

REPORT DOCUMENTATION PAGE					Form Approved OMB No. 0704-0188	
The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.						
1. REPORT DATE (DD-MM-YYYY)		2. REPORT TYPE			3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER		
				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)					8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)					10. SPONSOR/MONITOR'S ACRONYM(S)	
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT						
13. SUPPLEMENTARY NOTES						
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT	b. ABSTRACT	c. THIS PAGE			19b. TELEPHONE NUMBER (Include area code)	



Sponsor: USEUCOM
Contract No.: W56KGU-18-D-
0004/0001/S120
Project No.: 0719S120

The views, opinions and/or findings contained in this report are those of The MITRE Corporation and should not be construed as an official government position, policy, or decision, unless designated by other documentation.

This technical data was produced for the U.S. Government under Contract No. W56KGU- 18-D-0004/0001/S120 and is subject to the Rights in Technical Data-Noncommercial Items clause at DFARS 252.227-7013 (NOV 1995).

**Approved for Public Release:
Distribution Unlimited. Case
Number 19-1546
©2019 The MITRE
Corporation.
All rights reserved.**

Foreword Introduction Conclusion

Author: Timothy Thomas

August 2019



RUSSIAN MILITARY THOUGHT: Concepts and Elements

TIMOTHY THOMAS
THE MITRE CORPORATION
MAY 2019

Cover

The image on the cover was taken from a 2014 military security conference presentation in Moscow. The image was used in a CSIS product.

The MITRE Corporation operates seven federally funded research and development centers.

This document, MTR190302V1, is approved for public release, distribution unlimited. Copyrights 2018 and 2019 The MITRE Corporation. All rights reserved.

The views expressed in this document are those of the author and do not reflect the official policy or position of The MITRE Corporation, the Department of Defense, or the US government.

TABLE OF CONTENTS

<u>TABLE OF CONTENTS</u>	4
<u>FOREWORD</u>	7
<u>DEDICATION</u>	Error! Bookmark not defined.
<u>ACKNOWLEDGMENTS</u>	8
<u>INTRODUCTION</u>	9
<u>CHAPTER ONE: RUSSIAN MILITARY THOUGHT: BUILDING ON THE PAST TO WIN FUTURE HI-TECH CONFLICTS</u>	Error! Bookmark not defined.
<u>Introduction</u>	Error! Bookmark not defined.
<u>The Soviet Past Influences the Present</u>	Error! Bookmark not defined.
<u>Two Important Books on Military Thought</u>	Error! Bookmark not defined.
<u>Modern Times</u>	Error! Bookmark not defined.
<u>Military Leaders and Educational Institutes on Officer Training</u>	Error! Bookmark not defined.
<u>Conclusions</u>	Error! Bookmark not defined.
<u>CHAPTER TWO: RUSSIAN MILITARY ART AND THE CREATIVE EMPLOYMENT OF KNOWLEDGE</u>	Error! Bookmark not defined.
<u>Introduction</u>	Error! Bookmark not defined.
<u>Definitions of Military Art</u>	Error! Bookmark not defined.
<u>Weapons and Military Art: 2016-2019</u>	Error! Bookmark not defined.
<u>Conclusions</u>	Error! Bookmark not defined.
<u>CHAPTER THREE: RUSSIA'S REFLEXIVE CONTROL THEORY: MANIPULATING AN OPPONENT TO ONE'S ADVANTAGE</u>	Error! Bookmark not defined.
<u>Introduction</u>	Error! Bookmark not defined.
<u>Definitions and Use of RC: 2002-2013</u>	Error! Bookmark not defined.
<u>Definitions and Use Since 2013 and Ukraine... Some Recent Examples to Consider</u>	Error! Bookmark not defined.
<u>Conclusions</u>	Error! Bookmark not defined.
<u>CHAPTER FOUR: RUSSIA'S ASYMMETRIC CONCEPT: BASED ON MILITARY ART, GEOPOLITICS, AND RISK</u>	Error! Bookmark not defined.
<u>Introduction</u>	Error! Bookmark not defined.
<u>Definitions of Asymmetry, Military Art, and Risk</u>	Error! Bookmark not defined.
<u>Where Do Asymmetric Operations Fit in Russian Military Thought?</u>	Error! Bookmark not defined.
<u>Sources of Asymmetry</u>	Error! Bookmark not defined.
<u>Russian Military Asymmetric Thought in Action: The Past Decade</u>	Error! Bookmark not defined.
<u>Conclusion</u>	Error! Bookmark not defined.
<u>CHAPTER FIVE: CONNECTING GPS INTERFERENCE WITH RUSSIA'S A2AD CONCEPT</u>	Error! Bookmark not defined.
<u>Introduction</u>	Error! Bookmark not defined.
<u>Background</u>	Error! Bookmark not defined.

Part One: Disorganizing Control: From Syria to Future War	Error! Bookmark not defined.
Part Two: REB and Disorganization	...Error! Bookmark not defined.
Conclusions	Error! Bookmark not defined.
<u>CHAPTER SIX: RUSSIA’S CONTEXT FOR CYBER AND INFORMATION ISSUES: NINE THOUGHTS FOR CONSIDERATION</u>	
Introduction	Error! Bookmark not defined.
Consideration One: Have Media Tactics Changed over Time?	Error! Bookmark not defined.
Consideration Two: Russian Templates for Influence	Error! Bookmark not defined.
Consideration Three: Military Directorates for Cyber	Error! Bookmark not defined.
Consideration Four: Cyber and the Initial Period of War	Error! Bookmark not defined.
Consideration Five: Warning of Presidential Election Meddling	Error! Bookmark not defined.
Consideration Six: The Worries of Russian Cyber Planners	Error! Bookmark not defined.
Consideration Seven: Reflexive Control and Cyber	Error! Bookmark not defined.
Consideration Eight: Is There a “Cyber Dead Hand?”	Error! Bookmark not defined.
Consideration Nine: Battlefield Influence Operations	Error! Bookmark not defined.
Conclusions	Error! Bookmark not defined.
<u>CHAPTER SEVEN: ELECTRONS, UNDERWATER CABLES, SATELLITES, AND CREATIVE THOUGHT: THE RUSSIAN MILITARY’S INVISIBLE INFORMATION ENVIRONMENT</u>	
Introduction	Error! Bookmark not defined.
Newer Developments	Error! Bookmark not defined.
Older Concepts Still in Vogue	Error! Bookmark not defined.
Conclusions	Error! Bookmark not defined.
<u>CHAPTER EIGHT: RUSSIA’S MILITARY DISCUSSES THE DEFINITION OF WAR</u>	
Introduction	Error! Bookmark not defined.
The 2018 and 2019 Discussions	Error! Bookmark not defined.
The 2017 Debate on War	Error! Bookmark not defined.
Articles in the Journal of the Academy of Military Science (AMS)	Error! Bookmark not defined.
Articles in the Journal <i>Military Thought</i>	Error! Bookmark not defined.
Two Articles on the Classification of War	Error! Bookmark not defined.
Conclusions	Error! Bookmark not defined.
<u>CHAPTER NINE: RUSSIAN FORECASTS OF FUTURE WAR</u>	
Introduction	Error! Bookmark not defined.
Some Views of Russian Forecasters	Error! Bookmark not defined.
Contemplating Future War	Error! Bookmark not defined.
Conclusions	Error! Bookmark not defined.
<u>CHAPTER TEN: RUSSIAN GENERAL STAFF CHIEF VALERY GERASIMOV: SHAPING RUSSIA’S ARMED FORCES AND MILITARY THOUGHT</u>	
	Error!

<u>Introduction</u>	Error! Bookmark not defined.
<u>Part One: Background</u>	Error! Bookmark not defined.
<u>Part Two: Gerasimov’s Issues with the West</u>	Error! Bookmark not defined.
<u>Part Three: Gerasimov’s Non-AMS Interviews and Presentations</u>	Error! Bookmark not defined.
<u>Part Four: Presentations at the AMS</u>	Error! Bookmark not defined.
<u>CHAPTER ELEVEN: CONCLUSIONS</u>	Error! Bookmark not defined.
<u>Introduction</u>	13
<u>Overcoming Western Stereotypes</u>	13
<u>Are Civilian and Military Thought Patterns Similar in Russia?</u>	18
<u>Conclusions</u>	22
<u>APPENDIX ONE:</u>	Error! Bookmark not defined.
<u>APPENDIX TWO:</u>	Error! Bookmark not defined.
<u>APPENDIX THREE:</u>	Error! Bookmark not defined.
<u>ABOUT THE AUTHOR</u>	Error! Bookmark not defined.

FOREWORD

This report, *Russian Military Thought: Concepts and Elements*, addresses several concepts from the Soviet era that are still useful for current Russian leaders to consider; and examines contemporary technological advances and situational context that influence and cause adjustments in Russian thought. Technology has dramatically increased the speed at which decisions must be made, expanded the spectrum of military thought (from the strategic to the planetary), and focused more attention on innovative thinking, forecasting, and risk-taking.

The report is divided into eleven chapters. Chapter One offers some historical and current contextual information regarding Russian military thought, to include what is expected from military officers today. Chapter Two looks at the importance of military art's influence on thought processes. Chapter Three updates Russian use of its reflexive control concept, which is a way of manipulating or deceiving adversary thought processes. Chapter Four updates Russian use of asymmetrical and indirect operations. Chapter Five suggests that Russia uses an anti-area access and denial concept (A2AD) element often ignored in the West but central to Russian thinking. Chapter Six offers nine Russian cyber issues for consideration. Chapter Seven explores the invisible aspect of the information environment (underwater cable, satellites, electrons, etc.). Chapter Eight examines a 2017 discussion on the concept of "war" in Russia. Chapter Nine looks at Russian forecasts of future war. Chapter Ten offers a summary of the thoughts of General Staff Chief Valery Gerasimov. Chapter Eleven offers several conclusions about Russian military thought.

The report is of interest for its focus on purely Russian military thought. It attempts to avoid mirror-imaging Western concepts (hybrid, grey zone, etc.) onto Russian military thinking.

Timothy Thomas
EUCOM Information Operations Domain Specialist
The MITRE Corporation, 2019

ACKNOWLEDGMENTS

The author is solely responsible for the selection and analysis of the material in this work.

While there are many people who assisted in the preparation of this work, the author would like to acknowledge the support of several individuals. First, Dr. Harold Orenstein of Leavenworth, Kansas, deserves special recognition. He translated several key documents from Russian into English. Without his support, this report would lack numerous key details. Second, the author would like to express his thanks to Colonel Michael Jackson, the European Command's J39, who supported and encouraged this work along with two important staff members, Chris Kirschman and Alan Bal. Finally, the MITRE staff, who helped with the editing and clearing of the chapters, were instrumental in pushing the product along. Joe Angyal, Matt Eager, and Marion Michaud were key players who spent numerous hours working through the report's chapters.

INTRODUCTION

There are many issues that have motivated the development of this report. Two primary ones are a need to inform Western analysts of Russia's military thought process, which differs from that in the West, and a need to demonstrate that Western mirror-imaging of its concepts onto Russian thinking doesn't always work, whether it be anti-access area denial (A2AD) thinking or grey zone concepts. Russia doesn't utilize many of the concepts that the West does.

Initially, the report examines several specific thought processes of the Russian military, to include some that are seldom if ever discussed in the West. Those concepts include disorganizing an opposing force, reflexively controlling them, examining numerous forms and methods of applying force by branch of service, and finding innovative ways to employ military art, among other issues.

There are other concepts, such as indirect and asymmetric operations, that numerous countries examine, but nations understand and implement them in various ways according to national values and traditions. Russia is no exception to this process, as numerous authors have written on indirect and asymmetric operations. Even the definition and concept of "war" is being reconsidered by Russia. In 2017, there was a long discussion among military specialists in Russia about war. These articles examined whether nonmilitary issues, to include the civilian use of cyber capabilities, had changed war's character. Cyber weaponry potentially could take out a nation's power or state control mechanisms with special operations to destroy critical infrastructure targets (SODCIT). The definition of war, as a result, required reconsideration.

Over the course of the past two decades, Russian military thought has benefited from the conduct of serious "lessons learned" analyses from their forces' combat operations in Chechnya, Ukraine, and now Syria. Russia's Chief of the General Staff, Valery Gerasimov, underscored the need to learn not only from the conflicts that involved Russian operations but also those that the West undertook, such as in Afghanistan and Iraq.

Russia's military-industrial complex has developed new electronic warfare capabilities that offer additional protections for domestic command and control functions, while finding ways to debilitate foreign ones. In turn these developments have enabled new applications of military art, which is defined as the use of knowledge in innovative ways. Gerasimov noted that advanced weaponry imparts a new impetus to ways of thinking about military art and stressed that warfare cannot be stereotyped, since each conflict has a logic all its own.

Cyber and digital issues have been introduced into underwater cables and satellites, creating an invisible digital environment with which to contend. These science and technology issues affect warfare, military art, and other issues. Russia has carefully considered their impact. It is fair to say that technology now determines strategy, since with such assets it is now possible to reach the other side of the globe in milliseconds with digital attacks. On a geopolitical scale, Russia concentrates attention on developing forecasts of how future war might unfold and on ensuring the nation's equal security when nuclear weaponry is involved.

Meanwhile, in the West, the focus has centered on several specific topics: hybrid or grey zone operations, multi-domain, A2AD, and C4ISR issues. Each of these concepts is valuable, but they sometimes are mistakenly transferred onto Russian thought. Such stereotyping of Western concepts onto Russian actions causes analysts to miss some of the directions in which Russian thought is actually progressing.

This report attempts to offer some of the concepts and elements of contemporary Russian military thought. It has eleven chapters. Chapter One, "Russian Military Thought: Building on the Past to Win Future Hi-Tech Conflicts," discusses the need to not only uncover the nature of future struggles but how to contend with them. Similarities between Soviet and Russian thought are examined as well as contemporary thought, such as the need to avoid stereotyping and to develop creative thought in Russian officers. It is the latter who must demonstrate initiative, boldness, decisiveness, and risk in their decision-making in a hi-tech environment, according to Gerasimov.

Chapter Two, "Russian Military Art and the Creative Employment of Knowledge," focuses on Russia's push to have officers employ knowledge with creative thought. Gerasimov noted this is due to new developments in weaponry, which provide the impetus to such thinking. The use of electronic warfare or cyber capabilities, for example, can debilitate adversary systems and thus alter the correlation of forces of the sides.

Chapter Three, "Russia's Reflexive Control Theory: Manipulating an Opponent to One's Advantage," discusses numerous uses of the concept over the years, from manipulating an adversary's view of Russian military doctrine to altering an understanding of information space. Reflexive control theory is used in cyber and information capabilities as well as on the battlefield, according to Russian documents. It is a method of deception.

Chapter Four, "Russia's Asymmetric Concept: Based on Military Art, Geopolitics, and Risk," is based on a force's intellectual-technical superiority

over an opponent or on uncovering a weak spot in an opponent that has strategic consequences. It is an important theory, such that Gerasimov requested that the Academy of Military Science develop a holistic approach to the theory of asymmetric operations. He has not requested that in regard to any other issue, to include hybrid ones.

Chapter Five, “Connecting GPS Interference with Russia’s A2AD Concept,” discusses Russia’s focus on disorganizing an opponent’s command and control capabilities. It appears that even at the brigade level, Russia has called for the development of a disorganization plan to be implemented against an opponent in time of conflict.

Chapter Six, “Russia’s Context for Cyber and Information Issues: Nine Thoughts for Consideration” discusses the importance of the initial period of war, the worries of Russian cyber planners, and Russia’s view of the information-technical and information-psychological confrontation between or among adversaries. A short discussion of a cyber “dead-hand” and cyber’s use to conduct reflexive control operations is included.

Chapter Seven, “Electrons, Underwater Cables, Satellites, and Creative Thought: The Russian Military’s Invisible Information Environment,” examines specific elements of the information domain that are extremely hard to predict with confidence. No one really knows the intent of an electron except the executor of the action; it is hard to know if satellites and underwater cables are being monitored and in what ways; and it is of course impossible to know what military thought is driving decision-makers in Russia in peacetime and wartime.

Chapter Eight, “Russia’s Military Discusses the Definition of War,” looks at several discussions that took place in 2017 and two follow-on discussions, one in 2018 and one in 2019. The focus was on the impact of nonmilitary capabilities and whether they might be considered as an act of war; or whether only military actions can result in war. The 2017 discussion lasted from January through the summer. In August, there was to have been a summation of the results of the discussion, but this summary has never been published.

Chapter Nine, “Russian Forecasts of Future War,” demonstrates how Russia will continue to periodically (one recommendation was every three to five months) update its forecasts of the potential for a war to occur. The changing nature of war, due to technological achievements in weaponry, new trends in warfare (artificial intelligence, quantum computing, etc.), and new ways that the initial period of war might unfold, is the motivator for these periodic updates.

Chapter Ten, “Russian General Staff Chief Valery Gerasimov: Shaping Russia’s Armed Forces and Military Thought,” begins with a brief description of Gerasimov’s military career and qualifications to be the Chief of the General Staff. It then focuses on two separate areas: interviews with him that appeared in the Russian press; and a focus on the seven detailed presentations he has made at the Academy of Military Science from 2013-2019.

Chapter Eleven, “Conclusions,” wraps up the discussion with a list of thought priorities and vectors used in Russia’s military establishment. The analysis ends with a short comparison of Russian military thought juxtaposed against that used by the Kremlin leadership. The results are surprising and imply several cultural biases that exist in Russia that negotiators will need to take into consideration when dealing with the President of Russia.

CONCLUSIONS

Introduction

This work has focused on the concepts and elements behind Russian military thought and how they might be applied. Understanding military thought is important, for an examination of another nation's thought template helps eliminate the mirror-imaging of friendly thought patterns onto an opponent; and it provides friendly forces with new ways of thinking about strategy, operational art, and tactics.

Based on the chapters in this report that specified some specific Russian military thought patterns or qualities, the hope is that analysts will be better able to discern important elements of Russian thought as well as areas where new concepts appear. A summation of these points is in the first section of these conclusions.

That section is followed by a short examination of whether Russian military concepts coincide with those of the Kremlin. If true it might indicate closer cooperation between the two than originally suspected; or it might indicate that there is a specific tradition of thought in Russia that is applicable to both civilian and military decision-makers. Specific threat stimuli may result in common cultural responses if that is the case. Risk-taking, the development of alternate realities, and other methods of conducting operations (indirect, asymmetric, nonmilitary, etc.) appear to be methods of the military and civilian establishments alike and may come into play.

Overcoming Western Stereotypes

There are numerous Western journalists and a few military authors who ascribe Russian actions to be "hybrid" in nature. There are other Western authors who look for grey zone concepts in Russia's military. When examining Russian military thought closely, such estimates may only partially explain Russian motives; or they may be examples of mirror-imaging the Western thought process onto Russia's.

In recent times when Russia talks about their "new-type" means of conducting conflict, which seems to be the main term the military uses to describe warfare today, they sometimes place the term hybrid in parentheses behind new-type. This offers the idea that there is some similarity in the thought processes of the two and so this must be taken into consideration. But it is hard to find a prominent military official who clearly endorses hybrid war as a primary Russian concept. Most state that this is the type of warfare the West is conducting against Russia.

General Staff Chief Valery Gerasimov noted in 2017 that it was too early to state that what is occurring in warfare actions is actually hybrid in nature. President Putin supported Gerasimov's point the same year, stating that there is no need "to think up mythical Russia threats, hybrid wars, and so on. These are your [the West's] own fancy, and then you scare yourselves, and based on that formulate a policy prospect."¹ Russia's April 2019 security conference in Moscow featured a special session on Western hybrid actions and desire to invoke color revolutions, further buttressing Russian claims that these are methods used in the West.

While many in the West focus on calling Russian actions hybrid, Russia's military continues to call for input regarding its traditional building blocks of military thought. Gerasimov charges the Academy of Military Science yearly with developing new forms and methods of thought, and there are recommendations to revisit forecasts of potential war more often, with some analysts recommending such work every 3-5 months. The elements stressed in this publication attempted to focus the reader's attention on these and other issues that compose the Russian military thought process. In no particular order, the following terms summarize the focal points of the numerous chapters:

- Forecasting
- Forms and methods of fighting
- Correlation of forces
- Disorganizing an enemy force
- Reflexive control
- Asymmetrical and indirect operations
- Equal security
- Military art
- Information-technical and information-psychological actions
- Military and nonmilitary methods of conflict
- New-type warfare
- Operational design
- Trends in warfare
- Deterrence theory's various applications

While this report covered the past several years, it is possible to find most of these categories in Russian articles each month, indicating their priority in the development of strategy. What follows is a quick search from January through April 2019 to demonstrate how often these focal points appear (this is only a random sampling of a few topics):

¹ Russian *Interfax* News Agency (in English), 30 May 2017.

Chapter One, “Military Thought”: Armed conflicts use the latest technological achievements and “the integrated use of such **forms and methods** of armed combat as psychological operations, confusing the enemy, and other means.”²

Chapter Two, “Military Art”: Recent applications of the innovative use of military knowledge include **roving mortar tactics**,³ **a drone with a 12-gauge automatic carbine** to take out flying objects,⁴ new **artillery tactics**,⁵ and the use of “**tank carousels and Syrian embankments**.”⁶ Also, three of the first four issues of *Military Thought* in 2019 had a section titled “Military Art” and each contained two articles related to the topic.

Chapter Three, “Reflexive Control”: This category seldom appears, as it involves deception and its content is thus discussed less often.

Chapter Four, “Asymmetric Operations”: It was noted that the ideal **asymmetric response entails** a surprise for a potential adversary that causes him “to radically change the ideology of military-technological developments in a specific area of warfare and to incur costs that exceed ours by an order of magnitude of 1-2.”⁷

Chapter Five, “GPS Interference”: One article noted that a goal of electronic warfare (the first goal) was the “**disorganization** of the command and control of enemy forces and weapons.”⁸ A Murmansk-BN electronic warfare system is being deployed in Kaliningrad, with the capability to **suppress command and control** channels within a radius of up to 8,000 km.⁹

² Ye. Nikulin, M. Koval, and Yu. Rudin, “The Ability to Hamper the Enemy: Features of Electronic Warfare in Modern Armed Conflicts,” *Armeyskiy Sbornik Online (Army Journal Online)*, No. 3 2019, p. 78.

³ Southern Military District Press Service, “Roving Mortar Tactic Used for First Time in Firings at Dagestan Range,” *RIA Novosti*, 17 April 2019.

⁴ Unattributed article, “Russian Scientists Armed a Drone with an Automatic Carbine,” *RIA Novosti*, 15 March 2019.

⁵ Central Military District Press Release, “New Method of Using Artillery Tested at Central Military District Range Near Chelyabinsk,” *Ministry of Defense of the Russian Federation*, 11 April 2019.

⁶ Viktor Khudoleyev interview with Andrey Sergeyevich Ivanayev, “The Guardsmen Always Strive to be the Best. The Servicemen of Western Military District’s Guards Combined-Arms Army Came Well-Prepared to the Inspection on the Results of the Winter Training Period,” *Krasnaya Zvezda online (Red Star Online)*, 17 April 2019.

⁷ V. V. Selivanov and Yu. D. Ilyin, “The Methodological Basis for Launching Asymmetric Responses in Military-Technological Battles with a High-Technology Adversary,” *Voyennaya Mysl’ (Military Thought)*, No. 1 2019, p. 22.

⁸ Nikulin, Koval, and Rudin, p. 79.

⁹ Unattributed report, “Deafening Success: EW System to Cover Europe from Near Kaliningrad,” *Izvestiya Online (News Online)*, 26 April, 2019.

Chapter Six, “Cyber and Information”: In a *Military Thought* article, the importance of modernizing **over-the-horizon radar stations** was stressed, as they become important **defensive information weapons**.¹⁰

Chapter Seven, “Underwater Cables and Satellites”: Aleksey Ramm, a popular Russian journalist covering Russian military equipment, noted about the Nudol system that “one can assume the Nudol is capable of combatting not only intercontinental missiles but also satellites, and also manned spacecraft.”¹¹

Chapter Eight, “Defining War”: Issue 2 in 2019 of *Military Thought* included the article “About the **Hybrid Nature of Future Wars** and Armed Conflicts.” It was about Western use of the term hybrid.

Chapter Nine, “Future War”: Gerasimov noted in his 2019 address to the Academy of Military Science that Russia is **creating a unified system of reconnaissance and attack** means in order to “detect and designate a target, and launch precision strikes on critical infrastructure on a near-real time scale with strategic and operative-tactical non-nuclear weapons.”¹²

Chapter Ten, “Gerasimov’s Presentations”: Gerasimov **denied allegations** that Russia was **making military preparations** “which are now being actively reproduced by the Russophobic media and used in broad anti-Russian Western propaganda.”¹³ His comment on striking critical infrastructure (Chapter Nine above), however, leads one to believe Russia IS making military preparations. One is also reminded that Gerasimov used the term “war” 27 times in his 2019 presentation at the Academy.

Western analysts would be better informed about the content and direction of Russian military thought if more attention was focused on these basic elements. Further, understanding how the various elements of Russian thought could be integrated into an operational design is equally important. For example, Russian authors have stated on several occasions that simultaneous operations are one of the future waves for the employment of weaponry. Such comments should be followed and considered closely. Simultaneous operations

¹⁰ A. A. Tsepelev, “Over-The-Horizon Radar Stations as Russian Defensive Information Weapons,” *Voyennaya Mysl’ (Military Thought)*, No. 1 2019.

¹¹ Aleksey Ramm, “The Army: The Stars in our Sights: What is Known about the New Antisatellite System. Several Countries Are Working on Counters” *Izvestiya Online (News Online)*, 19 April 2019.

¹² Unattributed report, “Single Military Reconnaissance System Intended for Precision Strikes on Critical Infrastructure,” *Interfax* (in English), 2 March 2019.

¹³ Unattributed report, “Gerasimov Denies Russia is Preparing for Military Actions,” *Interfax* (in English), 24 April 2019.

that include several of the elements listed above would cause real problems for forces arrayed against Russia's military. Two such examples (hypothetical) follow.

A Russian reflexive control operation could involve a simple three step process: threaten a specific border with troop deployments; watch the response from the other side of the border, where troops are mobilized in specific locations and numbers (the reflexive response, where forces do something for themselves [shore up their defense] that they are actually doing for Russia [showing Russia what forces they would apply against such a buildup]); and then Russia makes adjustments to its correlation of forces in that specific area in order to have an advantage in numbers and capabilities in case of conflict. That is, a Russian reflexive control operation could be used to make adjustments in peacetime to its correlation for forces.

In another example, when tensions have reached crisis proportions on both sides of a border, international observers watch to see who initiates contact and thus which side is more responsible for starting a conflict. When Russia realizes it has an advantage in force correlations, it could consider sending a fake Russian electronic warfare broadcast that Russian forces were moving across the border. If EW interceptors on the other side of the crisis think the intercept is real, they would be forced to move troops to the area and thus begin military operations against Russia "before it was too late." In this case an EW intercept could fool an opposing force into acting first, appearing to the world community that Russia was only responding to a conflict started by the other side.

Such examples indicate that it is important to study and understand the elements of an opponent's thought process and how they might utilize their concepts. Hybrid definitions from a Western perspective usually offer a mix of diplomatic, cyber, economic, nonmilitary, and military issues. There is seldom a Western discussion of military art, the disorganization of a force, the forms and methods of warfare, or a force's reflexive control methodology. That is why it is important to have a common understanding of Russian concepts. It may offer a way to see through the fog of terminology.

A current trend is the focus of many nations on artificial intelligence and quantum computing. Such developments will provoke the development of new forms and methods of fighting, new ways to impose asymmetric methods on an opponent, or new developments in the application of military art or reflexive control. The close study of these issues is where an analyst's attention should be focused if they are to uncover the factors that support military decision-making. Hybrid issues, while important to keep in mind, offer less

material for analysts to consider when developing an adversary's specific way of thinking.

Are Civilian and Military Thought Patterns Similar in Russia?

In 2019 British author Keir Giles wrote a book titled *Moscow Rules* that describes Kremlin, not military, thought processes.¹⁴ A few of the similarities between Russian military thought covered in this report and in Giles work (referred to hereafter as Kremlin thought, that of Russia's civilian leadership) are listed here, along with one or two other sources (the citations from this volume are stated first followed by a Kremlin example from Giles book or another source).

This report noted that Russia's military shot down Malaysian airliner MH-17 and has had its forces in Eastern Ukraine for several years now. Russia's military **created their own alternate realities** (they offered numerous ways the incident occurred, all differing from the unanimous Western analysis) and denied involvement in both instances, even though there was overwhelming evidence (voice intercepts of the airliners downing in the first case, overhead imagery of forces on the ground in the second) from the international community that Russia was indeed the culprit in both cases. Russia has offered close to ten different ways the airliner was downed, each according to a version of its alternate realities. Likewise, in regard to forces in Ukraine, Russia continues to deny the presence of soldiers there unless they are those on vacation who feel like fighting against Ukraine. **Giles** noted that Russia's media creates an **alternative reality** that detaches the nation's leaders from Western rationality. Russia's preoccupation is with a subjective notion of truth.¹⁵ Other authors, some of Russian decent, such as Arkady Ostrovsky, offer the same opinion, that Russia's leaders invent their own reality to fit the situation at hand. Ostrovsky's book index even has an entry with the topic "media" and a subtitle under it of "invents reality."¹⁶

This report noted that one of the most important Russian military themes is to attain information and situational superiority in the **initial period of war** (IPW). Most analysts think we are in the IPW now. **Giles** states that in 2015 President Putin noted that "Fifty years ago, I learnt one rule in the streets of Leningrad: if a fight is unavoidable, you have to **hit first**."¹⁷ One might expect then that if Putin is confronted with a situation where confrontation is unavoidable, he would be prone to hit first. Whether the means to do so would

¹⁴ Keir Giles, *Moscow Rules*, Brookings Institution Press/Chatham House, 2019.

¹⁵ Ibid., p. 104.

¹⁶ See, for example, Arkady Ostrovsky, *The Invention of Russia: From Gorbachev's Freedom to Putin's War*, Viking Press, 2015, p. 365.

¹⁷ Ibid., p. 54.

be nuclear or nonnuclear strategic is unclear, but preparations for the IPW would be crucial to success.

This report noted that Russia's military has several historical issues in common with its **Soviet past**, such as the IPW, deep strikes, and military-political officers. The military has consistently offered their own version of events and battles that transpired during the Great Patriotic War (WW II), even in the face of contradictory accounts. Some historical revelations were not deemed worthy of consideration. **Giles** describes how the Kremlin **politicizes** history for its own use and rewrites chapters for schoolbooks, even in light of new and incontrovertible historical evidence to the contrary. The past lives in the present, which is negotiable and malleable for the authorities, but unchallengeable for everybody else.¹⁸ Both the military and the civilian leadership create alternate realities with historical facts.

This report stated that in the 1990s there were numerous Western efforts to **help Russia's military**, especially with explanations of peacekeeping issues, military insurance and supporters of the military in Congress (explaining Tricare, Association of the US Army, etc.). Numerous conferences were held in Russia and in the West with the militaries of both sides present. **Giles** notes that the **Kremlin was also assisted** by numerous developments in spite of Russia's deflated position in the world in the 1990s. These efforts included giving Russia the seat of the USSR on the United Nations Security Council and membership in the G-8.¹⁹ When Russia was at its weakest, the West tried to help put it back on its feet. These efforts are now lost on the Russian leadership, who view any Western advice or advance as a threat.

This report stated that in a discussion of the new meaning of "war," Chekinov and Bogdanov, two of Russia's premier military analysts, stated that there exists a state of permanent war of this new-type where distinctions between military and peaceful means disappear. It splits conquered countries into warring parts, creating a "**fifth column**" for themselves.²⁰ General Staff Chief Gerasimov stated that the Pentagon has a strategy whose essence is the active use of the "protest potential of a **fifth column**," which will destabilize a situation along with the simultaneous delivery of precision-guided missile strikes against important targets.²¹ **Giles** states that President Putin has used the same term and warned of "actions by a **fifth column**, a disparate bunch of

¹⁸ Ibid., p. 120.

¹⁹ Ibid., p. 168.

²⁰ S. G. Chekinov and S. A. Bogdanov, "The Evolution of the Essence and Content of War in the 21st Century," *Voennaya Mysl' (Military Thought)*, No. 1 2017, p. 41.

²¹ Valery Gerasimov, "Vectors of Development of Military Strategy," *Krasnaya Zvezda (Red Star) Online*, 4 March 2019.

national traitors.”²² Other Kremlin-directed media reports have discussed the use of influence as a **fifth column**.

This report quoted General Staff Chief Gerasimov on numerous occasions. In one of those presentations to the Academy of Military Science, in 2014, he stressed the importance of his **National Defense Control Center**, from which the Armed Forces are controlled. The **Center** is also, **Giles** adds, a “mechanism for all government ministries coming under the command of that same General Staff in time of crisis.”²³ When mobilized, all sectors of the economy and all civilian industry will fall under this establishment.

In **this report** it was noted that Russia’s military has continually increased military spending to counter what it terms to be the threat of **containment from the West**. **President Putin** has stated the exact same concern. In his December 2014 address to the Federal Assembly of Russia, he noted that “The **policy of containment** was not invented yesterday. It has been carried out against our country for many years...”²⁴ There is a Russian term for deterrence that translates as containment, thus containment may be understood in Russia as a means to deter Russia.

This report has stressed that Russia’s military believes in the importance of carefully evaluating a situation and, if necessary, take **calculated risks**. In a 1991 military book, risk was stated to be highest manifestation of a commander’s military skill, experience, endurance, and ability to anticipate.²⁵ In a *Foreign Affairs* article in 2016, in regard to Crimea, President Putin reportedly admitted that he carefully weighed the situation unfolding in Kiev, that Russia conceived an operation that was not well-planned, and that the decision to intervene was a **spontaneous one**.²⁶ The author of this article, Daniel Treisman, stated that Putin told him this at a reception in Sochi in October 2015.²⁷ Treisman added that he feels Putin is an improviser, gambler, and **risk-taker**.²⁸

This report has noted that Russia has specific terms and, if you will, templates (trends, forecasting, correlation of forces calculations, forms and methods, etc.) that make **Russian evaluations** of potential confrontations **more consistent** and clearer to follow. Likewise, **Giles** notes that his book “has argued that there are consistent themes throughout Russian history and Russia

²² Giles, p. 131.

²³ Ibid., p. 19.

²⁴ Ibid., p. 196.

²⁵ Gaivoronsky and Galkin, p. 19.

²⁶ Daniel Treisman, “Why Putin Took Crimea,” *Foreign Affairs*, May/June 2016, p. 47.

²⁷ Ibid.

²⁸ Ibid., p. 53.

social and geographic reality that induce its leaders to act in **consistent ways** when faced with challenges.”²⁹ If that is the case, why haven’t Western analysts noted these themes in the past? Most likely it is because of a reliance on stereotyped Western terms.

This small example offers some evidence of similar thought within both the Russian military establishment and the Kremlin. Knowing that Russia’s leadership engages in the development of alternate realities and subjective versions of truth, Western statesmen and military officials need to be particularly aware of these cultural proclivities. Otherwise, their best intentions may either go nowhere or be manipulated without their understanding.

On 11 April 2019 three eminent US statesmen, George P. Shultz, William J. Perry, and Sam Nunn wrote an opinion piece on nuclear issues for the *Wall Street Journal*. They noted that the risk of nuclear war is still with us, especially in an age where cyber-attacks can take out nuclear warning and command-and-control systems (recalled here is this report’s emphasis on the Russian goal to disorganize C2 capabilities of an opponent). The statesmen offered an approach of three steps: address the US’s dysfunctional Russia policy; have Presidents Trump and Putin announce a joint declaration that reaffirms that a nuclear war cannot be won and must never be fought; and have the US and Russia discuss a framework for strategic stability that reflects both the current period of global destabilization and emerging military technologies.

The statesmen called for the US and Russia to work toward a mutual vision for a stable world and to identify tools and policy initiatives to get there. The article ended this way:

It is essential that we re-engage with Russia in areas of common fundamental interest to both nations, including reducing reliance on nuclear weapons, keeping them out of unstable hands, preventing their use, and ultimately ending them as a threat to the world.³⁰

These are sound pronouncements. A few weeks later, on 30 April, the same journal published an editorial from the former President of the Soviet Union, Mikhail Gorbachev. He supported the statesmen’s position and added more concern and reasons to fear “the madness of nuclear deterrence.” Gorbachev noted that technical, human, or computer error could cause the release of nuclear weapons in spite of deterrence concepts. That is, he was stating that

²⁹ Ibid., p. 159.

³⁰ George P. Shultz, William J. Perry, and Sam Nunn, “The Threat of Nuclear War Is Still with Us,” *The Wall Street Journal*, 11 April 2019, p. A17.

even more needs to be done to place checks on nuclear means in an age when, if launched, the speed of today's hypersonic weaponry may prohibit the weapons recall in the case of an accidental launch.³¹

The former US statesmen have dealt with Russian negotiating behavior and its predilection to create alternate realities as Giles described. However, talking and agreeing to forms of strategic stability were more conceivable and doable under Gorbachev, it seems. For years now Russia's leaders have derided Western accusations (emanating from nearly every European country) in regard to cyber-attacks on these nations' infrastructures. Russia either ignored or rejected these allegations as fantasy. Even when Russian attackers were listed by name and agency, Russia only responded with comments that these accusations were just Western ploys and threats with no substance. Russia said it would never militarize the Arctic, and it has done just that.

This means the West will have to work harder to negotiate with the Putin regime and the latter's suspicious and near paranoid approach to security issues. Negotiators today with less experience must deal with a different Russia and reality. The Kremlin and its military appear more interested in engaging in risk-taking more often than in the past, since Russia now feels powerful again and looks at the West as being weaker than it was. With risk-taking being the "highest manifestation of a commander's military skill, experience, endurance, and ability to anticipate,"³² commanders such as Putin or Gerasimov may be looking for places to apply such advantages.

Conclusions

Applying Western-preferred strategies to Russian thought fails to consider the specific vectors of military thought discussed throughout this report. Without an awareness of these various methods of thought it is impossible to comprehend what Russia is doing to its adversaries and how it is planning present and future operations.

Russian military thought is traditional yet contemplative of the unfolding situational environment before it. Closely following trends and constantly updating forecasts keep the military informed and able to meet new challenges. When specific capabilities are required to confront specific threats to Russia's security, forms and methods are developed to provide the organizations and techniques required, to include the sequencing of events and operational design for successful outcomes.

³¹ Mikhail Gorbachev, "The Madness of Nuclear Deterrence," *The Wall Street Journal*, 30 April 2019, p. A17.

³² Gaivoronsky and Galkin, p. 19.

The Russian thought process is a complex mixture of vision, deception, deterrence, outright power, innovative thought, preparation, and the development of alternate realities. Vision and foresight heavily influence Russia's focus on ensuring superiority in the initial period of war. Deception includes reflexive control operations and deterrence measures accomplished through legal, information, demonstration, or other means to contain or scare opponents. Power is found in Russia's military-industrial complex, which produces nuclear and nonstrategic nuclear forces, weapons based on new physical principles, and the capabilities to strike deep into the heart of another nation with cyber capabilities. Innovation is most apparent in new applications of military art and the use of disorganization of an opponent's information and C2 capabilities. Preparation is influenced by the Soviet past and Russian presence, from methods passed down through the years to today's lessons learned from observing foreign armies in action or from their own experiences. Alternate realities and the rewriting of history provide certain rationales for specific situations.

Overall, Russia's methodology, the wording, particular focus, and rationale behind its actions, differs from that employed in the West. Russia will use many of the items listed in this report to better prepare for its confrontations with future opponents, and hopefully the West will not be one of them. However, it would still be wise to study Russian thought "just in case."

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our federally funded R&D centers and public-private partnerships, we work across government to tackle challenges to the safety, stability, and well-being of our nation.

Learn more www.mitre.org

