roki tunnel untouched to give the surviving population of South Ossetia an opportunity to leave. This proves that Georgia wanted to carry out ethnic cleansing, Rogozin added. [638]
- On 13 August Russian analyst Alexander Konovalov stated that Ukraine's desire to enter NATO will increase with thoughts that Russia may attempt to solve the issue of the status of Sevastopol and Crimea through the use of coercive pressure. Konovalov writes that the decision to halt military operations so quickly may have been influenced by Russia's desire to join the World Trade Organization, the conflict's impact on the conduct of the Olympic Games in Sochi, and other issues. [639]
- From 13-19 August Israeli press commentators questioned the reliability of the US in the wake of the Georgian-Russian conflict.
- On 17 August Yevgeny Volk, a political analyst with the US-based Heritage Foundation think tank, stated that the conflict will have "dramatic repercussions for Russia and the international community as a whole for quite some time to come. It is the biggest geopolitical turning point since the 1991 Soviet collapse." Poland obtained US agreement on conditions deemed necessary for Poland's approval to host a new US missile system. [640]
- On 17 August German Ex-Chancellor Gerhard Schroeder accused Tbilisi of launching the conflict in South Ossetia. He stated that "we witnessed the West's blunders in its policy with respect to Russia" adding that Europe risks losing its influence. [641]
- On 19 August a Lithuanian writer asked how an army trained by NATO could only endure a

Russian attack for two days. [642]

- On 19 August a former Estonian prime minister stated that it needed more defense against Russian information warfare capabilities in light of Russia's media war against Georgia. What matters is speed and resourcefulness. Estonia also needs to build a strong defense. [643] Ras al-Khaimah, one of the emirates of the United Arab Emirates, has invested heavily in Poti to encourage a free economic zone. Russian damage to the port and their continued peacekeeping occupation of the port spoils for the time being the Gulf investment in the Caucasus. [644]
- On 20 August Syrian President Bashar al-Assad pledged support to Russia in its conflict with Georgia and said it is ready to consider deploying Russian Iskander missile systems in its territory in response to the US missile shield in Europe. [645]
- On 21 August NATO ships were deployed to the Black Sea immediately adjacent to the boundary of the security area in which the Russian Black Sea Fleet operates. Russia is worried that humanitarian assistance to Georgia via NATO ships will include Patriot missile systems and firearms, reconnaissance in the interest of the US, and the start of a process to determine the status of Abkhazia and South Ossetia. [646]
- On 21 August the Russian General Staff accused the OSCE of not warning Russian peacekeepers about Georgia's plans to attack South Ossetia. [647]
- On 21 August the Open Source Center reported that conservative Iranian media blame Georgia and the West for the conflict and think this could lead to the erosion of the 5+1 diplomatic initiative against Iran's nuclear program. This will allow Iran to take advantage of deteriorating US-Russian relations [648] and eliminates a US back channel to Iran.
- On 26 August Russian General Staff Deputy Chief Anatoliy Nogovitsyn noted that Russia has not stopped NATO military transit to Afghanistan through its territory but may do so. [649]

Conclusions

This analysis reviewed Russian press reports about their peace enforcement operation and its consequences. It discussed the background and context of events leading up to the confrontation in South Ossetia; the strengths and weaknesses of the Russian armed forces conduct of the operation; and what the potential consequences of the conflict might be for South Ossetia, the US, and other nations. It also discussed the three aspects of information operations (cyber, information-psychological, information-technical) from a Russian perspective.

First, the press review revealed some strong resentment among the Russian military and some journalists about the suspected involvement of the US military in this operation. This resentment led to several almost inexplicable assumptions and statements from Russian leaders. Earlier it was mentioned that Colonel General Nogovitsyn stated the US does not do well at humanitarian issues.

Another article stated that the Georgian army had weak morale since the US tradition of "ready to fight but not to die" had rubbed off on the Georgians. [650] These and similar comments demonstrate a real misunderstanding about the traditions, accomplishments, and methods of western forces. These misunderstandings are understandable from the context of Russia's approach to problems in the Caucasus which is colored by a series of issues: Russia's predisposed assumptions about US military intentions (which we have helped construct) due to our actions in the vicinity of Central Asia; the inherent ambiguity in Russian reporting (making statements that are not backed up with proof, whether it be Georgia or events surrounding the death of a Chechen rebel leader), that seems to be a leftover tradition from the days of the Union of Soviet Socialist Republics (USSR); and the restoration of Russian dignity (payback?) for the nose thumbing on the part of its former republics as they left the USSR.

Second, winning or losing the information war was a major theme of the press review. Papers, radio and TV, and the Internet were filled with reports on this issue. Media operations started slowly but eventually became effective. The interpretation of events through the Russian press was easier to ascertain than in Soviet times but remains difficult.

The overwhelming weight of official reports from ITAR-TASS versus the more light weight reporting of journals was quickly felt. President Medvedev's tone was one of praise for the armed forces achievements and capabilities. He also sounded like the optimist in light of his statements encouraging future cooperation with not only international organizations and the US but with Georgia as well. He directed negative comments at Georgian President Saakashvili's fitness for office. Medvedev's lighter tone contrasted sharply with Prime Minister Vladimir Putin's harsh and strict deliveries which at times were laced with derision as well. This didn't appear to be a good cop-bad cop setup but rather the figure head Medvedev versus the actual real power authority still vested in Putin.

On the other hand, there were also significant achievements that indicate Russia learned some lessons in dealing with the press in Chechnya. The difference is that Chechnya was an internal conflict and a different methodology was needed than that required to deal with an international incident. Egon Bar, said by some to be Germany's patriarch of foreign policy, noted that Russia's mistake was not bringing in the Western press right off.[651] With regard to cyber activities the press review revealed that the Russian media focused primarily on what Georgia was doing to block access to Russian reporting in Georgia. The US publication Defense News stated that Russia's attacks did little harm so perhaps there simply was nothing to crow about.

Third, the Russian press utilized the words of people outside their own country to buttress their accusations that Georgia initiated the conflict. In particular, authoritative figures were used. They included the US Undersecretary of Defense for Policy Edelman and US Ambassador to Russia Beyrle. However, on 18 September ITAR-TASS added more fuel to this fire. According to former Defense Minister Irakly Okruashvili, who served as Saakashvili's defense minister between 2004-2006, part of the blame for the war belongs on the shoulders of the US administration which, according to the former minister, could not contain President Saakashvili's ambitions. He noted that in 2005 Saakashvili and he (Okruashvili) drafted plans to capture both Abkhazia and South Ossetia. Saakashvili believed that the US would block Russia's response through diplomatic channels.

Okruashvili thinks Saakashvili let Russians into Georgia so that he could avoid criticism and portray himself as a victim. Today, Okruashvili is a political exile living in France. [652]

Fourth, there was much to add with regard to equipment failures and shortcomings. Perhaps retired Colonel General Sergey Mayev offered the best advice. He laid the failure of equipment to the fact that it was outdated, and he noted that equipment was outdated because of officer corruption. Money for the military-industrial complex often was redirected to areas other than where it was intended, that is for the modernization of equipment. He emphasized that there were over 3,000 financial violations in fulfilling government orders in the first half of 2008 alone! Enterprises, he added, live by the rules of the crises-ridden 1990s. These include illegal salary schedules and various amendments. Now, he noted, there is so much money that some enterprises in the military-industrial complex "cannot spend it all and turn to various illegal schemes." [653] What is needed is government will in executing decisions that have been made in the past as well as rigid control over their execution." [654] Equipment requirements that involve information technologies were highlighted as priority shortcomings that must be fixed.

Other recommendations to improve shortcomings were not far behind those of Mayev. Chief of the Main Combat Training and Troop Service Directorate, Lieutenant General Vladimir Shamanov, offered an example of future offensive combat exercises (and a template for conducting offensive operations?) during a tactical exercise conducted by the 138th Guards Separate Motorized Rifle Brigade. The order of offensive operations would be artillery preparation fires, air defense units taking out enemy aircraft, Russian bomber and army aviation units joining the fight, and the use of Smerch as the final chord in the song. Journalist Yuliya Nikitina, who wrote the report on Shamanov, finished by stating that "the General Staff intends to place special emphasis on strengthening air assault battalions and creating for the troops their own aviation" although the specific type was not specified. [655] A few days later Shamanov stated that troops need equipment with up-to-date geolocation and telecommunications instruments integrated into the fire command chain, and they need top-notch friend –or-foe systems that differ from the old Soviet models, still used by many of the former republics. The three main shortcomings from the war were, in his opinion, poor coordination between the Ground Troops units and the Air Force, problems with ensuring uninterrupted telecommunications, and the poor resolution power of reconnaissance assets. [656]

General of the Army Makmut Gareev, perhaps Russia's finest military theoretician today, offered further criticism of combat operations. He stated that the conflict exposed "the inexpediency of some main commands of the armed services and the main directorates of the Defense Ministry to take control of certain special, logistical, and even combat units and formations in military districts." [657] He recommended that army aviation should be under the control of combined-arms commanders and not in the hands of an air force commander-in-chief. [658] Finally, he noted that Russia can learn a lot from NATO military personnel by studying leading technologies, their improved command and control systems, and how they equip their soldiers. However, Russia should NOT borrow NATO's personnel training methodology. He stated that

Their unit commanders still conduct exercises with their subunits; they themselves plan them, and develop operations for themselves and for their enemy. That is like telling the players before a chess match who must move how and later see how they move the pieces. Really, in a

combat situation, there is practically no information about the enemy, and everything is not always known about our own troops—where they are, how many there are, who has gotten lost, and who has ended up under fire. Therefore, Marshal Zhukov already called exercises, in which everything is known beforehand, pampering.[659]

Gareev added that many international exercises are a sham, a senseless expenditure of ammunition and time.[660]

Fifth, it is unfortunate that the UN, NATO, the CIS, or the EU couldn't have found a way to stop the confrontation. Russia points out that it warned about the possibility of conducting a peace enforcement operation in South Ossetia in Red Star on two occasions in July. In the absence of any success at the level of international organizations, Georgian took matters into its own hands and Russia responded with a peace enforcement operation. The question to ask is whether this type of peacekeeping model could be used in other areas on Russia's periphery? Or is this a one-time use model? Russian President Dmitriy Medvedev offered one reply to this question. He noted that "should somebody encroach against our citizens, our peacekeepers, we shall certainly respond in the same fashion we have done already. One should have no doubts about that." [661] International organizations still figure strongly in future Russian plans, however, and they will be called upon often to help sort out complicated situations.

Finally, the Russian method of concluding this conflict indicates that Russia feels it will no longer make easy concessions (if they ever did) in the area of peace operations. In Georgia, for example, this new method has included staying in particular areas longer than anticipated, especially in the Poti port vicinity. A new peacekeeping provision was added as well that, according to the Russian media, will allow the Russian Black Sea Fleet to be used "exclusively as part of the peacekeeping operation."[662]

Russia's press reported that peacekeepers will be pulled back to the temporary security zone determined by the decision of the Joint Control Commission (JCC) of 1999 after checkpoints and stations are completed. At the same time consultations with the Organization for Security and Cooperation in Europe (OSCE) were initiated to negotiate a possible increase in the number of military observers from the OSCE in South Ossetia. [663] Additional Russian peacekeeping checkpoints are an additional security measure to be installed by 22 August. [664] Most important with regard to peacekeepers, the six point plan agreed to by all parties continues to be reinterpreted by all sides and the final shape of troop deployments may not be known for some time.

Russia will probably learn from this conflict and be even better prepared to conduct a peace enforcement operation and to use the press to its advantage the next time around—but let's hope there won't be a "next time." Yet planning for potential future incidents has become a reality now that South Ossetia is in the rear view mirror. That is the geo-political reality with which everyone must now deal.

CHAPTER TEN: OPERATIONAL DECEPTION IN SOUTH OSSETIA—WHO SET THE "BEAR TRAP"?

Introduction

The 8-12 August 2008 skirmish between Russia and Georgia over South Ossetia (see Appendix Five for South Ossetia maps) and Abkhazia has generated a plethora of articles and essays by Russian, Georgian, and international analysts. Many of the articles address the topic "who started the conflict?" The revelations of these journalists and professionals are insightful and encourage a comprehensive reexamination of events. The interesting conclusion on both sides is that each drew the other into the fight. Who is telling the truth? Will we be able to see through the fog of operational deception that appears to lie at the heart of this conflict? Or for that matter, is a true rendering of those five days ever going to be discernable? This analysis will offer the reader several versions of events that transpired and attempt to answer that question.

Short Background Information

Georgia's autonomous region of South Ossetia has sought to be independent from Georgia since the breakup of the Soviet Union, when Georgia became a state. Sitting in the north of Georgia and bordering on Russia, South Ossetia's governing authorities have voiced their desire since 1988 to be united with Russia's North Ossetia. The government of Georgia has thwarted each effort to do so. In 1991-1992 a bloody civil war broke out between South Ossetia and Georgia resulting in an Organization for Security and Cooperation in Europe (OSCE) mediated settlement that ended the conflict. As a result Georgian and Russian peacekeepers were deployed in South Ossetia to maintain the peace.

A steady peace has held, although in 2004 tensions grew once again and dozens of Ossetians, Russians, and Georgians died in clashes over local policies. Sporadic shooting has continued since that time in the region. In July 2008 shootings and bombings escalated, resulting in a renewed conflict in August. Georgian forces entered South Ossetia with the goal, as one Georgian peacekeeper explained, to restore constitutional order. The environment was a chaotic one. More than eighty villages in South Ossetia were composed of Ossetians and more than forty were designated as Georgian. There were more than forty-six thousand Ossetians and thirty-six thousand Georgians in South Ossetia before the conflict in August. Most of the Ossetians were pro-Russian. South Ossetian forces seeking independence from Georgia and supported by Russia. They were led by South Ossetian President Edward Kokoity. The Georgian population of South Ossetia that was loyal to Georgian President Mikhail Saakashvili was led by the appointed head of the South Ossetian Provisional Administrative Entity, Dmitriy Sanakoyev. Russian and Georgian peacekeepers were also in the region when the fighting started that eventually drew in Georgian and Russian regular forces.

The August 2008 conflict between Georgia and Russia reportedly began on 8 August and ended on 12 August. An initial catalyst for the confrontation was NATO's April 2008 meeting in Bucharest, at which Ukraine and Georgia were offered NATO membership. This move greatly concerned Russia since that would move NATO forces to Russia's border. Georgia, on the other hand, wanted to consolidate its territory (South Ossetia included) as soon as possible and thus meet all of the

territorial requirements for admission to NATO. Paragraph 23 of the Bucharest Declaration stated the following:

NATO welcomes Ukraine's and Georgia's Euro-Atlantic aspirations for membership in NATO. We agreed today that these countries will become members of NATO. Both nations have made valuable contributions to Alliance operations. We welcome the democratic reforms in Ukraine and Georgia and look forward to free and fair parliamentary elections in Georgia in May. MAP is the next step for Ukraine and Georgia on their direct way to membership. Today we make clear that we support these countries' applications for MAP. [665]

Both Russia and Georgia had different concerns and thus may have set different "bear traps" to accomplish their goals, Russia's being to halt Georgia's accession to NATO and Georgia's being to gain admission to NATO. Setting "bear traps" involves the deceptive manipulation of opinions and decision processes at both the strategic and operational levels. Russia refers to such manipulations in some cases as "reflexive control" operations. They are expert in the set up and execution of this concept. It is similar to the US concept of perception management. Reflexive control is designed to get another party to perform specific actions or think in a particular way. [666] A Georgian official seemed to support this possibility when he noted that "we have been dragged into this process and we did exactly what the Russians wanted us to do."

Georgian officials state that Russia forced Georgia to attack by using surrogates or Russian/South Ossetian forces to strike at the homes of Georgian citizens living in South Ossetia, forcing Georgia to defend them. This would be the "bear trap" set by Russia, an enticement that provoked Georgia to attack. For Russia this would ensure that, after defeating Georgian forces and ensuring South Ossetia was in Russian hands, NATO would not control access to the Roki Tunnel and in fact may not want to admit Georgia to NATO at all for their aggressive actions. Russia, some Georgians believed, had given indications that it would not intervene if Georgian troops entered South Ossetia. Unfortunately for Georgia, these "indications" may have been part of Russia's deception plan. Georgia's armed forces under this scenario were duped by a strategic deception plan developed and employed by Russia that produced the required results.

Russian officials, on the other hand, state that Georgia forced Russia to intervene since they attacked South Ossetia first, as Georgian President Mikhail Saakashvili has admitted and in the process killed Russian peacekeepers. This produced an aggressive Russian response and the global impression that Russian aggression had returned to the world stage. This would be the "bear trap" set by Georgia.

Bottom Line Up Front

There are reporters, military men, and politicians who support or refute each of these theories. The focus of each version of reality lies around not only who "knew what when" but more importantly who introduced forces "when and where" and the responses these actions precipitated. For Russia, the entry point for their forces from Russia would have to be through the Roki Tunnel that connects Russia with South Ossetia. For Georgia, there are multiple entry points into South Ossetia along the South Ossetian-Georgian border. The timing of the crossing of these points by Russian or Georgian forces is one key to understanding who was deceiving whom.

There are five categories of opinions on these two versions of complicity for setting the bear trap. They are:

- Russians who accuse Georgia of being the aggressor
- Russians who accuse Russia of being the aggressor
- Georgians who accuse Russia of being the aggressor
- Georgians who accuse Georgia of being the aggressor
- International opinions

These categories indicate that journalists and some politicians on both sides were able to express positive and negative viewpoints on the operation. In spite of this stab at balance, there remained many problems with the reporting of Russian and Georgian authorities and journalists. These problems, described below, make the search for responsibility for strategic and operational deception more difficult to pinpoint. The following discussion summarizes the main arguments of these five categories. The first section does not use the names of the people whose opinions are expressed. The reader will become acquainted with these names as they read more lengthy synopses of the actual articles in the sections that follow this one.

Evidence against Russia

First, Russia's Ministry of Defense and pro-Russian journalists all failed to provide a documented timeline of events for Russian forces passing through the Roki Tunnel and entering Georgia. This near total absence of information leaves the impression that Russia's military is hiding something. Russian officials developed a detailed Georgian timeline of events. Yet with regard to those events they knew best, their own, they were silent.

Second, with regard to attempts to stop the conflict, it was apparent that on the evenings of 6 and 7 August Georgian officials tried to negotiate a settlement with Russia and conduct a cease fire. Russia refused Georgian President Mikhail Saakashvili's offers. Most military officials interpreted this turn of events as evidence that the Russian operation probably had already started and it was too late to turn back and conduct further discussions. Some Georgian military officials have stated that Russian forces entered South Ossetia on 6 and 7 August.

Some Russians were more pro-Georgian in their analyses and blamed Russia for starting the conflict. One Russian found irony in the Russian response that blamed Georgia for conducting the war:

To strike your fist on the table and with metal in your voice ultimately remind the world about humanism! To turn Grozny into ruins and then talk sternly about the double standards of those who don't want to look at the ruins of Tskhinvali. To look firmly in the eye of the frightened expert community and compare the Georgian enemy to Hitler, his attack on South Ossetia's capital to the Nazis' attack on Poland, and the invasion of Georgia by our troops naturally to the assault on Berlin. And if that wasn't enough, to compare 8 August to 11 September. [667]

One Russian unearthed information in the South Ossetian press indicating that Russian forces were in South Ossetia as early as 6 August. Unfortunately, none of those sources were listed for independent examination. The same Russian source also stated that one of Russia's Deputy Defense Ministers along with the head of the military's intelligence apparatus visited South Ossetian President Edward Kokoity on 3 August, which could indicate final planning for an operation. But with no documentation, just a list of dates and times that purportedly came from South Ossetian papers, this version of events was no better than the Russians total lack of a timeline on their forces movements.

The only pieces of potential if not actual evidence that Russia entered Georgia early were a recording of an intercepted conversation and a posting on a web site. According to one Russian journalist, there was an electronic intercept on the evening of 7 August indicating that Russian forces had passed through the Roki Tunnel. A voice recording of this event was played for Russian journalists. With regard to the website, a wounded Russian officer's interpretation of events posted on a Russian web site stated that Russian forces had entered South Ossetia on 7 August. The post was soon removed from the website by the Russians.

With regard to a pro-Georgian view of events, some of Georgia's political leaders provided detailed testimony before a parliamentary commission. They admitted attacking first but stated that this was done to protect their citizens who were being driven from their homes in South Ossetia by Russian and South Ossetian forces. One Georgian official noted that on 2 August pro-Russian refugees were moved from South to North Ossetia, which is to Russian soil, indicating that Russia was planning something. A day later some fifty Russian journalists moved into and began transmitting from Tskhinvali. The official believes that on 7 August Russian troops rolled into Georgia while there was a dense cloud cover and darkness over the Roki Tunnel area. The same official also played a recording of the conversation between two South Ossetian border guards indicating that Russian forces moved into South Ossetia on 7 August. If this Russian movement was in progress as reported, then it seems logical that Georgia should have sent an unmanned aerial vehicle to the vicinity of the Roki Tunnel to see whether tanks were coming through the tunnel or not. They did not need to rely on satellite data alone. A voice intercept should have been backed up by hard visual evidence. It was not. Verifying the intercept's activity was important since the voice intercept could have been Russian disinformation designed to provoke a Georgian response.

Another Georgian official stated that representatives tried to talk to Russian officials on 6 August and hopefully end the growing tensions between the two countries. A day later that same official informed allies in the area of the growing tension and the potential for conflict. This was because Russian officials refused to negotiate.

Evidence against Georgia

There were several Georgians with an entirely different view of events that fingered Georgia as the responsible culprit for the fighting. One such official noted that on 19 June a high-ranking Georgian official said "in my presence" that Georgia could take Tskhinvali, the capital of South Ossetia, in three hours and the Russians couldn't lift a finger to help. Based on information from Moscow, the official notes, people from Saakashvili's inner circle fiercely persuaded him that Russia would not defend South Ossetia.

A Georgian military official stated that on the night of 7 August Georgian troops were operating to bring "constitutional order" to Tskhinvali which indicates a Georgian action that is not a counteraction to Russian involvement but rather a civil-military operation. This statement was deemed "not sanctioned" by Georgian officials and later was removed. Thus not only did the Russians take a statement off the web indicating their complicity in moving into South Ossetia earlier than officially indicated, Georgia also rejected just such a damaging statement from one of their officials.

International opinion was split over who did what to whom. Some US journalists felt that Russia lost the war due to the negative reaction of the international community. Others felt that no one was the victor. Some Russian journalists felt that Russia had won the war and was now in a much better negotiating position on other global matters as a result.

So, who was responsible? This author cannot offer a conclusive answer for which side set the bear trap based on these fragmentary elements of information. However, for the sake of argument, more evidence appears to point to Georgia having started the war than Russia. Georgia may have been duped into starting the conflict by Russian reflexive control methods. The case against Russia is buttressed by their unwillingness to offer a timeline of events from the Russian point of view while not hesitating to offer a timeline from a Georgian point of view. Russia could have very adeptly set a strategic and operational trap for Georgia and the latter took the bait. The Georgian side (along with some Russians) offers evidence for Russian complicity but fails to present enough hard supporting evidence to be conclusive, even though there are claims of having South Ossetian documents to support the argument.

Georgian responsibility is buttressed by two elements. The first is that Georgians can cite personal discussions with President Saakashvili and other high-ranking officials who indicated Georgian interest in starting a conflict. The second is the comments of US officials who continued to warn Saakashvili not to be provoked to use force or be drawn into a trap and yet he ignored the advice. Both conclusions would rest solely on the assumption that the testimony as presented in detail below is accurate. Perhaps it is not. However, readers may find it easier to come to a definitive conclusion than does this author.

Russia's plan (and there was a plan—Russian involvement didn't appear out of thin air) was most likely motivated by a series of events that had transpired over the previous five months. First, there was the April decision in Bucharest mentioned above. Second, there were the small but continuous incidents of shooting and looting between South Ossetian and Georgian forces in South Ossetia. Finally, there was the decision to recognize the independence of Kosovo. These incidents appear to have motivated Russia to act strategically and operationally. It is also possible that Russia had inside knowledge of Georgia's plans from covert operators or intercepts of communications from within the Saakashvili regime. This is backed up by the fact that Georgia has now arrested an individual for allegedly providing key military information to the Russians. If Russia conducted this operation as outlined, then its leaders did a masterful job of orchestrating the operation and manipulating Saakashvili's geopolitical position (and perhaps his vanity). It is not easy in the information age to fool public opinion yet Russia may have done so by enticing Georgia to take its "bear bait."

Georgia, on the other hand, offered adequate information and rational to make Russia take a similar action as well, in essence to avert a Georgian takeover of South Ossetia as Saakashvili had long desired and so stated. Or perhaps Georgia, seeing Russia mobilized at its border following the Kavkaz exercise, decided to act before Russia could put their plan into action.

One aspect of the conflict still under investigation from a Russian viewpoint is why the Organization for Security and Cooperation in Europe (OSCE) observers deployed in South Ossetia had warned their superiors of a Georgian attack but this information was not transmitted to all of the organization's member states. Russian Foreign Minister Sergei Lavrov has called for an explanation if not an inquiry into these events. [668]

It is now you, the reader, who should read through the testimonial summary of presentations by Georgians and Russians and draw your own conclusions. It is an interesting yet convoluted set of opinions that await your analysis. (The analysis also includes Georgian views on mistakes that their country made during the conflict as a separate section. Chapter Nine listed Russian mistakes.)

Russians Who Accuse Georgians of Being the Aggressor

(1) Analysis of the Public Observations of Dr. Vitaliy Shlykov

Dr. Vitaliy Shlykov, the Russian Chair of the Commission on Security Policy and Evaluation of Defense Legislation of the Public Council of the Russian Federation's Ministry of Defense at the time of the conflict, offered a sober yet balanced assessment of the Russian peace enforcement operation. He noted that far-reaching conclusions concerning the five-day conflict are "hard to reach." It is hard to argue with his conclusion.

Shlykov begins his analysis by offering Russian readers "Georgian views" on the fight, comments he believes are familiar in the West but practically unknown in Russia. It is the Georgian version (through Shlykov's retelling) that follows. [669]

First, he notes that Georgian President Saakashvili and Defense Minister David Kezerashvili asserted that Russia was the first to introduce troops into South Ossetia, causing Georgia to initiate combat operations in response to Russian aggression. He offered the following timeline from a Georgian, not Russian, perspective:

At 1400 hours on 7 August, South Ossetian artillery opened fire against the Georgian village of Arnevi, located on South Ossetian territory and killing two peacekeepers, according to Saakashvili and Kezerashvil. This caused Georgia to move heavy equipment into the area as a show of force.

At 1900 hours on the 7th Saakashvili announced a unilateral cease fire. Kezerashvili stated that at 2200 South Ossetian artillery fired on the Georgian villages of Sarabuki and Korta where the head of South Ossetia's pro-Georgian administration is located. Saakashvili states that he received information on the 7th that Russian troops were concentrated near the Roki Tunnel's northern portal.

At 2350 on the 7th Saakashvili confirmed that Russian tanks had appeared on South Ossetia's territory. After that, Saakashvili felt he had no alternative but to open fire and to try to destroy the

bridge at Didi Gupta and shell the road near the Roki Tunnel to prevent further movement of the column.

At 2400 the Roki Tunnel and the government buildings in Tskhinvali and villages around the city came under Georgian fire. Saakashvili stated that he prohibited the shelling of civilians.

At 0200 on 8 August Georgian troops advanced to Tskhinvali's outskirts, and at 1000, 4500 Georgian troops entered the city but withdrew two hours later under heavy Russian artillery and aircraft fire. At 1500 they reentered the city. At 2300 they again withdrew.

Georgians reentered the city on 9 August and, already exhausted, withdrew toward Gori on 10 August, outnumbered 4500 to 15-20,000. Saakashvili describes the Georgian operation as defensive and stated that Russia had stealthily massed military forces near Dzhava prior to the introduction of troops on the night of 7 August. Shlykov notes that "as far as I can tell from his [Saakashvili's] words, the Americans explained their mistake [not detecting Russian movement through the tunnel] to him by saying that their reconnaissance satellites had been directed toward Iraq at that time" and that "the Roki Tunnel area was covered by clouds."

In these reports, neither Saakashvili nor Kezerashvili ever mentioned the shelling of Russian peacekeepers, Shlykov notes, and this is an exceptionally important omission by Saakashvili. From the Russian point of view, it was the attack on the peacekeepers that prompted their involvement. Shlykov adds that Russian politicians and military personnel refute Saakashvili's assertions and timeline.

Shlykov presented Georgia's views, he states, to answer one question: what were Saakashvili's goals? His goals might provide answers as to why the West felt Russia's reaction was incommensurate to the situation it faced or why many Russians felt Russia's force was inadequate to finish off the enemy and take Tbilisi.

Shlykov then switches gears to give readers Russia's version of events without a timeline. Many Russians believe that Saakashvili wanted to conduct a blitzkrieg against South Ossetia, close the Roki Tunnel, and place a *fait accompli* before Russia and the world. Russia's General Staff experts have no doubts about this version of events, Shlykov writes, since they base their assessment on captured Georgian maps. Saakashvili apparently felt his forces were strong enough to defeat Russia in a short and local clash. The General Staff also believes Saakashvili wanted to use the factor of surprise to catch the Russians unaware (perhaps implying that the world would be watching the Olympics in Beijing which began on the same day as the fighting).

Many former Russian military figures of some prominence (former Defense Ministers Marshal Dmitriy Yazov and General of the Army Pavel Grachev, General of the Army Makhmut Gareev, and Colonel General Gennadiy Troshev) blamed Russian military intelligence for failing to detect Georgia's treacherous plans. Unfortunately, the intelligence service cannot engage in open polemics with these officers, Shlykov notes, due to their active duty status and thus cannot present their side of the issue. As a former intelligence officer, it is certain that Shlykov has some sympathy for his former comrades and the criticism they must endure. This also implies that Russian intelligence may have

been well informed.

Shlykov states that the longer time passes, the more doubt he throws on the blitzkrieg version of events. If the Georgians were implementing a blitzkrieg theory, then why did the Georgians need three days to storm the camp of the peacekeepers, who were obliged not to fire first, when they could have bypassed it and headed straight toward the Roki Tunnel? Instead, the Georgians opened fire on them and fought them for two days. Why did the Georgians bomb Tskhinvali's residential districts for 18 hours? Why did they enter Tskhinvali twice on 8 August and withdraw and only engage Russian forces in the city on 9 August? The seeming implication here is that the Georgians were trying to entice Russia's armed forces into an aggressive, offensive posture.

Clearly the Georgians did not catch the Russian armed forces unaware, Shlykov adds. Both sides had been openly preparing for the conflict. So what were Saakashvili's goals and hopes? Of course, hope number one for Saakashvili would have been that Russia would not get involved in the conflict and "his American advisors presumably prompted him to that assessment." Saakashvili most likely took into consideration the current weakness of the Russian armed forces as well. Shlykov notes that the 58th army, however, was in a high state of combat readiness and uses his first hand observation of their training as his criteria. He considers that the training Russian servicemen receive is basically on a par with the training of US servicemen.

Perhaps the most interesting aspect of his article focuses around whether Russia enticed Georgia to attack, inviting the Georgian army into a "bear trap." First, he states that the precise time of the introduction of Russian troops, their composition, and the timing of their exit from the Roki Tunnel would help clarify this question, but "unfortunately, the RF Ministry of Defense has not yet published that data." (Shlykov was writing on 1 November 2008, almost three months after the conflict ended. Why didn't the Russian General Staff publish such a timeline?) Instead, Shlykov states that "based upon the conversations of wounded servicemen, we can reconstruct the picture which provides the basis to dismiss the conjecture about the trap, into which Russian troops allegedly enticed Saakashvili, which is being disseminated in the West and also by some of our commentators."

A separate comment is required here on Dr. Shlykov's analysis. First, if the Russian Federation's Ministry of Defense did not publish such data, then the suspicion grows elsewhere that perhaps they are covering something up such as the exact times they moved. An analyst of Shlykov's renown and with his wide range of contacts should have been able to get a bit more information out of the Ministry of Defense than what he has offered. It is a weak argument in this day and age to state that MOD hasn't produced a timeline and then conduct your analysis solely based on the other side's information. If the Defense Ministry were innocent, as Shlykov asserts, then they should have had no qualms about publishing a timeline. Or other sources should have provided him with information based on his access to Russian military leaders. He is a prominent and respected MOD insider.

Second, a Russian report from a wounded Russian officer (Captain Denis Sidristy) states that "on 7 August, the command came to advance on Tskhinvali. They had us scramble—and march." Thus according to this Russian report (one of the very people Shlykov says he relies on for his timeline, the wounded) the Russian 135th Motorized Rifle Regiment of the 58th Army entered South Ossetia about

the time Saakashvili was announcing a ceasefire. More interesting is that after this article appeared on a website it was removed.[670] Dr. Shlykov is obviously aware of the suspicion that such an action would produce. The newspaper *Krasnaya Zvezda* (Red Star) is purportedly where it first appeared before it was taken offline. The actual website is listed here as a footnote.[671] Thus, it is odd that Shlykov can articulate in detail what Georgia did and when, but he can't do so for Russia. And his reliance on wounded soldiers for Russia's timeline was somewhat rebuffed by the report of Captain Sidristy.

Another separate comment is required regarding Dr. Shlykov's belief that suspicions are growing with regard to the US role in the five day war. In spite of the words of US Special Ambassador to Georgia Matthew Bryza, who said he warned Saakashvili not to be drawn into a trap, or US Ambassador to Russia John Beyrle, who said US diplomats cautioned the Georgian leadership against responding to provocations and using force, Shlykov relies on other equally intelligent but less informed US spokesmen. For example, he cites George Friedman, President of the US based STRATFOR Center, who wrote that it is hard to believe the Georgians would act counter to US wishes. Friedman, according to Shlykov, states that either US intelligence failed to detect Russian troops nearby, or the US wanted to extract a harsh response from the Russians. Canadian Piotr Dutkiewicz, Shlykov adds, notes that Saakashvili was played masterfully by the Americans and the Russian's counterstrike was just what the US wanted. Russia can no longer criticize the US for its military adventures, Dutkiewicz adds, and Russia's political influence has been weakened.

It is also hard to comprehend how someone of Secretary of State Condoleezza Rice's competency in Russian affairs would entertain such thoughts. Would she really advocate "playing" Saakashvili so that Russia would attack and lose credibility? This sounds very farfetched. How would she have foreseen that Russian influence would be weakened (as Dutkiewicz asserts) or that Russia could no longer criticize the US for its military adventures? It makes little sense. That is, it makes little sense until you read the testimony of Georgia's Ambassador to Russia, Erosi Kitsmarishvili, who stated that the US had given the green light to Georgia. Kitsmarishvili, a leader of the peaceful Rose Revolution in Georgia, offers a much different version of events in his testimony as summarized below—and then changes his mind.

Rather, Shlykov might want to argue that if the US knew of Georgian plans, then why didn't the US warn others? If the US tried to talk Saakashvili out of attacking, then they surely knew what he was thinking. By warning the international community, the US could have potentially thwarted Georgian plans through international pressure. Shlykov doesn't mention this possibility, most likely because Saakashvili had no such plan until he was cornered by events.

A more tit-for-tat response to Shlykov would be that if he can disregard the words of our government spokesmen, then shouldn't US analysts completely disregard Russian spokesmen too, such as Prime Minister Vladimir Putin? Putin stated that Russia was searching for a compromise with Georgia just at the time that Saakashvili acted. With his hatred for Saakashvili a known fact, are we to think this is what the Prime Minister was really thinking? Or was Prime Minister Putin really reacting to Georgia's acceptance into NATO and Kosovo's recognition of independence, and thus he drew up a plan to entice Georgia into attacking? Naturally, such tit-for-tat responses do neither side any good.

With regard to the Russian understanding of how events transpired in an hourly fashion, Shlykov offers his own timeline from what he has been able to ascertain from his Russian contacts, who he does not mention. Again, this is strange. He can recount in detail the Georgian timeline with input from the Georgian President and Minister of Defense but is unable to cite a single source from his own Ministry of Defense. Something doesn't add up in a country where they supposedly learned the problems associated with "losing the information war over Chechnya." If the Ministry of Defense is keeping information from Shlykov, then it either hasn't learned its lesson from the Chechen experience or it is hiding something.

At 3 a.m. on 8 August, Shlykov writes that the 58th Army was alerted. It emerged from the Tunnel no earlier than noon on 8 August. At that time Russian aircraft were inactive. The force consisted of three battalion teams of the 19th Motorized Rifle Division, which had deployed near Dzhava and Gufta by 1600.

Shlykov offers no other timeline data in this lengthy article.

Shlykov's best evidence from the Russian viewpoint that Georgia started the war is that the introduction-withdrawal of Georgians from Tskhinvali had a dual purpose—to simulate offensive operations toward Roki Tunnel and to attribute the destruction of Tskhinvali to Russian military operations. Finally, he notes that the two day siege of the Russian peacekeeper's camp, which could have been bypassed, was intended to keep the peacekeepers hostage and encourage Russian forces to free them. When the situation developed slowly, the decision was made in Tbilisi to fire on the peacekeepers with Grad (BM-21 multiple rocket system) launchers in order to raise Russia's ire and encourage them to march on Tbilisi. This version of events would be better if supplemented with a timeline from some participants in the conflict from either the civilian or military sphere.

By 10 August, Shlykov adds, Saakashvili had "realized his plan." Then the most powerful combatcapable division, the 42nd, arrived from Chechnya. It is a totally permanent readiness contract formation. The Georgians didn't have the slightest chance of success against it. Earlier in the article, Shlykov had stated that, in regard to the Kavkaz-2008 exercise conducted by the Russians across the border from Georgia in late July, "the maneuvers were conducted with the goal of rehearsing the methods for rendering assistance to the peacekeepers in South Ossetia." It must be assumed that these maneuvers, with "700 military vehicles and over 30 aircraft and helicopters," were near total readiness as the maneuvers practiced a peace enforcement operation. So did the Russians really need the 42nd to guarantee success?

Thus, Shlykov's version is that the Georgians were setting their own bear trap for the Russian forces. Their primary goal was to present Russia as the aggressor which invaded the territory of a small democratic country. He offers a credible rational for this story to be true although his lack of authoritative Russian sources is a serious shortcoming in his storytelling. Or, in fairness to Dr. Shlykov, a very credible figure widely admired and respected for his knowledge, perhaps as Chair of the Public Council he is not as compelled to cite others. As an insider, he knows what he is talking about.

Russians Who Accuse Georgia of Being the Aggressor (cont.)

(2) The Analysis of Reporter Zaur Alborov 672

Zaur Alborov's analysis was much less balanced than Shlykov's. He wrote one of the most pro-Russian assessments of events. His timeline is purely from his point of view with no Georgian input.

At 2310 on 7 August, he writes that Georgian forces started their massive artillery bombardment, adding that Georgian forces were deployed in the theater of operations before 7 August, preparing a bridgehead for the attack. The Georgian air force regularly violated South Ossetian airspace. Russian military intelligence learned about these plans in advance in his opinion. Thus Alborov, in contrast to Shlykov's analysis, felt that Russia had prior knowledge of Georgia's plans, thus indicating that he knew more than Yazov, Grachev, and Gareev, even though all of these former officers most likely have much better contacts in the General Staff than the reporter.

At 0900 on 8 August, after Georgian forces got bogged down in their attempts to take Tskhinvali and failed to address the issue of the Roki Tunnel and the Trans-Caucasus Motorway, Alborov states that Russia decided to launch a peace enforcement operation to coerce Georgia to peace. Russia's MOD sent in two battalion task forces. Georgian forces, Alborov added, exhibited extreme cruelty, finishing off the wounded, driving tanks over people, and throwing grenades into basements where civilians were located. This was the last hourly timeline in Alborov's discussion.

Alborov states that the interaction between Russian and Ossetian groups was well organized. They eliminated several Georgian diversionary groups (Georgian special forces) in the tunnel area [Shlykov said the Georgians never made it to the tunnel] and in breaking the siege of Tskhinvali. Russian units eliminated Georgian troops on the heights around the town, suppressing Georgian artillery and encircling Georgian-populated villages. The Chechen Vostok special-purpose battalion of the Main Intelligence Directorate (GRU) of the Russian Armed Forces merits special attention for the manner in which it knocked out enemy groups utilizing Shmel and RPG launchers.

On 9 August Russian troops continued pushing Georgian subunits out of the area of the peace enforcement operation. As reinforcements continued to arrive, a grouping two regiments-strong was deployed in South Ossetia. They were able to push back a Georgian assault on the afternoon of 9 August. By 10 August only a limited number of Georgian troops remained in South Ossetia and these troops withdrew completely on the afternoon of the 10th. On the night of 10-11 August, Georgian troops were only able to fire some artillery rounds into South Ossetia. By the end of 11 August Georgian units pulled back to Gori, and were reinforced with 800 service personnel from Iraq. Russian units pursued them in the face of strong electronic countermeasures that partially suppressed Russian tactical communications. By noon on 12 August, the Russian President had decided to terminate the active phase of the operation (coercing Georgia to peace). By the end of the day, the "strongest army in the Caucasus" had disappeared like smoke.

Alborov writes that US advisors took part in the planning of the operation and were involved in the operation, commanding subunits of the Georgian Army. Passports of US citizens were found, Alborov writes, in the combat operation area in positions formerly held by Georgian troops. He fails to mention that the passport "found" in a position formerly occupied by Georgians was a person who was actually in the US at the time of the conflict, so suspicions arise that this "discovery" was

possibly a plant by either the Russians or Georgians.

Russians Who Accuse Georgia of Being the Aggressor (cont.)

(3) The Interviews with Prime Minister Putin

On 11 September, shortly after the August events, Russian Prime Minister Vladimir Putin stated that the Western propaganda machine acted "unfairly and immorally" when covering the conflict. In his statement, Putin discussed "Georgian military aggression" and offered a detailed timeline of Georgian activities. When discussing Russian events, he only stated that Russian troops approached Tskhinvali on the morning of 10 August. [673] That may indeed be true, but when did they emerge from the Roki Tunnel? On 6, 7, 8, or 9 August? Again, no timeline is offered from the Russian side. PM Putin states that immoral politics always lose. Yet this is exactly what the Western press is sensing from official Russian statements like Putin's, the immorality of detailing only one side of events.

On 4 December, Putin said Russia would have continued its effort to restore Georgian territorial integrity if Georgia had not launched its war against Russia. He also made it clear that in his opinion, Georgia needs new leadership.[674]

Russians Who Accuse Georgia of Being the Aggressor (cont.)

(4) Interview with Russian General Staff Chief Nikolay Makarov

On 10 December 2008, some four months after the fighting ended, an official spokesman reiterated the Russian position on the timeline of Russian forces. General Nikolay Makarov stated "As the Chief of the General Staff I officially declare that not a single tank entered the territory of South Ossetia before 2 p.m. on August 8."

Russians Who Accuse Russia of Being the Aggressor

(1) The Interviews with Andrey Illarionov

Andrey Illarionov is a former economic adviser to Vladimir Putin and now a critic of Russian policies. A former Kremlin insider, he is perhaps the most aggressive of all Russians in his accusations that Russian authorities enticed Georgia into attacking first. Two reports he made contain this claim. The first was a speech he made to the Cato Institute's Summer School in Alushta, Ukraine and posted on 21 September. The second was a telephonic interview with Sergey Buntman and Mariya Gaydar of the radio station Ekho Moskvy on 24 October, nearly two and a half months after the fighting stopped.

The speech in Ukraine [675]

Illarionov noted initially that the conflict is far from being over, as Russia will continue to use every tool at its disposal to keep Georgia from becoming a member of NATO. Not only is the conflict continuing in Georgia but Illarionov states Russia is beginning to look at other parts of the former Soviet Union, implementing actions not clearly understood at the present time by the international community. Points he made during his speech were as follows:

First, if Russia was only interested in recognizing the independence of people who stated they wanted to live separately from other people—imperial or occupying—then Russia would have recognized Chechen independence long ago. Russia also would have recognized Kosovo's

independence under this line of reasoning. Thus it does not appear that recognizing people's right to national determination is a principle that Russian authorities follow but rather a double standard they impose on others.

Second, if Russia was concerned about the rights of Russian citizens, then it would have defended the rights of Russian citizens living in Turkmenistan, where some 200,000 Russian citizens were abandoned and had no rights whatsoever. Thus defending Russian citizens in South Ossetia is only "undisguised hypocrisy" used as a pretext for certain operations. The so-called genocide of the Ossetian population did not take place. Declarations of genocide were made by Russian authorities and they cited death tolls nearing 3,000. In Illarionov's opinion, only 133 South Ossetians were killed and 80% were fighters in South Ossetian President Kokoity's South Ossetian Army.

Third, Illarionov believes that in the past four years Georgia has set up a modern European type state that is democratic, transparent, and accountable to its people with efficient state agencies and state institutions. Georgian economic growth was between 11-13%, higher than China, but the country must import its oil and gas. Prior to the conflict Georgia became a net exporter of electricity to Russia [Author's note: which would be a reason for Russia NOT to attack Georgia]. Foreign investments accounted for 18-20% of GDP in Georgia while foreign investments accounted for only 1% of GDP in Russia.

Fourth, the majority of the Russian-supported population of South Ossetia has not worked in the past four years according to Illarionov. There are few jobs and no one seems to care since people live off Russian subsidies that approached 700 million dollars last year.

Fifth, Russia prepared the ground for the invasion over the past four or so years. They instituted a partial and then a full economic blockade of Georgia, a port blockade, a transport blockade, a visa blockade, and even mineral water and wine blockades. They supplied the Russian base in Dzhava, South Ossetia, a 20 minute drive from Tskhinvali, before the active phase of the conflict began with military hardware and food.

Sixth, the level of militarization of South Ossetia, however, bears special mention. Russia has provided free of charge weapons and support to South Ossetia and Abkhazia. Even North Korea is not saturated with weaponry as are these areas in Illarionov's opinion.

Finally, the Bucharest NATO summit that offered Ukraine and Georgia the go-ahead for NATO admission, in Illarionov's opinion, was the event that accelerated military preparations for an operation against Georgia. A corps of Russian railway troops was moved to Abkhazia and a railway was hastily repaired. Fifty trains with armored vehicles arrived, giving the impression that the main attack would be launched from the West. On 1 August bombardments began from the Ossetian side against Georgian villages, bombardments which were more severe than those carried out earlier. Illarionov states the following with regard to the sources he is using for his analysis:

What I am telling you now is taken not from Georgian sources, but from Ossetian and Russian sources. One of the most detailed accounts of how the war was prepared and conducted was taken from Ossetian sources, official sources which said they would mop up Georgians from

South Ossetia and, moreover, would reach Tbilisi, seize Tbilisi, and I will not use the terminology to say what they were going to do with the leadership of Tbilisi. According to Ossetian journalists, our [Ossetian/Russian] tanks and our armored personnel vehicles passed by 6 August, heading for Georgian positions. I am quoting this—here is a pile of reports by the official Ossetian radio, Osradio, and the state committee for media and press of the Republic of South Ossetia, with very detailed accounts.

It would have been much more useful if this "pile of reports" Illarionov referred to could be translated and placed in the press. Otherwise, readers are forced to listen to his account of what the South Ossetians were saying without any backup proof. Illarionov offers the following timeline of events. Illarionov offers dates but few hourly descriptions.

He notes that between 1 and 7 August many local residents were transported out of Tskhinvali. Contradictory reports indicate that a minimum of 17,000 and a maximum of 34,000 people were transported out (out of a population of 40,000). The buses that took people out returned with curtains drawn and the suspicion remains that other people were brought in (Russian military personnel).

On 3 August Illarionov writes that Russian Deputy Defense Minister Nikolay Pankov and the head of the main intelligence directorate of the Russian army arrived in Tskhinvali to hold meetings with South Ossetian President Kokoity and the local leadership on the acceleration of the military operation (Illarionov does not state how he knows this information) which appeared to be scheduled for the night of 7 August. Also on 3 August Cossack and volunteer mobilization started in the North Caucasus.

On 6 August Russian frontier troops occupied the southern portal of the Roki Tunnel (that is, in South Ossetia). Illarionov's contention is even earlier than Shlykov's Georgian timeline of events.

On 7 August, when Georgia tried to reach an agreement with Russia, Russian representative Yury Popov did not show up to meet the Georgian negotiator, Minister for Reintegration Temur Yakobashvili. Instead, Yakobashvili was told by the commander of the Russian peacekeeping battalion, General Marat Kulakhmetov, that Georgia had one option, a unilateral cease-fire.

At 1830 on 7 August Georgian troops, under orders from President Saakashvili, entered into a ceasefire.

At 2210, South Ossetian units started a massive shelling on the Georgian village of Tamarasheni, and more fire was aimed at other Georgian villages along the Trans-Caucasus highway. Georgian units received information at this time that 150 Russian tanks were on the way to Zaravak, which is at the Roki pass.

At 2300 on 7 August, Russian units departed the pass. When the Georgian leadership heard of this, they issued an order to storm Tskhinvali and Dzhava and to block the Roki Tunnel. Most of the hostilities for the next 48 hours occurred in the area from the Roki Tunnel to Dzhava and around Dzhava.

On the evening of 10 August, Russian army units reached Tskhinvali.

In order for the Russian Black Sea Fleet to be at the Georgian coast on 9-10 August, they would have had to have left Sevastopol on the evening of 7 August, fully loaded with ammunition, fuel, and assault troops. Such an operation takes a few days to prepare, with Illarionov's suggestion that Russia had planned the timing to coincide with the arrival of tanks from the Roki Tunnel.

Illarionov believes that no one has cancelled the strategic aims of the operation, to topple the leadership of Georgia and change the political, economic, and foreign model in Georgia.

The Ekho Moskvy Radio Interview 676

Illarionov stated that since 2005 Russian officers have held positions in the security and defense agencies in South Ossetia, to include the defense ministry, the interior ministry, and emergencies ministry. This has enabled them to exercise tight observation over events in South Ossetia. The accumulation of arms and people in the area really began in May 2004. Officers of the South Ossetian armed forces were undergoing special training at the Vladikavkaz military academy in North Ossetia (Russia).

Illarionov notes that Georgia came up with several proposals for peace in the area from April to August 2008 as did the European Union. They were all rejected by South Ossetia and Abkhazia.

On 1 August the civilian population evacuation started and on 2 and 3 August North Caucasus mobilization (volunteers and Cossacks) started. Georgia made several appeals to Russia to establish joint Russian-Georgian control over the number of people passing through the Roki Tunnel on 2-3 August. Russia never responded even though the US joined in the request. Illarionov states that Russian troop exercises across the border in Russia ended on 2 August but the troops did not go anywhere.

As of 3 August, 300-1,000 volunteers were arriving in South Ossetia every night. Also on 3 August there were reports of a "third party presence" (implying Russian involvement) in an area where firing was taking place and where both South Ossetia and Georgia firmly denied any involvement.

On 4 August, several Russian special units were deployed in South Ossetia. How Illarionov knows this is unknown.

On 6 and 7 August a large group of Russian journalists arrived in South Ossetia to cover "a war." Also on 6 August the Federal Border Service of Russia occupied both ends of the Roki Tunnel. Some Russian soldiers said they had been positioned on the hills around Tskhinvali for a week or before 7 August. At least four units of the Russian army were deployed in South Ossetia before 7 August, including the 135th Motorized Rifle Regiment and the 22nd Special Task Brigade. Some tank units also made the move into South Ossetia. Again, there are no sources cited by Illarionov for this important information.

The Russian Migration Service indicated that 17,000 South Ossetians were evacuated from South

Ossetia as of 7 August. Russian journalists in Tskhinvali on 6 and 7 August observed that 80-90% of the civilian population in Tskhinvali and Ossetian villages had been evacuated with only the male population of military age remaining. Apparently most of the Georgian population was evacuated on 8, 9, and 10 August.

Illarionov implies that Russian officials, in particular Foreign Minister Sergey Lavrov, admit that Russian forces were in South Ossetia on or before 7 August. Then the question of who started it and who was the aggressor is officially admitted by Russian state officials in Illarionov's opinion. However, the transcript makes this accusation by Illarionov difficult to follow or understand. A few jumbled, almost unintelligible fragments are followed by "admit that Russian armed forces were present in South Ossetia before 7 August."

Russians Who Accuse Russia of Being the Aggressor (cont.)

(2) The Writing of Russian Alexander Lvovich Yanov on "Why Russia Lost the Information War" [677]

Yanov states that Europe, when it helped declare Kosovo independent, worried about the security of the Serbian minority. Russia did not set the return of the purged Georgians as a condition of its recognition of the independence of South Ossetia by Russia. Further, the Kosovo controversy was analyzed by a UN commission under the chairmanship of Finland's former President Martti Ahtisaart. The commission decided that no solution existed for Kosovo other than independence under the condition of guarantees to the Serbian minority. Europe tried to send this decision to the UN Security Council for review, but Russia vetoed it. Thus the birth pains of an independent Kosovo were very different from the birth pains of a South Ossetia and Abkhazia. Yanov's argument is that Russia used some very poor analogies in their attempts at information confrontation and thus failed miserably.

Russians Who Accuse Russia of Being the Aggressor (cont.)

(3) A Report in the Russian Press

Russian reporter Lev Makedonov wrote that the Georgian Internal Affairs Ministry made public an intercepted telephone conversation between South Ossetian border guards that was supposedly intercepted on the morning of 7 August. If true the call would confirm that the first Russian units passed through the Roki tunnel 12 hours before a mobilization order was given to Georgian troops. The time of the conversation was between 0341 and 0352 on the morning of the 7th .[678] As mentioned earlier, if the call was a planned deception event by Russia and intended for Georgian sources to intercept, then the Russians had provided a pretext for Georgian forces to begin moving.

Russians Who Accuse Russia of Being the Aggressor (cont.)

(4) The opinion of journalist Pavel Fel'gengauer

Pavel Fel'gengauer is a noted Russian journalist who often reports on Russia's Ministry of Defense. He noted in a December report that Russia prepared early for full-scale war with 40,000 servicemen and that the preparation was carried out with remarkable secrecy. Since an invasion was only possible in the summer, this required a carefully balanced and rehearsed plan. The exercise Kavkaz-2008 allowed units to be forward deployed along the border with South Ossetia in July. Fel'gengauer adds that, according to some participants, units may have deployed into South Ossetia beforehand. The Black Sea Fleet was prepared for an immediate combat mission as well. [679]

Conclusions to the Russian Version of Events

The Russian discussion of both sides involvement is wide-ranging and does present a fairly impressive accounting from different angles. The arguments of Russians supporting the Russian position are that the Georgians drew them into the conflict, and the Russians supporting the Georgian version of events believe that the Russians drew the Georgians into the conflict. Obviously, there are weaknesses in the positions of both sides that could be seriously buttressed by some firsthand source material. Some of these individuals should have had access to such materials (and some claim they did) but they did not cite them by author and source when offering their case.

Georgians Who Accuse Russia of Being the Aggressor

(1) Georgian Minister of Internal Affairs, Vano Merabishvili[680]

The Russian paper <u>Kommersant</u> (<u>Businessman</u>) granted an interview with Georgian Internal Affairs Ministry chief Vano Merabishvili. He is called the second-highest person in Georgia after President Saakashvili. <u>Kommersant</u> correspondent Olga Allenova conducted a question and answer session with him.

Merabishvili states that Georgian troops entered South Ossetia on the 8th of August in response to a Russian intervention at 3 a.m. on 7 August. He provided Allenova with what he termed an intercepted transcript of a conversation between border servicemen on the night of the 7th. Merabishvili also stated that some Russian Captains (probably the same interview cited above with Captain Denis Sidristy) also stated that Russian troops were in South Ossetia on the 7th.

In addition to the introduction of Russian troops, Merabishvili states that the ethnic purge of 15,000 Georgians from South Ossetia was also a factor in Georgia's decision to intervene.

From 1 August those Georgian's were, in actuality, South Ossetian President Edward Kokoity's hostages. He would not allow Georgian police into the area where they resided. These people were not evacuated by Georgia because Saakashvili, Merabishvili adds, was hopeful of a peaceful solution. He did not expect Russia to attack.

- On 2 August pro-Russian refugees were moved from South to North Ossetia, which is Russian territory.
 - On 3 August 50 Russian journalists moved into and transmitted from Tskhinvali.
- On 7 August Russian troops rolled in at a time early in the morning when they couldn't be photographed from space due to a dense cloud cover and darkness. That is another reason this war came as a surprise for the West, he adds.

The war was also a surprise for Merabishvili. He thought that Saakashvili's unilateral ceasefire was the best chance of stopping the escalation of the conflict; and he felt that Russia would not bring tanks onto the territory of another state as the Soviets did.

Merabishvili adds that had Georgia just surrendered without resistance the population would have

never forgiven the government for not acting. Actually by fighting for two days, time was offered to the West to start protesting over Russian actions. This eventually resulted in Russia halting their attack before moving into Tbilisi.

In conclusion Merabishvili said what matters to him is what Georgia lost during the conflict. Above all, it is "Abkhazians and Ossetians themselves who have lost Abkhazia and South Ossetia. They will live by Russian standards now. If they like it, let them live by them. If not, we have not lost them."

Later, answering web users' online questions, Merabishvili stated that Georgia did not press the offensive because it did not want Russia to bomb Tbilisi. Georgia had no bombs capable of bombing the Roki Tunnel, he added, so that is why it did not destroy it. Additionally, there is an alternative road to South Ossetia from Russia which normally functions during the summer. [681] He stated that the main aim of the operation was to "halt Russian aggression and rescue the besieged population of the Didi and Patara Liakhvi Gorges." The latter are areas of South Ossetia that were under Georgian control until August. When Russia entered with 30,000 troops, over 3,000 armored vehicles, and 60 units of rockets the main objective became a defensive operation near Igoeti. He added that Georgian forces used Grad missiles around Tskhinvali but not against the city, which is a rumor generated by Russia's propaganda machine. The population of Didi Liakhvi Gorge was not evacuated because Georgia was not preparing for war. On the other hand, Russians evacuated Tskhinvali a week earlier. [682]

Georgians Who Accuse Russia of Being the Aggressor (cont.)

(2) Georgian President Mikhail Saakashvili

On 28 November Georgian President Mikhail Saakashvili testified before the Georgian Parliamentary Commission studying the August war. Saakashvili stated that after learning about hundreds of tanks and heavy equipment passing into South Ossetia, he decided to take military action in the Tskhinvali region. [683] He admitted to starting those actions but stated that his citizens were being killed. Efforts to curb the intervention did not work. "It is wrong to ask if we had the right to defend our citizens." [684]

Saakashvili stated that people in the West did not believe him when he said that Russia would attack Georgia. As a result there was no way that the US could have given a signal for Georgia to launch military action in South Ossetia. [685] The US did not provide a green light for Georgia's military operation. However, Saakashvili adds, Georgia did regularly inform its friends about Russia's aggressive policy regarding Georgia and even asked these friends to help assist in normalizing relations with Russia. [686]

Finally, Saakashvili stated that he tried to reach Russian President Medvedev on 6 August as well as Russian Special Ambassador Yury Popov but neither got in touch with him. Only the Russian Commander of the peacekeeping forces in South Ossetia, Marat Kulakhmetov, talked with him and explained that he was in no position to help or change anything. Saakashvili says he called Lithuanian, Polish, Swedish, and NATO representatives on 7 August and told them the situation was very bad and that he couldn't reach the Russian President. As an aside regarding how much Russia appeared to be itching for a fight, Saakashvili states that French President Nicolas Sarkozy told him what Russians

wanted to do to him with all of the physiological details (to hang him by a certain part of his anatomy). [687]

Georgians Who Accuse Russia of Being the Aggressor (cont.)

(3) Georgian Foreign Minister Eka Tqeshelashvili

At a session of the Georgian Parliament's investigative commission on the conflict in August with Russia, Foreign Minister Tqeshelashvili noted her disappointment with Russia's refusal to interact with Georgia and resolve the issues over which the conflict was fought. She feels that Russia's aggression was in response to Georgia's steps to become a member of NATO and to Georgia's energy independence. The problem, she believes, is Russia's geopolitical aspirations that work at odds with Georgia's conflict resolution efforts with OSCE help. Russia has procrastinated in all respects when presented with Georgian initiatives. [688]

Georgians Who Accuse Georgians of Being the Aggressor

(1) Testimony of Georgian Ambassador to Russia, Erosi Kitsmarishvili

Erosi Kitsmarishvili is a former general director of the Rustavi-2 television channel; is considered one of the main architects of Georgia's "Rose Revolution" that provided a conflict free independence for Georgia; and was a close ally of President Saakashvili. He provided perhaps the most damning testimony of his friend at the hearing on the August conflict in South Ossetia. He noted that the government of Georgia wanted to start the war in Abkhazia several months earlier than in South Ossetia. Kitsmarishvili noted that in March 2008 Saakashvili stated that he wanted to move the capital of Georgia to "Sokhumi." He also stated that the US (President Bush and Secretary of State Condoleezza Rice) gave Georgia a "green light" to start a military operation in late April in Abkhazia and against South Ossetia as well, and he accused the Georgian government of having dragged Georgia into war. He stated that the August war could have been averted and that the Georgian leadership did not do enough to normalize relations with Moscow. [689]

Also in his testimony, Kitsmarishvili noted that on 19 June the Georgian Minister for Reintegration Temur Yakobashvili said "in my presence" that Georgia could take Tskhinvali in three hours and the Russians couldn't lift a finger to help. Kitsmarishvili was convinced that Russia, however, did know of Georgia's plans and in effect, "we have been dragged into this process and we did exactly what the Russians wanted us to do." Opposition leader Lean Gachechiladze supported Kitsmarishvili's statement. [690]

On 26 November, Kitsmarishvili changed his story. He noted that Saakashvili mistook US messages as encouragement for aggression. Russia's press noted that he said "The US never told the Georgian authorities it would agree with a military operation for the purpose of restoring the country's territorial integrity." He further states that he met with the US ambassador to Tbilisi and was told that the US did not give its consent to the operation. Russian commentary at the end of this report added that "when Saakashvili's allies-turned-foes charge him with grave crimes, they revoke their claims after authorities threaten them with criminal persecution or throw them into jail."[691] Georgia's presidential administration denied these accusations, stating that the ambassador began these accusations after losing his powers in the diplomatic service.[692]

Another article of great interest involving Kitsmarishvili was his statement that Russia knew the

exact time of the attack on Tskhinvali and that, "based on some kind of information from Moscow, people from Saakashvili's circle fiercely persuaded him that Russia would not be defending South Ossetia." [693] This implies that Moscow was running some type of reflexive control operation (perception management to the US) against Saakashvili and his entourage, and the Georgians fell for the information they were provided from Russia about the latter's lack of interest in defending South Ossetia.

Georgians Who Accuse Georgia of Being the Aggressor (cont.)

(2) Comments from Georgian peacekeeping force commander General Mamuka Kurashvili

Kurashvili stated late on the night of 7 August that Georgian troops were operating to bring constitutional order to Tskhinvali. This statement "was not sanctioned" and South Ossetia was attacked only following the "confirmation of the information" of Russian aggression, according to Georgian Security Council Secretary Alexander Lomaia. [694]

Georgians Who Accuse Georgia of Being the Aggressor (cont.)

(3) Badri Bitsadze, former Chief of the Georgian border department, husband of ex-speaker of the Georgian parliament Nino Burdjanadze

Badri Bitsadze led the Georgian border department in August. He said in an interview that he has evidence that Georgia started the military action in Tskhinvali on 7 August. Saakashvili, as noted above, stated that he did in fact start the war but only in reaction to Russian forces crossing the border. It is the date that is crucial here. Bitsadze notes that "at around 12 p.m. on August 7, I personally saw two yellow buses near Tskhinvali, carrying Georgian national flags and three podiums, and the bus drivers were claiming that they would soon go to Tskhinvali, where a rally would be held." Clearly the date favors Moscow's version of events but the items on the buses hardly indicate an attack. National flags and podiums on their way to a rally? Bitsadze's statement would have been strong if he had indicated weapons and equipment on their way. Two yellow buses won't scare many Russian or South Ossetian residents. [695]

Georgians Who Accuse Georgia of Being the Aggressor (cont.)

(4) Former Georgian State Security Minister Igor Giorgadze

Giorgadze believes that the conflict started with the silent consent of the US. He asks why the US did not prevent this conflict from arising. Perhaps, he asked, someone wanted to see how sharp are Russia's teeth?[696]

Georgians Cite Georgian Mistakes during the Conflict

(1) Club of Georgian Military Experts

An article in the Georgian press critiqued mistakes that Georgia made during the conflict. Military expert Irakli Sesiashvili states that the August defeat was caused by a number of mistakes since 2004. This includes the appointment of four defense ministers in the past four years and the complete replacement of each staff. War with Russia was not unavoidable, as many like to think, especially since Georgia was not ready for such a conflict.

The report of military experts cites former Defense Minister Giorgi Qarqarashvili, who noted that even one mistake could cause military aggression from Russia. Qarqarashvili, the report notes, stated that "the Georgians had been ordered not to open fire on the Russian peacekeepers." He also adds

that "there was a secret deal with the commander of the Russian peacekeepers, Marat Kulakhmetov, that the Russians would not interfere even if the Georgians seized Tskhinvali but that proved to be deviousness."

Journalist Koba Likikadze stated that Georgian soldiers were deceived by local officials who told them that the US would support them. He also states that no top military official held a briefing during the conflict to inform journalists as to what was happening. Military expert Vakhtang Maisaia stated that the worst mistake was that Georgia did not take into account the threat of war and that Georgian leaders were fooled by Moscow into believing that Moscow was so entwined in North Caucasus affairs that it did not have time for events in Georgia. [697]

Georgian Mistakes during the Conflict from a Georgian Perspective (cont.)

(2) Georgian Military Expert Giorgi Tavdgiridze

Tavdgiridze questioned the commentary of the ex-Commander of the Georgian peacekeeping forces in South Ossetia, Mamuka Kurashvili, who appeared before an investigative committee. The latter stated that the operations of his forces were to restore constitutional order in South Ossetia. Tavdgiridze believes that this statement is nothing but a public relations gambit to make Kurashvili look better. Tavdgiridze asks why Kurashvili did not stand beside his peacekeeping battalion and protect the peaceful population, as his job dictates. As Georgian forces retreated, Kurashvili should have assisted in the evacuation of the local populace. He should also have gotten in contact with Russian peacekeeping commander Kulakhmetov when hostilities first began. Instead of performing his primary duty, Kurashvili states that had he done so, the Russians would have killed all of his peacekeepers. Tavdgiridze asks who gave Kurashvili the order to restore constitutional order, and what objective they told him to achieve? [698]

Chief of Staff Zaza Gogava stated that he received his orders by telephone. He was told to halt the advance of forces onto Georgian territory, destroy strategic points from which Georgian forces were being fired on, and defend the peaceful population. [699]

Conclusions to the Georgian Version of Events

There is a distinct dichotomy in the Georgian version of events. On the one hand is the testimony of Erosi Kitsmarishvili, former Georgian ambassador to Russia, who states he was present in the company of high-ranking people (identified in the Russian press, in a phone interview with Kitsmarishvil, as the current parliamentary chairman and the Minister of Defense of Georgia in the office of the President) when Saakashvili told him in April 2008 about a plan for attacking Abkhazia in late May. Further, Georgia's peacekeeping commander, General Mamuka Kurashvili, stated that his goal was to bring constitutional order to South Ossetia, a statement for which he was accused of making a statement "not sanctioned." The main difference between Russian and Georgian dissension is that some of Georgia's dissension comes from Saakashvili's inner circle. Russian dissension came from people outside of President Medvedev's inner circle.

On the other hand, several members of Saakashvili's cabinet testified in an opposite manner—that Georgia did not decide to attack South Ossetia until Russian armed forces had exited the southern end of the Roki Tunnel. They were able to substantiate their accusations about the timeline based on two documents, the supposed intercepts of border personnel discussing the passing of Russian units on the

night of 7 August and the testimony of a wounded Russian captain. It would have been more conclusive had Georgia substantiated these accusations with footage from an unmanned aerial vehicle flying along the road from Tskhinvali to the Roki Tunnel. Why this was not done is unknown, but in hindsight it may have been a huge mistake. Georgian sources did not mention it in the mistakes they discussed about their armed forces. Georgia also allegedly has recordings of conversations with Russian peacekeepers on the eve of the fighting that indicate Russia's reluctance to negotiate at that point in time.

International Perceptions

Dr. Stephen Blank, a professor and well-known Russian expert at the US Army War College in Carlisle Pennsylvania, wrote that Russia lost the war with Georgia. He felt that Russia's unprovoked use of large-scale force opened a "Pandora's Box of cascading negative effects merely to gratify its own imperial fantasies of resentment and revenge." [700] These feelings of revenge include Prime Minister Putin's personal hatred for President Saakashvili. There are also a host of geopolitical negatives for Russia that will affect it down the road, according to Blank, and nothing but empty rhetoric when it comes to Russia's actual military options. He feels Russia's armed forces are not suited to contemporary large-scale operations or to counterinsurgency. [701]

A Senior Fellow at the International Institute for Strategic Studies (IISS), Oksana Antonenko, wrote that President Saakashvili may have been provoked but his decision still bears signs of a calculated move. He had taken control of strategic positions around Tskhinvali; relocated peacekeeping units within the conflict zone; and brought troops and weaponry into the region. Antonenko reports visiting Georgia in July 2008 and sensing the expectations of a conflict in the near future. She notes that Georgia gave Russia a "patina of legitimacy" by not only attacking Tskhinvali but also by attacking Russian peacekeepers. She feels that Saakashvili underestimated Russia's response and feels he expected Western support in case of Russian aggression. [702]

Antonenko adds that Georgia had tried to discredit Russia as a mediator in South Ossetia for months. However, Russian actions did more to damage its public posture than Georgia could have done. Russia's move into Georgia proper brought strong criticism from the West, and its public image and credibility suffered when it failed to implement French President Sarkozy's ceasefire plan. Its image also suffered when it began to conduct ethnic cleansing against the Georgian population in South Ossetia and when it conducted a unilateral recognition of Abkhazia and South Ossetia, a move that failed to win support from either its Western partners or allies in post-Soviet Eurasia. [703]

Antonenko writes extensively about Western weaknesses as well in their handling of the crisis. Russia's call for an emergency Security Council meeting on the night of 8 August saw little support from the US or Europe to offer alternatives. The interventions of the West in Iraq and Kosovo weakened the Western hand considerably. Putin had warned the West earlier around the time of Kosovo's declaration for independence that Russia would establish a step-by-step formalization of their ties with Abkhazia and South Ossetia. [704]

Concluding her article, Antonenko writes that none of the parties—Georgia, Russia, or the West—won this war. Instead the period of relative stability in Russian-Western relations that followed the end of the Cold War has been challenged.

Russian Sergey Markedonov, head of the Interethnic Relations Department of the Institute of Political and Military Analysis, wrote that "by formal criteria, Russia was the winner. Its actions were justified, taking into account the many connections between the security of the North Caucasus and the South Caucasus."[705] Russia was able to destroy the status quo and unlock what had become a frozen conflict.

So Who was responsible?

It will be of interest to see which set of events and conclusions readers will choose after reading the points of view of Georgians, Russians, and international experts. Certainly this is not an all inclusive set of articles and opinions and represents only a small sample. Conclusions based on additional information from other articles could lead to very different conclusions. For example, Nathalie Ouvaroff wrote that Russia played a dangerous game and did what it could to keep tensions high in the region. Russia introduced Chechen fighters into the region before hostilities began, he noted, this occurring as early as July in the case of Abkhazia, where Chechens were blamed for a series of attacks that shook the city of Sukhumi. Such provocations, according to Ouvaroff, heated up tensions. In South Ossetia, Chechens served as border guards and then took part in the fighting. The Chechen Vostok battalion, under the control of the Russian Ministry of Defense and headed by Sulim Yamadaev (who was invited to President Dmitriy Medvedev's inauguration), was particularly effective. It lost 40 men in the fighting. [706] Reports such as these tilt the evidence against Russia for deliberately trying to entice Georgia to take the action it did. Other reports tilt evidence against Georgia.

A worrying aspect in the aftermath of the conflict is an opinion expressed by Dr. Shlykov. He hopes to be able to refute claims that the US gave Saakashvili the green light. If he can't, then he believes this will spell bad news for future US-Russian relations. Another, and perhaps more worrisome aspect of the conflict for the area at large, is the potential escalation of tensions or a renewal of the conflict. This concept is buttressed by the multitude of accusations (made by both sides) that one side is sniping or firing at the other to this day. For example, Georgian Interior Minister Vano Merabishvili stated in October 2008 that an additional 2,000 Russian servicemen were moved into the Tskhinvali region.[707] Russian Deputy Defense Minister Colonel General Anatoliy Nogovitsyn does not rule out a new Georgian foray against South Ossetia and Abkhazia since he believes Georgia is enlarging its forces near the border with South Ossetia. If Georgia decides to restore constitutional order at any cost, Nogovitsyn notes, then a tough Russian response will await them.[708]

Pavel Fel'gengauer noted in his report that Georgia is now building defensive lines, shelters, and firing positions. Georgia's armed forces are discussing the use of lessons learned in Iraq, such as the use of roadside bombs. Provocations and firefights continue along the cease-fire line as well. European Union monitor Hansjoerg Haber notes that "the situation along the administrative border is unpredictable, incidents are again occurring." [709]

These types of events are occurring all too often and indicate that things have not really settled down in the region. Clearly the EU and OSCE (which may end its mission in South Ossetia) have their work cut out for them as they try to ascertain who is telling the truth and attempt to prevent the

crisis from starting all over again. The coming months will see a continuation of attempts by both sides to continue to exert influence over the area. As a result, to use a phrase from former New York Yankees baseball player Yogi Berra, "it ain't over till it's over." And, from all appearances, it ain't over. When the confrontation finally does end, let's all hope it is through diplomatic means.

CHAPTER ELEVEN: RUSSIAN INFORMATION WARFARE THEORY AND THE CONSEQUENCES OF AUGUST 2008

Introduction

The August 2008 war between Georgia and Russia clarified for Russian leaders the growing influence of information warfare (IW) and exposed several deficiencies in the Russian armed forces in regard to information-based equipment and theory. The conflict served as the primary motivator for a Russian military reform effort that, in its procurement of new equipment, is sure to include the latest advances in information-technologies. In short, the conflict has wide-ranging implications for future information warfare activities.

Russia's leadership was not taken by surprise over IW's growing importance. For the past several years, Russian political and military figures have written extensively about the impact of the information age on Russian domestic, foreign, and military affairs. In the case of politicians and diplomats, the focus has been on writing international strategies and policies designed to shape the information environment to Russia's liking. Considerable time and effort has gone into participation in international forums devoted to information topics, such as the world summits on information societies in Okinawa in 2000, Geneva in 2003, Tunis in 2005, and other such events. Efforts to inject Russian-led information policies into United Nations discussions have also been persistent. Domestically, politicians have written legislation to confront cybercrime and other internal issues related to the development of an information society. President Dmitriy Medvedev is allegedly an active Internet user who understands the net as an important information weapon and so emphasis on this area should continue. Former President Vladimir Putin was not as enthusiastic in accepting the net as is Medvedev

Russia's military remained active in a number of information-related areas and also was not taken by surprise in the IW arena. In 2007, Defense Minister Anatoliy Serdyukov promoted Oleg Eskin to the position of seventh deputy defense minister, making him responsible for handling information technology and communications. Under his direction, the military continued to write extensively on information warfare theory, electronic warfare doctrine and equipment, satellite clusters designed for military purposes, and reconnaissance-strike complexes. In addition, the military continued its focus on two components of IW, its information-technical and information-psychological aspects, as they had done since the concept was first discussed openly. However, advancement in all areas was not performed as quickly as initially anticipated and, when theory was tested in conflict, several weaknesses appeared immediately, most notably problems with communication equipment. The current Russian military reform focus of Serdyukov is designed to correct this and other shortcomings. In November 2008 he replaced Eskin with 39-year-old Dmitriy Chushkin, another sign of his displeasure over the performance of information technologies during the crisis. [710]

This chapter will address two issues associated with these information-related topics in Russia shortly before and after the August 2008 war. The chapter will discuss the information-related policies of the Russian Federation and their emergence as a key factor in Russia's spiritual and technical development; and the impact of the recent Georgia-Russian conflict on the future of

information warfare theory, organization, and equipment in Russia. Russian leaders hope that addressing policy and "lessons learned" now will prevent future failures in information-related areas, especially those of the military.

Background on Information-related Strategies of the Russian Federation

Russian information warfare policy makers at the strategic level appear to have adopted a three-pronged approach to information-related developments. This approach, in progress since the late 1990s, has shown steady progress in two prongs, the international and domestic fronts, where the development of policies and doctrines has continued unabated. However, the August 2008 conflict appears to have affected the third prong (military) the most (and provided the greatest controversy) since the fighting ended.

The first prong of Russia's strategic approach is that politicians and diplomats continue their primary thrust aimed at shaping the international information environment, an approach that began more than a decade ago. Russian leaders focused initially on shaping international opinion at the United Nations through the definition of terms, such as information weapons, but they have experienced little progress on this front. However, their efforts continue and in 2009 several new information-related issues were on the UN's agenda. Russia has also focused on shaping international opinion at worldwide conferences on the development of an information society. Armed mentally with the experience of losing an ideology at the end of the Cold War (described by some as "World War III"), Russian strategists understand the important role that information and news play in influencing the minds of its citizens. As a result Russia should not be expected to back away from this approach.

The second prong of Russia's strategic approach is that Russian politicians have developed several doctrines and policies to enhance domestic information security, especially the impact of new media on the Russian population. Politicians do not want a replay of the end of the Cold War. These internal policies are aimed at technical issues such as cybercrime and at psychological issues such as the information-psychological stability of society. Leaders have long recognized, from their perspective, an information threat to Russia. In January 2000, for example, Russia's National Security Concept dealt with affairs in the information-technical sphere. It was noted that

There is an increased threat to the national security of the Russian Federation in the information sphere. A serious danger arises from the desire of a number of countries to dominate the global information domain space and to expel Russia from the external and internal information market; and from the development by a number of states of 'information warfare' concepts that entail the creation of ways of exerting a dangerous effect on other countries' information systems, of disrupting information and telecommunications systems and data storage systems, and of gaining unauthorized access to them.[711]

In July 2001, Russia published a draft version of a program called "Electronic Russia 2002-2010." Electronic Russia 2002-2010 would enhance domestic information security by creating the institutional and legal environment for the development of an information and communications technology industry. This environment would assist the interaction between the state and society via these technologies. The program was designed to supplement other federally targeted programs (to

include but not limited to: Strategy for Russia's Social and Economic Development Until 2010; Development of Electronic Commerce in Russia 2002-2006; the Development of a Unified Educational Information Medium in the Russian Federation 2001-2005; and the Creation and Development of a Special-Purpose Information and Telecommunications System in the Interests of Governmental Bodies 2001-2007).[712]

Russian Professor Alexander Selivanov added to this discussion of information security with an article on internal and external IW threats to Russia. He stated that Russia had lost much on the information front in the past 25-30 years. No other "weapons" have emerged to replace the ideological ones that buttressed the people's souls. For that reason alone IW remains important. Russia must clarify the direction of information attacks, methods of conducting information operations, and methods of countering them. Without this knowledge it cannot proceed with confidence in the realm of information security. He notes that the principle method of carrying out information operations is "to form a stratum of people with transformed values in society who actually become carriers of a different culture and of the tasks and goals of other states on the territory of one's own country."[713] Seizure of territory, he adds, "presumes 'nontraditional occupation' as the possibility of controlling territory and making use of its resources without the victor's physical presence on the territory of the vanquished."[714]

The third prong of Russia's strategic approach is that Russia's military continues its attempts to modernize its military force and develop the proper military strategy for the twenty-first century. The recent conflict with Georgia has helped this process pick up speed as the fighting indicated that Russia needs to make significant improvement in command and control and in developing information-based equipment if it hopes to remain competitive in the event of future war. The military's recent focus on military reform seems dedicated to making these adjustments happen. In addition to improving tactics and equipment, the Russian military is determined to enhance the psychological stability of its servicemen. The paper *Krasnaya Zvezda* (Red Star) has printed a number of recent articles dedicated to the information-psychological stability issue. One of these articles noted that only eleven per cent of servicemen are currently satisfied with information services the military provides. [715] The government wants to ensure that soldiers get objective information from the new information environment that has surrounded and penetrated the country. [716]

Professor Selivanov wrote that Russia is now obligated to speak about the need for information subunits in the Armed Forces to shape patriotism and a fighting spirit, to counteract enemy information-ideological operations, and to conduct information-ideological operations against an actual or potential enemy.[717] Thus the reform effort is designed to make improvements in both the technical and psychological components of IW.

These three avenues of approach to information security in Russia are influenced by events worldwide and domestically. A look at just seven Russian headlines from 2007-present indicates some of the rationale and concern behind Russia's urgency in handling information security issues:

• "Information technical company head speculates that economic crisis will fuel information security needs"

- "Growing dependence on computer systems may threaten Russia's security"
- "National security implications of information warfare analyzed"
- "Internal, external threats to Russia from information warfare detailed"
- "Russian General Staff expects cyber war in 2-3 years"
- "Almost 300,000 hacker attacks on President's website repelled in 2008"
- "Caucasus conflict prompts Russia to resume development of robotic weapons"

Three Russian Policies Designed for Domestic Stability

Russian efforts on the international stage to influence and shape the international environment will not be addressed here, as the work on this aspect is too extensive for this analysis. Rather, the focus will remain on Russian internal information-related policies and on military capabilities. This section will discuss three internal policies, to be followed by the section on military issues related to the Georgian-Russian conflict of August 2008. The first policy issue addressed in this section, Russia's 2000 Information Security Doctrine, will be examined in more detail than the other two policies, the 2008 "Strategy of Information Society Development in Russia" and the 2009 "National Security Strategy."

Russia published a very specific and important information-related document in September 2000, that being the Information Security Doctrine of the Russian Federation. Signed by then President Vladimir Putin, Russia's Information Security Doctrine presented the purposes, objectives, principles, and basic directions of Russia's information security. Russia's Information Security Doctrine defines information security as "the state of protection of its national interests in the information sphere defined by the totality of balanced interests of the individual, society, and the state." The doctrine declares that the "implementation of the guarantees of the constitutional rights and liberties of man and citizen concerning activity in the information sphere is the most important objective of the state in the field of information security." [718]

Some of the main points of the doctrine are:

- First, the document discusses the national interests of the Russian Federation in the information sphere, including the protection of information resources from unsanctioned access.
- Second, the document examines the types of threats to Russia's information security. These include constitutional rights that protect one's spiritual life, information support for state policy, the development of the information industry, and the security of information.
- Third, the document identifies external and internal sources of threats to Russia's information security.
- Fourth, it outlines the state of information security in the Russian Federation and objectives supporting it, discussing tension between the need for the free exchange of information and the need for restrictions on dissemination of some information.
- Fifth, general methods of information security in the Russian Federation legal, organizational-technical, and economic are outlined.
- Sixth, the document discusses several features of information security: economics, domestic

- policy, foreign policy, science and technology, spiritual life, information and telecommunication systems, defense, law enforcement, and emergency situations.
- Seventh, the goals of international cooperation in the field of information security are discussed, such as a ban on information weapons and the coordination of law enforcement activities.
- Eighth, the doctrine describes the provisions of state policy regarding information security: guidelines for federal institutions of state power, and balancing the interests of the individual, society, and the state in the information sphere.
- Finally, organizational elements of Russia's information security system are described; these include the President, Federation Council of the Federal Assembly, the State Duma of the Federal Assembly, the government of the Russian Federation, the Security Council, and other federal executive authorities, Presidential commissions, judiciary institutions, public associations, and citizens. [719]

When the information security doctrine was first announced in 2000, it was supported by a series of official proclamations. Official spokesmen reinforced this message. First Deputy of the Security Council Vladislav Sherstyuk, who helped draft the doctrine, claimed that the doctrine would not be used to restrict independent media or control television channels, but asserted that the state must supervise all media, state or private. [720] Anatoliy Streltsov, another doctrine author, noted that the components of the doctrine provide for the constitutional rights and freedoms of citizens to obtain and use information, while providing for Russia's spiritual renewal, the development of moral values, patriotic and humanistic traditions, and cultural and scientific potential. Most important, according to Streltsov, was that currently Russia's information security does not fully comply with the needs of society and the state, lacking sufficient legal, organizational, and technical backing. [721]

Details of the Information Security Doctrine's section on defense are described next.

Information Security in the Sphere of Defense

Information security in the defense sphere involves: (1) the information infrastructure of the central elements of military command and control, and the elements of military command and control of the branches of the armed forces and the scientific research institutions of the Ministry of Defense; (2) the information resources of enterprises of the defense complex and research institutions; (3) the software and hardware of automatic systems of command and control of the forces and weapons, arms, and military equipment furnished with computerization facilities; and (4) information resources, communication systems, and the information infrastructure of other forces and military components and elements.[722]

External threats to the Defense Ministry (MOD) include the intelligence activities of foreign states; information and technical pressure (electronic warfare, computer network penetration, etc.) by probable enemies; sabotage and subversive activities of the security services of foreign states, including information and psychological pressure; and activities of foreign political, economic, or military entities directed against the interests of the Russian Federation in the defense sphere. Internal threats included the violation of established procedure for collecting, processing, storing, and transmitting information within MOD; premeditated actions and individual mistakes with special information and telecommunications systems, or unreliability in their operation; information and

propaganda activities that undermine the prestige of the armed forces; unresolved questions of protecting intellectual property of enterprises; and unresolved questions regarding social protection of servicemen and their families.[723]

Ways to improve the system of information security for the armed forces included the refinement of the modes and methods of strategic and operational concealment, reconnaissance, and electronic warfare and the methods and means of active countermeasures against the information and propaganda and psychological operations of a probable enemy. [724] The terms information-technical and information-psychological are not used in the information security doctrine, perhaps because military people did not write it. However, its sections on the spiritual and cultural sphere, and the scientific research sphere, do cover the gist of the military's concerns in information-psychological and information-technical realms.

2008/2009 Policies

In February 2008, Russian President Vladimir Putin approved the <u>Strategiya Razvitiya Informatsionnogo Obshchestva v Rossiyskoy Federatsii</u> (Strategy of Information Society <u>Development in Russia</u>). The strategy has both information-technical and information-psychological overtones. Among the information-technical tasks are: developing modern information and communication infrastructures; developing the Russian Federation economy using these infrastructures; and developing science, technologies and engineering, and training qualified personnel in the field of information and communication technologies. Among the information-psychological tasks are upgrading the quality of education, health services, and social protection of the population; improving the constitutional rights of citizens acting in the information sphere; and preserving the culture, moral, and patriotic principles associated with the public consciousness. [725]

The strategy also discussed how the government of Russia would solve these tasks. The government will formulate basic actions for the development of an information society and create conditions for the implementation of these actions; will define reference values for the development of an information society in Russia; will develop the legislation and updates for law-enforcement's use of information and communication technologies; will create conditions for the intensive development of science, education, and culture (and science-driven information and communication technologies); will enable the improvement of the quality and efficiency of public services for business and citizens; will create conditions for equal access for citizens to information; and will use the capabilities of information and communication technologies for strengthening the defense capacity of the country and the security of the state. [726]

In May 2009 Russia's National Security Strategy was published. It further addressed the concerns expressed in the 2000 National Security Concept. The unclassified version of the strategy, in superficial terms, mentions the global information confrontation; information as a strategic deterrent; information as a means of conducting armed combat; the availability of information technologies (especially telecommunications); the formation of an information and military infrastructure; the importance of information science and information resources; the role of information networks and systems in situation centers; and information and information-analytical support necessary for implementing the strategy.

The Georgian-Russian Conflict: IW and Military Reform

The August 2008 conflict with Georgia occurred midway between Russia's 2008 strategy for an information society and the 2009 national security strategy. The conflict likely influenced the 2009 national security strategy.

Information-related aspects of the August 2008 conflict were discussed often in the press of both countries. Russian cyber attacks, Georgians stated, neutralized Georgia's use of the Internet and its ability to talk internally with its citizens. Georgian attacks on Russia were less successful but still merited consideration in the Russian press for their ability to shut down some services. With regard to military equipment dependent on information-based technologies, the Russian military did not do well. Equipment with information technologies were deemed a critical shortcoming that must be fixed. Lieutenant General Vladimir Shamanov, at the time chief of the Main Combat Training and Troop Service Directorate of Russia, stated that troops needed equipment with up-to-date geolocation and telecommunications instruments (to include ensuring uninterrupted telecommunications) integrated into the fire command chain, a top-notch friend-or-foe system, and the ability to improve the resolution power of reconnaissance assets. [727] Command and control equipment often failed and relegated commanders in some instances to using the cell phones of journalists. Precision-guided weaponry did not perform well. The military's poor performance in Georgia served as a catalyst for change and military reform efforts, headed by Defense Minister Anatoliy Serdyukov.

Several prominent Russian authors discussed the good and bad features of Russia's information warfare response months after the conflict ended. Most prominent among them are the Dean of the Russian Foreign Ministry's Academy for Future Diplomats, Igor Panarin; the head of the Institute for Political and Military Analysis Center of Military Forecasting, Colonel Anatoliy Tsyganok; the deputy chief of the Russian Armed Forces General Staff, Anatoliy Nogovitsyn; and Russia's first deputy of the General Staff, Alexander Burutin. The views of these and other Russian authors follow.

Russia Lost the Information War: Three Opinions

Russian analyst Igor Panarin addressed shortcomings with what he termed information-related reform. He offered an interesting plan to correct Russia's information warfare deficiencies. Panarin is a long-time information warfare specialist in Russia and thus understands quite well the ins and outs of the problem. Overall, he was not impressed with Russia's use of IW, noting that in regard to the Georgian conflict "the Caucasus demonstrated our utter inability to champion our goals and interests in the world information arena." [728] Two public groups of Russian experts, Panarin added, had looked at the information warfare problem against Russia in a September round table of the Russian Federation Public Chamber (titled "Information Aggression against Russia: Methods for Countering It"); and an October international conference sponsored by the party "A Just Russia" (titled "Information Warfare in the Modern World"). Panarin concluded that "the geopolitical and geoeconomic role of Russia in the world will be determined to a large extent by whether or not it can create an effective system for information warfare." [729]

Panarin writes that to win information war, Russia needs a specialized management system and analytic structures that counter information aggression against Russia. The components of such a system are:

- Council for Public Diplomacy: would include members of the state structure, media, business, political parties, NGO's, and so on headed by Prime Minister Putin.
- Advisor to the President of Russia for Information and Propaganda Activities: would coordinate activities of the information analysis units of the President's administration, the Security Council, and several other ministries.
- State Foreign Affairs Media Holding Company (All-Russia State Television and Radio Broadcasting Company): would be subordinate to the Ministry of Foreign Affairs, where the American experience can be copied.
- State Internet Holding Company: would create a domestic media holding company for the publishing of books, video films, video games, and the like for dissemination on the Internet.
- Information Crisis Action Center: would enable the authorities to present commentaries on unfolding events in a timely manner to the world information arena. "Homework assignments" must be readied in advance.
- Information Countermeasure System: would create a system of resources to counter information warfare operations by Russia's geopolitical enemies.
- Non-Governmental Organization (NGO): would provide a network of Russian organizations operating on CIS, EU, and USA territories.
- System for Training Personnel for Conducting Information Warfare: would define which institutions will train individuals in this topic. Most likely candidates at the highest level are the Diplomatic Academy of the Ministry of Foreign Affairs and the Russian Civil Service Academy; and at the middle level, Moscow State University, the Higher Economic School, and the Moscow State Institute of International Relations.[730]

Panarin adds that these activities must be unified within the frame of an organizational and analytic system composed of eight parts (diagnostic, analysis and forecasting, organization and management, methodological, consultative, prevention, control, and cooperation); and that information Special Forces must be developed to "prepare for effective operations under conditions of a possible crisis."[731] In summary, Panarin advocated creating his system, strengthening financing for the plan, creating a state/private system for managing activities, creating a state/private system for formulating a positive image of Russia overseas, and expanding the information resources of the Russian speaking populations across the globe.[732]

While Panarin's plan was the most complete, it was not the only one offered for consideration. With regard to other plans like Panarin's, an unattributed report eerily similar to Panarin's appeared in the paper *Novyy Region* (New Region). It stated that "Russia lost the information war in August 2008."[733] This unnamed author recommended improving the information structures available to Russia. Special organization-managerial and research entities for counteracting information aggression should be formed by presidential decision. Information troops should be created composed of state and military news media, people responsive to the needs and interests of Russia in response to a crisis. Information troops would do the strategic analysis of control networks, counterintelligence work, operational concealment measures, information security issues, and security for one's own men and equipment. To insure the proper information impact it is necessary to construct an anti-crisis center, a national media holding company, work with public relations entities, and train specialists (military press, radio, and TV) in applied journalism. To construct information

countermeasures it is necessary to develop a center for the determination of critically important information entities of the enemy, how to eliminate them physically, and how to conduct electronic warfare, psychological warfare, systemic counterpropaganda, and net operations to include hacker training. Personnel of information troops would be diplomats, experts, journalists, writers, publicists, translators, operators, communications personnel, web designers, hackers, and others. [734]

In March 2009, analyst Anatoliy Tsyganok also wrote that, at the preliminary stage of the conflict, Georgians won the information war. In Tsyganok's opinion, every agency was unprepared to conduct IW against Georgia. This includes the Security Council, the Ministry of Foreign Affairs, and the press center of the Ministry of Defense. The two main goals of information warfare are to disable an enemy's command and control systems; and to impose on enemy citizens moral norms and cultural traditions that are foreign to them. Tsyganok also recommended creating information troops, as did the two previous authors. They would conduct strategic analysis, information influence, and information countermeasures. His discussion of these categories is identical to the paragraph above, indicating it was perhaps he and not Panarin who provided the interview to *Novyy Region* (New Region). [735]

Tsyganok added three other important facts that he did not cover in his *Novyy Region* interview. They are that information warfare is a reality of geopolitics that Russia's political elite does not understand; that the Israeli Army is the technological model that Defense Minister Serdyukov's reform should follow; and that a military GLONASS system is badly needed, a system that did not work well against Georgia. Thirty-six GLONASS satellites are needed. Then precision weaponry will work. [736]

Russian IW Did Well against Georgia: Two Opinions

There were other opinions that positively assessed Russia's information warfare effort in Georgia. The deputy chief of the Russian Armed Forces General Staff, Anatoliy Nogovitsyn, is representative of someone who was not at all negative about Russia's information warfare performance during the conflict. He said that "Russian journalists stood united with the Russian army as never before, displaying heroism in covering the events in South Ossetia" and that journalists helped "finding the words and evidence to rebut torrents of lies and rejection, and helped the West to view our operations with understanding." [737]

Colonel P. Koayesov also found more positive than negative in Russia's information warfare effort against Georgia. He began by praising Georgian IW efforts. He noted that, from a Georgian perspective, the effort began long before hostilities, with the key information warfare themes being Georgia's historic right to South Ossetia, Georgia's legal right to South Ossetia, and Georgia's psychological information pressure on world opinion. Once conflict began, Georgia organized a denial of service attack against South Ossetian websites carrying information about the progress of the fighting. This occurred from 7-8 August. On 9 August Russian news agencies were attacked, making it difficult to access *RIA Novosti* (RIA News) in particular (http://www.rian.ru). Concurrently the Georgian leadership organized psychological information pressure on their population from within the country and from abroad. Support from abroad was particularly strong from the Anglo-Saxon media, such as CNN, BBC, Reuter, Bloomberg, and others. Georgian President Mikhail Saakashvili, for example, conducted all of his public statements against a backdrop of the European Union flag. [738]

Koayesov defined information warfare in the following way in January 2009, some five months after the conflict ended:

Information warfare consists in making an integrated impact on the opposing side's system of state and military command and control and its military-political leadership—an impact that would lead even in peacetime to the adoption of decisions favorable to the party initiating the information impact and in the course of conflict would totally paralyze the functioning of the enemy's command and control infrastructure. [739]

Information warfare's two components, from a Russian military perspective, have remained consistent through the years. These two components are information-technical and information-psychological. Koayesov defined the former as "blocking the operation of the enemy's state and military command and control systems" and the latter as "exerting psychological information pressure on its leaders, Armed Forces personnel, and the population." [740] The pillars of US information doctrine, on the other hand, have undergone significant change since the 1990s.

Koayesov describes the damage caused by Russian hackers against Georgia as "significantly more serious." Virtually all of Georgia's national ministries and government departments (along with some news agencies) came under attack. Georgia was forced to find other servers to host its web material. Internet online surveys were an important information warfare field for Russia, as Russia's actions were viewed as peacekeeping by a majority of voters in a CNN survey, which "obviously CNN terminated very promptly."[741] Blog entries were also more pro-Russian than Georgian. Koayesov summed up his research the following way:

On the whole it can be noted that whereas the Georgian side built its strategy for waging information warfare at the official level, attempting to convince people through mass exposure in popular, primarily Anglo-Saxon publications, the South Ossetian side gambled on involving as many of its Internet supporters as possible in information warfare...the utilization of 'mass information armies' conducting a direct dialogue with people on the Internet is more effective than a 'mediated' dialogue between states' leaders and the world's peoples. [742]

Further IW Consequences of the Conflict

Besides plans and positives/negatives, there were rather significant consequences of the conflict that appeared months later after the conflict's lessons had been digested. These consequences and second thoughts by major IW players in Russia are important to consider.

One early consequence was the Strela research and production company's announcement in October 2008 of a new Internet-based military intelligence system. This system will provide a collective view of the battlefield. Strela also announced the production of a new radar known as Aistyonok and a modified version of the Fara-1 radar. The new Fara-PV radar, with night-vision devices, can open fire on group targets in the total absence of "optical" visibility. [743]

Another of these consequences appeared in the form of a few statements from Russia's first deputy of the General Staff, Alexander Burutin. He said in an interview on 29 January 2009 that it is

"essential to switch from an analysis of the challenges and threats in the sphere of information security to a response and to their preemption." [744] In the sense of preemption Burutin sounds more like the Chinese. More importantly, Burutin stated that a mechanism should be developed that would require states to "incur liability for what is happening in their information space." [745]

The importance of Burutin's last statement was developed further in the US journal <u>Parameters</u>. Authors Stephen Korns and Joshua Kastenberg discussed the issue of cyber neutrality from the perspective of the Georgian-Russian conflict. They asked what a neutral nation can do to remain a cyber neutral when another nation at war (Georgia) uses the servers of a neutral (US) in order to converse with its own nation after its servers have been neutralized or debilitated by another nation (Russia) with whom they are at war?[746] During the Georgia-Russian conflict, a Georgian website was relocated on a private US IT company site and the company provided a cyber conduit through which Georgia's leadership could talk with its population, apparently without the knowledge or approval of the US government. Luckily, Korns and Kastenberg note, the Georgian authority sought cyber sanctuary on a US ".com" site and not a ".gov" or ".mil" site. Korns and Kastenberg recommended that the US government should take steps to determine if it will allow future cyber belligerents to make use of Internet assets in the US and, if so, what protocol is appropriate to control the situation.[747] Thus they recommend discussion about the issue of cyber neutrality much as Burutin recommends developing a mechanism for incurring liability. Both nations should talk this through.

Information-Psychological Stability of the Force: Recommendations after August 2008

Russia's military leadership seems intent, in the course of its military reform effort, to prepare the way for an infusion of new digital patriotic educational materials into the armed forces. A three stage plan is proposed. Between 2009-2012 the expectation is that a television digital format will be introduced into the garrisons as well as the creation of Internet sites of military print media. Between 2013-2017, Internet access will be available for eighty-five per cent of servicemen. Between 2018-2020 all barracks will have satellite and cable TV and there will be 20 newspapers per 100 servicemen. [748]

Conclusions

Russia is working hard at shaping the international environment to its liking. Their efforts at international conferences and at the UN are indicative of this effort. They have offered proposals on the development of principles for information and communication technologies, discussed the formalization of terms such as information warfare and information weapons, and have developed government groups of experts to discuss information related topics. Russia is also interested in developing an international conference site that will mimic the economic conferences at Davos. They appear to have targeted Garmisch, Germany as the site for these meetings. For the past few years, Russians have been meeting there to discuss information-related issues in April.

Domestically, Russian policy makers worry about what types of information warfare activities other nations are running against their citizens. To thwart the further loss of patriotic and other cultural values, Russian leaders have developed a host of policies to ensure that protection is offered to Russia's spiritual values.

The war with Georgia forced a host of information security issues to the fore. Communication problems surfaced early as did the performance of precision-guided weaponry. Both issues affected the command and control of Russian troops. These problems served as the primary motivators behind Defense Minister Serdyukov's military reform process.

A short confrontation on the Internet between Russian and Georgian hackers resulted in a wide-ranging discussion about the power of the Internet to influence public opinion during a conflict. Russia's leaders seem keen on harnessing this power. Recently, the Kremlin opened what is known as a "school of bloggers," an indication that President Medvedev's interest in social media is taking on new avenues of approach.[749] Evgeney Morozov, who found the site, noted that "extensive 'googling' for 'Kremlin's school of bloggers' reveals at least one interesting project—Polit-TV.ru—a series of ideological YouTube videos, all branded with a funny Kremlin-shaped logo, which aim to rally up support for the Kremlin's recent public campaigns."[750]

Russia is addressing its military information warfare problems with more focus than at any time in the recent past. This focus includes the proposed development of several new organizations aimed at better control over the information-technical and information-psychological aspects of information warfare. And for once, these reform efforts appear to have the backing of the political leadership. Overall, one should expect that in the next ten years significant improvement will be noted in all three prongs of Russia's approach to IW—external, internal, and military. The West would be wise to keep a close eye on how Russia proceeds. There is much to learn from their experiences.

CHAPTER TWELVE: THREE BOOKS ON THE CONFLICT

Introduction

Once the Russia-Georgia conflict (see Appendix Five for South Ossetia maps) ended, there were many articles written about the conflict. After a short while, books also began to appear on the topic. This chapter focuses on three such works that offer varying opinions as to what really happened.

The first two books favor Georgia's view of the war, that President Mikhail Saakashvili was caught in the middle of a real dilemma: does he allow parts of Georgia's territorial integrity to slip into Russian hands without a fight; or does he go against the advice of several international actors and fight over the potential annexation of Abkhazia and South Ossetia after attempts at negotiation fail? The third book favors a Russian version of events.

The Guns of August 2008: Russia's War with Georgia

Editors Svante E. Cornell and S. Frederick Starr's book <u>The Guns of August: Russia's War with Georgia</u> is, due to the number (10) and variety of its contributors, an important discussion of the August 2008 conflict between Russia and Georgia from a variety of perspectives. The work employs the analysis of two Russians and several US and international academicians and analysts.

In Chapter One, "Introduction," Cornell and Starr point out that the conflict was quickly "submerged under a cloud of polemics involving both spin and disinformation." Much of the early reporting (and spin) emerged largely from a Russian point of view, mainly because their reporters were the only ones with direct access to the area. [751] Before the conflict started (from 2-7 August) Russia had slipped, by some accounts, nearly fifty journalists into South Ossetia. As a result, policymakers and others studying the press often made premature judgments based on erroneous information or on very little information. The editors add that, in their view, Russia engaged in detailed planning for this war for months and maybe years. Perhaps Saakashvili fell into a trap. Russian contributors Pavel Fel'gengauer and Andrei Illarionov suggest that "even if he had not, a pretext would have been found to proceed with the campaign as it had been planned." [752]

Thomas Goltz wrote Chapter Two, titled "The Paradox of Living in Paradise: Georgia's Descent into Chaos." Goltz, well-known for his excellent reporting on Chechnya and the Russian periphery, describes how a nationalistic slow-broil was underway in Georgia that exploded with Mikhail Gorbachev's call for *glasnost* and *perestroika* in the 1980s. There arose a desire to dissolve all connections with the USSR.[753] South Ossetia's more recent history, however, was closer with Russia than with the Georgians and in 1990 the Ossetian "popular front" organization preemptively declared their independence from Georgia and said it wanted to remain inside the USSR,[754] setting the stage for many of Russia's future actions to hold onto South Ossetia.

Thornike Gordadze wrote Chapter Three, titled "Georgian-Russian Relations in the 1990s." He describes how Russia tried to make viable a hybrid of its long abandoned political model in a totally new environment.[755]

Russian aggression in South Ossetia may hearken back to the fact that the West allowed Russia to act

with some impunity in Abkhazia from August 1992 to September 1993.[756] The leaders of Russia may have considered this a sign that they could do the same in the other regions. Russia further retained and sustained its military bases in Abkhazia and South Ossetia and supported various separatist movements in neighboring countries. More importantly, Russia declared at the United Nations that only Russia can put peacekeepers in the post-Soviet space. This strategy of "peacekeeping" became "piece keeping" in the words of Paul Goble. This was Russia's way to maintain control over parts of these lost territories.[757] This peacekeeping force, which was hardly impartial, would later be seen by the West as a major reason for the outbreak of the conflict. Russia received the right to put military bases in these regions of Georgia and obtained influence over the appointments of the ministers of defense, interior, and security in South Ossetia.

Edward Shevardnadze, former Foreign Minister of the USSR under Mikhail Gorbachev and President of Georgia from 1995-2003, realized that his relation with Moscow was becoming less profitable even though he tried to find a way to compromise with Moscow's demands. The quasivassal relationship failed to bring any real benefit to Georgia and so he turned to the West, welcoming American involvement in the Baku-Tbilisi-Ceyhan pipeline project. Georgia became a leading beneficiary of US foreign aid per capita globally. [758] In 1999 Shevardnadze announced his intention to close Russia's military bases in Georgia. Russia responded by requiring all Georgians to obtain visas before entering Russia. For "humanitarian reasons" visas were not required for residents of Abkhazia and South Ossetia, clearly challenging Georgia's territorial integrity. Perhaps this can be seen as one of Russia's initial steps in annexing the provinces. This action was soon followed by the broad distribution of Russian passports in the provinces. [759] Russia used energy blackmail as well during the Shevardnadze era.

Andrei Illarionov wrote Chapter Four, titled "The Russian Leadership's Preparation for War, 1999-2008." Illarionov, a Russian who had served as then-President Vladimir Putin's economic advisor until 2005, wrote that while both sides took steps towards war it is obvious that most of those steps were made by the Russian-Abkhazian-South Ossetian coalition in advance. It is remarkable how detailed, precise, coordinated, and secretive was the Russian planning for military action, Illarionov notes. [760] In his chapter he outlines the decisions Russian leaders took in chronological order. They were:

- Several days after 9 January 2002, once Eduard Kokoity had been elected President of South Ossetia and Gerasim Khugaev had been appointed as Prime Minister, Kokoity called a closed meeting of the South Ossetian elite and revealed a plan to launch a war against Georgia and gain independence. [761]
- On 23 June 2002 Tskhinvali started registering candidates for Russian citizenship. Russia then demanded to use Georgian airspace for operations in Chechnya, which resulted in the bombing of Georgian territory on 6 August 2002. At the end of 2002 Kokoity started filling position in the government with representatives of the Russian power ministries. Further, the Russian-Abkhazian railway line was reopened. [762] On 11 February 2004 the first meeting between Russian President Putin and Georgian President Saakashvili occurred. Putin asked Saakashvili to slow down the removal of Russian bases from Georgia and to "take care of" Minister of State Security, Valery Khaburdzania.
- On 11 October 2004 elections in Abkhazia failed to get a Kremlin backed candidate, Raul

Khadjimba (a former KGB agent), into the Presidency of Abkhazia. Instead Putin had to settle for a Khadjimba-Bagapsh joint victory but not before Putin had halted railway traffic, closed the Abkhazian portion of the Russian-Georgian border, and banned the import of Abkhazian agricultural products into Russia, moves designed to put more pressure on voters and policy makers. Abkhazia seemed more independent than South Ossetia up to this point. [763]

- In 2005 Russia had the telecom firm Megafon build a non-Georgian mobile communication system in South Ossetia for military and intelligence service use. Russia also raised its subsidies to the two regions. The primary part of the subsidies went to defense, making up some 150% of South Ossetia's GDP.
- On 30 May 2005 Russia agreed to withdraw its forces from its Georgian bases before the end of 2008. The dates for withdrawing from bases in Batumi and Akhalkalaki were also the dates for setting up bases in Abkhazia and South Ossetia. [764] From 2006-2008 South Ossetia and Abkhazia received twice as much military equipment as Georgia possessed. [765] On 7 July 2006 the Russian Federation Council adopted a law allowing the Russian President to deploy the country's military forces outside Russian territory to prevent international terrorism.
- On 27 September 2006 Georgia uncovered a GRU coordinated spy network. The individuals apprehended were sentenced on 29 September. Russia's response was rapid and aggressive. They responded by surrounding the Georgian embassy in Moscow, putting forces on Georgia's border, and promising to deport Georgian migrant laborers. On 2 October the officers were released and Russia suspended all communications with Georgia, amounting to the institution of a total embargo. [766] On 11 March 2007 Russian military helicopters shelled Georgian administrative buildings and villages in the Kodori Gorge in Upper Abkhazia. On 27 June 2007 Russia unexpectedly withdrew its troops from its military base in Akhalkalaki. This may have been done to prevent their forces from being held hostage in an upcoming war (65).
- On 13 July 2007 Putin signed a decree to terminate Russia's participation in the Treaty on Conventional Forces in Europe (CFE). This removed limits on the movement of troops and equipment in the North Caucasus. On 4 and 7 March 2008 respectively, South Ossetia and Abkhazia called for Russia to recognize their independence. On 13 March 2008 the Russian State Duma and the MFA discussed a strategy for achieving Abkhazian and South Ossetian independence. [767]
- On 3-5 April 2008, NATO denied a Georgian and Ukrainian request for membership action plans (MAP). On 16 April Putin established direct relations with Sukhumi and Tskhinvali, just like with his federation territories, amounting to full annexation of the two Georgian regions. On 17 April 300 additional Russian servicemen with heavy equipment arrived in Abkhazia. On 20 April Russian a MIG-29 shot down an unarmed Georgian Unmanned Aerial Vehicle and withdrew into Russian airspace. In April 2008 airborne troops deployed to Abkhazia. In May 2008 Russia's Air Force sent out a nationwide "call to active duty" of former military helicopter pilots with experience flying in mountainous regions. [768]
- In June-July 2008 there were a series of exercises, over flights, base construction improvements, and movement of people and equipment. The most significant actions indicating Russian war moves were: 2 and 8 July, Ossetia's information agency Osinform

published articles declaring the participation of Russia's 58th army "in the future operation to force Georgia to peace." On 4 July Ossetian President Kokoity announced a total mobilization in South Ossetia (then canceled it the same afternoon) and the Russian website Kavkaz-center predicted a Russian attack on Georgia in August 2008, noting "preparations for the war have been under way already for several months." [769]

- On 7 July Russian peacekeeping battalions in Abkhazia and South Ossetia fortified their positions. On 10 July Bagapsh and Kokoity were called to Moscow for consultations. On 8, 14, 18, 19, 22-25, 30, and 31 July the US, Germany, EU, OSCE, and Finland proposed negotiations that Russia brushed aside. On 15 July the Russian Kavkaz-2008 exercise used a leaflet with a description of Georgian forces. On 28 July South Ossetian forces fire at joint peacekeeping forces and OSCE observers for the first time. [770]
- On 1 August Ossetian and Georgian forces exchanged fire. On 2 August South Ossetia began moving civilians to Russia. By 7 August nearly 20,000 citizens had been evacuated. The areas from which they left accounted for more than 90% of the population of the future area of battle and about 40% of the total population of South Ossetia. From 2-7 August Russian journalists arrived in Tskhinvali while foreign journalists were banned except for a group from Ukraine.[771] On 3 August Russia's Deputy Minister of Defense, along with the Deputy Chief of Intelligence and the commander of the 58th army, met in Tskhinvali with Kokoity and others.[772] On 4 August 300 Cossack mercenaries arrived in South Ossetia. By 5 August more artillery systems, an intelligence battalion, and several armored units all moved through the Roki tunnel and into South Ossetia. More than 1200 Russian servicemen had entered South Ossetia by that time.[773]

Niklas Nilsson wrote Chapter Five, "Georgia's Rose Revolution: The Break with the Past." He notes that Saakashvili came to power in January 2004 and his top priority was territorial integrity. [774] Saakashvili achieved success in Adjara in May 2004 and then switched his attention to South Ossetia, hoping that Kokoity lacked legitimacy and would depart as public support came Saakashvili's way. He hoped that economic achievements would enable the change to occur but he underestimated South Ossetian fears of Georgian aggression.[775]

Tbilisi criticized Russia's mode of conflict resolution and support for separatist authorities which Tbilisi believed were designed to keep the conflict alive and keep parts of Georgia under Russian control. Russia, however, proved to be a biased participant in the conflict and didn't want resolution. Tbilisi wanted external actors brought into the conflict resolution process to neutralize Russian bias toward the separatists. Tbilisi alternated using peace plan proposals with threats of force to attempt to move the process forward. Georgia reestablished control over the Kodori Gorge in Abkhazia and installed the Abkhaz government-in-exile there. Georgian Minister of Defense Okruashvili said he would celebrate New Year's Eve in his native Tskhinvali, upping the fears in Moscow of Georgian intentions.[776]

Most hopes for Georgian successes disappeared by 2006 as Russian authorities saw that Saakashvili would be more Western oriented than Shevardnadze. Russia began using energy and trade levers to attain dominance over separatist regions and bombed Georgian territory and shot down Georgian UAVs. Instead of the elimination of Shevardnadze from the scene, the Rose Revolution came

to be viewed as a shift orchestrated by the US and one that had to be stopped. [777]

Stephen Blank wrote Chapter Six, "From Neglect to Duress: The West and the Georgian Crisis Before the 2008 War." He writes that in the former Soviet Union, a conflict of "imagined geographies" and different mentalities remains in progress. Russian delivery of pressure against former Soviet republics remains the latter's greatest security threat. States that align with Russia must face a future of Russian troops and Russian political and economic influence in their policymaking. Russia wants to freeze the process of European integration and replace it with regional bipolarity. [778]

US support for Georgia's MAP aspiration had two consequences: it caused Russia to act more quickly to keep NATO off its border, and it caused Georgia to believe the US had its back. Russian actions were sped up after 16 April and resulted in the following motions: opening consular relations with Abkhazia and South Ossetia; prepositioning logistics in Abkhazia; and building a railroad there to connect it to its own military and logistic bases. US policy at the time was weak, advancing no plan to resolve stalemates in disputed provinces, failing to publicly warn Moscow about the consequences of their actions, and failing to organize a coherent Western response to Russian pressures, all issues that Moscow exploited. Instead, the US faced consequences of its own from the August conflict that include the likely permanent truncation of Georgia, its long-term exclusion from NATO, further divisions within NATO, and the emboldening of Russia to undertake further military actions in neighboring countries when it considers it necessary to do so.[779]

David Smith wrote Chapter Seven, "The Saakashvili Administration's Reaction to Russian Policies Before the 2008 War." Smith notes that both Tbilisi and the West missed or misread Russian intentions. Tbilisi somewhat suspended its belief of a possible Russian incursion due to some Western criticism about their path to democracy. Westerners, on the other hand, missed the approaching indicators of war and the fact that Russia was either irked by or feared Georgian independence. The path may have begun with the inauguration of Saakashvili on 25 January 2004, which put Georgia on an independent path that included his commitment to reintegrate South Ossetia and Abkhazia into Georgia, use geography to establish Georgia as an energy transit state, liberalize the economy, and gain membership into NATO. [780]

Russia, for its part, was confronted with three issues: the independence of Kosovo (which they saw as an example and rationale for future Georgian actions), Georgia's push toward a Western path and NATO, and NATO's slow approach to admitting Georgia to the MAP. Russia capitalized on the latter point by keeping the provinces unstable and in Russia's camp. Georgia felt the Russian analogy of using what occurred in Kosovo as their reason to keep Abkhazia was pointless since there was no genocide or ethnic cleansing in Abkhazia. On 6 March Russia withdrew sanctions on separatist authorities in Abkhazia, allowing Russian arms shipments to Abkhaz separatists. On 24 March the Duma called up the Kremlin to consider recognizing the two Georgian territories. [781]

In March 2008 Georgia's proposal to "unfreeze" the situation in the territories was negated by the Russians. Instead of the 1992 Sochi Agreement that put Russia, Georgia, South Ossetia, and North Ossetia on the commission, the Georgians offered a "2+2+2" proposal of Georgia and Russia; the Kokoity and Tbilisi-backed Sanakoyev administrations from South Ossetia; and the OSCE and EU.

Instead, Russian forces continued to position themselves on Georgian territory "to protect Russian citizens" and to protect against a Georgian military buildup. [782]

Georgia, however, could see that conflict was perhaps imminent. Its leaders could see this process developing better than the US. Georgian State Minister for Reintegration Yakobashvili said Georgia and Russia were close to war since Georgia knows Russia well and sees signals of propaganda and Russian troops entering Georgian territory under false pretenses. On 8 and 12 May Saakashvili stated that NATO will not help Georgia and Georgia "requests the EU to study, investigate, and react on the illegal movement of Russian peacekeeping forces." The EU must become more involved in conflict resolution processes. On 6 June Saakashvili met with Russian President Medvedev and said Russia should withdraw its additional troops in Abkhazia, stop military construction there, and reverse the 16 April decision to establish ties with Abkhazia and South Ossetia. Georgia's approach was consistently diplomatic, sought the help of friends, used international organizations, and put forward peace proposals. The reality is that "the August 2008 war was neither provoked nor a product of miscalculation. It was initiated and waged by Russia for well-articulated geopolitical reasons." [783]

Johanna Popjanevski wrote Chapter Eight, titled "From Sukhumi to Tskhinvali: The Path to War in Georgia." The chapter details some of the final decisions that led to the conflict. On 4 March Georgia decided to withdraw from the Joint Control Commission in South Ossetia and on 6 March Russia lifted its trade restrictions on Abkhazia. On 16 April outgoing President Putin signed a presidential decree instructing Russia's state agencies to establish official ties with the Abkhaz and South Ossetian de facto administrations, to institutionalize their trade relations and to provide consular assistance to residents of the two regions. On 20 April a Georgian UAV was shot down over Abkhazia. Russia increased its peacekeeping numbers in Abkhazia to 2542 due to what Russia termed the mobilization of Georgian troops in the Kodori Gorge, which UNOMIG said did not occur. In fact, the US, EU, and UN all backed the Georgian version of events. On 31 May Russia sent 400 military personnel to Abkhazia to repair the railway infrastructure between Sukhumi and Ochamchire, describing the project as humanitarian assistance to Abkhazia. Georgia, NATO, and the EU objected that the peacekeeping mandate did not authorize this. [784]

On 4 July Russian authorities stated that Georgia had staged an attack on the head of the Provisional Administration in South Ossetia to justify a Russian military build-up in the conflict zone. On 7 July Georgia accused South Ossetia of kidnapping four Georgian police officers. On 8 July Russia sent four military aircraft into Georgian airspace over South Ossetia as US Secretary of State Condoleezza Rice visited Tbilisi. From 2-5 August numerous reporters from Moscow-based media outlets started arriving in Tskhinvali. A Chechen freelance photographer stated that on 5 August he found close to 50 Russian journalists at his hotel in Tskhinvali to cover "something big." From 3-5 August South Ossetian authorities announced that 800 Ossetians were being evacuated to North Ossetia. On 7 August Russian negotiator Popov failed to show up to meet Georgian Yakobashvili. Russian peacekeeper Kulakhmetov informed Yakobashvili that the Georgian side should declare a unilateral ceasefire, which Saakashvili did at 1910 on 7 August. A short time later on 7 August the first media reports about Russian troops moving through the Roki tunnel from North Ossetia appeared. At 2000 Rossiya TV showed Abkhaz leader Bagapsh telling the Abkhaz National Security Council that a battalion from Russia had entered South Ossetia and this was based on his (Bagapsh's) conversation with South Ossetian President Kokoity. At 2300 Saakashvili received information that

100 vehicles were already passing through the Roki tunnel and at 2335, Saakashvili instructed the Georgian Minister of Defense to advance towards Tskhinvali with two goals: prevent the Russian advance on Tskhinvali and stop the shelling of the Georgian villages by separatist rebels. The cease fire was suspended shortly after midnight on 8 August. On 8 August at 1000 the first Russian fighter plane entered Georgian airspace from South Ossetia. The Georgian army began to withdraw on the afternoon of 9 August. On 10 August Georgia requested a cease-fire but Russia continued attacking, destroying a railroad bridge as late as 16 August and firebombing Borjomi National Park, a Georgian national treasure, on 15-16 August. [785] Medvedev had ordered combat operations to cease on 12 August but a ceasefire was not signed until 15-16 August.

These facts and others point argue that Russia had preplanned the incursion, underscored by the influx of Russian journalists, preparation of the railroad, and the absence of Russian peacekeeper control over the South Ossetian Defense Ministry. The argument over "who fired the first shot" points to Russia as well since Georgia has recordings of Russian advances into South Ossetia on 7 August, which has not been refuted by Russia. Western technical experts deem the recordings to be credible. Moscow carries the burden of proof for breaching Georgia's sovereign border and for conducting more than a humanitarian mission. [786]

Georgia's move on Tskhinvali was an attempt to protect its territory based on Russia's actions (the buildup, etc.) since April and the credible reports (Abkhaz leader on TV, telecommunication intercepts, etc.) that the country had been invaded. Georgia does not carry the burden of proof or need to prove proportionality of response. Russia believed that the international community would either ignore a Russian invasion of Georgia or excuse it as justified to prevent Georgian aggression against South Ossetia. [787]

Russian Pavel Fel'gengauer wrote Chapter Nine, "After August 7: The Escalation of the Russia-Georgia War." Georgia, he writes, did not expect a full scale invasion in August, according to the chief of staff of Georgia's armed forces. Rather, even though several thousand Russian troops began moving through the Roki tunnel on 7 August (according to Georgia's National Security Council Secretary Alexander Lomaia), Georgia expected an attack in September, October, or November 2008 and not on two fronts. [788]

Georgia's defense minister said Georgia was not prepared for conventional war. After the war there was a Georgian parliamentary commission to scrutinize events; no public hearings happened in Russia about the prewar plan or course of the war. Moscow wanted its Georgian actions to be seen as a reaction to "Georgian aggression" against Tskhinvali and against peacekeepers in the region. Russian President Medvedev said he suspected that Saakashvili was planning military action and that Russia "had prepared for that." Russian General Staff Chief Nikolay Makarov noted that Russia was "forced to handpick colonels and generals from all over Russia, men who were able to command in battle..." This could not have been done on the morning of 8 August. [789]

Georgia's chief of staff of the armed forces during the war, General Zaza Gogava, said Saakashvili gave the military three orders at 2335 on 7 August. First, to prevent all military vehicles from entering Georgia via the Roki Tunnel; second, to suppress all positions attacking Georgian peacekeepers and MVD posts or Georgian villages; and third, to protect the interests and security of

the civilian population while implementing these orders. Lomaia said the logic was to circle around Tskhinvali and advance closer to the Roki tunnel. Georgian Minister of Defense Davit Kezerashvili and his first deputy Batu Kutelia told Fel'gengauer in November 2008 that they had a scout at the south end of the Roki Tunnel on 7 August who monitored Russian vehicles entering South Ossetia at that time. At 0045 on 8 August, Georgian artillery opened fire on these advancing forces. Over 12,000 Russian troops entered South Ossetia. 15,000 Russian troops were in Abkhazia. Altogether some 25,000 Russian troops were in Georgia with 1200 pieces of armor and artillery. 10,000-15,000 separatist militias acted as auxiliary forces. On 10 August Georgia declared a unilateral ceasefire.

Paul Goble wrote Chapter Ten, "Defining Victory and Defeat: The Information War between Russia and Georgia." New digital mediums have increased the calculations associated with the conduct of information war (IW). Russia and Georgia both realized that how the media treated their actions was important. Both assumed that control over the media was possible but neither recognized how facts on the ground might over time overwhelm their information strategies. The two sides engaged in an information war before, during, and after the conflict to state who won and lost and to announce who was the aggressor and who was the victim. Russia was usually on the offensive, Georgia on the defensive. Moscow themes were that Saakashvili was the aggressor, Moscow had to protect its citizens, and the US actions in Kosovo were similar to Moscow's. Georgia said that Russia's invasion had violated international law. Georgian authorities believe that their (Georgia's) introduction of troops was legitimate, and that Georgia was different than Kosovo.[791]

Moscow's greatest success in IW was proclaiming that it had acted defensively in response to Georgian aggression. Many criticized Saakashvili for his actions, to include international actors such as Germany. Russia's prepositioning of journalists in Tskhinvali is a sure sign that the Kremlin knew that there was going to be a war to cover. Some Russians felt the coverage was so uneven that they sought out Western coverage for leavening. Putin said Western propaganda is powerful but will fail due to its dishonesty and amorality. He added that Russia's response to Georgia was similar to the USSR's response to the German invasion of WWII. (Misinformation is the spread of completely false reports and is less serious than disinformation which is the mixing of truths and falsehoods in a way that will be either plausible or impossible to check. When disinformation is picked up by other news outlets its credibility is enhanced.)[792]

Georgia had a different reporting approach, trying to restrict the flow of Russian messages and blocking Russian Internet sites and TV. It simultaneously sought to put out its message in Western capitals. Georgia's use of the blogosphere enabled it to "come out better in the information war while the conflict was going on than anyone could have expected...." Both sides eventually felt that they had lost the information war. Russian critics said that information technology allowed the Kremlin's propaganda to become so transparent that "it was deceiving only those who wanted to be deceived." Russia offered a "smorgasbord of 'varied and contradictory' explanations for what it was doing...." and explained that it was only protecting the rights of its citizens outside its borders. People were asking about those inside Russia's borders, whether they deserved the same rights? Russia also implied it could act as it did because it could get away with it, more the thinking of a criminal group than a state in Goble's opinion. Some Russians argued for new administrative and analytic centers and the creation of new Information Forces in the Russian Armed Forces. IW lessons learned were:

future wars will be defined by who wins the IW; clarity and consistency are more important than ever; low-intensity conflict make the war and peace distinction less meaningful; facts on the ground matter since they create limits as to what can reasonably be claimed; and the explosive growth of personal media may make controlling messages almost impossible and the conduct of IW more difficult and important than ever. [793]

James Sherr wrote the last chapter in the book, titled "The Implications of the Russia-Georgia War for European Security." He notes that Yeltsin, not Putin, was the first to state that "ideological confrontation is being replaced by a struggle for spheres of influence in geopolitics." Yeltsin did so in 1994. Russia had a long term security cooperation view with its former republics as early as 1992 when the Yeltsin administration noted that the former USSR was a zone of Russian "special interests" to be pursued by all legitimate means including "divide and influence" policies. Western security elites define threats in terms of intention and capability while Russia does so in terms of the "presence" of foreign forces in the vicinity of Russian territory. [794]

Kosovo removed any pretense from Russia's democrats that NATO was a defensive alliance. Putin had restored national pride, established a strong geo-economic impulse to policy, and freed Russia from its helplessness. On 12 July 2008 the Foreign Policy Concept of Russia noted that "should our partners be unprepared for joint efforts, Russia, in order to protect its national interests, will have to act unilaterally but always on the basis of international law." By August 2008 Russia saw a US that was overextended, a NATO policy with no teeth, and a NATO that was divided. This helped embolden the Russian leadership to act. On 12 September 2008 President Medvedev stated that Russia was "no longer weak and defenseless" and would "no longer tolerate" the West's "unfair and humiliating" policy in its neighborhood.[795]

Medvedev added that Saakashvili's "reckless and unprovoked aggression" was not his own doing, but carried out "at the instigation of forces abroad." He added that Russia has the right to maintain regions of "privileged interests," i.e., "with our close neighbors." NATO must halt its "mechanical enlargement," even when it occurs by invitation, and confine itself to issues of "hard security" within the "geographical limits of the alliance." [796]

A Little War That Shook the World

The eight chapters of Ronald Asmus's book <u>A Little War that Shook the World</u> offer insights into the world of diplomatic and military intrigue and secrecy, US-Russian and EU-Russian relations, and Russian negotiating behavior, albeit from a US perspective. His analysis brings to the fore the question of who started the conflict and the crucial role that international actors played in stopping the conflict before it spun further out of control.[797]

Chapter One, "The Decision," is perhaps the book's most important chapter. Here Asmus lays out a timeline of events from an insider's perspective. Asmus was provided tapes of important conversations and conducted personal interviews with key participants (ministers, presidents, soldiers) of the conflict. However, he was not offered access to Russian leaders so his timeline is influenced in that respect.

The situation that developed months before the conflict is crucial to understanding the context for

the timeline that unfolded. Context helps the analyst understand how events were perceived by both sides. For Russia, the decision in February of 2008 to grant independence to Kosovo and the decision taken at NATO's Bucharest summit in April regarding Georgian access to NATO membership appear to have precipitated a series of Russian actions. These decisions touched a raw Russian nerve: NATO moving closer to Russia's borders. However, Russia used the Kosovo event as a further rationale for intervening and ensuring that self-determination voices in favor of Russia were heard (voices directed by ethnic Russians in many cases) as NATO had recognized them in Kosovo.

It is apparent that Russia's leaders understood fully that they were putting Saakashvili in an untenable and unwinnable situation. Undoubtedly, they also knew that no help would be offered from Washington or the international community if Saakashvili went to war. They appear to have been informed about what was being said among the various parties to the conflict. Russia watched as international leaders and the US pleaded that Saakashvili not take any action against the Russians. No such effort was expended to ensure that Russia would not act in an aggressive manner, and this was a mistake. [798]

Saakashvili realized, however, that if he did nothing to counter Russian moves, which were becoming more and more aggressive, and sacrificed Abkhazian and South Ossetian sovereignty, that he would be termed a political failure and ousted for allowing another country to take Georgian territory. Georgians were aware that in 1921 their forefathers had not fought the Bolsheviks and lost their independence—he didn't want that to be his fate. As Asmus notes, "That was the gap between Georgia and the West that Moscow was now exposing and exploiting—and where it was laying its trap."[799] In this sense, the conflict showed how Russia set up and took advantage of a political-diplomatic-military situation. Georgia's leaders had examined Russian actions and rationalized that Russian activities were threatening not only Georgia's villages and citizens but perhaps Georgia's government itself. Saakashvili was thus placed in an unenviable situation. Russian pressure and foresight had put him in a no win situation.

Asmus writes that Saakashvili's order to go to war at 2335 on 7 August 2008 was influenced by numerous Russian actions that left him no choice other than attack or sacrifice territory. A list of those factors in Asmus's chapter is offered here:

- 1. Saakashvili's political manifesto was based on Georgia's territorial integrity and the recovery of the provinces of Abkhazia and South Ossetia; he did not feel he could remain president of he failed to defend Georgian citizens; Russia used the status quo against him as they continued to add their influence in South Ossetia with the appointment of a Russian citizen as prime minister, Russian citizens as defense and interior ministers, and a Russian citizen as head of the national security council. Russia also began handing out Russian passports to South Ossetian citizens.
- 2. The Georgian armed forces were in no level of readiness to fight. Commanders were allowed to grant leave in August. The elite First Brigade was in Iraq and another unit was in training to deploy. Some commanders on 6 August were on vacation at traditional Georgian feasts; this was not a country prepared for an invasion as Russia claims.
- 3. In mid-July, Georgian intelligence had reports that Russian fighters were moved to North Ossetia.

- 4. In the weeks prior to the invasion, the Russians conducted a major exercise (Kavkaz 2008) that used materials about Georgia (leaflets, etc.) as the pretext for the mock operation. It was a de facto Georgian war game scenario.
- 5. South Ossetian artillery opened fire on 29 July on Georgian positions in a more systematic and lethal manner than in previous summers; further, the Georgians had intercepted phone calls from Russian peacekeepers that had helped South Ossetian's target the Georgians (in some cases, the firing came from behind Russian peacekeeping positions. If Georgians retaliated they ran the risk of killing Russian soldiers).
- 6. Russian Deputy Defense Minister Nikolay Pankov and Fifty-eighth Army Commander in Chief Anatoliy Khrulyev arrived in Tskhinvali on 2 August for consultations with President Kokoity.
- 7. On 2 August South Ossetia began evacuating women and children from its capital to North Ossetia.
- 8. Between 2 and 6 August some fifty Russian journalists arrived in Tskhinvali, which was highly unusual.
- 9. On 3 August North Ossetian, Chechen, and Cossack "volunteers" were mobilized by Moscow and assigned to the South Ossetian peacekeeping battalions, flouting the peacekeeping agreements put in place in the early 1990s.
- 10. The movement through the Roki Tunnel (the tunnel connecting Russia with South Ossetia) of Russian forces on 6 August, a force not authorized to be in South Ossetia.
- 11. The renewed shelling of Georgian villages on 7 August.
- 12. On 7 August, the world's attention was focused on the opening of the Olympics in Beijing, China and not on South Ossetia.
- 13. On the morning of 7 August Georgia received reports that on 4 or 5 August additional aircraft were deployed to the Mozdok air base in North Ossetia; and that parts of the Russian Black Sea fleet had left port several days earlier.
- 14. On the afternoon of 7 August, Saakashvili felt Russia had crossed a red line based on information accumulated: heavier weaponry had been used in the conflict zone, a buildup of air and land power had occurred, Russian forces were already deployed in South Ossetia, there had been an influx of North Caucasian volunteers, and Russia controlled the Roki tunnel. However, in parallel to convening his national security meeting to discuss red lines, Saakashvili sent civilian Temur Yakovashvili to Tskhinvali to try to establish direct contact with Russian and South Ossetian authorities. He met with Major General Kulakhmetov, the Russian head of the joint peacekeeping forces. The latter stated he could no longer control the South Ossetian forces and confirmed that artillery was coming from behind Russian positions, using peacekeepers as human shields. Yakovashvili asked to establish a ceasefire for at least a day and Kulakhmetov said he'd try. Saakashvili was for the ceasefire.
- 15. More South Ossetian shelling began again at 2030 on 7 August and Georgian forces did not respond. Georgia's National Security Council decided this was a slow motion Russian invasion taking advantage of a situation. The corresponding Georgian decision to move was finally made due to the lack of any Ossetian or Russian response to Saakashvili's unilateral ceasefire offer, fresh intelligence that other Russian units were poised to move through the tunnel, visual confirmation of a military column moving from Java toward Tskhinvali, and Medvedev's refusal to return Saakashvili's calls to discuss what was happening. At 2330 on 7 August, when Saakashvili was informed that Russian forces were moving from Java to

Tskhinvali, he ordered forces to move and open fire.

- 16. An important point here, however, is that Russia's slow motion plan had been in the works for weeks if not months; Georgia's plan, on the other hand, was haphazard at best and an indication that the last minute plan indicated this was not a long planned move to conquer South Ossetia.
- 17. Russia's rational for invading contained three points: there was an initial proclamation that their invasion was to prevent a possible genocide against South Ossetia (which turned out to be false, as the EU report of Heidi Tagliavini noted); there was an initial aim to defend Russian citizens in South Ossetia (citizens newly minted by Russia); and there was the death of Russian peacekeepers on 8 August, who according to one Russian journalist blog had opened fire first and then were shot by the Georgians (with the reality being not only that Russian peacekeepers had long since ceased to be neutral but also that Georgian peacekeepers had been killed on 7 August). A further claim was that Georgian artillery attacks were indiscriminate.[800]

There was, of course, evidence against Georgia. One OSCE report indicated that Georgia used GRAD missiles against Tskhinvali; and the EU's independent fact-finding trip headed by Ambassador Heidi Tagliavini stated that Georgia's decision to go to war was unjustifiable under international law. Further, Georgia's armed forces did engage in contingency planning and on occasion showed these plans to US officials. Russia surely noted that at 1430 on 7 August a public mobilization order was issued; and at 1800 forces were ordered to deploy to the edge of South Ossetia and the conflict zone. Washington, however, had warned Saakashvili that they would not come to his rescue if he started a conflict. Georgian forces most likely tempered their operations based on this advice. They were ordered to fight a defensive engagement around Tskhinvali. Their plan was to destroy the Gupta bridge and prevent Russian forces from advancing further south; Georgian peacekeeper Brigadier General Mamuka Kurashvili stated that Georgia's aim was different, however, that being to restore constitutional order. This caused an international stir, especially in Russia, where Georgia's refutation of this claim was seen as a ruse.[801]

Asmus makes the following statement in his conclusions to the chapter:

On the evening of August 7 the ambiguity about Georgia's future territorial integrity, the makebelieve nature of Russia's role as peacekeeper; the marginalization of the UN and OSCE missions; and the lack of political will and interest from the West came together with a Russian agenda and a cornered Georgian leader to produce this war.[802]

Chapters Two, Three, and Four cover the history of the region in more detail, the impact of Kosovo independence on Russia's decisions, and the Russian interpretation of the Bucharest conference for Russia's border in the Caucasus, respectively.

Chapter Five, "Diplomacy," discusses in some detail the give and take between Putin and Saakashvili and offers some indication as to why the latter acted as he did in confronting Russia with force. It also helps analysts understand Russian negotiating techniques. First, Saakashvili was reacting to direct threats from Putin that the latter would make Abkhazia "a second Northern Cyprus if Georgia continued to pursue its goal of going to the West." [803] Saakashvili was also reacting to

Europeans who stated that Georgia should just accept the loss of Abkhazia, which went against his campaign promises and inherent feeling of the importance of protecting Georgia's territorial integrity. Simultaneously, Russia was building up its military force in Abkhazia and Russia's leadership was refusing to talk to Tbilisi. Saakashvili had felt after his last meeting with Putin in February 2008 that President Putin was preparing for war. Diplomats were encouraged to engage both sides to head off a confrontation. However, Russia continued to move men and equipment into Abkhazia and force Saakashvili to turn his attention there. [804]

Moscow, after watching the West support Kosovo's declaration of independence, decided on 6 March to rescind a 1996 decision banning weapons and military aid for Abkhazia and South Ossetia; on 21 March Moscow's Duma adopted a resolution to recognize the regions; on 3 April Putin pledged support for the regions via practical, not declarative means; and on 16 April Putin decreed the establishment of direct legal and diplomatic ties with the regions. Russian aircraft on 20 April then shot down an unmanned aerial vehicle (UAV) flying over the potential conflict zone. [805]

Washington felt the best way to cool down Saakashvili's fears was to engage him directly. A US plan was devised to show allies that Saakashvili was serious about peace, to provide assurances against Russian moves and the latter's monopoly on peacekeepers, and to start another type of negotiating process for Abkhazia's future. The plan did not, however, signal to Moscow that any move against Georgia would seriously undermine present day Russian-US relations and those with the West in general. Germany also proposed a plan that was based on a Georgian non-use of force pledge and the use of international mediation to settle the Abkhaz issue. The differences in the plans, a lack of western unity, and Russian attempts to sabotage the moves it did not like ensured that Moscow would not be deterred from acting in Asmus's opinion. Russia used the diplomatic effort to continue to mask its preparations in the regions. [806]

On 21 June Saakashvili offered an interim solution. He offered to split Abkhazia into two areas —"one opened to Georgian influence and the other firmly in Russian hands" in return for a Georgian non-use of force pledge and a pledge to abandon any effort to overturn the current Russian peacekeeping mandate. On 3 July Russia responded—negatively. It asked for more preconditions. In Asmus's opinion, Georgia was now losing confidence in both the US and in the EU. As National Security Council Secretary Alexander Lomaia commented about the Russian response, "…the letter is empty. We are going to have a hot summer." [807]

Chapter Six is titled "The Battle." Russia placed some 20,000 forces in Abkhazia and 20,000 in South Ossetia, some three times the size of Georgia's army. The preplanning had evolved over time, as the chapters above indicate, to include weapons, bases, infrastructure, personnel, and even the Black Sea fleet. Asmus writes that cyber forces constituted the fourth front. Cyber attacks on Georgia began in late July. The heaviest attacks occurred on 8 August as blocking, re-routing, and seizing Georgian cyberspace control began in earnest. Different groups attacked different targets. The attacks included less serious defacements and more serious reductions of Georgia's cyber capabilities. Economic disruption of the banking system also appeared prominent among the attack vectors. Interestingly, Asmus writes that the attacks began and ended within 30 minutes of one another, beginning at 1715 on 8 August and ending at 1245 on 12 August. Since Moscow announced its initial ceasefire at about this time, the attacks appear to have been well-controlled and coordinated. Thus

Asmus believes the attacks were part of a larger campaign's political and military objectives. [808] Of course, Asmus relates other interesting Russian recruitment issues such as bringing helicopter pilots out of retirement and sending doctors and medics to Tskhinvali in July. All of these issues indicate preplanning on Russia's part. However, Asmus speculates that Russia's plan was to strike several days later, seize territories outright, and precipitate the fall of Saakashvili's government. If this was the case, the latter's decision to move on the evening of 7 August may have further infuriated Putin. In any event, Asmus feels the trap that Moscow set can be explained as follows: "Either you acquiesce to the creeping annexation and run the risk of being toppled domestically—or you choose to fight and be crushed militarily." [809]

Russian defense correspondent Pavel Fel'gengauer offered an alternate solution. He felt the plan was for the Ossetians to provoke the Georgians into acting against their interests. This scenario has legs based on the Ossetian's heavy artillery bombardment against Georgia while it hid behind the Russian peacekeepers human shield. Any Russian deaths could then be a pretext for an intervention.

Asmus also notes how successful the Russians were in directing Georgian attention away from the real conflict area. By developing a major buildup of forces in the open in Abkhazia Georgian attention was directed there. Meanwhile, a surreptitious buildup of forces was occurring in South Ossetia that wasn't as well documented by the Georgians.

Further, in order not to provoke Russia, US training of the Georgian army was focused on counter-terror capabilities and not on territorial defense. This further ensured the lack of competency on behalf of the Georgian army to confront a Russian force. US intelligence assets monitoring the Caucasus had been relocated to focus on Iraq and Afghanistan. So when the force moved out early on the 8th, they were not only undermanned and underinformed but also undertrained and handed a plan that had been developed only the previous afternoon.[810]

Asmus notes that Kurashvili had no radios that worked with the two infantry brigades that were deploying on the left and right flanks. He also relates that a Georgian battalion commander, Major Shalva Dolidze, gave an order early in the fight NOT to fire on Russian peacekeepers who his unit had just encountered. As the peacekeepers passed, they opened fire on Dolidze's unit, killing him. [811] On 9 August Russia attacked with SS-21 Tochka and SS-26 Iskander missiles and 28 Russian aircraft. The following day, Russian forces entered Western Georgia from Abkhazia. That same day, Secretary of State Condelezza Rice called Russian Foreign Minister Sergei Lavrov. Lavrov indicated the fighting would halt if Tbilisi issued a non-use of force pledge and if Saakashvili was removed from power. Rice said she would have no part of that and, against Lavrov's protests, proceeded to call her European counterparts to explain Russia's actual operational goal. To Washington, this was a turning point in the war. This occurred as Russian tanks were some two hours from Tbilisi. The US held firm on its decision not to employ a military option. Instead it began delivering humanitarian aid and warning Russia of the consequences of its actions if it did not reverse its course immediately. [812] Fortunately for everyone involved, Russia's assault did not materialize and a ceasefire plan was developed and adopted by Russia and the West.

In Chapter Seven, "Ceasefire," Asmus begins by noting that Saakashvili sent the army into South Ossetia to "preempt what he feared was a larger Russian move." [813] The chapter then explains the

diplomatic means used by Russia to get larger concessions from the conflict, Saakashvili's anger at the EU's negotiating "success" that was more favorable to Russia than him, and how the eventual compromise was reached.

A key motive behind US President George Bush's negotiating strategy was that he did not want the conflict to evolve into a US-Russian confrontation. For this reason he preferred to allow the European Union to take the lead role in attempting to stop the conflict while the US supported their moves from behind the scene. This meant Saakashvili would have to rely on actors in whom he had less faith and he would not have the benefit of a military response if things went wrong with the US out of the game. At that moment, the rotating chair of the Presidency of the European Union was held by French President Nikolas Sarkozy and it thus fell on his shoulders to stop the conflict. He soon found out this would be a difficult task as he was confronted by Russian leaders who seemed intent on teaching Saakashvili a lesson. On the other hand, Asmus writes that Paris was blaming Saakashvili for initiating the fighting and their goal was thus not to gain back lost territories but to stop the fighting and save Georgia. [814]

The Russian leaders demanded a security zone that would have given Russia control over east-west highways in Georgia and thus over Georgia's economic recovery. In effect it could have led to regime change. The negotiating principles that Russian implemented were interesting: first, Putin always appeared angry and aggressive, thus setting the stage for nothing more than limited concessions on the part of Russia. Second, other actors outside the formal setting (to include Kremlin spin doctor Gleb Pavlovsky) were offering radio interviews that appealed to calm the restive leadership who "reportedly" didn't want a ceasefire but wanted to march on Tbilisi. Third, the Russian leadership stated that South Ossetia's claim was simply the exercise of their right to self-determination. Asmus describes this as "the diplomatic equivalent of blowback" from the example of Kosovo where NATO used this logic to extract Serbian influence. However, Sarkozy was able to end the fighting and spare Tbilisi so he felt the negotiations had ended successfully.[815]

Back in Tbilisi and even in the US, another feeling emerged, that Sarkozy had not done enough to specify the parameters of a ceasefire (specific dates and locations) and had not included Georgia's non-negotiable demands (that Georgia's territorial integrity must be mentioned). Saakashvili also did not want the Russians to be able to address the "status" of Abkhazia and South Ossetia. This word must be eliminated, he stressed. Sarkozy stressed that the negotiations had been difficult and that Saakashvili needed to live with the agreement. [816] In the end, Sarkozy was able to negotiate with the Russians over the points that concerned Saakashvili. However, Russian President Dmitriy Medvedev continued his diplomatic offensive while the negotiations were underway, recognizing Abkhazia and South Ossetia on 26 August and stating that "Russia, like other countries in the world, has regions where it has privileged interests." [817] This statement made it clear that Russia, Asmus writes, had made "an unabashed claim to a renewal of a Russian sphere of influence on its borders." [818] For their part, the European Union upheld Georgia's territorial integrity, stated that Russia's recognition of Abkhazia and South Ossetia was unacceptable, and deployed EU monitors to the region. The EU also allowed Russia to get away with changing borders, kicking Georgians out of parts of Abkhazia and South Ossetia, and not completely complying with all the measures of the ceasefire.[819]

Chapter Eight is titled "Georgia, Russia, and the Future of the West," a chapter that serves as the book's conclusions. Asmus notes that the book contains two core arguments. First, that the origins of the war do not lie in the details of local ethnic rivalries between Georgians on the one hand and Abkhazians and South Ossetians on the other. The core conflict was over Tbilisi's desire to break out of its relationship with Russia and become part of the democratic West (this view, of course, does not take into account Russia's core concern, that its borders would align with NATO's if South Ossetia was part of Georgia). Second, the war was aimed against the West (especially the European security system) as well as Georgia for the West's granting independence to Kosovo and for considering Ukraine and Georgia as potential members of NATO. Russia abandoned its core concept of equal security for all countries in Europe when that security issue infringed on Russia's border. [820]

The EU's Tagliavini Report blames Georgia for firing the first shot. It rejects, however, many aspects of Moscow's actions. These include: Moscow's allegations that Georgians committed genocide; Moscow's concept that its response was commensurate with the threat to its peacekeepers; Moscow's claim of having undertaken a humanitarian intervention; Moscow's rational for distributing passports to citizens of Abkhazia and South Ossetia in the years before the conflict; and Moscow's rational for its recognition of Abkhazia and South Ossetia, which is contrary to international law. [821] Western mistakes, in Asmus's opinion, included an unwillingness to invest in proper peacekeeping procedures, which allowed a prejudiced Russian force to conduct operations; the push for Kosovo's independence with no plan for blowback on Georgian desires; and NATO's handling of the Bucharest summit, a final warning sign as interpreted by Russia that motivated leaders in Moscow to act. [822]

Asmus closes his book with a discussion of how European institutions have evolved over the last two decades. He discusses the effort to integrate Russia into this system and how it might have been done better. More ominously he notes that the issues that caused the August 2008 conflict have not been resolved. Saber-rattling is still ongoing. Observer missions on the ground have not been strengthened. What Russia, Georgia, and the West do in the coming months and years will determine the future of the region. Asmus writes that the West must return to its principles of Western security and recreate unity among the parties. Pulling Moscow into that debate will be difficult for two reasons. First, it does not want to be part of the West. Second, it continues to stress its right to intervene in governments on its borders that have security plans and foreign policy directions in opposition to Kremlin concerns. [823]

The Tanks of August

The best (and perhaps only) Russian timeline of events was contained in a book titled <u>The Tanks of August.[824]</u> The book was published by the Center for the Analysis of Strategies and Technologies in Moscow in 2009. The Center's research interests include both the Russian armed forces and armed conflict on post-Soviet territories.

Authors Mikhail Barabanov, Anton Lavrov, and Vyacheslav Tseluyko's work (Barabanov wrote the Forward but did not take credit for any of the chapters) contained seven chapters: (1) The Reform of the Georgian Army under Saakashvili before the Five-Day War of 2008 (2) A Chronology of Military Operations between Russia and Georgia in August 2008 (3) The Present and Future of the Georgian-Russian Conflict: The Military Aspect (4) Russian Air Force Losses in the Five-Day War

with Georgia in August 2008 (5) The State of the Georgian Army toward the Conclusion of Military Operations and its Losses (6) Postwar Facilities of the Russian Armed Forces in the Newly Recognized Republics of Abkhazia and South Ossetia and (7) Known Deliveries of Basic Types of Military Hardware to Georgia in 2000-2008. This last chapter will not be discussed since it consists only of tables of equipment supplied to Georgia from 2000-2008.

In the book's Forward, Barabanov noted that the goal of Georgia's leaders was to "wage a Blitzkrieg to conquer South Ossetia, which had declared its independence." Russia intervened to act as the guarantor of peace. The mission of the armed forces of Georgian President Mikhail Saakashvili was to restore by force the regions of Abkhazia and South Ossetia to Tbilisi's control. Georgia had been preparing for this conflict since 2006. In spite of such preparation, Georgia proved to be only a Third World army clothed in Western uniforms. Well-known characteristics of the Georgian national mentality were demonstrated: narcissism, megalomania, and contempt for neighboring peoples, and a passion for putting on a façade. Georgia remains an unstable and potentially aggressive country (its military potential has grown over the past year) with an anti-Russian orientation in Barabanov's opinion.

He added that the time of arrival of Georgian troops in the zone of combat operations refutes official Georgian statements that they were only responding to a massive Russian incursion. Russian forces did, however, attempt to "demilitarize" Georgia. Their aim was to deprive Georgia of a substantial portion of its military potential and to demoralize the Georgian armed forces. Russian successes in this endeavor showed that the victor in the Five-Day War was really Russia. Russia demonstrated its firmness and power to ensure that the people of the Caucasus understood "what had happened to them." If war breaks out again, Russia is ready to demonstrate this more effectively than it did in August 2008.

In Chapter One, "The Reform of the Georgian Army under Saakashvili before the Five-Day War of 2008," author Vyacheslav Tseluyko details with extensive footnoting some of the activities in Georgia that worried Russia and hinted that Georgia was preparing for a future conflict. Even though Georgia stated that it was improbable it would face large-scale aggression (which implies Russia, Tseluyko notes, as the only force in the area capable of large-scale aggression) preparation for such an eventuality continued in Georgia. Joining NATO was considered a guarantee against this type of activity. However, participation in NATO operations required a small, lightly armed army of professional forces that were highly mobile. This worked against Georgian aims of becoming self-sufficient. The number of Georgian troops grew in 2007 from 28,000 to 32,000 troops and was projected to take an even bigger leap in 2008 to 37,000. Training of the force had improved in 2008 due to a contractual method of recruitment, the introduction of military education reforms, and the grants of foreign aid the country had received.

Tseluyko adds that the greatest successes of the Saakashvili regime were in the sphere of weapons and hardware purchases, particularly of foreign make. He lists these purchases in detail. Finally, Georgia increased its infrastructure (such as stationing units nearer to the zone of anticipated operations) and defense budget. Taking into account foreign military aid, Georgia's actual military expenses grew from 30 million dollars in 2003 to 940 million dollars in 2007. Tseluyko concluded his chapter noting that by the summer of 2008, Georgia represented a threat to its autonomous regions

due to the qualitative difference in its force. Periodic purges of army personnel for political reasons still occurred, however, and this led to the appearance of many poorly trained commanders.

Chapter Two, titled "Chronology of Military Operations between Russia and Georgia in August 2008," is perhaps the most important chapter in the book since it highlights, for the first time in such detail, a Russian timeline of events. The Asmus and Cornell/Starr books offer timelines from a Western perspective (and use two Russians, Illarionov and Fel'gengauer, as sources) but neither book covers the conflict in such detail as this one. Unfortunately, the chapter has no footnotes and thus it is unclear how author Anton Lavrov could possibly be so well-informed about both Georgian plans before the conflict and combat activities in general as they unfolded. This is clearly the best description of the day to day fighting that has appeared in Russia. Perhaps one of the security services in Russia supplied him with the information he used in this assessment.

Lavrov notes that Georgian forces were prepared for offensive operations, utilized UAVs to conduct reconnaissance of South Ossetia, and utilized regular troops to play the part of peacekeeping forces in the area in order to familiarize battalions with the terrain. Some battalions were only on station for a month instead of the standard six months. Russia only had 500 peacekeepers in South Ossetia. Thus, to resist a Georgian offensive to retake its territory, South Ossetia would require a direct military intervention by Russian forces to thwart such an event.

Russia made no special plans to prepare for a war with Georgia. They decided to utilize the armed forces located in the area in case of an escalation of tensions. Troops located in the North Caucasus Military District, which bordered South Ossetia, were some of the most battle hardened forces in the entire Russian inventory. However, the equipment of Russian units in the area was poor, mostly T-72 tanks, outdated T-62 tanks, and older BMP-2s and BTR-80s. The 4th Air Force did maintain a strong presence in the region. Overall, even this outdated equipment was better than Georgia's. Russia also had several airborne units ready to be dispatched to the region at a moment's notice. Russian exercises in the region included the 58th Army and the 4th Air Force. These exercises began in 2006 and by 2008 had reached 10,000 participants.

Tensions rose early in 2008 as Georgian troops were deployed along the Abkhazian border and Russian forces shot down three UAV Hermes 450s, Georgian UAVs supplied by Israel. Russia increased its peacekeeping units to 3,000 personnel in Abkhazia and brought in railway troops to fix rail tracks that would enable the movement of troops if a conflict erupted. Su-24 bombers were moved to the Sochi Airport and a landing exercise was conducted a few kilometers from the Russian border with Abkhazia. Lavrov states that "it was noticed that the Russian high Command was paying more attention to Abkhazia."

Georgia's 2008 offensive plan was to capture the capital (Tskhinvali), block the access of Russian troops to the area, totally occupy South Ossetian territory in three to four days, and establish a Georgian administration under the control of Dmitriy Sanakoyev. There was no place in the Georgian plan for the potential of Russian involvement. Lavrov contemplates that perhaps the reason for this oversight was Georgian promises of non-aggression against Russian peacekeepers in South Ossetia or the thought that Russia would first try diplomatic means to end the conflict. However, Russia knew

of the Georgian plans ahead of time and thus a political decision was made to protect South Ossetia in advance. Additional troops were left at the border after the Kavkaz-2008 maneuvers ended and airborne troops remained on alert status, along with some Air Force units. Once combat operations began, Russian forces were quickly introduced into the area and Russia's plan to shield South Ossetia turned into a success.

Georgian operations appeared to commence on 1 August in the form of small arms and harassing fires. As a result, on 2 August the Ossetian leadership evacuated women and children from Tskhinvali to safer regions of South Ossetia or to North Ossetia. On this date, the Kavkaz-2008 exercise ended and some units remained in Russia at the mouth to the Roki Tunnel. There was calm until 6 August when once again small arms fire erupted along with mortar fire. On the evening of 6 August Georgia's armed forces received orders to prepare for combat and orders were issued on the night of 6-7 August. On 7 August Georgia began evacuating women and children from the village of Ergneti near the border with South Ossetia. At 1430 Georgian President Mikhail Saakashvili issued orders to start preparations for an assault on South Ossetia. At 1545 Georgian units fired on Khetagurovo and to the south of Tskhinvali with tanks and artillery. At 1936 Saakashvili announced a Georgian unilateral cease-fire. The Georgians used the cease-fire premise to move troops to the combat area and by 2300 their movement was complete. Numerous forces were concentrated on the border with South Ossetia. Georgia planned to have the 4th Infantry Brigade sweep around Tskhinvali on the left and the 3rd Infantry Brigade sweep around Tskhinvali on the right. The two forces would meet up at Gufta to complete the encirclement. Two small units were formed on the west border of South Ossetia with the goal of cutting off the Transcaucasus highway and then occupying the Roki Tunnel.

At 2330 on 8 August, the Georgian Army received orders to open fire. At 2345 hours, in a telephone conversation between the Commander of the Joint Peacekeeping Force, Russian Major General Marat Kulakhmetov and the Chief of Staff of Georgia's Peacekeeping Operations, General Mamuka Kurashvili, the latter offered immunity to Russian peacekeepers if they would not hinder the Georgian advance (according to certain information).

Early on 8 August the Russian Peacekeeping Forces Headquarters was struck. General Kurashvili at 0030 announced the cancellation of the unilateral cease-fire and stated that the start of "the operation of reestablishing constitutional order in the conflict zone" had begun. At about the same time, at 0100 on 8 August, Russian forces in close proximity to the border were given orders to proceed to the Roki Tunnel. At the same hour, Defense Minister Serdyukov and President Medvedev sanctioned Russian troop movements into South Ossetia. At 0200 hours the 693rd Motorized Infantry Regiment crossed the Russian border. At 0600 an exchange of fire took place between a Georgian Special Forces unit and Russian peacekeepers.

The real prize on 8 August was control of the Gufta Bridge, whose destruction would make it difficult for Russian forces to move south to support combat operations around Tskhinvali. By 0745 Russian forces had secured the bridge. Not until 1400 did Georgian forces manage to control 30 percent of Tskhinvali. At 1415 the Georgian government offered a humanitarian cease-fire from 1500-1800 to allow civilians to leave Tskhinvali. At the same time Russia completed the deployment of many of its troops and continued to bomb Georgian positions. By the end of the day, the Georgian

assault on Tskhinvali had been thwarted and Georgian forces began to withdraw to the border area. Georgian troops reorganized and began preparations for a new assault the next day.

Georgian troops reentered the city on 9 August around 1500. They were met with intense fire from Russian units and they departed the city around 1900. These forces did not return but began a hasty retreat back into Georgia. By 1400 on 10 August, all Georgian forces had withdrawn from South Ossetia. On the evening of 11 August Russian troops decided to counterattack Georgian positions across the border from South Ossetia and establish a buffer zone around it. On 12 August Russian forces began taking Georgian settlements located between Gori and Tskhinvali without encountering any resistance. At 1300 Russian President Dmitriy Medvedev announced the cessation of hostilities but gave an order to suppress strongholds of opposition if required. On 15-16 August a ceasefire agreement was signed with the help of international negotiators. On 18 August Russian troops began leaving the area.

Lavrov's description of the fighting is much more detailed than the description above might indicate. He even includes in his chronology the side numbers of many vehicles that were destroyed. Any analyst interested in an in-depth coverage of the fighting should begin with this chapter in <u>The Tanks of August</u>.

Chapter Three is titled "The Present and Future of the Georgian-Russian Conflict: The Military Aspect." It was also written by Vyacheslav Tseluyko, is well-documented, and is instrumental in demonstrating the direction in which Georgia's military is now heading. Russians are instructed to pay attention to the reorganization effort of Georgia's reserve system (from three components, individual, active, and National Guard to two components, regular and territorial) and to its qualitative growth. More attention is being directed in Georgia to combined arms training instead of low-intensity conflict. Tseluyko notes that new arms deliveries in the 2007-2008 time period were not adequately mastered by Georgian forces and this impacted negatively on their military potential in August 2008.

Today, Georgia's Army has increased its military power in relation to the Five-Day War but remains in a learning curve. Taking into account the fact that the force is learning combined arms operations, learning how to use new equipment, and reforming its reserve, Georgia will not be able to switch over to active combat operations aimed at the restoration of territorial integrity no earlier than 2010 or 2011. This will result in Russia increasing the size of its force in the threatened areas and in the preliminary storage of heavy equipment there in case of another Georgian Blitzkrieg-type operation. Russian forces in Armenia may also take part in any future operation that Georgia starts, thereby forcing the Georgian force to fight on several fronts. The chapter concludes with a fascinating analysis of Russia's territorial gains in Abkhazia and South Ossetia and the operational and even strategic advantages that Russia obtained.

Tseluyko concludes that the August war did not resolve all of the contradictions between the two countries. One may no longer speak of a Georgian-Ossetian conflict but rather a potential Georgian-Russian conflict. In this sense any conflict in the region has the potential to escalate quickly out of control as one side or the other pushes for a final resolution over territory.

In Chapter Five, "Losses of the Russian Air Force in the Five-Day War in August 2008," author Anton Lavrov describes the loss of Russian aircraft due to friendly fire and the confusion that existed between Russia's land forces and the airspace situation. Not only did Russian and Ossetian forces fire at Russian aircraft but Russian aircraft strafed Russian land forces on occasion. Lavrov used footnotes extensively to support his chapter, adding further weight to the thought that he was supplied with information from some Russian agency for Chapter Two, his timeline chronology of events.

Lavrov also wrote Chapter Six, "The State of the Georgian Army toward the Conclusion of Military Operations and its Losses." He notes that Georgia lost only 20 or so armored vehicles and that the greatest losses occurred among armed forces personnel. He lists the losses by brigade and sometimes by unit. He makes the point that if Russia had not taken much of Georgia's equipment on 12 and 13 August that Georgia would have ended the conflict without significant losses. In this chapter as well, Lavrov did not use footnotes. It is unclear where he received such detailed information. Lavrov also wrote the last chapter, "Postwar Facilities of the Russian Armed Forces in the Newly Recognized Republics of Abkhazia and South Ossetia," again without footnotes.

Regardless of the complaints about footnotes, Lavrov's chapters are detailed and interesting. They represent, along with Tseluyko's chapters, some of the best first hand military reporting on the conflict. Without a doubt Lavrov is an authoritative research specialist on the Russian-Georgian War of 2008.

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PART FOUR: Conclusions

PART FOUR: CONCLUSIONS

CHAPTER THIRTEEN: RUSSIA'S NEW VISION

The past, the present, and the future are linked inextricably, and each generation takes its own place in the chain of history, with its own victories and defeats, gains and losses. Hopefully, the lessons learned from the historical experience of our country will not only enable us to develop a new vision of the tasks facing the army and the country but also to solve them to the benefit of our great nation.—

General of the Army (retired) Anatoliy Kulikov[825]

Introduction

Anatoliy Kulikov offer a fittingsummary for this book. The work attempted to illustrate the lessons learned over the course of recent Russian history that have resulted in three elements coming together: the traditions and conventions of the past, the technology-based present, and the forging of tradition and technology with toughness. Prime Minister Vladimir Putin is spearheading the latter effort, a process he began when President. His continued support of President Dmitriy Medvedev ensures the process stays on track. Taken as a whole, their new vision of Russia's military is taking shape.

Many military traditions appear certain to be maintained. This includes aspects of both the Tsarist and Soviet legacies. The dialectical thought process, the emphasis on military doctrine, and aspects of the historical works of Marx and Lenin all continue to influence Russian military thinking.

Putin has personally overseen technological progress, in particular the industries of the military-industrial complex that are building command and control complexes for the military. Nanotechnologies and satellites are other areas of intense focus. President Dmitriy Medvedev has been deeply involved in the modernization effort as well, focusing on telecommunications developments and the use and security of the Internet.

Defense Minister Anatoliy Serdyukov has stayed the course on reform, never wavering even when major military figures and organizations (the airborne in particular) confronted him. He has helped change the culture of the officer corps by fighting corruption along the way, a fact that will be important in eliminating military arrogance and clans. He has made mistakes as well, but what Defense Minister hasn't?

These concluding comments will describe some of the consequences (and thus future direction) of Serdyukov's reform effort, will update Medvedev and Putin's technology focus, and will highlight the continuing impact of tradition on the evolution of the Russian military. It will also examine the consequences of the 2008 conflict with Georgia with the advantage of two and a half years of hindsight.

Many Traditions Remain

There are numerous Imperial and Soviet traditions that have migrated to become Russian military traditions. Some of these traditions have taken on a different appearance (new flags, different wording to the oath, etc.) but they remain in general form. The same applies to the use of the dialectical thought process, traditional military toasts, and so on.

Another tradition that remains is the Russian focus on its borders and immediate operational environment. Russia maintains a consistent approach to its historic spheres of influence and appears set to fight the emergence of any regime, whether truly democratic or not, on its borders. Security for Russia apparently means total control over any situation that appears to impinge on its concept of sovereignty.

Equal security is a Soviet concept that Russia is raising more often today. It was defined by American Fritz Ermarth as "a going-in force balance in which they have an equal or better chance of winning a central war, if they can orchestrate the right scenario and take advantage of lucky breaks." [826] In this sense, security appears to go beyond parity. To have a chance of winning, the "correlation of forces" must be in Russia's favor. That is, operating capabilities, digitalization, and other such factors must ensure that Russia can survive a conflict or go down defending the homeland if they can't. Iraq did not have "equal security" in military jargon just because it had more tanks. Coalition forces easily overcame numbers with technological advantages built into the Abrams tank (longer range acquisition, precision, etc.). Thus the digital correlation of forces was definitely not in Iraq's favor. Russia's focus on technical developments is designed to erase such imbalances in their force. At the present time, however, Russia is depending on its nuclear deterrent as the final arbiter of equality.

Military reform, on the other hand, is a long-standing Russian tradition that is the focus of the recasting effort. Military reform in Russia is a traditional topic of discussion. For many years during the Tsarist and then Soviet periods, military reform was debated in military journals. However, while debated, none of these discussions reached the level of contention and finally achievement that has occurred in Russia in the past three years.

The positive consequences of the reform effort have been demonstrated in the production or acquisition abroad of new weaponry, the reorganization of the force into new military districts and operational-strategic commands, and the informatization and digitalization of military equipment as the force prepares for potential conflicts and future wars. Many of the purchases and equipment developments are covered below in the section on "the modernization effort."

The negative consequences of the reform effort were stated by Russian military analyst Alexander Goltz in one of his postings. He noted in October 2010 that these reforms had generated growing hatred in the officer corps for Defense Minister Serdyukov. Coming from Goltz, a Serdyukov supporter, this is a warning to heed. Goltz adds, however, that the hatred is expected. More than 100,000 officers have been discharged from the armed forces in the two years of reform. Many have not received the benefits that were promised to them. Others (some 40,000) were taken off the tables of organization and received a miserly salary while waiting for promised housing, one of the benefits at the end of a military career in Russia. Attendance at military schools has been severely cut. Finally, general officers were cut off from their posts and in many cases their "extra" financial flows were stopped since they were unable to maintain exclusive control over their resources.

Why did these events transpire? In Goltz's opinion it was due to an excessive number of officers (especially generals) in the armed forces, the stupidity of maintaining partially-manned organizations, and the enormous amount of money allocated to defense that disappeared without a trace. Goltz

believes that Serdyukov is correct and the only course to cure the force is surgery (alas, without anesthesia he notes). While officers will suffer and Serdyukov will be hated, the homeland will profit in the end. Thus in Goltz's opinion, the consequences of reform are worth the present suffering, unbearable as it may be. [827]

Serdyukov, in an interview with the German magazine <u>Der Spiegel</u>, supported Goltz's comments about the excessive number of officers in the armed forces and the fact that some units were not combat ready. He noted, for example, that Russia had one officer for each soldier in the past whereas in Western armies the officer corps made up 9-16% of the entire army. He also stated that he had tried to stifle corruption as much as possible.[828] The online website <u>Tverskaya</u>, 13 recently carried an article about the topic of corruption, noting that some money belonging to general officers is appearing in offshore accounts.[829]

The overall atmosphere Serdyukov attacked was described as follows: "Some members of the armed forces feel too sure of themselves. In addition, the central administration was inflated beyond reason. Thus, we reduced it to a fifth of its previous size." [830] Serdyukov added that now there are only three levels (instead of ten) at which decisions are made. The purchase of some items abroad (unmanned aerial vehicles from Israel and the helicopter carrier *Mistral* from France) also did not endear Serdyukov to the domestic military-industrial complex.

Serdyukov added, somewhat surprisingly, that he foresees NATO as a partner in the future. He noted that the "political will" to become partners exists. This is an encouraging sign. Serdyukov added that he hopes NATO troops do not depart Afghanistan until their mission is fulfilled. [831]

Perhaps the biggest reform development of the year, however, was the shift to four operational-strategic commands (OSK). These commands include the forces of the previous six military districts, all four fleets, and the Caspian Flotilla. The Strategic Missile Troops, the nuclear-powered ballistic missile submarines, Space Troops, Long-Range Aviation, and Airborne Troops remain directly subordinate to Moscow.

The main reasons for making this shift, according to a Deputy Head of the General Staff, Lieutenant-General Andrey Tretyak, were to create an effective command system for different types of troops and to establish powerful strategic groups capable of serving as a strategic deterrent. Operational tasks were resolved as well. No longer are several strategic units operating in one War Theater. Now one commander makes decisions for the theater. [832] It will be interesting to see if these commands become Russian semi-equivalents of US commands except on a local basis. That is, will the Western OSK be a partner to EUCOM and the Eastern OSK a partner to PACOM?

The overall consequence of Serdyukov's reform efforts, in his view, is that service in the armed forces will soon be attractive since wages will be raised[833] and the force will be more professional at all levels with no excessive fat. Many observers around the world feel that the reform effort is long overdue in its present form and will be an important aspect enabling Russia to regain its military prominence. Medvedev and Putin support Serdyukov's efforts. Nothing else need be said.

The Modernization Effort

Russia's leadership is working diligently to bring its armed forces into the space, information, and nanotechnology era. Both the President and Prime Minister have stressed the necessity of accomplishing this task no later than 2020, although several programs are underway now and nearing completion.

Three areas have received priority development according to the military press. One is the development of sufficient command and control equipment, especially its telecommunications component. The second is the development of satellites, space weapons, and unmanned aerial vehicles. The third is the development of nanotechnologies. All three of these items are crucial to the further development of the armed forces. Four communications systems are undergoing further development. They are: *Kassiopeya* at the operational-strategic level; *Akatsiya* at the operational level; *M/YeSU TZ* [tactical-echelon integrated command and control system] at the tactical level; and *Streletes* at the tactical level below battalion. Command and control assets are included not only in communication endeavors but also in essential components of Russia's C4ISR complex and control over armed UAVs. The latter are important for securing Russia's borders and for specific reconnaissance missions. Nanotechnologies are the wave of the future and will be as important in ten years as information technologies are today in the opinion of military specialists.

General A. G. Burutin (who was removed from service by Medvedev on 22 November 2010) stated in March 2009 that the "main challenge for contemporary war is not in disabling the enemy's combat forces but in disabling its command and control systems." [834] Russian press reports indicate that the military is putting additional emphasis on creating secure information systems.

The armaments industry will continue to work in other areas as well. General Burutin noted earlier that one of the key directions of the armament industry remains the development of information-control and information-attack systems on the basis of advanced telecommunication technologies. [835] The armament department's long-range goals are the following:

- The development of useful armament systems, first of all high-precision (intellectual), informational, and other kinds of weapons, including those based on new physical principles and the perfection of nuclear weapons. This also involves the development of space and aviation means, antimissile complexes and air defense systems, and an expanded range of naval and overland armaments;
- The creation of integrated systems and means of intelligence, control and communication, navigation, and other support systems as well as achieving their compatibility;
- The development of information control systems and their integration with new generation weapon systems;
- The development of basic and critical military technologies and dual-purpose technologies; the introduction of robotization, microminiaturization, and nanotechnologies;
- And finally the ability to maintain the unification, standardization, and multi-functionality of military equipment. [836]

A major incentive for Russia's military-industrial complex remains the challenge of creating asymmetric counters to the creation and deployment of expensive and advanced (that is, beyond

Russian capabilities at the present time) armament systems in some foreign countries. [837] One of the most impressive foreign systems that Russia is watching closely is the US X-37B Orbital Test Vehicle which, one Russian report noted, signifies an important aspect of space militarization. Expert Vikto Kazimirov noted that "The long-term project marks the beginning of US positioning of powerful armament systems in space and the creation of high-precision offensive space systems, which will monitor space objects of other states and disable them either with space armaments or by knocking them out of their orbit." [838] The X-37B, in the opinion of some Russians, is designed to offset an adversary's C4ISR apparatus (a potential counter to the X-37B, the IUO, is discussed below).

An asymmetric counter to the US armed forces network-centric concept was discussed. This counter was Russia's development of a global information and communication space, the foundation for a new troop control system. Yuriy Tuchkov, deputy head of the Military Academy of the General Staff, stated that such a system would represent "an asymmetric response to the USA's capability to conduct so-called 'network-centric' warfare."[839] He further noted that there is no need to design a system like the US's NCW concept if there are alternative, asymmetric paths that could be followed. However, he also notes that Russia's scientific and technological potential allows Russia to conduct network-centric warfare at the present time if it so desires. On 22 December 2010 he reportedly took part in a workshop devoted to trends in the development of the theory and practice of network-centric warfare. [840] Thus Russia is studying the issue closely whether it be to implement it, to be familiar with it, or to develop counters to the concept.

Russia may be developing counters to the X-37B with its information-strike operation or IUO. The reconnaissance-fire operation concept evolved over the years into the information-strike system and information-strike operation. Its further development will allow for engagements such as the reconnaissance-strike-maneuver, and it may eventually eliminate neutralizing, harassing, and suppressive fires. A one-time, guaranteed engagement of targets is under development. It may be all that is required before combined-arms groupings are committed to battle in smaller conflicts. [841]

The reconnaissance-strike operation (ROO) would be used to accomplish objectives such as targeting an enemy's military-industrial potential. It was developed for a large-scale war as a form of employing a prototype combined-arms reconnaissance-strike system. The ROO could last from a few weeks to a month or longer. [842] However, the information-strike operation may now have superseded the ROO due to its increased precision and extended reach.

Retired Major General I. N. Vorobyev, Doctor of Military Sciences and author of countless articles in <u>Voennaya Mysl'</u> (<u>Military Thought</u>) on tactics and operational art, discussed the information-strike operation (IUO) in detail in 2007. The article stresses several specifics of the Russian concept of the IUO and information warfare, to include the importance of the information-psychological aspect of IW and the issue of disorganizing an opponent in order to attain superiority.

Vorobyev states that electronics has taken a prominent position in determining an armed forces' might in contemporary conflicts. Electronic and electro-optical assets are used for the detection, identification, target location, guidance, and homing of various classes of weapons; for navigational support of aircraft, spacecraft, and ships; and for the conveyance of orders, reports, and other military information. It is now possible to disorganize an adversary's troop and weapon command and control

system not only by physically destroying its command post but also by attacking wireless communication, radar, remote control, electronic navigation, radiotelemetry, and electro-optical and hydroacoustic equipment. Electronics are now an active offensive weapon as effective as firepower, in Vorobyev's opinion.[843]

Vorobyev believes that the classic triad–fire, strike, and maneuver–has been augmented with two new forms of combat, electronic-fire and information-strike operations. An information-strike operation (IUO) is the sum total of interconnected information-fire engagements, information-fire battles, and information strikes coordinated in terms of targets, objectives, place, time, and methods, conducted to disorganize an adversary's troop and weapon command and control system and inflict a blow on its information resources. An information strike is a short-term and powerful attack by an information weapon on an adversary's information resource. The attack may be selective or tailored for a specific type of information resource or it may be a massive or combined attack (using all types of information weapons on the entire information resource).[844]

There are several types of information strikes according to Vorobyev: information and psychological types that misinform and mislead an adversary; psychotropic types that affect people's minds with special tools; electronic types that jam; and software types that attack adversary command and control computers with special destructive or corruptive software. IUOs make it possible to seize the initiative and gain superiority in the information sphere (troop and weapon command and control, reflexive control of the adversary, etc.). They can be carried out independently or in combination with multiservice, aerial and naval operations, offensively or defensively, and on a strategic or tactical scale. [845]

Vorobyev believes the key objective of the IUO in a local war is to counteract adversary information support of troop and weapons command and control. This includes blocking the gathering, processing, and sharing of information and the planting of disinformation at all stages through a set of measures that use information tools to cripple an adversary electronically or with fires. Simultaneously, a commander must ensure that an IUO includes concealing friendly command and control electronic assets (EA), countering adversary intelligence, and employing unexpected EA jamming methods; setting up various electronic barriers, such as blocking radar; jamming reconnaissance equipment; and carrying out simultaneous electronic-fire attacks on key adversary troop and weapon command and control sites. [846]

Finally, Vorobyev stressed the importance of developing information-psychological weapons and employing them in conjunction with information-strike weapons as this could significantly improve IUO's forms and methods. The combination of a fire, electronic, energy, and massive information-psychological attack on an adversary expands the operational and strategic methods of accomplishing IO objectives. An information-psychological attack could be carried out suddenly and surreptitiously, taking the adversary by surprise and making it hard for him to take countermeasures. [847]

Vorobyev adds that energy-information and somatropic-psychological weapons are under development. Psychotropic-information, bioenergy-information, information-genetic, and virtual information-psychological weapons are being considered as future possibilities (Vorobyev cites foreign publications for this type of weaponry). He notes that energy-information weapons will make it possible to generate and directionally emit simulated ultra high frequency, ultrasound, and infrasound waves which, combined with an energy-information attack, could destroy the human nervous system. Also considered very promising are psychotropic-information weapons which would use pharmacological preparations, narcotic substances, and chemical compounds that have an information-control effect on the biochemical processes in the human nervous system. They can affect a person's combat activity and perception of the combat environment. These technological tools have the potential to exert information-psychological impacts on the human mind.[848]

Thinking about the topic of information warfare theory and its relation to warfare in general continues in Russia. A recent issue of <u>Armeyskiy Sbornik</u> (<u>Army Digest</u>) contained such an example. Author V. Yu. Mikryukov, in the article "The Essence and Content of War," noted the following special characteristics of *informatsionnaya voyna* (information warfare):

- Information warfare includes as separate objects all kinds of information and information systems, separating information from the environment of its use.
- Objects can act as a weapon and as the objects of protection.
- Information war expands the territory and space of the conduct of wars; it is conducted both when war is declared and during crisis situations in different spheres of human activity.
- Information warfare is conducted by specialized military and civilian structures.<a>[849]

Mikryukov added that, according to Russian Special Services assessments, the concept of "information warfare" includes these additional items:

- Suppressing (in wartime) the infrastructure elements of state and military control (destruction of command and control centers);
- Electromagnetic effects on elements of information and communication systems (electronic warfare);
- Obtaining intelligence through the interception and decryption of information flowing over communication channels, also via incidental transmissions, and by technical means of electronic eavesdropping devices (electronic intelligence) that have been specially introduced into the premises;
- Gaining unauthorized access to information resources (through the use of software and hardware that penetrate the security layers of the enemy's information and telecommunication systems), and then distorting them;
- Carrying out the destruction, theft, or disruption of these systems' normal functioning ("hacker warfare");
- The creation and mass dissemination, via enemy information channels or global networks, of disinformation or tendentious information to influence the assessments, intentions, and orientation of the public and of decision-makers (psychological warfare);
- Obtaining information of interest by intercepting and processing public information passing over insecure channels, circulating in information systems, and published in the mass media.

There have been two major military-technological failures over the past year. They were the repeated test launches of the Bulava missile system (which has now been deemed successful after several failures) and the inability to put into orbit the GLONASS-M satellites in a recent December 2010 launch of a Proton rocket. Progress, however, outweighs the failures since progress includes the acquisition of foreign made equipment, especially Israeli-made UAVs. The Israelis have supplied Russia's military with the Bird Eye 400 light portable mini-UAV, the tactical I-View MK 150, and the Searcher MkKK UAV according to press reports. [850]

Overall, the development of military technologies in Russia over the past few years has been impressive. Some of the achievements and plans of the military-industrial complex are listed here:

- The seven-nation Collective Security Council summit in December 2010 resulted in consideration to draft documents regulating the activities of the organization in the military-technological cooperation and information security fields, among others. A Collective Rapid Reaction Force was also agreed to.[851]
- The production of wear-resistant nanocomposite materials has been exhibited. [852]
- The GLONASS orbital group of 24 satellites is expected to be operational by March 2011. [853] GLONASS precision will increase to about three meters in 2011 and to several centimeters by 2020.[854] Prime Minister Vladimir Putin has called GLONASS a priority item on which the agencies must not relax their attention.[855]
- The procurement plans for 2020 indicate that the percentage of precision-guided weapons will increase by 18 times and UAVs by 6 times; the Air Force will buy 1500 new planes and helicopters and modernize some 400 more; and all-weather aviation systems will increase by 4.5 times.[856]
- The Russian space defense troops will be armed with S-400 and Pantsir-S systems by 2020, with the latter capable of responding in 5-6 seconds.[857]
- President Medvedev stated that Russia is willing to spend 20 trillion rubles (approximately 681 million dollars) on developing a high-tech army that uses breakthrough technologies. Some seventy per cent of the funds will go to the purchase of high-technology weaponry. [858]
- The RS-24 intercontinental ballistic missile came into service in November 2010.[859]
- Russian designers built an intelligent or smart rocket propelled grenade launcher. Two charges, cumulative and thermobaric, use time delays to strike targets depending on its thickness, hardness, and strength. The cumulative charge smashes through the obstacle and the thermobaric charge overcomes an enemy behind the obstacle. [860]
- Russia hopes to enter two nuclear submarines into service in 2011, the *Alexander Nevsky* and the *Yury Dolgoruky*. The third missile carrier of the series, the *Vladimir Monomakh*, is continuing to be built.[861] However, no ground-effect planes or aircraft carriers are planned.[862]
- Chief of the General Staff Nikolay Makarov noted that a 10 billion dollar command and control system for the armed forces is planned for completion by 2012.[863]
- Finally, an air and space defense system will be built as the next phase of army reform in 2011.[864]

Of course, much could go wrong with this military program. For example, setbacks in testing (such

as occurred with the Bulava missile system) could cause havoc with Russia's plans. A shortage of hard currency or the appearance of an unanticipated conflict could also affect planning.

The Impact of the War with Georgia

The impact of the war with Georgia was felt worldwide. No one appeared to be a true "winner" in the traditional sense, that is, to win the war and win public opinion. Russia won the war, no doubt about that, but lost credibility in the international arena for its actions. Only a few countries have verified Russian gains from the conflict. And, as time progresses and more facts are made available, Russia's actions appear to be more preplanned than originally thought. As international investigations continue, Russia is feeling the pressure and is fighting back. For example, Russia is now stating that the Organization for Security and Cooperation in Europe (OSCE) is biased in its position against Russia.

It is thus no surprise that Russia views the US Congress's 14 December 2010 resolution supporting Georgia's territorial integrity with regret. A Russian Foreign Ministry spokesman stated, with reference to South Ossetia and Abkhazia, that "Seeing them as 'Georgian regions occupied by the Russian Federation' is incorrect and illogical, to say the least," he said. The spokesman noted that the resolution ignores the new reality that emerged from Georgia's aggression in August 2008. The Russian Foreign Ministry statement noted that Tbilisi launched the aggression and that two independent states emerged. They are no longer part of Georgia. [865]

What evidence exists to suggest that Russia planned to draw Georgian President Mikhail Saakashvili into action, offering him a *fait accompli* if he didn't act? Was this a masterful "strategic reflexive control" preplanned operation on the part of Russia, a plan that integrated deception and asymmetry in a coordinated manner and fooled the international community? One is reminded of Vorobyev's interest in 2007 of offering information "bait" to induce someone to make incorrect decisions. Is this what happened?

Consider the facts. First, it has been extremely difficult to extract from Russia a timeline of events. In many cases Russian authorities and analysts only use or refer to Georgia's timeline. The Russian book <u>The Tanks of August</u> offered an explanation of events and a timeline. However, the timeline omitted crucial meetings and attempts of Georgia to avoid conflict and none of the events were documented with footnotes.

Second, there were numerous examples of Russian preplanned actions such as the following:

- Russia slipped journalists and doctors into Tskhinvali weeks before the fighting started. They also recruited pilots who had experience flying in mountainous areas. Why, if it wasn't to cover or participate in a conflict?
- Some Russian journalists (like Illarionov, Latynina, and Fel'gengauer), much like Georgian and international journalists, documented the progression of events in foreign and local (South Ossetian) media, to include the movement of Russian troops into South Ossetia and Abkhazia days if not weeks before the fighting erupted.
- On 16 April then President Putin established official ties with South Ossetia and Abkhazia, an incursion on Georgia's soverignty.

- Russia had infiltrated the government of South Ossetia with Russian citizens (to include military personnel holding key positions as ministers and national security personnel). Russia issued Russian passports to South Ossetian citizens which is against international law. Russia also provided military equipment to South Ossetia.
- Kavkaz-Center announced weeks before the conflict that preparations for war with Georgia had been underway for several months. Russia shot down several unarmed reconnaissance drones.
- Russian troops openly prepared Abkhazia for a potential conflict, lifting embargos, fixing rail lines, working with separatists, and moving troops into the area. In hindsight, analysts are viewing this as a deception operation to draw attention away from preparations underway in South Ossetia.
- Russia refused to negotiate with Georgia in the crucial days before conflict erupted. Georgia made several attempts that were rebuffed. Conversations of some of these efforts were taped by the Georgians.
- Civilians in South Ossetia were evacuated to North Ossetia in the days before the fighting started.
- Nearly 1200 mercenaries arrived in South Ossetia by 5 August.
- On 2 August the commander of the fifty-eighth Army arrived in Tskhinvali for "consultations."
- There appeared to be an attempt to instigate a fight. Artillery duels were heavier than in the past, and some artillery positions were located behind Russian peacekeeping forces in South Ossetia. If provoked into firing and killing a peacekeeper, then a pretext for an intervention would have been arranged.
- Russia knew that the US and NATO had warned Saakashvili not to respond to Russian aggression and that they would not assist him if he did. Knowing this ahead of time allowed Russia to place Saakashvili in a no-win situation. He would be responsible either for losing territory if he did nothing or for fighting and potentially losing a war if he did. He underestimated Russia's response as well.
- There were other rumors of Russian information that made its way to Saakashvili that persuaded him to think Russia would not help Kokoity. Further, Georgia's government was stressed to the max at the time of the conflict, feeling isolated as peacekeeping organizations did not seem to do enough to maintain the status quo. Georgian citizens in South Ossetia had to be protected.
- The Kavkaz-2008 exercise in July was openly provocative, using Georgia as the "enemy"—to include anti-Georgian leaflets.
- The deaths of Georgian policemen (and assassination attempts in South Ossetia against officials who supported Georgia) may have served as the initial bait for Georgia to take action.
- Russia may have known that many Georgian servicemen were on vacation in August and thus would not be in preplanned assembly areas or at their military garrisons.

The conclusion that many analysts have reached is that the actions of the Russians were preplanned and that they drew the Georgians into a decision dilemma: either act or lose territory.

Conversely, there were accusations from the Russian side that Georgian actions were preplanned. In hindsight, these accusations are harder to comprehend about an armed force that had many people on vacation, had its elite fighting force in Iraq, and had only conducted counterinsurgency training over the past few years. However, there is a case to be made even though it does not stand up to the circumstantial evidence that surrounds the extensive Russian plan.

Russian thoughts that Georgian actions were preplanned included the following:

- Georgian Defense Minister Okruashvili stated he would celebrate New Year's Eve in Tskhinvali.
- Saakashvili came to power promising to return South Ossetia and Abkhazia to Georgian control. Russia, on the other hand, had regions of "privileged interests" in the area.
- Georgia's "Rose Revolution" had been orchestrated by the West, in Russia's opinion, and had introduced a government that wasn't legitimate.
- The decision in the West to recognize Kosovo's independence was seen as the legitimizing step for Russia to recognize the independence of South Ossetia and Abkhazia.
- There had been a huge increase in Georgia's defense budget over the past five years and a corresponding increase in the number of soldiers in its armed forces.
- Georgia consistently alternated its peacekeeping contingent in South Ossetia in order to allow more soldiers to acquaint themselves with the terrain for future operations.
- Georgia used Saakashvili's ceasefire on 7 August to move forces to the border of the conflict zone.
- Georgia fired first so it started the war. The EU's investigation supported this fact.

Russia's stated goal now is to prevent Georgia's "re-militarization" but they are constructing other deterrents as well. Russia and South Ossetia are developing a joint defense system to help make it impossible for Georgia's armed forces to even consider an attack. Diplomatically, Russia's main objective at the Geneva Discussions (that included Georgia, South Ossetia, and Abkhazia) remains the signing of a legally binding agreement that insures Georgia's nonuse of force against Abkhazia and South Ossetia.

One of the problems with the Russian version of events is that it ignores all of the positive things Georgia did to prevent fighting from ever breaking out. The books of Cornell/Starr and Asmus, on the other hand, state the good and bad of both sides. That is, Russia's version is much more one-sided than the Western versions, which attempt to cover more ground.

Even though the war has ended, incidents continue to occur along the border region. Of primary concern to Georgia is that on 7 December 2010 Russia's leadership placed a Smerch multiple launch rocket system in South Ossetia. This weapon system can cover an area of 67.2 hectares and has a range of up to 70 kilometers or more. The system is being deployed near the capital of Tskhinvali, close to Georgia's northern border. [866] In addition, Russia is continuing its aggressive posturing in the diplomatic community against Saakashvili.

Georgia responded with an official statement on Russia's Smerch deployment that noted

The Treaty on Conventional Armed Forces in Europe (CFE) imposes limitations on such systems. Deployment of Smerch systems on the occupied territory of Georgia provides further proof that Russia, by unlawfully declaring suspension of its participation in the CFE Treaty, has created a prerequisite for the enhancement of its military presence in the areas to which the Treaty applies. [867]

The statement further notes that Russia's expulsion of UN and OSCE monitors from the occupied regions of Georgia and the rejection of EU monitors to access these territories was carried out to prevent the international control and monitoring of the situation. [868]

Georgia continues to claim that ethnic cleansing of Georgians is underway in South Ossetia. The cleansing is particularly prevalent in the Akhalgori district where residents have been stripped of their ownership rights to land and property. South Ossetian President Edward Kokoity notes that ownership certificates issued to Georgians living in South Ossetia by Georgian authorities from 1991 to 2008 were invalid.

Further, Georgian Deputy Foreign Minister Sergei Kapanadze told journalists that Georgia will not sign a document on the non-use of force with the "puppet regimes" in South Ossetia and Abkhazia. [869] However, Georgian President Mikhail Saakashvili has stated that Georgia will not use force unless it is invaded. He has sent statements of this fact to the General Secretaries of the United Nations, the OSCE, NATO, and to the leaders of the European Union and the US. In spite of what Saakashvili calls Russia's refusal to withdraw its troops from Georgian territory and where human rights continue to be violated, Georgia will exercise its right of self-defense only if the other 80 percent of Georgia is invaded. [870] Georgia has noted, after signing an agreement with the EU, that Russian flights to Abkhazia will be unacceptable for the EU. It will be regarded as an intrusion in the common European air space according to Vera Kobalia, Georgian Minister for Sustained Development. [871] Thus there is no end in sight at the end of 2010 for a final settlement of the situation.

Conclusion

Russia's new vision, then, is based on a combination of tradition, technology, and toughness. The military's "2011 Program on Information-Propaganda and Military-Patriotic Events in the Russian Federation Armed Forces to Strengthen Ties between the Army and Society, Raise the Stature of Military Service, and Foster Social Support for the Transformation of the Army" appears to ensure that historic military traditions will not be lost. The program focuses on the books and movies that have motivated Rusisan and Soviet officers and soldiers for centuries. Technological developments are a vital part of the new vision. They are found in nanotechnologies, new generation satellites, new command and control achievements, new concepts (such as the information-strike complex) and ideas about future war, and the development of advanced weaponry among other issues. Toughness is found in the focused attention that Defense Minister Serdyukov, Prime Minister Putin, and President Medvedev (who stated on 25 November 2010 "I dare assure you, absolute resolve, steadfast resolve, to finish and bring these reorganizations to completion") have provided.

In hindsight, the year 2010 will be seen as a year of significant change for the Russian armed forces. It will be thought of as the year military reform really acquired teeth after its slow beginning in 2008 and the year the Defense Minister weathered one attack after another for his reform efforts. Whether this will be for the eternal good of the force or not remains to be seen, but a new process of reform has begun. This effort has resulted in the shrinking of the general officer corps, a renewed fight against corruption in the force, the development of regional commands, the expansion of Russia's operational environment concept, the introduction of foreign weaponry into the force, and the further informatization of command and control and C4ISR, among many other changes. Russia's tradition of creative thought and innovation in areas such as military science, military doctrine, and foresight and forecasting remains in place. Not everything went smoothly in 2010, of course. Russian failures included the unsuccessful testing of Bulava missiles and launching of GLONASS-M satellites. Russian efforts to protect its national interests have also landed it in hot water in recent years. But overall one senses that the Russian military is on its way back to regaining prominence as a legitimate power—or at least it is getting close. In short, the recasting of the Red Star is well-underway.

APPENDIX ONE: IW DEFINITIONS AND RELATED INFORMATION SECURITY POLICIES OF THE RUSSIAN FEDERATION

Russian definitions of IW differ by organization. Three definitions are offered here and they are all dated concepts of the 1990s. The three examples include military definitions; an external security service or SVR (CIA equivalent) definition; and a Foreign Ministry definition.

Information Warfare Definitions

Military definitions

Military definitions are more specific, as expected, and primarily address battlefield IW. Battlefield IW emphasizes the information-technical aspect and is composed of elements such as command and control and reconnaissance-strike complex systems. However, the military is acutely aware of the potential destructiveness of peacetime IW, especially what it terms the information-psychological component of IW capable of influencing the morale and discipline of soldiers and citizens. Naturally, there is also a wartime aspect of this component.

Among authoritative definitions are those offered by the Russian General Staff Academy and by a Ministry of Defense civilian. A definition provided in 1995 by a Russian General Staff Academy student defined information war (using the Russian "informatsionnoye protivoborstvo," literally information confrontation) in a psychological/technical and operational-strategic sense. The former applies more to a peacetime use and the latter to a wartime use:

Information warfare is a way of **resolving a conflict between opposing sides**. The goal is for one side to gain and hold an information advantage over the other. This is achieved by exerting a specific **information/psychological and information/technical influence on a nation's decision-making system, on the nation's populous, and on its information resource structures**, as well as by defeating the enemy's control system and his information resource structures with the help of additional means, such as nuclear assets, weapons, and electronic assets.[872]

The operational-strategic version defined information war as:

Within the framework of the execution of the operational-strategic (operational) missions of offensive and defensive troop units, information warfare consists of the specially planned and coordinated-integrated actions of the forces and assets of intelligence and early warning, command and control, communications, deception, and electronic warfare, whose purpose is to guarantee the achievement of the goals of the operation (of its combat actions).[873]

Also in 1995 Ministry of Defense civilian analyst Dr. V. I. Tsymbal offered both a broad and narrow definition of information war (he preferred the Russian "informatsionnoya voyna," literally information war), noting that:

In the **broad sense**, information warfare is one of the varieties of the "cold war"—countermeasures between two states implemented mainly in peacetime with respect

not only and not so much to the armed forces as much as to the civilian population and the people's public/social awareness, to state administrative systems, production control systems, scientific control, cultural control, etc. It is namely in this sense that the information security of the individual, society, and state is usually understood.

In the **narrow sense**, information warfare is one of the varieties of military activity/operations/actions (or the immediate preparation for them) and has as its **goal the achievement of overwhelming superiority over the enemy in the form of efficiency, completeness, and reliability of information upon its receipt, treatment, and use, and the working out of effective administrative decisions and their purposeful implementation so as to achieve combat superiority (victory) on the basis of this. The waging of information warfare in the narrow sense is the field of responsibility of mainly the ministers of defense of modern states.[874]**

Another definition was offered by Colonel S. A. Komov. A Candidate of Technical Sciences and Professor, Komov wrote more about the subject on IW in <u>Military Thought</u> in the mid '90s than any other analyst. He defined information warfare (*informatsionnaya bor'ba*) within the context of its wartime use:

IW is a complex of information support, information countermeasures, and information defense measures, taken according to a single design and plan, and aimed at gaining and holding information superiority over an enemy while launching and conducting a military action/battle. Interconnections between information warfare and other types of operational/combat support and activities that make up its contents should be noted as well (intelligence, information gathering, communications, etc).[875]

Komov believes four issues are at stake in his definition: first, identifying a set of measures to do three things: gain information about the opponent and about an engagement (electronic, weather, engineer, etc.); gather information about friendly forces; and process and exchange information between command and control echelons or sites; second, identifying measures to block the information gathering processes of others and to feed deceptive information at all stages; third, identifying friendly countermeasures; and finally, gaining information superiority over the enemy.

External Intelligence Service (SVR)

The Sluzhba Vneshnik Razvedka (SVR) defined IW in the following way:

Information war, according to the head of the external security service (SVR), is a concept that includes **establishing control** over other states' information resources, **deterring** the development of information technology in countries which are potential enemies, possibly **disrupting or completely putting out of operation** information networks and communication systems, and **developing information weapons and systems** for safeguarding the security of a country's own information structure and information flows.[876]

Of all the definitions of IW, this is perhaps the most impressive for its scope and inclusion of several geo-political issues (deterrence, etc.); and the most questionable, for its designs are to

establish control over other states information resources (and thereby attain world hegemony in this area?). Perhaps this is just a further explanation of the idea to "attack enemy and defend friendly," but the verbs control, deter, and disrupt the resources and the capabilities of potential enemies (while developing information weapons in Russia) indicates a more far reaching goal. The SVR definition is much more active and implies peacetime missions. The SVR is one of the few services that has a clear mission outside of Russia's borders.

Definition of IW offered by the Foreign Ministry at the United Nations

The Russian definition of IW provided by the highest-ranking official was that of Russian Foreign Minister Igor Ivanov. It was far from the most comprehensive, however. In a letter to the General Assembly of the United Nations on 23 September 1998, he defined information war as "actions taken by one country to damage the information resources and systems of another country while at the same time protecting its own infrastructures." Within his definition is the object of attack (information resources) as defined by the Russians.

It is important to understand what the Russian's mean by an information resource (IR), and its place in the overall understanding of Russian IW thinking. For military IW specialist Admiral (retired) Vladimir Pirumov, an information resource is

information which is gathered and stored during the development of science, practical human activity, and the operation of special organizations or devices for the collection, processing, and presentation of information saved magnetically or in any other form which assures its delivery in time and space to its consumers in order to solve scientific, manufacturing, or management tasks.[877]

The Academy of Natural Sciences offered a slightly different definition of IR, defining it as "information received in the process of the life of citizens, society, and the state, and registered in the form of a document." [878]

It is likely that the United Nations definition was purposely left vague to incite discussion in the UN. The military, SVR, and UN definitions demonstrate a true difference in approach among the security services in the 1990s as no two agencies openly agreed on a common meaning of IW.

Information Operations and Russia's Military Doctrine and National Security Concept

This section will compare information operation/warfare aspects of Russia's October 1999 draft military doctrine and national security concept with those passed in 2010 and 2009 respectively. The analysis will help analyze progress that Russia is making in this sphere of importance.

The 1999 draft military doctrine was divided into three parts: military-political principles, military-strategic principles, and military-economic principles. [879] Each part reflected the influence of information operations on national security issues.

The military-political section of the document noted that the exacerbation of the information opposition/confrontation is an important feature of today's international relations. The use of information and other non-traditional means to achieve destructive military-political goals is a key-

destabilizing factor affecting current operations and the overall security environment. External threats to the Russian Federation include information-technological (attacks on computers, nets, infrastructure, etc.) and information-psychological threats. The greatest internal threats are actions to disrupt or disorganize the Russian Federation's information infrastructure. [880] Russia desires to conduct coordinated information war. However, if the variety of definitions of IW above is any indicator, the RF was still a few years away from this goal in 1999.

Military-strategic features of the draft doctrine focus on the features of modern war: the use of indirect strategic operations and means of IW and the development of a massive preparatory information (information blockades, expansion, and aggression) operation. Other important military-strategic tasks include confusing public opinion of certain states and the world community and achieving superiority in the information sphere in either wartime or during the initial period of war (as the armed forces have demonstrated their total information superiority over public opinion during the second [1999-present] conflict in Chechnya). An acute information confrontation struggle will characterize both local and world wars, the draft noted, and providing information security will become a basic military security mission. [881]

Finally, in the realm of information-economic principles, the priority mission remains information support. This includes science and technology issues, information technology equipment, and resource independence in the development of military products for all missions. [882]

In 2010 Russia passed a new military doctrine.[883] This version of military doctrine was divided into sections that discussed military dangers and threats; the military policy of the Russian Federation; and military-economic support for defense. Information issues were not stated to be an express external military danger.

They were, however, an internal military danger defined as the disruption of the functioning of organs of state power, of important state and military facilities, and of the information infrastructure of the Russian Federation. Any impediment to the functioning of state or military command and control systems was expressed as a main military threat. A "characteristic" feature of contemporary military conflicts was noted to be the intensification of the role of information warfare. A "feature" of modern military conflicts was stated to be the prior implementation of measures of information warfare in order to achieve political objectives without the utilization of military force. Further the ability to shape a favorable response from the world community for the use of military force was highlighted. High technology devices to be used in future military conflicts include precision weaponry, electromagnetic weapons, lasers, infrasound weaponry, computer-controlled systems, drones, and robotized models of arms and military equipment. [884]

To deter conflict, Russia must possess the proper information technologies according to the doctrine. A main task of the development of military organization was listed as improving the system of information support for the troops. With regard to military-economic support, the main task was to create conditions for developing the military-technical potential at a level necessary for implementing military policy. This included developing forces and resources for information warfare, improving the quality of means of information exchange using up-to-date technologies, creating new models of high-precision weapons and developing information support for them.[885]

The Russian Security Council approved the country's Concept of National Security in October 1999. [886] Various sections of the Concept addressed the country's information security and technology needs.

The section "Russia's National Interests" included the following specific information interests: observing the constitutional rights and freedoms of citizens to obtain and use information; developing modern telecommunication technologies; protecting state information resources against unauthorized access to political, economic, S&T and military information; and preventing the use of information in manipulating the mass consciousness of society. [887]

The section "Threats to the Russian Federation's National Security" in the information sphere included: attempts by a number of countries to dominate the world information space and to crowd Russia out of the foreign and domestic information market; the development of "information warfare" concepts by a number of states envisaging the creation of means (1) to exert a dangerous effect on the information spheres/systems of other countries (2) to destroy the normal functioning of information and telecommunications systems and (3) to use means to safeguard information resources or to prevent unauthorized access to them.[888]

Finally, under the section "Ensuring the Russian Federation's National Security" there is a list of tasks. These include: implementing citizens' constitutional rights and freedoms for information activities; improving and protecting the domestic information infrastructure and integrating Russia into the world information domain; and countering the threat of the initiation of confrontation in the information sphere. [889]

The National Security Strategy of May 2009 listed national security tools as the technologies and also the software, linguistic, legal, telecommunication channels, and organizational items used in the national security system to transmit or receive information on the state of national security.[890] The concept was divided into The Contemporary World and Russia; Russia's National Interests and Strategic National Priorities; and Organizational, Normative-Legal, and Information Bases for Implementing the Present Strategy. Information issues that the document either discussed or highlighted included the following:

- The global information confrontation
- The use of information to enhance strategic deterrence
- The ability of information to present a threat to military security
- The illegal movement of narcotics and "psychotropic substances"
- The preservation of information technologies and information focusing on the various issues of society's sociopolitical and spiritual life
- The development of information and telecommunications technologies such as computer hardware and electronics
- The proper use of the information-telecommunication medium
- The implementation of a series of information measures serving as the basis of this strategy: the harmonization of the national information infrastructure with global

information networks and systems; overcoming the technological lag in information science; developing and introducing information security technologies in the state and military administrative systems; increasing the level of protection of corporate and individual information systems; and creating a single information-telecommunications support system for the needs of the national security system.[891]

Strel'tsov's High-Priority Scientific Issues Related to the Theory of Government Information Policy

- 1. Political consciousness and public opinion as targets of government information policy.
- 2. Political consciousness as a factor in the competitive abilities of society and in the stability of its development, as well as the legitimacy of the transformation of political consciousness in a historical context.
- 3. Public opinion as a factor of political life in society, the legitimacy of its shaping and influence on government policy.
- 4. Social institutions for education and instruction as factors in ensuring the competitive advantages and stability of social development.
- 5. Social institutions for education and instruction as targets of government information policy. Methods and means of government management to improve educational and instructional systems.
- 6. The role and place of religious organizations in the educational and instructional system.
- 7. Everyday culture of society as a target of government information policy and a factor in social development.
- 8. The meaning of information support for government policy and the forms in which it is implemented at various stages of societal development.
- 9. The role and place of the ideology of the agent holding public authority in the shaping and implementation of government information policy.
- 10. Indicators characteristic of public support for the policy agent at home and abroad, methods for evaluating and predicting this support.
- 11. Legal and organizational mechanisms for government influence on the development of political consciousness and the shaping of public opinion in historical and political contexts.
- 12. Legal and organizational mechanisms to counter the spread of ideologies of legal nihilism, extremism, and terrorism.
- 13. Legal and organizational mechanisms for implementing government information policy during information warfare.
- 14. Methods for researching the legitimacy of the development of political consciousness in the context of implementing government information policy.
- 15. Methods and means for shaping government information policy in various historical periods of society's development.
- 16. Method and means for uncovering threats to the implementation of government information policy brought about by the activities in the information sphere of national and foreign political forces that oppose the agent holding public authority, and evaluating and predicting the danger of these threats.
- 17. Methods and means for evaluating the socioeconomic and political effectiveness of the implementation of government information policy measures.

- 18. Methods and means for using state-of-the-art information technologies to implement government information policy.
- 19. Methods and means for using the potential for international cooperation to implement government information policy.
- 20. Methods and means for cooperation between government officials and agencies and non-governmental organizations and citizens in the process of implementing government information policy.
- 21. Methods of evaluating and predicting the effectiveness of government policy in developing political consciousness and influencing the sociopolitical and economic development of society.[892]

APPENDIX TWO: DEFINITIONS ASSOCIATED WITH RUSSIAN MILITARY CULTURE

Definitions

Military traditions took shape over time in Russia and the basic elements, once developed, have remained intact. Of course, the Soviet military tradition added other elements. Early military traditions were instituted to ensure love of the Fatherland and a sense of duty and honor. Cultural-educational work in the armed forces, also defined here, was defined most often during the Soviet period but continues into post-Soviet times. The term "educational (*prosvetitel'naya*)" carries with it, as the definition below will demonstrate, several other associated US meanings such as consciousness raising, enrichment, cultural awareness, and perhaps even morale, welfare, and recreation (MWR). In addition, when discussing old Russian army traditions, Vladimir Lobov, who served as Chief of the General Staff of Russia for a short time in 1991, stressed several times that training and education were the most important elements of the period of Russian military history before 1917. However, instead of *prosvetitel'naya*, he used the term *vospitaniya* for education. *Vospitaniya's* meaning is more in line with someone's formational development, more like childrearing, an upbringing. Another term, *obrazovaniya*, is used when formal school education is meant, more in the line of moulding.

Listed here are the Soviet and post-Soviet period definitions for military tradition and tradition, respectively; 1980 and 1990 definitions of culture and military culture, respectively; and the Soviet period definition for cultural-educational work:

Military traditions (Soviet period, from the 1983 Military Encyclopedic Dictionary)—the rules, customs, and norms for military personnel's conduct in connection with the completion of their military missions and performance of military duty that have been historically established in the army and navy and passed on from one generation to the next. The most important military traditions of the Soviet Armed Forces are: total devotion to communism, love of country, the Communist party, and the Soviet government; constant readiness to defend the achievements of socialism; faithfulness to one's military oath and military duty, strong military comradeship, and respect for and protection of one's commander in battle, and so on. In addition to military traditions common to the Soviet Armed Forces, there are military traditions of the branches of service, combined units, units, and warships. Military traditions have the goal and simultaneous important means to educate fighters with high moral-political and military qualities. [893]

Tradition (post Soviet period, from the 1997 book Soul of the Army)—customs, norms of behavior, views, and tastes that took shape over history (and persisted) and that were conveyed from generation to generation; legends of military feats and victories of armies (units); everything essential that was preserved from generation to generation; a spiritual link with the past; the remains of spirit and character of one's own forefathers. "Tradition consists in the customs, views, and ways of reasoning and acting that have been taken from the times of glorious feats of one's own forefathers." (A. Liven). "The traditions of the army's feats of honor, valor, and glory play a colossal role in maintaining the spirit of the army" (N. Krainsky). "By being attentive to its past, the army is attentive to its real future...It is its conservativeness that makes the army truly progressive" (M. Menshikov). [894]

<u>Culture</u> (<u>Dictionary of the Russian Language</u>, S. I. Ozhegov, 1984): 1. the totality of achievements of humanity in industrial, social, and intellectual relations. *Soviet culture is nationalist in form and socialist in content. History of culture. Culture of ancient Greeks.* 2. related to cultural. *A person of high culture.* [895]

Military culture (1990, just before the end of the Soviet Union and under the influence of perestroika, in the well known Russian military journal Military Thought): the sum total of organizational-technical, socio-psychological, and spiritual values developed throughout all military history and connected with and supporting military activity. [896]

<u>Cultural-educational work</u> (Soviet period, from the 1983 <u>Military Encyclopedic Dictionary</u>)—in the USSR Armed Forces, a system of measures conducted by commanders, political agencies, party and Komsomol organizations pertaining to Communist indoctrination, political education, satisfaction of the spiritual/intellectual needs and organization of the leisure time of military personnel, Soviet Army and Navy civilian workers and employees; a component part of ideological work conducted by the Communist Party in the Armed Forces. The Party views cultural-educational work in the military as a part of the cause of the Party and people pertaining to defense of the socialist homeland and implementation of the cultural and educational functions of the state. The principal directions and tasks of cultural-educational work are:

- Forming and shaping of a Communist ideological outlook, ethics, and morality
- Development of Soviet patriotism and proletarian internationalism
- Dissemination of revolutionary, fighting, and labor traditions
- Advanced know-how, publicity on progress in and results of socialist competition
- Dissemination of military technical information
- Education in aesthetics, organization of personnel amateur entertainment, and leisure-time activities.

Cultural-educational work is organized on the principle of involving the community and developing servicemen's creative abilities. Basic facilities and organizations involved include officers' clubs, enlisted men's clubs, libraries, museums, theaters, ensembles, bands, and orchestras. Practical cultural-educational activities include the extensive holding of evening events honoring outstanding performers in combat and political training, methods conferences, advanced know-how maneuvers, cruises by naval ships, get-togethers with persons active in science, literature, and the arts acting as patrons of military units. Events include cultural patronship months and Soviet science, literature, and music weeks. Special-interest clubs are expanding (for book-lovers, motion-picture buffs, fine arts, literature, efficiency innovators, foreign languages), and various organizations for amateur entertainers. Central cultural establishments give methods assistance to clubs, libraries, and museums. [897]

APPENDIX THREE: CYBER ATTACKS IN THE RUSSIAN-GEORGIAN CONFLICT

Cyber attacks, Use of propaganda:

- Weeks before the conflict—a security researcher in Massachusetts watched an attack against a country in cyberspace. A stream of data was directed at Georgian sites with the message "win+love+in+Rusia."
- 20 July—"other Internet experts in the US said attacks against Georgia's Internet infrastructure began at that time as DDOS attacks. Shadowserver tracked some attacks. Were these attacks dress rehearsals for the actual intervention?
- 7 August—Georgia moves under cover of the Olympics, Russia responds on 8 August with massive assault
- 9 August—RBN blog run by Jart Armin claimed there was a full cyber siege of Georgia. Russia-based servers AS12389 Rostelecom, AS8342 Rtcomm, and AS8359 Comstar were controlling all traffic.
- 11 August—denial of service attacks against Izvestiya and RAI Novosti
- 12 August—Georgian government and news websites seek refuge on web-servers outside of Russia, including Google blogs, US and Estonian IP space, and the Officer of the President of Poland.
- 13 August—Russian commercial bot-nets are attacking Georgian government websites and are responsible for the most serious attacks after August 8; regional news portal attacks attributed to Russia; Georgian forces allegedly used EW to strike at targets using cell/satellite phones in Ossetia, injuring journalists; censorship of Russian media in Georgia continues to expand.
- 14 August—Ukraine writer Andrey Barbash wrote that both sides were using the Internet for electronic disinformation. Journalists of the Russian Center of Extreme Journalism noted that many social-political web forum have brigades operating there to form public opinion with news such as Ukrainian criminal cyber groups are attacking Russian and Georgian web resources.
- 15 August—the patriotic hacker site stopgeorgia.ru provides opportunities to launch denial of service attacks against Georgian websites; website of the President of Georgia remains under heavy denial of service even though it was moved to a service provider in the US; Global Voice reports that attacks are in social network sites with pro-Russian messages;
- 15 August—a media and cyberspace theater appeared almost as soon as the conventional fighting according to Moldovan analyst Dumitru Minzarari. Disinformation and propaganda were used. Russian sources (based on accounts from South Ossetian sources) cited 2000 dead in the early fighting while Human Rights Watch stated that hospital figures in Tskhinvali were 44 dead and 273 wounded. Georgian authorities said they were reestablishing constitutional order which is familiar wording used by Russia in Chechnya. Without European intervention, Russia went on an anti-American accusation campaign. Russian state TV said that black soldiers were helping Georgia, that Georgians were using Western made weapons, and that Washington wanted to force Russia out of the area. Ukraine was blamed as well. A CNN webbased pole on who was responsible for the war found that 92% felt Russia was the peacekeeper and only 8% felt Georgia was the peacekeeper. However, Russian bloggers

organized a "rapid response" in which the Russian search engine Yandex.ru had a number of links with comments like "vote yes, support Russia," "pass the link to others," and so on. News@mail.ru, Securitylab.ru, and Russian bloggers at LiveJournal were also involved. Pro Kremlin youth groups like Nashi and Molodaya Gvardiya also asked for young people to confront Western propaganda. The Georgian government experienced denial-of-service attacks and the Georgian Foreign Ministry's web site was hacked. Estonia volunteered to host the Foreign Ministry's website.

- 15 August—Russian UN ambassador Vitaliy Churkin regrets propaganda media campaign on the Caucasus run by Western mass media. Their facts do not conform to reality. Russia is guarding a huge depot near Gori to keep the population safe. Everything else is a disinformation campaign, and he waved the <u>Washington Post</u> and <u>Financial Times</u> (without stating why) as examples of disinformation.
- 17 August—Russian general accuses Georgia of disinformation. Colonel General Anatoliy Nogovitsyn, deputy chief of the Russian General Staff, noted that Georgians had made many false allegations, such as that Russian had blown up a railway bridge outside Tbilisi which in fact the Georgians blew up themselves. Georgians, Ukrainians, and Chechen terrorists all plan to wear Russian uniforms and loot Gori, blaming everything on Russian peacekeepers. We will see if the authorities in Gori can prevent what the Georgian military is planning.
- 17 August—Vitaliy Churkin said that Russia had warned the UN about Georgia's aggressive policy and that if Western powers had supported them, things would have been different. On this matter, Russia has a clear conscience.
- 17 August—Russian peacekeepers found a military map of the seizure of Abkhazia and other combat documents in a Georgian military unit. He showed journalists a working map of the Georgian army which reflects the tasks, areas to be taken first, as well as the timeframe for doing so. The trophy map was obtained by the Russian 76th Airborne Division. [Why it was found so far forward of the General Staff in Tbilisi was not noted.] The plan was referred to as Tskhinval-2.

APPENDIX FOUR: RUSSIAN DEFINITIONS OF DECEPTION

Russian terms that appear closest to the US meaning of deception, in this author's opinion, are *vvedenie v zabluzhdenie* (mislead), *obman* (mislead), *voennaya khitrost*' (military cunning or stratagem), and *refleksivnoe upravlenie* (reflexive control). For the sake of precision and continuity, these terms and others associated with Russia's understanding of deception are listed here as they evolved in publications over time. The list mixes Soviet, Russian, and Western sources (in the latter case when English-Russian dictionaries were published in the West):

- 1. The 1978 <u>Soviet Military Encyclopedia</u> of the Ministry of Defense of the Russian Federation (Institute of Military History) does not define *obman*. It has separate definitions for *dezinformatsia* and *maskirovka*. The dezinformatsia definition occupies one column of a two column page. The *maskirovka* definition is extensive, covering four pages with photos of camouflaged equipment.[898] Due to their length, they are not listed here.
- 2. The 1981 Russian-English Dictionary under the direction of A. I. Smirnitsky defined *obman* as "fraud, deception." [899] The 1981 English-Russian Dictionary under the direction of V. K. Muller listed the following descriptors under deception: "*obman* (fraud, deception), *zhul'nichestvo* (cheating), *lozh'* (lie), *khitrost'* (cunning or stratagem)."
- 3. The 1983 Russian-English English-Russian Military Dictionary, published by London's Her Majesty's Stationery Office, states that deception is "*vvod v zabluzhdenie*, *obman* (mislead, deceive, deception)."[900]
- The 1983 Soviet Military Encyclopedic Dictionary does not define obman or vvod v zabluzhdenie but does define maskirovka and dezinformatsiya. Maskirovka is defined as a "Complex of measures to deceive the adversary regarding the presence and disposition of troops (forces), military objectives (targets), their status and condition, combat readiness, and actions as well as command authority plans; category of operational (combat) support. Maskirovka helps achieve the element of surprise in the actions of troops (forces), helps maintain their combat readiness, and increases their survivability. Subdivided by scale of employment and character of missions into strategic, operational, and tactical (voyskovaya). Depending on the means of reconnaissance against which maskirovka is directed, hydroacoustic masking, noise reduction (acoustic), magnetometric, optoelectronic, radiation, radar, radio and electronic, thermal, and others. The greatest effect is achieved with simultaneous employment of *maskirovka* measures against all hostile reconnaissance assets. Maskirovka is conducted in the preparation and use of military activities of forces. Methods of maskirovka: concealment, demonstration (diversionary) actions, imitations simulations, and disinformation." [901] Dezinformativa (disinformation) is defined as "a mode of operational (strategic) camouflage, consisting in the deliberate dissemination of false information about one's own troops (forces), their disposition, strength, equipment, military capabilities, and plan of military activity with the goal of leading the enemy into a trap. Dezinformatsiya uses different means of communications, publications, radio, TV, and so on. Dezinformatsiya is conducted as a complex of means to include demonstration activities, imitations, and concealment."[902]
- 5. The 1984 Oxford Russian-English Dictionary defined obman as "fraud, deception;" maskirovka as "masking, disguise; (mil.) camouflage;" and dezinformatsiya as

- "misinformation." [903]
- 6. The Russian equivalent of Webster's Dictionary (in terms of popularity of use) is S. I. Ozhegov's 1984 <u>Slovar' Russkogo Yazyka</u> (<u>Dictionary of the Russian Language</u>). He defines *obman* as "a false impression about something;" *maskirovka* as "an adaptive device used to disguise or conceal;" and *dezinformatsiya* as "misleading through the use of false information." [904]
- 7. The 1984 <u>Uchebnik Voennogo Perevoda</u>, published by Moscow's Voennoe Izdatel'stvo, noted that deception can be translated as "vveddenie v zabluzhdenie (there was no corresponding translation from the Russian into English)."[905]
- 8. The Soviet English-Russian Military Dictionary, printed by the Soviet Military Publishing House in 1987, defined deception in the following order of descriptors: "vvedenie protivnika v zabluzhdenie (leading the enemy into a mistake/drawing false conclusions); dezinformatsiya (disinformation); dezinformiruyushchie mery (disinformation measures); dezorientatsiya (disorientation); obmannye deystviya (misleading actions); maskirovka (concealment or camouflage)."[906] Camouflage was defined with the following descriptors: "maskirovka (masking, disguising, camouflage); maskirovat (mask, disguise, camouflage); maskirovochnyy (masking, disguising, camouflaging)."[907] This dictionary did not have a separate entry for disinformation.
- 9. The 1995 <u>Military Encyclopedia</u> of the Ministry of Defense of the Russian Federation (Institute of Military History) does not define *obman*. It notes for *dezinformatsiya* (disinformation) that one should "see *maskirovka*." This definition covers one page of three columns and two additional columns of a three column page. Like the 1978 definition, it is not listed here due to its length.
- 10. The 1999 book *Iskusstvo Obmana* (The Art of Deception) is a civilian text that covers all aspects of deception, from technological deception to the use of deception in politics, military affairs, spying, religion, medicine, business, and other areas. [908] Obviously, deception is defined by the term *obman* as the title indicates.
- 11. A Comparative Lexicon of US-Soviet Military Technical Terminology produced by the US's BDM Corporation (no date provided) notes that deception is rendered in Russian as dezinformatsiya. The definition they purportedly used was from Volume Three of the Soviet Military Encyclopedia. This definition notes that dezinformatsiya is "a method of maskirovka, to include the dissemination of false information about one's troops (forces), their formations, composition, equipment, military capabilities, plans for military activity, and so on with the goal of leading an enemy force into a trap and at the same time create more favorable conditions for the achievement of success."[909]
- 12. The 2007 Military Encyclopedic Dictionary did not have an entry for *obman*. It defined disinformation in the exact same way as did the 1983 Military Encyclopedic Dictionary noted in (4) above. It defined *vvedenie v zabluzhdenie*, *maskirovka*, and "means of *maskirovka*" in the following way (the *maskirovka* definition is almost identical to the 1983 Military Encyclopedic Dictionary definition except it integrates s strategic, operational, and tactical *maskirovka* into the definition which were separate in the 1983 edition):

Vedenie v zabluzhdenie—a form or manifestation of military cunning; disorienting the enemy in the course of preparing and conducting combat actions; misleading the enemy in

order to induce a false impression or idea about the commander's plans or intentions, or about the status and nature of troop (forces') actions. The measures taken to mislead the enemy must appear reliable and be diverse in nature. The false impression is created through disinformation and the use of decoy or simulated actions combined with the use of forms and methods of conducting combat actions and means of defeat unknown to the enemy. (See also *maskirovka*.)

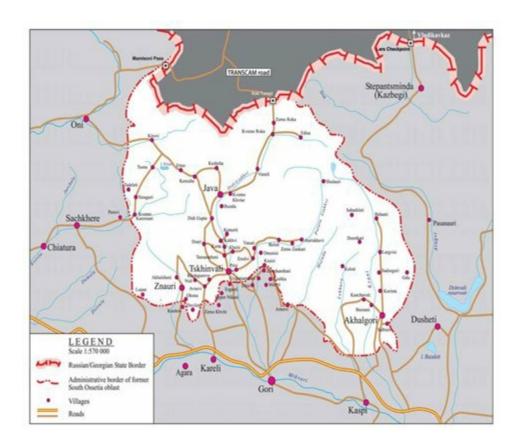
Maskirovka—(from the Fr. masquer – to render imperceptible, unseen for someone), a complex of undertakings aimed at concealing troops (forces) and assets[910] from the enemy and deceiving it regarding the presence, disposition, make-up, state, actions, and intentions of troops (forces), as well as the plans of the command; a type of battle (operational) support. M. enables an element of surprise in the actions of troops (forces), maintenance of their readiness and increased operability. Depending on the scale of application and nature of objectives, M. can be strategic, operational, or tactical. Strategic M. is carried out based on the decision of the high command and encompasses a complex of undertakings related to the concealment of campaign preparation and strategic operations from the enemy, as well as disorientation regarding the true intentions and actions of armed forces. Operational M. is carried out with the goal of achieving secrecy in the preparation of operations, or operational surprise, concealing the main thrust of actions by troops (forces) from the enemy. It is carried out based on the decision of the command of front-line troops (army) or navy (fleet). Tactical M. is organized and carried out in commands, units, and detachments and at individual assets with the goal of concealing preparation for battle or the presence (disposition) of one's own troops (forces), firing (missile) positions for artillery and rockets, command points, and other important targets. It is carried out in coordination with other types of battle (operational) support based on the decision of commanders of commands (units, detachments) by all personnel through their efforts and resources. The most complex M., demanding the use of special resources and equipment, is carried out by Special Forces units and detachments.

Depending on the means of reconnaissance against which M. is carried out, it could be optical, electro-optical, radar, radio-electronic, sonic (acoustic), hydroacoustic, etc. The greatest effect is achieved when M. is used against all means of enemy reconnaissance. M. is carried out continuously during preparations and over the course of battle and is achieved through the maintenance of military secrets, the secret placement of troops and assets exploiting the screening properties of the area and conditions limiting visibility, the use of technical means of M. and *simulation*, smoke, aerosol mists, deceptive actions, the staging of false deployment of troops, positions, and assets, camouflaging of weapons, equipment, and disinformation of the enemy.

Means of *maskirovka*—means of industrial and military fabrication to disguise troops (forces) and military assets. They are divided into means of disguise and simulation. Means of disguise can be general purpose (masks, personnel means, camouflage, aerosol, foamforming) and special (camouflage clothing and coverings, disguise outfits, vehicle-mounted aerosols, blackouts, silencers, etc.). Simulation means are divided into mockups (kits) of military hardware and simulators of the physical field (radar, heat radiation, magnetic

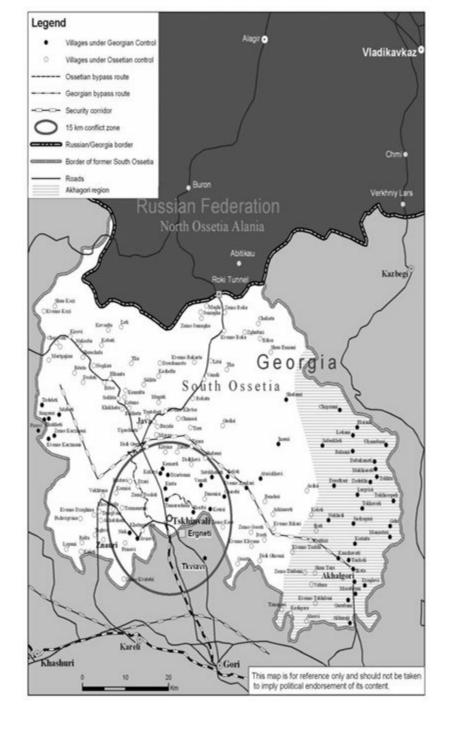
guidance, acoustic, radiation, etc.).[911]

APPENDIX FIVE: MAPS OF SOUTH OSSETIA



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