

RUSSIA'S WAR IN SYPA

ASSESSING RUSSIAN MILITARY

CAPABILITIES AND LESSONS LEARNED







RUSSIA'S WAR IN SYPIA

ASSESSING RUSSIAN MILITARY
CAPABILITIES AND LESSONS LEARNED





RUSSIA'S WAR IN SYPIA

ASSESSING RUSSIAN MILITARY
CAPABILITIES AND LESSONS LEARNED

Edited by Robert E. Hamilton, Chris Miller, and Aaron Stein



Published by the Foreign Policy Research Institute 1528 Walnut Street, Suite 610, Philadelphia, PA 19102 www.fpri.org

Copyright@2020 Foreign Policy Research Institute

All rights reserved. No part of this book may be reproduced in any form or by any electronic or mechanical means, including inofmration storage and retrieval systems, without written permission from the publisher, except by a reviewer who may quote passages in a review.

Library of Congress Cataloging-in-Publication Data

Names: Hamilton, Robert E., editor. | Miller, Chris, editor. | Stein, Aaron, editor.

Title: Russia's War in Syria: Assessing Russian Military Capabilities and Lessons Learned/edited by Robert E. Hamilton, Chris Miller, and Aaron Stein

Identifiers: ISBN 978-0-910191-00-5 (electronic) | ISBN 978-0-910191-13-5 (print)

Subjects: Political Science

Printed by Creative Print Group

Cover Design: Natalia Kopytnik

Cover Images (from left to right): mil.ru, mil.ru/Facebook, mil.ru, mil.ru/Facebook, mil.ru/Facebook, mil.ru/Facebook, kremlin.ru, Fathi Nazam/Wikimedia Commons, mil.ru, UNHCR/Flickr

Contents

Acknowledgements	viii
About the Book 1 Setting the Stage for the Intervention	ix
	1
Robert Hamilton, Chris Miller, Aaron Stein	1
2 The Russian Way of War in Syria: Threat Perception and Approaches to Counterterrorism	15
Anna Borshchevskaya	
3 Syria and the Russian Armed Forces: An Evaluation of Moscow's Military Strategy and	35
Operational Performance Michael Kofman	
J	
4 The Russian Ground-Based Contingent in Syria	67
Lester Grau and Charles Bartles	
5 Russian Aerial Operations in the Syrian War	89
Anton Lavrov	07
6 Russian Naval Forces in the Syrian War Igor Delanoë	111
-8	
7 Implications for the West	127
Robert Hamilton	

Acknowledgments

The Russian intervention in Syria has provoked renewed thinking about Moscow's military tactics and strategy outside its borders. The strength of this volume rests on the work of the contributing authors' willingness to share their deep expertise. The volume would also not have been possible without the tireless efforts of Maia Otarashvili, Deputy Research Director at the Foreign Policy Research Institute, who kept the train running on time and shepherded the book from conception to completion. The book would not read as it does, nor look the way it does without contributions from our colleagues at FPRI, Mr. Thomas Shattuck and Ms. Natalia Kopytnik.

This project would not be possible without the generous support of FPRI members and donors. We would like to give our special thanks to the Sarah Scaife Foundation for their support of this research. We are also grateful for the support and guidance we received from Ms. Rollie Flynn, President of FPRI.

We sought to maintain an analytical approach throughout the volume, on grounds that to make sense of the brutality of the Syria Civil War we must first understand the methods and the objectives of its major participants. This book is one of the first to describe and assess Russian combat operations, drawing on experts who focus on different aspects of Russia's war in Syria. Our aim with this volume is to provide readers with a first draft history of Russia's war. As with any scholarly endeavor, we hope it will prompt others to pick up where we left off, and to do more research on a topic that will continue to have salience for U.S. interests in the Middle East and help inform thinking about Russian foreign policy.

Bob, Aaron, and Chris

About the Book

This edited volume, Russia's War in Syria: Assessing Russian Military Capabilities and Lessons Learned, published by the Foreign Policy Research Institute, sets out to examine the Russian Federation's way of war in Syria. It consists of seven chapters, authored by nine subject-matter experts from the United States, Europe, and Russia. The authors closely examine the various roles that Russia and its military forces have played in the Syrian civil war and fight against the Islamic State (ISIS).

In chapter one, Robert Hamilton, Chris Miller, and Aaron Stein, editors of the volume, provide a comprehensive timeline of the Syrian civil war from March 2011 to the present. The chapter provides a detailed account of U.S. and Russian involvement in the war and describes the situation in Syria at the time of this book's release. On the fifth anniversary of Russia's intervention, the war in Syria presents a far different picture than it did in September 2015. The Bashar al-Assad regime now controls most of the country. The Syrian armed forces have regained much of their fighting power thanks to Russian assistance, although Turkey's attacks in Idlib have done real damage. The strategic partnership between Moscow and Damascus has been revitalized, as has Russia's geopolitical presence in the Levant and eastern Mediterranean. But the war is not over and could escalate again. Conflict among regional powers such as Turkey, Israel, and Iran is still possible. Despite the success of the deconfliction arrangements at preventing conflict between the United States and Russia so far, the potential for mistakes and miscalculations will exist as long as both militaries are operating in Syria and in the skies over it. The August 2020 incident, where four U.S. service members were injured after an altercation with Russian forces in northeast Syria, demonstrates this risk.

In chapter two, Anna Borshchevskaya, a Senior Fellow at The Washington Institute, examines the geopolitical logic behind Russia's war in Syria and the instruments of statecraft that Moscow used to pursue its objectives. Borshchevskaya's chapter proceeds from the national strategic level of war and works its way down to the military strategic level. It discusses Moscow's 2015 Syria intervention in the context of what it says more broadly about the Russian Federation's way of war, the Kremlin's threat perception, and its approach to counterterrorism. Russia's way of war is evolving to adapt to new realities, but the fundamental values that underpin the reasons for the war in the first place remain largely unchanged.

Chapter three, authored by Michael Kofman, Director of the Russia Studies Program at CNA, briefly reviews the road to war and Russia's political objectives in Syria, then conducts an in-depth evaluation of Russia's military performance in Syria and the war's impact on Russian military capabilities. It picks up at the military strategic level and works its way down to the level of military operations, examining how Russia is fighting in Syria and what this might tell us about the Russian way of war.

The next three chapters cover the performance of Russia's military services in the war and the effect of the war on each. Chapter four is co-authored by Lester Grau, Senior Analyst for the Foreign Military Studies Office (FMSO) at Fort Leavenworth, Kansas, and Charles Bartles, an analyst and Russian linguist at the Foreign Military Studies Office at Fort Leavenworth, Kansas. Grau and Bartles assess the Russian Army and conclude that while Russian military support to Syria has proved expensive and difficult to withdraw, Russian Ground Forces have, nevertheless, improved their expertise in many areas. Chapter five is authored by Anton Lavroy, a Russia-based

military observer for Izvestia newspaper covering Russian military developments. In his chapter, Lavrov covers the Russian Aerospace Forces and explains the unprecedented experience that the Russian Air Force has gained through its involvement. Chapter six is authored by Igor Delanoe, Deputy-Head of the French-Russian Analytical Center Observo (Moscow, French-Russian Chamber of Commerce). In his chapter, Delanoe covers the role of the Russian naval forces and explains how the crisis has catalyzed Russia's naval reinvestment in the Mediterranean.

In chapter seven, Robert Hamilton draws general conclusions from the preceding chapters and discusses implications for Western policy and strategy toward Russia. Russia has not won conclusively in Syria, but may not need to in order to achieve its objectives. Russia hopes to make Syria the centerpiece of its regional presence, but seeks to avoid engaging in reconstruction or nation-building there. Moscow is risk-tolerant, unconcerned about reputational damage, and sees all agreements in instrumental terms, violating them as soon as it is convenient. Finally, one of the key lessons that Hamilton draws for the Western observers is that the institutionalization of the lessons of Syria may change the way in which Russia approaches warfare, from seeing each war as an isolated case to forming a doctrinal template for certain types of warfare.

The views expressed in this volume are those of the authors alone and do not necessarily reflect the position of the Foreign Policy Research Institute, a non-partisan organization that seeks to publish well-argued, policy-oriented articles on American foreign policy and national security priorities.

The following disclaimer applies to the chapters written by Robert Hamilton, Charles Bartles, and Lester Grau. The views expressed are those of the authors and do not necessarily represent the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

This page was left blank for printing purposes

Chapter 1

SETTING THE STAGE FOR THE INTERVENTION

Robert Hamilton, Chris Miller, and Aaron Stein

"It's your turn, doctor." Those words, scrawled on a wall by teenagers in the southern Syrian city of Der'a in March 2011, were the harbingers of what has become the bloodiest war started in the 21st century. Within days, the teenagers were arrested, and thousands of people poured into the streets to demand their release. A police crackdown killed at least 100 of the protestors, and unrest spread. By July, protests had erupted in other cities, and Syrian military officers began to defect to form the Free Syrian Army, the first organized opposition to the Bashar al Assad regime. That same month, Abu Bakr al-Baghdadi, the leader of a still obscure al Qaeda splinter group in Iraq, sensed an opportunity in the chaos unfolding in Syria. Baghdadi dispatched operatives to recruit fighters for the group that eventually rampaged across Syria and Iraq under the banner of the Islamic State of Iraq and Syria (ISIS).

In July 2012, opposition forces captured eastern Aleppo and named it their *de facto* capital. The next spring, an opposition coalition that included ISIS and the Al Nusra Front, at the time al Qaeda's affiliate in Syria, captured Raqqa. The desperate Syrian

government turned to chemical weapons, killing hundreds of people in a chemical attack in East Ghouta in August 2013 and crossing a "red line" established by U.S. President Barack Obama the previous year. The Russian Federation, which had been watching nervously as one of its few partners in the Middle East teetered on the verge of collapse, brokered a deal with the United States for the Assad regime to turn over its chemical weapons to avert a U.S. strike.

In summer 2014, ISIS which had been steadily gaining strength, tore across much of Syria, crushing government forces and other opposition groups alike. Al-Baghdadi, who had moved from Iraq to Syria the previous year, announced the establishment of a caliphate across large parts of both countries, declared himself its leader, and rebranded his movement the Islamic State. By September, Islamic State fighters had besieged Kobani, along the Turkish border, causing many of its residents to flee. U.S. policy on Syria, which had to this point been ambiguous and uncertain, suddenly had a clear objective: defeat the Islamic State. The United States and its coalition partners launched airstrikes on Islamic State fighters in Syria, and the U.S. military began a program to train and equip socalled "moderate opposition groups" to fight the Islamic State. The United States relied on a separate, clandestine train-and-equip program to put pressure on the Assad regime to compromise and allow for a governing body to take his place.

The year 2015 began with a defeat for the Islamic State, as Kurdish fighters and U.S. airpower forced the terrorist group from Kobani. This first collaboration between the U.S. and Kurdish militias was the kernel that grew into the Syrian Democratic Forces (SDF), an army of some 65,000 fighters, roughly evenly divided between Kurds and Sunni Arabs. While a potent ground force against the Islamic State, the SDF attracted the ire of Turkey, which

considered it an offshoot of the Kurdistan Workers' Party that Ankara had designated as a terrorist organization.

Despite its setback in Kobani, the Islamic State was far from defeated. In May, it captured the central Syrian city of Palmyra. Coupled with the capture of Idlib two months earlier by the Al Nusra Front and its allies, Palmyra's fall again put the Assad regime on tenuous footing. From Idlib, the Al Nusra Front could threaten the government's coastal stronghold of Latakia, and from Palmyra, Islamic State fighters were within striking distance of the capital Damascus. For the Kremlin, it was clear that the window to save its client regime in Damascus was closing. Russia began quietly moving forces and equipment into an airbase at Khmeimim in Latakia Province. By September 2015, it was conducting airstrikes from there, marking the start of the first Russian military action since the Cold War outside the borders of the former Soviet Union. Although Russia claimed to be striking the Islamic State, most of its early strikes hit Western- and Turkish-backed groups in northern Syria, which it considered a greater threat to the Assad regime.

In October, the United States announced the deployment of Special Operations Forces (SOF) to northern Syria to advise forces fighting the Islamic State there. This marked the first overt deployment of U.S. ground forces to Syria and took cooperation between the United States and the still-nascent SDF to a new level. With aircraft from the U.S.-led coalition and Russia flying over Syria, and with both sides having boots on the ground, the danger of mistakes and miscalculation was high. After a meeting between Vladimir Putin and Barack Obama on the sidelines of the United Nations General Assembly in late September, the United States and Russia began negotiations that eventually produced a Memorandum of Understanding establishing a channel to

"deconflict" the two sides' air operations over Syria, although the agreement did not guarantee that the two sides would not come into contact.¹

The U.S.-Russian air deconfliction mechanism eased the building tension between the two air forces and reduced the chance of an accidental escalation between them. But, in November, Russia found that the United States was not the only threat that it faced in the air. That month, a Turkish F-16 shot down a Russian Su-24 along the Syrian-Turkish border, raising tensions between Moscow and Ankara to levels not seen since the Cold War. The threat of an expanded war focused minds and gave the Syrian peace process a much-needed boost. In December 2015, the UN Security Council passed Resolution 2254 (UNSCR 2254), which called for a cessation of hostilities among signatories, unimpeded delivery of humanitarian assistance, and talks on political transition. The Al Nusra Front and the Islamic State—both UN-designated terrorist groups—were left out of the peace process and remained legitimate targets for the United States, Russia, and their allies.

Winter and spring 2016 were the most hopeful time for peace since the start of the war. In February, a nationwide ceasefire, jointly brokered by the United States and Russia, took effect. In March, Syrian government forces, backed by Russian airpower, chased the Islamic State from Palmyra. As spring turned to summer, relentless U.S. and Russian airstrikes, combined with increasingly capable ground forces allied with the two, began to have an effect. In August, the SDF liberated the northern Syrian town of Manbij from the Islamic State, the beginning of an 18-month campaign

¹ Lisa Ferdinando, "U.S., Russia Sign Memorandum on Air Safety in Syria," *U.S. Department of Defense*, October 20, 2015, internet resource at: https://www.defense.gov/Explore/News/Article/Article/624964/us-russia-sign-memorandum-on-air-safety-in-syria/, accessed July 17, 2020.

by the SDF, with U.S. support, that would see the entire north and east of Syria liberated from the terrorist group's control.

Russia, meanwhile, was using the cessation of hostilities for its own purposes. The recapture of Palmyra by government forces removed the immediate Islamic State threat. So Russian and Syrian government forces turned their attention to Aleppo, the eastern half of which was then under the control of a coalition of rebel groups, most of whom were signatories to the cessation of hostilities agreement and therefore not legitimate targets. The attack on eastern Aleppo followed a pattern that Russia and the Assad regime used in many rebel-held cities.

First, they cut supply routes into the city and prevent humanitarian assistance provided for under UNSCR 2254 from reaching it. Next, they began a bombing campaign that did not discriminate between terrorist groups and legitimate opposition groups that were parties to the cessation of hostilities. Russian and Syrian bombing also did not discriminate between legitimate military targets and civilian targets, such as schools, hospitals, and residential areas. Having choked off humanitarian assistance to the city and subjecting it to relentless and indiscriminate bombing, the Russian military then offered to open "humanitarian corridors," allowing rebel fighters to leave along with civilians. In most cases, these people were moved to Idlib Province, which was filled with opposition groups—from moderate, Western-backed groups, to Turkish-backed groups and UN-designated terrorist groups.

As Russia and the Assad regime besieged eastern Aleppo in fall 2016, the SDF, with support from the U.S.-led anti-ISIS coalition, launched an operation to capture Raqqa, which the Islamic State had designed as its Syrian "capital." December saw both victory and defeat for Russia and the Syrian government: Their operation

to capture eastern Aleppo succeeded, but the Islamic State again captured Palmyra, pushing out the government forces that had liberated it seven months earlier. The fall of Aleppo made clear that Moscow and Washington had widely divergent views on the implementation of UNSCR 2254 and incompatible strategic objectives for Syria. The United States pulled out of a nascent plan for a U.S.-Russian intelligence-sharing and joint targeting center in Geneva, and the Syrian peace process at the United Nations there devolved into acrimony and recriminations between its cochairs.

Russia responded to the breakdown of the Geneva peace process—largely of Moscow's own making—by launching a parallel process that excluded the United States and United Nations. In January 2017, the first meeting of the Astana Process took place in the capital of Kazakhstan, attended by Russia, the Assad regime, Iran, and Turkey. Bringing Turkey on board was a coup for Moscow and demonstrated how far Russian-Turkish relations had come since their nadir in November 2015 after Turkey downed the Russian warplane.

In March, Palmyra once again changed hands when government forces wrested it from the Islamic State. In April, the Assad regime again used chemical weapons against a rebel-held area. This time, the attack came in the town of Khan Sheikhoun in Idlib Province, killing at least 89 people and injuring over 500. Aside from the fact that it was a clear war crime, the attack proved that Russia's promise to have secured all of Syria's chemical weapons was hollow. This time, U.S. retribution was swift: Three days after the attack, the United States launched 59 cruise missiles at Shayrat Airbase, where the Trump administration claimed the attack had originated.

In May 2017, the United States stepped up its assistance to the SDF, when it began providing weapons in addition to the non-lethal equipment and advisors that it had been providing for 18 months. That same month, rebel forces abandoned Homs, which had been under siege by government forces for months. Many of the rebel fighters evacuated to Idlib Province, where they joined other rebel groups in what was fast becoming the lone remaining rebel stronghold in western Syria. Having secured Palmyra and Homs—and having no answer for what to do about Idlib—Russian and government forces began a sustained campaign against Islamic State forces in central Syria. The objective of this campaign was to clear Islamic State fighters from the central Syrian desert and capture the town of Dayr-Az-Zawr, along the Euphrates River.

The largest city in eastern Syria, Dayr-Az-Zawr had been under Islamic State control since 2014, but two garrisons of Syrian government forces held out there, refusing to surrender or withdraw. For this reason, the liberation of the city held considerable value for the Russian and Assad regime narrative that they were turning the tide in the civil war. As government forces, supported by Russian advisors and air power, fought their way across the central Syrian desert toward the Euphrates, with sights set on Dayr-Az-Zawr, the U.S.-backed SDF was steadily gaining the upper hand in its fight to liberate Raqqa from the Islamic State, farther up the Euphrates, and preparing to fight its way down the east bank of the river. With U.S. and Russian ground forces converging along the Euphrates, the chance of miscalculation and accidental clashes between them rose. So, as they had in the skies over Syria, Washington and Moscow set up a deconfliction channel for their ground forces and eventually reached a more detailed air deconfliction arrangement.

As summer 2017 turned to fall, U.S.- and Russian-backed forces in Syria enjoyed a series of victories over the Islamic State in the Euphrates River Valley. In September, Dayr-Az-Zawr fell to government forces, providing a huge boost to morale. In October, Raqqa—the terrorist group's Syrian "capital"—fell to the SDF. That same month, Assad regime and Russian forces captured Mayadin in the lower Euphrates River Valley. As 2017 ended, U.S.-backed and Russian-backed forces fought their way down the Euphrates toward the Iraqi border, sending Islamic State fighters reeling before them. Both the air and ground deconfliction channels were exceptionally active during this period, with the Euphrates River the only boundary between ground forces, and U.S. and Russian aircraft operating on both sides of the river.

As 2018 began, the war seemed to be winding down. The Islamic State's "caliphate" had been overrun by government forces and their allies west of the Euphrates and by the U.S.-backed SDF east of the river. While there were still a few rebel-held areas in western Syria, none posed a threat to the Assad regime in the way that they had prior to Russia's intervention in 2015. The regime and its Russian sponsor still had no answer to the problem of rebelheld Idlib Province, but had it surrounded and contained so that the groups there posed no real threat. The U.S. military garrison at Al-Tanf, west of the Euphrates in the Syria-Jordan-Iraq triborder region, still rankled Damascus and Moscow, but also posed no threat to regime control elsewhere in the country. And the U.S.-backed SDF, which controlled almost the entire country east of the Euphrates, insisted on managing its own affairs and resisted government control. These were problems that could be resolved over time. None of them were urgent, and none eclipsed the fact that in just over two years, Russia's intervention had prevented the fall of the Syrian regime and helped it regain control over most of

Syria.

Then regime forces and their allies pushed too far. In February, flush with their recent success against the Islamic State, proregime forces attacked the SDF and their U.S. Special Forces advisors east of the Euphrates, near the town of Khasham. The United States activated the ground deconfliction line, notifying the Russian headquarters at Khmeimim that unless the attack stopped it would retaliate. The Russian headquarters disavowed knowledge of the attack. The U.S. then carried out massive air and artillery strikes on the attacking forces, killing well over 200 of them and ending the attack. Included in the dead were mercenaries from the Russian Wagner Group. The Russian military downplayed the attack, claiming it had no knowledge of it or control over it, even though at one point they did ask the United States to call off the attack.

Stymied east of the Euphrates, the Assad regime turned its attention to clearing the remaining small pockets of rebel control in the west. In spring 2018, regime and Russian forces captured eastern Ghouta, in the Damascus suburbs; that summer, Der'a—the place where it all started seven years before—fell to the government. In September, the Assad regime turned its attention to Idlib, the last major pocket of resistance west of the Euphrates, and one in which Turkish-backed rebel groups were prominent. To avoid an escalation that could draw Turkey directly into the war, Russia brokered a new de-escalation agreement for Idlib, forestalling a regime attack and establishing Russian and Turkish observation posts around the borders of the rebel-held area.

That same month, escalation occurred from an unexpected quarter.

² Email exchange with the Director of the Russian Ground Deconfliction Cell, Combined Joint Task Force-Operation Inherent Resolve, February 8, 2018.

A Syrian air defense battery, responding to an Israeli airstrike against Iranian forces in Syria—Tel Aviv and Tehran had quietly been fighting a proxy war against each other there—accidentally shot down a Russian military aircraft, killing all 15 of its crew. In response, Russia announced it was delivering S-300 air defense systems to Syria to better enable the Assad regime to deal with threats from the air. After the de-escalation deal in Idlib and the downing of the Russian plane, the rest of 2018 and early 2019 passed in an unstated and uneasy truce among all the disparate parties.

Late 2019 saw renewed escalation. First, in October, U.S. President Donald Trump announced suddenly that he was withdrawing American forces from northern Syria, opening the way for a Turkish offensive against the SDF. The announcement caused a wave of resignations in the U.S. government—among them, Secretary of Defense James Mattis and Special Envoy for the Counter-ISIL Coalition Brett McGurk—and threw U.S. Syria policy into renewed disarray. The move was a boon not only to Turkey, which quickly moved against the SDF in northern Syria, but also to Russia and the Assad regime. General Mazloum Abdi, the leader of the SDF, announced a deal to allow Syrian government and Russian forces into part of the area under SDF control to prevent further Turkish incursions. Mazloum framed the deal this way, "If we have to choose between compromises and the genocide of our people, we will surely choose life for our people."3

³ Tareq Haddad, "Kurds Strike Deal with Putin and Assad in Syria: 'We Had to Choose Between Compromises and the Genocide of our People," *Newsweek*, October 14, 2019, internet resource at: https://www.newsweek.com/kurds-strike-deal-putin-assad-syria-donald-trump-criticized-1464950, accessed July 21, 2020.

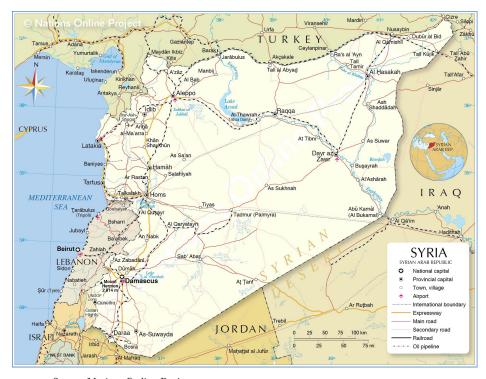
The second escalation in late 2019 came, again, in Idlib. Ignoring the de-escalation agreement there, Syrian and Russian warplanes began a relentless bombing campaign in December. The bombing continued into early 2020, causing a wave of civilians to flee north toward Turkey. In late February, a regime airstrike hit a Turkish military post on the borders of the rebel-held area of Idlib, killing at least 33 Turkish soldiers. Turkey's response was swift and massive, killing over 300 pro-regime fighters, destroying over 20 tanks and downing several Syrian aircraft. As escalation continued and direct conflict between Turkish and Russian forces loomed, Presidents Recep Tayyip Erdogan and Vladimir Putin met in Moscow in early March, inking another de-escalation agreement. Under this agreement, Russian and Turkish forces would conduct joint ground patrols in Idlib, and airstrikes would be suspended.

As summer 2020 grinds on and the 5th anniversary of Russia's intervention approaches, Syria presents a far different picture than it did in September 2015. The Assad regime, which was teetering on the edge of collapse then, now controls most of Syria. The Syrian armed forces have regained much of their fighting power thanks to Russian assistance, although Turkey's attacks in Idlib have done real damage. The strategic partnership between Moscow and Damascus, which had withered in the post-Cold War period, has been revitalized, as has Russia's geopolitical presence in the Levant and eastern Mediterranean. The Russian armed forces have been transformed by their experience in the war and present a far greater problem for Western militaries than they did five short years ago. For all these reasons, Russia's intervention in Syria can be seen as a success.

But the war is not over and could still escalate again. Conflict among regional powers like Turkey, Israel, and Iran is still possible. And despite the success of the deconfliction arrangements at preventing conflict between the United States and Russia so far, the potential for mistakes and miscalculations will exist as long as both militaries are operating in Syria and in the skies over it. The U.S. garrison at Al-Tanf still rankles Damascus and Moscow and complicates Tehran's efforts to establish a zone of influence from Iran through Iraq and Syria to Lebanon. Despite Turkey's operation against the SDF and the subsequent agreement of the SDF to allow Russian and regime forces into part of its zone of control, eastern Syria is still largely not under government control. Neither the problem of Al-Tanf nor the problem of eastern Syria can be resolved without the acquiescence of the United States, and Moscow seems to have little idea how to gain it.

Idlib is still probably the most dangerous place on earth, where jihadist groups co-exist uneasily with moderate opposition groups, all ringed by Russian, Turkish, Syrian-regime, and Iranian-backed forces, themselves in uneasy co-existence. The March 2020 deescalation agreement, like its predecessors, is unlikely to last. Eventually, an escalation between proxy groups is likely to draw in their state sponsors, or the Assad regime—with or without a green light from Moscow-will renew its offensive, bringing it into renewed conflict with Turkey and threatening to draw in Russia. If violence escalates again in Idlib, new waves of refugees, doubtless with jihadist fighters mixed in, will push north toward the Turkish border. Rather than deal with the problem itself, Turkey will likely open its own borders to the European Union to force its neighbors Bulgaria and Greece to deal with it, as Erdogan did in March. As this picture makes clear, Russia's intervention has achieved much, but has not solved the problem that is Syria.

Political Map of Syria



Source: Nations Online Project

This page was left blank for printing purposes

Chapter 2

THE RUSSIAN WAY OF WAR IN SYRIA:

Threat Perception and Approaches to Counterterrorism

Anna Borshchevskaya

From the moment Vladimir Putin officially took the reins of power in 2000, he focused on the promotion of the Russia Federation's great power status through zero-sum competition with the West in favor of a multipolar world. This is the broader context that stands in the backdrop of his military intervention in Syria in September 2015. Putin had multiple goals in Syria, but fundamentally, his September 2015 intervention was part of this same pursuit: the erosion of the U.S.-led global order.

Putin calculated correctly that the West would not oppose his military intervention in Syria. The Kremlin interpreted years of Western policies towards Russia as an expression of weakness. In Syria, the West had consistently signaled disinterest in getting involved beyond fighting the Islamic State (ISIS). Putin also supported Syrian dictator Bashar al-Assad in multiple ways for years before the military intervention. Moscow's deep and multifaceted ties to Syria, together with Putin's strategic posture

toward the West, put the Kremlin on a path towards supporting Assad to the bitter end.¹ The Syria intervention offers important lessons about Russia's way of war and the links between Russia's political aims and military tactics—indeed, Moscow used both to achieve its aims in Syria, where Moscow's diplomatic campaign supported its military objectives. These efforts showed more continuity than change in the Kremlin's approach to war and counterterrorism, as well as its broader threat perceptions, with adaptations to new realities. Moscow is unable and unwilling to lead reconciliation in Syria and can live with low-level conflict to the detriment of international stability.

Moscow's Approach to War and Counterterrorism

Moscow's approach to war and counterterrorism sets the important context for Russia in Syria. In this regard, there is more continuity than difference in the grand scope of Russia's history—from Muscovy's crushing of its democratic rival Novgorod, which paved the way for the creation of the Russian state, to the brutality of Soviet invasions, to Russia's two wars in Chechnya in the 1990s. Similarly, when it comes to security services, there are parallels between Ivan the Terrible's Oprichniki, Joseph Stalin's NKVD, and Putin's National Guard.² This continuity lies in utilizing terror to subdue the population into submission (both at home and abroad), a paranoid search for internal enemies, and blurring lines between war and peace, as well as domestic and foreign policies as part of a fundamental insecurity that historically drove the Kremlin. The lesson: either control others or be subjugated.

¹ Anna Borshchevskaya, "Russia's Many Interests in Syria," The Washington Institute for Near East Policy, January 24, 2013, https://www.washingtoninstitute.org/policy-analysis/view/russias-many-interests-in-syria.

² Brian Whitmore, "The New Oprichniki," RFE/RL, June 8, 2017, https://www.rferl.org/a/the-new-oprichniki/28536410.html.

Indeed, as Russian military expert Alexander Golts wrote, Russia's "ideology of governing was built on the idea of the country as a military camp, a fortress under siege."³

The state's level of terror has varied. Indeed, it was astronomically higher under Stalin, who tortured and murdered millions and gripped the entire country in constant psychological fear. Indeed, in private, Soviet citizens described life as "behind a barbed wire," meaning that the entire country was one big prison, whether in or out of the Gulag system.

Putin's Russia is not totalitarian and has killed far fewer people for political reasons, even as it continues to incarcerate prisoners of conscience as the Soviet Union had done. Nor does Putin adhere to the revolutionary Communist ideology of the Soviet Union. Yet, the values that guide the Kremlin's thinking ultimately lead it to similar conclusions about its course of action, regardless of the number of victims. Thus, Putin's Russia has seen a revival of a search for internal enemies and paranoid fear of outside (usually Western) influence. It has also seen a frightening revival of Stalinism and broader rehabilitation of the Soviet Union.

Terrorism historically played an important role in Russia. As Russian military expert Pavel Baev wrote, "Russia has a uniquely rich history in facing domestic terrorism, which reached a peak in the late 19th and early 20th centuries." Vladimir Lenin himself was an extremist. The Bolsheviks rose to power from a small minority, and utilized a combination of propaganda and indiscriminate,

³ Alexander Golts, Military Reform and Militarism in Russia, (Washington, D.C.: Jamestown Foundation, 2019), p. 9.

⁴ Pavel Baev, "Why Russia is Failing the 'Syria test' for counterterrorism cooperation with the West," PONARS Eurasia, May 2018, http://www.ponarseurasia.org/memo/why-russia-failing-syria-test-counterterrorism-cooperation-west.

brutal, and often arbitrary terrorism.5

Russia's counterterrorism typically focused on brutal repression and murder. This is how imperial, and later Stalinist, Russia sought to subdue the Caucasus—an approach that created more problems than it solved, as it only hardened resistance to the Russian state. Indeed, this is how post-Soviet Russia approached the Caucasus. Thus, veteran Russia expert Fiona Hill wrote that unlike the United States, which suffered from external terrorism, Russia is "inadvertently spawning" its own terrorist problem. Indeed, Moscow's heavy-handed approach in Chechnya in the 1990s, coupled with its focus on pushing out or ignoring moderate and secular leaders in favor of those who professed loyalty, only fueled radicalization and helped turn what began as a secular separatist struggle in Chechnya into a more extremist one, with a radical Islamist component.

During two of the most high-profile terrorist events during Putin's tenure—the October 2002 Moscow seizure of the Dubrovka theater and the September 2004 seizure of a school in Beslan, North Ossetia—hostages died primarily as a result of the Russian government's botched rescue attempts than actions of terrorists To be sure, terrorism posed a real problem, but a different one than Western societies faced. The radical Sunni terrorist group Caucasus Emirate, or Imarat Kavkaz, formed officially in October 2007, during the second Chechen war, and prioritized local attacks,

⁵ See, for example, Richard Pipes, Russia under the Bolshevik Regime, (Vintage Books, Random House: New York, 1995).

⁶ Fiona Hill, "Putin and Bush in Common Cause? Russia's View of the Terrorist Threat After September 11," Brookings Institution, June 1, 2002, https://www.brookings.edu/articles/putin-and-bush-in-common-cause-russias-view-of-the-terrorist-threat-after-september-11/.

^{7 &}quot;Chechnya and the Bombs in Boston," *The Economist*, April 20, 2013, http://www.economist.com/blogs/easternapproaches/2013/04/russian-politics-0.

especially on Russian officials, despite its professed allegiance to the global jihad in April 2009. The Kremlin exaggerated Imarat Kavkaz's connections to al Qaeda and other Sunni terrorist groups operating outside of Russia. This approach helped Putin to style himself as a leader fighting global terrorism. His official reason for the Syria intervention was that "thousands" from Russia and the former Soviet Union joined ISIS in Syria, and Russia had to intervene to prevent terrorist attacks inside Russia.⁸

The real number of Russian citizens who joined ISIS is hard to verify, but more to the point, the Kremlin exaggerated the threat that the group posed to Russia. Furthermore, as one analyst observed, "Paradoxically [ISIS] helped Putin by destroying the North Caucasian resistance as an organized force." Russia's own investigative journalists concluded that the Russian FSB (Federal Security Service) directly forced North Caucasians out of Russia to join ISIS and other terrorist groups in Syria after traveling to Turkey, especially in advance of the 2014 Winter Olympic Games in Sochi. In other words, the FSB controlled the flow of fighters going into Syria. Even if this approach saved Russia from possible attacks (though that remains unclear at best), it certainly shows Moscow's disregard for international security because it was willing to add to the ranks of a terrorist organization. The

⁸ Andrey Biryukov, "Putin Says Thousands From Russia, CIS Joined Islamic State," *Bloomberg*, October 16, 2015, https://www.bloomberg.com/news/articles/2015-10-16/putin-says-5-000-7-000-from-russia-cis-fight-for-islamic-state.

^{9 &}quot;Dmitry V. Shlapentokh, "Russia's Approach to ISIL: the Hidden Benefit of Evil," *NATO Review*, October 30, 2015, https://www.nato.int/docu/review/articles/2015/10/30/russias-approach-to-isil-the-hidden-benefit-of-evil/index. html.

¹⁰ Elena Milashina, "Халифат? Приманка для дураков! [Caliphate? A bait for fools!]," *Novaya Gazeta*, July 29, 2015, https://novayagazeta.ru/articles/2015/07/29/65056-171-halifat-primanka-dlya-durakov-187.

Kremlin's primary motivation in Syria was limiting American influence in world affairs and projecting its own great power status, not fighting terrorism.

Moscow's Threat Perception

The Kremlin's support for terrorist tactics abroad and towards its own population stems from a historic disregard for individual rights and fundamentally different threat perceptions from those of Western governments. The Kremlin always perceived a link between external and internal threats and centered on "the need to maintain sovereignty and stability. . . . This consists primarily of defense of the sovereign," as Russia expert Keir Giles put it.11 Regime survival is the primary goal, and, for the Kremlin, survival is linked to deterring the West. As one analyst explained, "The Kremlin places regional influence and counteraction of the American hegemony as a greater priority than fighting terrorism."12 This focus comes from the Kremlin belief that the U.S.-led global order had disadvantaged Russia, which explains why Russian officials had been calling for a "multipolar world" since the 1990s, even prior to Putin taking power. It was a vision first articulated by former Russian Prime Minister Yevgeniy Primakov.

Moreover, terrorism for the Kremlin can be a useful political tool, domestically and internationally. Thus, Moscow's partnership with Hezbollah, outreach to the Taliban, and friendly relations with Hamas are not irrational. Indeed, taking a strong public

¹¹ Keir Giles, Moscow Rules: What Drives Russia to Confront the West, The Chatham House Insights Series, Royal Institute of International Affairs: London, January 29, 2019, p. 90.

¹² Mariya Y. Omelicheva, "Russia's Counterproductive Counter-Terrorism, Testimony presented to the US," Commission on Security and Cooperation in Europe, June 12, 2019, https://www.csce.gov/international-impact/events/russias-counterproductive-counterterrorism.

stance against terrorism took Putin out of obscurity and into the presidency. Furthermore, domestically, the Kremlin uses such a vague definition of terrorism that allows it to de-legitimize regime critics as "extremists." The Kremlin also perceives a threat to its regime from anti-government protests, such as the "color revolutions" and the Arab Spring, which in the Kremlin's view was orchestrated by the West in pursuit of undermining the Kremlin. In this view, the West utilizes protests to move countries closer to the Western sphere of influence to undermine and destabilize Russia, especially countries on Russia's periphery. Part of this Kremlin narrative is that the West sows chaos and fuels terrorist activities inside Russia and beyond towards the same aim and that the West created ISIS and other terrorist groups in the Middle East. In this narrative, Russia is a more stable and reliable alternative to the United States in Syria—indeed, Russian officials never fail to point out that Moscow entered Syria upon a "legitimate" request of Assad, while the United States was there illegally. Russia, in this narrative, seeks stability in contrast to havoc-wreaking United States.

The Military Campaign in Syria

Moscow focused primarily on deterring the West as part of its military campaign in Syria. Saving Assad is a subset of this approach and, in this sense, a chief military objective. The intention to save Assad and deter the West was obvious from the weaponry that Moscow brought into Syria and from the types of operations that it conducted. In the broader context of the Kremlin's threat perception, this made sense. Whether it was first intended as a short-term operation or not, Moscow soon showed that it desired to stay for the long term.

Moscow quickly and methodically set up an anti-access area

denial (A2AD) layout by bringing in S-400 surface-to-air missile (SAM) system, tactical ballistic missiles, and advanced anti-ship cruise missiles, as well as establishing airspace control. Another important component of this layout was electronic warfare. Russian Foreign Affairs Minister Sergei Lavrov described SAMs as an "exclusively a defensive weapon," which again highlighted the difference between Russian and Western threat perception. While SAM systems are indeed partly defensive, they also help to contest and control an airspace and thus augment the regional military balance of power. That Russian (and incidentally, Iranian) officials refer to SAMs as exclusively defensive suggests that they see the alteration of the regional power balance as defensive.

ISIS and other terrorist groups operating in Syria never had an air force, so the weapons that Moscow brought into the Syrian theater showed that ISIS was not the primary target. Most of Moscow's strikes were outside ISIS territories—in fact Russian airstrikes at times indirectly strengthened it. The moderate anti-Assad opposition that the Kremlin bombed also opposed ISIS, so, in effect, Moscow helped eliminate ISIS opponents or reduce their ability to operate. Once Russia entered the Syrian theater, ISIS used "the newfound air cover to maneuver and reposition fighters." Indeed, early in the Russian military intervention, British Foreign Secretary Philip Hammond said, "Their [Russian] intervention is strengthening [ISIS] on the ground, doing the

¹³ Carol J. Williams and Paul Richter, "Putin lifts Russia's ban on delivery of S-300 missile system to Iran," *Los Angeles Times*, April 13, 2015, https://www.latimes.com/world/europe/la-fg-russia-lifts-ban-missiles-iran-20150413-story.html.

¹⁴ Thomas Gibbons-Neff, "ISIS attacks increase in Syria despite Russian air strikes, report says," *Washington Post*, February 24, 2016, https://www.washingtonpost.com/news/checkpoint/wp/2016/02/24/isis-attacks-spike-in-syria-with-help-from-russian-air-cover-report-says/.

very opposite of what they claim to be wanting to achieve." To give another example, Moscow rejected a coalition request for permission to strike Islamic State targets near al-Tanf, used by American troops. 16 These actions show that ultimately it was Western efforts, not Russia's, that eventually rolled ISIS back.

Another important aspect of the campaign is assurance of access for Moscow, chiefly expansion of the Tartus naval facility and establishment of the Khmeimim airbase, which the Kremlin used as a springboard for greater power projection and to support operations throughout the region. This aspect also shows the long-term view that Moscow has taken in Syria. It is an extension of the historic Kremlin push for influence in the Eastern Mediterranean that always mattered in Russian great power ambitions.

More fundamentally, Moscow's operations in Syria highlighted how little the Russian approach to counterterrorism changed over the years, despite improvements in technology. Chief to this approach in Syria was the belief that anyone who is armed and opposes Assad is a terrorist—a view that Assad himself also holds. This view was also an extension of the Kremlin's historic definition of terrorism and approach to it, as outlined earlier. Indeed, Moscow's airstrikes aimed to give the West a choice: ISIS or Assad, chaos or stability.

This view was a classic Kremlin false dichotomy. Assad can never stabilize Syria under the guise of a "secular dictator." Without

^{15 &}quot;Putin is strengthening Isis in Syria, says UK foreign secretary," *Guardian*, February 1, 2016,

https://www.theguardian.com/world/2016/feb/02/putin-strengthening-isis-syria-uk-foreign-secretary-philip-hammond-russia.

¹⁶ Ryan Browne, "Russia hindering fight against ISIS in Syria, says coalition official," *CNN*, January 8, 2018, https://edition.cnn.com/2018/01/08/politics/us-russia-hindering-isis-fight-syria/index.html.

Russian help, Assad would have fallen. His forces often could not even hold territory after they conquered it, despite Assad's promise to regain "every inch" of Syria.

The atrocities that Assad committed spread rather than smothered the initially peaceful uprising, which, at its initial stage, merely demanded government reform, rather than for Assad to step down. It was Assad who injected Islamist radicals into the protest movement, and his presence had been the single greatest recruiting tool for ISIS.

Moscow's and Assad's bombing of civilian targets like hospitals was meant to inflict terror on the general population and beat it into submission. The bombing of Aleppo in particular bore striking resemblance to Moscow's scorched earth tactics in Chechnya, where, for example, Moscow essentially razed the republic's capital, Grozny, to the ground in the December 1999-January 2000 siege. While no one disputed Moscow's legitimate right to fight terrorists, its methods, according to many observers at the time, fell into the category of war crimes, and world leaders expressed shock at the violence. Moscow's approach stands fundamentally at odds with Western, and internationally recognized, standards for conducting war. Western militaries have carefully established procedures to hit targets with as much precision as possible, to minimize, if not avoid entirely, civilian casualties. More fundamentally, Western militaries draw sharp distinctions between war and peace and combatants and civilians, whereas for the Russian state, the line is blurred: war is more of a spectrum than the clear-cut perception in Western countries.

Another tactic that the Kremlin used was to engage in risky behavior to get the West to back down, knowing that the West was more risk averse than Russia. As Andrew Weiss and Nicole Ng wrote, Moscow engaged in risky military maneuvers, for example, to force American counterparts into a conversation or amend deconfliction agreements in Russia's favor. They add, "Robert Hamilton, the first head of the U.S. ground deconfliction cell, has memorably described these tactics as a variation on the Russian military's controversial 'escalate to deescalate' doctrine in the nuclear realm."

An important evolution of the Russian tactical approach has been reliance on proxies to do the heavy lifting. Moscow's military involvement in Syria remains limited. Most of Moscow's participation has been to provide air support. This reflects the Kremlin's aversion to casualties, given the risk of domestic blowback and its awareness of the dangers of overextension. Moscow has relied primarily on Iran and Hezbollah to do the heavy fighting on the ground. Moreover, Moscow's reliance on so-called private military companies (PMCs) in Syria is another important aspect of this growing trend.¹⁸ These developments show that tactics evolve, but the underlying deeper drivers of Kremlin behavior remain the same.

Although the Russian government remains non-transparent about true numbers, Russian soldiers appear to have been far more likely to die in Ukraine than in Syria. Especially in Ukraine, it is almost impossible to distinguish between the so-called

17 Andrew S. Weiss and Nicole Ng, "Collision Avoidance: The Lessons of U.S. and Russian Operations in Syria," Carnegie Endowment for International Peace, March 20, 2019, https://carnegieendowment.org/2019/03/20/collision-avoidance-lessons-of-u.s.-and-russian-operations-in-syria-pub-78571.

18 Anna Borshchevskaya, "Russian Private Military Companies. Continuity and Evolution of a Model," Foreign Policy Research Institute, December 18, 2019, https://www.fpri.org/article/2019/12/russian-private-military-companies-continuity-and-evolution-of-the-model/.

"volunteers" (PMCs) and regular troops, but the overall level of Russian involvement is deeper in Ukraine than in Syria. In Ukraine, Moscow focused on ground operations, but, in Syria, the focus was on aerial ones, which carry less risk. Approximately a year after Moscow annexed Crimea, Russian opposition said over 200 Russian soldiers had died in eastern Ukraine. A group of Russian volunteers in Project Cargo allegedly managed to verify at least 649 Russian soldiers (excluding PMCs) killed in action in Ukraine between 2014-2016, but the real numbers are likely higher.

The picture in Syria is a bit clearer, if only in comparison. Moscow officially confirmed 116 total "personnel" deaths in Syria from the start of the intervention until spring 2019.²¹ According to the reputable Syrian Observatory for Human Rights, between March 2011 (start of anti-Assad protests) and January 2020, 264 "Russian soldiers and mercenaries" had died in Syria. The report implies that the vast majority of these individuals (perhaps as many as 200) came from a single episode in February 2018 when U.S. forces shot in self defense at a group of Russian PMCs who violated a de-confliction agreement between the U.S. and Russia.²²

¹⁹ Maria Tsvetkova, "Scores of Russian soldiers killed in east Ukraine: opposition report," *Reuters*, May 12, 2015, https://www.reuters.com/article/us-ukraine-crisis-russia-report/scores-of-russian-soldiers-killed-in-east-ukraine-opposition-report-idUSKBN0NX0WA20150512.

^{20 &}quot;Волонтеры обнародовали список российских военных, погибших в Донбассе," [Volunteers Unveiled a list of Russian Soldiers who Died in Donbas], NV, March 6, 2016, https://nv.ua/ukraine/events/volontery-obnaro-dovali-spisok-rossijskih-voennyh-pogibshih-v-donbasse-101773.html.

21"4 Russian Special Forces Officers Killed in Syria – Reports "Mascaga Times

^{21&}quot;4 Russian Special Forces Officers Killed in Syria – Reports," *Moscow Times*, February 3, 2020, https://www.themoscowtimes.com/2020/02/03/4-russian-special-forces-officers-killed-in-syria-reports-a69139.

²² Kimberly Marten, "The Puzzle of Russian Behavior in Deir al-Zour," *War on the Rocks*, July 5, 2018, https://warontherocks.com/2018/07/the-puzzle-of-russian-behavior-in-deir-al-zour/.

The Diplomatic Track

Western countries lacked a unifying purpose in Syria. On the one hand, they said that their priority was to fight ISIS in Syria. On the other, they said that Assad had to go and coordinated negotiations with the opposition. However, they did little to back up talk with action against Assad. Moscow by contrast had clear priorities and preferences it pursued consistently. As an authoritarian country, it wasn't hampered by internal government disagreements and differences of opinion. Moscow's political track went hand-inhand with its military campaign in Syria. Both aimed to keep Assad in power, elevate Moscow's role, entrench its position, and reduce American influence. To achieve these aims, Moscow marginalized genuine anti-Assad opposition, not only militarily, but also politically and diplomatically. Critically, the West was willing to make Russia a partner in Syria. Western leaders assumed that despite certain differences, their ultimate goals in Syria coincided with Moscow's, which highlights Moscow's ability to deceive the West during negotiations, or conversely Western inability to see through the deceptions.

Moscow positioned itself as a critical decision maker. This was a natural extension of Putin's approach to the Middle East, where he had long worked to establish ties to all actors in the region—a contrast to the Soviet Union's ideological and more one-sided approach. The Soviet Union cultivated ideological allies and had clearly defined adversaries in the region in the context of the revolutionary aims of communism. Putin's Russia, by contrast, has built good relations with all governments and major opposition groups to them, both domestically and regionally. Thus, Putin has balanced good relations with Israel, Iran, and Saudi Arabia, as well as Hamas and Hezbollah. Although the Russian Supreme Court

had labelled the Muslim Brotherhood as a terrorist organization, when the organization's member Mohammad Morsi won the Egyptian presidency in 2012, Putin had no qualms reaching out to him.

In Syria, Moscow used its position on the United Nations Security Council to block over a dozen resolutions to ensure no action could be taken against Assad. It also pursued its goals in more subtle ways. In June 2012, the Geneva Communiqué outlined a UN roadmap for ending the violence and establishing a transitional governing body, but used vague language on Moscow's insistence. On this basis, Moscow then engaged in peace talks but with groups that did not demand Assad's departure as a precondition for talks. In other words, Moscow created a veneer of international legitimacy to its actions—also a historic aspiration of the Russian state that predates Putin.

Another key tactic for the Kremlin was the use of ceasefires and de-escalation zones to prop up Assad. The ceasefires generally did not hold. Moscow served as one of the guarantors of the de-escalation zones, along with Ankara and Tehran under the Astana process—which was meant to promote Assad and to give these efforts international legitimacy. Assad used these de-escalation moments to regroup, gather strength, and retake major urban centers. As Baev notes, "The fight against ISIS was downplayed in these plans, so battles such as for Raqqa in Syria (and Mosul in Iraq) were left for the US-led coalition to wage." This highlights Moscow's strategic decision to support Assad, not fight ISIS.

²³ Pavel Baev, "Why Russia is Failing the 'Syria test' for counterterrorism cooperation with the West," PONARS Eurasia, May 2018, http://www.ponarseurasia.org/memo/why-russia-failing-syria-test-counterterrorism-cooperation-west.

Indeed, when it came to diplomacy, Moscow took its script from its earlier behavior in Chechnya. In early-mid 2000s, the Parliamentary Assembly of the Council of Europe (PACE) wanted formal peace talks with Chechen leaders, so Moscow engineered this process and pushed faux opposition members it had installed in Chechnya. A January 2006 joint report by the Helsinki Federation for Human Rights (IHF), International Federation for Human Rights (FIDH), Norwegian Helsinki Committee, Center "Demos," and Human Rights Center Memorial explains that upon Moscow's insistence "separatists" could participate in the political process if they rejected terrorism and extremism. Theoretically, it made sense, but there were two problems within the Russian context. First, in reality, anyone who said they were a separatist in Chechnya would "issue a death warrant to himself."24 Second, and more to the point, Russian federal law forbade any activity that infringed upon territorial integrity of the Russian Federation. The law deemed any kind of separatist conviction as extremist, regardless of the methods a person used to pursue separatist aims.²⁵ Thus, the report concluded, at the time, "It is quite obvious that voluntarily or not Europe actually agreed to organize a negotiation ground with participation of only one side to the conflict."26 In Syria, Moscow's actions recreated this pattern through the Astana peace talks, which were also meant to create a parallel international diplomatic track that marginalized the United States.

²⁴ International Helsinki Federation for Human Rights (IHF), International Federation for Human Rights (FIDH), Norwegian Helsinki Committee, Center "Demos," Human Rights Center "Memorial," *In a Climate of Fear "Political Process" and Parliamentary Elections in Chechnya*, January 2006, p. 16.

²⁵ In a Climate of Fear "Political Process" and Parliamentary Elections in Chechnya, p. 16.

²⁶ In a Climate of Fear "Political Process" and Parliamentary Elections in Chechnya, p. 16.

Another key feature of Moscow's diplomatic efforts was to build leverage over political actors and create dependence on Moscow. As a result of these efforts, Turkish President Recep Tayyip Erdogan slowly came around to accept Moscow's position on Assad because it had few other options. Moscow leveraged its position in Syria and its relationship with the Kurds to achieve this outcome. Another example is Israel. Once Moscow gained control over Syrian air space, Israel became dependent on Moscow to conduct its airstrikes against Iranian targets. In July 2018, Moscow also promised that Iran would withdraw its forces and proxies at least 85 kilometers away from Israel's border,²⁷ but this, too, failed to diminish Iran's presence—though it succeeded in making Moscow look as if it had tried. Similarly, in Lebanon, Moscow created a perception of a necessary and reliable partner and utilized the issue of refugee return to bolster this position, consolidate ties with Beirut, and gain diplomatic leverage. However, in reality, few refugees returned, and the Assad regime killed or detained many who did.28 In short, Moscow positioned itself as an indispensable power in Syria and the region. Regional players saw that Putin stuck to his guns and kept Assad in power, standing up to the wavering Western leaders. Saving Assad and winning a bigger Russian footprint in Syria allowed Moscow to project power and utilize Syria as springboard for other activities in the region.

²⁷ David Makovsky, "Putin's Golan Comments: Implications for Israeli Security," The Washington Institute for Near East Policy, July 19, 2018, https://www.washingtoninstitute.org/policy-analysis/view/putins-golan-comments-implications-for-israeli-security.

²⁸ Anna Borshchevskaya and Hanin Ghaddar, "How to Read Lebanon's Acceptance of Russian Military Aid," The Washington Institute for Near East Policy, December 7, 2018, https://www.washingtoninstitute.org/policy-analysis/view/how-to-read-lebanons-acceptance-of-russian-military-aid.

Conflict Resolution?

Conflict resolution requires reconciliation. Moscow is in no position to lead this process. Moscow is not even talking about reconciliation in Syria, merely stability—as Moscow defines it—embodied by restoration of Assad's sovereignty and end of large-scale fighting.

The Kremlin would tout Chechnya as an example of its success in achieving stability because Chechnya is contained and pacified, while large-scale terrorist attacks in Russia have declined after 2010. But the Kremlin's definition of stability is fundamentally flawed because repressed problems eventually erupt, and, in Russia, these problems are of the Kremlin's own making in the first place. Syria is far more complex than Chechnya, and if Moscow could not provide genuine stability in Chechnya, then it could not possibly do so in Syria. Moreover, in Chechnya, Moscow rebuilt Grozny; it does not have the funds to finance Syria's far more sizable reconstruction and has been working on getting others to foot the bill while gaining access to Syria's resources.

More fundamentally, Moscow's aim is not conflict resolution. For all its talk of stability, it does not really aim to achieve it. Moscow benefits from low-level conflicts that continue to simmer, such as the so-called frozen conflicts in the post-Soviet space. As Keir Giles has written, "Russia feels secure only when all others are at risk." Oscar Jonsson, author of *The Russian Understanding of War*, finds repeatedly the term "controlled chaos" in Russian writing on this subject. Indeed, Moscow's use of controlled chaos—the spread of disorder in a country through multiple means, either in

²⁹ Keir Giles, Moscow Rules: What Drives Russia to Confront the West, p. 21. 30 Oscar Jonsson, The Russian Understanding of War, (Georgetown University Press: Washington, D.C., 2019).

preparation for war or as means of achieving policy goals without resorting to war—has played out over and over in post-Soviet Russia. In Ukraine, Moscow preferred a situation of crisis on its border to one in which its neighbor is connected with the European Union. Moscow had followed a similar pattern in other parts of the post-Soviet space, such as Transnistria in Moldova and the Nagorno-Karabakh conflict between Armenia and Azerbaijan. These conflicts generally cost little, foster dependence on Moscow, and prevent these countries from leaving Russia's sphere of influence—that is, they achieve policy aims through continuous instability, but without resorting to full-scale war. Syria for years has been headed towards a similar scenario. It is also impossible to imagine a genuinely stable Syria with Assad (or someone like him) in power, but that is Moscow's chosen outcome.

Conclusion

Putin's Syria intervention shows that Russia's way of war is evolving to adapt to new realities, while the fundamental values that underpin the reasons for the war in the first place remain largely unchanged. Whether Russia itself became more secure as a result of the Syria intervention is debatable. As mentioned earlier, 2010 saw the highest number of terrorist attacks in Russia, five years before the Syria intervention. Russia also experienced two major terrorist attacks after the military intervention in Syria—the downing of the Metrojet in November 2015 after it took off from Sharm al Sheikh and the April 2017 St. Petersburg metro bombing. More to the point, the root cause of Russia's terrorism problem remains internal. As Russian liberal opposition leader Ilya Yashin has written, "No single politician or government agency can guarantee today that the Islamic state which [Ramzan] Kadyrov has created in Chechnya... will not be transformed over

time into another ISIS."31

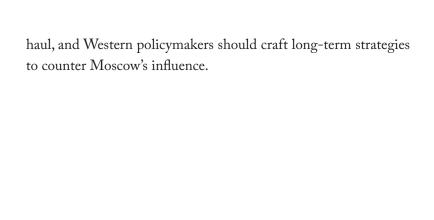
Moscow's campaign in Syria shows that while its tools are evolving, the fundamental strategic interests and threat perception remain largely the same. Moscow looks to be a conflict manager, not a country that fosters genuine conflict resolution. Putin's behavior in Syria fits within the historical Kremlin pattern, just as it does in Ukraine and Georgia, countries that were moving closer to the West and have warm water ports. These countries, just like Syria, also mattered to Russia's historic efforts to extend influence towards over its southern frontier: the Black Sea, Eastern Mediterranean, and the Middle East.³² Libya is another country that falls in this category. Libya has emerged as another focal point of Russian activities. Here, Moscow exhibits a similar pattern of behavior that focuses more on securing Russian influence and building leverage than resolving conflicts.³³ Moscow will continue to push for influence in the Black and Caspian Seas and Eastern Mediterranean.

Another chief lesson of Moscow's Syria campaign is that Putin's Russia and the West do not, and have never, shared the same goals and threat perceptions. In Syria, as elsewhere, Moscow's priority is regime survival, which, in the Kremlin's view, requires it to alter the balance of power in its favor. The West can count on Moscow to stay on this course. It is committed to this game for the long

³¹ Ilya Yashin, "A Threat to National Security: An independent expert report," Boris Nemtsov Foundation for Freedom and Free Russia Foundation, Moscow, February 2016.

³² Jakub Grygiel, "Russia's Return to The Middle East," Hoover Institution, December 12, 2019, https://www.hoover.org/research/russias-return-middle-east.

³³ Anna Borshchevskaya, "Russia's Growing Interests in Libya," The Washington Institute for Near East Policy, January 24, 2020, https://www.washingtoninstitute.org/policy-analysis/view/russias-growing-interests-in-libya.



Chapter 3

SYRIA AND THE RUSSIAN ARMED FORCES:

An Evaluation of Moscow's Military Strategy and Operational Performance

Michael Kofman

The Russian Federation's intervention in Syria has been a qualified success from the Kremlin's perspective, and certainly from the Russian General Staff's. The expeditionary operation has accomplished many of the initial objectives of the campaign and continues to serve the institutional interests of the Russian military. True, the war is not over, and Russia's "victory" may yet prove a thorny crown to wear, as it has for countless other great powers who came to the Middle East in search of influence. However, Russia's military operation merits examination, particularly because at the time of initiation, many had presumed the outcome

would be a quagmire. Furthermore, the war in Syria has proven a crucible for evolution in Russian operational art, capability development, and strategy. It will influence an entire generation of military leadership.

A systemic examination of the intervention would seek to first establish what was known about the original Russian political goals, understanding that the ends sought may change over the course of a war, and the extent to which the military campaign was able to accomplish them. Did the Russian military strategy marry with the political ends, and were the ways and means visibly linked to supporting those objectives? This chapter seeks to understand how Moscow was able to achieve relative success in saving the Syrian regime, destroying the opposition, and aiding Assad in recapturing much of Syria's population centers. This chapter also briefly reviews Russia's road to war and its political objectives in Syria, then conducts an in-depth evaluation of Russia's military performance in the Syrian War and the war's impact on Russian military capabilities.

The Road to War

The Russian deployment to Syria was the logical conclusion of the original position Moscow took at the start of the civil war in Syria, but, at the same time, it was an accident of history. Although Russian-Syrian relations had an extensive Cold War legacy, with Syria becoming a full-fledged Soviet client state in the 1970s, Russian-Syrian relations were transactional by 2011. At the time, there was no discernible Russian strategy to become a

¹ Alistair Bell and Tom Perry, "Obama warns Russia's Putin of 'quagmire' in Syria," *Reuters*, October 2, 2015, https://www.reuters.com/article/us-mideast-crisis-syria-airstrikes/obama-warns-russias-putin-of-quagmire-in-syria-idUSKCN0RW0W220151003.

power broker in the Middle East, and no notable military activity that could make use of Syria's strategic position in the Eastern Mediterranean. Russia's relationship with Syria did contribute to Moscow's status as a great power in international politics, a sort of Middle East outpost that suggested interests and influence in another region. But it was more faux than real. There was little to the relationship beyond arms sales, and Syria's significance was minimal both in a geopolitical and military sense.

It is the Russian involvement in the civil war, and eventual introduction of forces in September 2015, that dramatically upgraded the relationship and the military relevance of Syria to broader ambitions that emerged over the course of those years. Like other classical great powers, Moscow grew hungrier from the eating, becoming more ambitious after seeing success in the Syrian war, thereby making the country an outpost for its expanded interests in the region after 2016. Only after launching combat operations did Moscow sign a 49-year agreement to lease the Tartus naval base, dramatically expanded the facility to actually meet Russian naval requirements, and began to entrench its forces in Syria.² Similarly, Syria was hardly the centerpiece of U.S. foreign policy in the Middle East, nor was the United States particularly antagonistic towards the Bashar al-Assad regime in the run-up to the outbreak of civil war. If anything, U.S.-Syrian relations appeared to be warming.³

When protests began in Syria in spring 2011, Russia and the

^{2 &}quot;Moscow close to finalizing deal to lease Syria's Tartus port for 49 years," RFE/RL, April 21, 2019, https://www.rferl.org/a/moscow-damascus-near-deal-on-lease-syrian-port-tartus/29894114.html.

³ Hillary Clinton even stated, "There's a different leader in Syria now. Many of the members of Congress of both parties who have gone to Syria in recent months have said they believe he's a reformer. See, Glen Kessler, "Hillary Clinton's uncredible statement on Syria," *Washington Post*, April 4, 2011.

United States found themselves on opposite sides. The contest would be waged via diplomacy in the United Nations and as a bloody proxy conflict between several intervening states as Syria descended into civil war. Moscow's principal concern was that following Libya, the United States would use the internal crisis as an opportunity to conduct regime change. Russia wanted to draw a line in the sand at Syria and prevent what it came to view as a policy that led to state collapse, demonstrated best by Libya's implosion following the U.S.- and European-led intervention in March 2011. Russian Foreign Minister Sergei Lavrov made Moscow's position clear, "Some leaders of the coalition forces, and later the NATO secretary-general, called the Libyan operation a 'model' for the future. As for Russia, we will not allow anything like this to happen again in the future." Lavrov noted that any scenario "involving military intervention in Syrian affairs is absolutely unacceptable for us."4

Statements from senior Russian leaders during this period reflected fears that the United States saw Libya as a model to replicate. Moscow intended to veto this in the case of Syria. The Russian intervention in 2015 was multicausal, serving several goals, with a range of stakeholders among Russian elites beyond Vladimir Putin himself. Some of the reasons stated were undoubtedly rationalizations, but elites often believe in things that an analyst might dismiss as cynicism or post-hoc justification. Ideology, elite perceptions, and personalities play a role in such decisions.

⁴ See, Lavrov's statements in: "Sergey Lavrov's Remarks and Answers to Media Questions at Joint Press Conference with UAE Foreign Minister Abdullah Al Nahyan," Ministry of Foreign Affairs of the Russian Federation, November 1, 2011; and as quoted in James Brooke, "Syria: Russia Clings to Legacy of Soviet Ties in Arab World," *Voice of America*, November 29, 2011, http://blogs.voanews.com/russia-watch/2011/11/29/syria-russia-clings-tolegacy-of-sovietties-in-arab-world/.

Russian Political Objectives

The proximate cause of Russia's intervention was Assad's looming defeat in 2015, despite almost five years of Russian and Iranian efforts to aid him in the war. By April 2015, Assad faced an opposing coalition of Jabhat al-Nusra fighters and various opposition groups, calling itself the Army of Conquest, which was threatening the population centers under his control in the north. Meanwhile, the Islamic State (ISIS) pressed from the east, capturing Palmyra, pushing back Assad's forces on multiple fronts. Russian policy, initiated in 2011, was failing, and Iran was lobbying for a coordinated military intervention.⁵ Russian elites firmly believed that the regime's collapse would end in Islamic State and various al Qaeda affiliates in charge of a dismembered Syria. From Moscow's perspective, the implosion of Syria would further destabilize the region, with Sunni extremists invading neighboring states, eventually sending radicalized fighters into Russian parts of the Caucasus and Central Asia.

The Libya experience loomed large, given that Damascus was geographically much closer than Tripoli, and thousands of Russian citizens had already joined the extremist groups fighting there.⁶ Consequently, some in Moscow saw the war as a preventive conflict against jihadists, a sort of "fight them over there" rationalization that had been widespread in the United States during the George W. Bush administration. The wider context played an important role. U.S.-Russian relations had seemingly reached a nadir after the

^{5 &}quot;Iran Quds chief visited Russia despite U.N. travel ban: Iran official," *Reuters*, August 7, 2015, http://www.reuters.com/article/us-russia-iran-soleima-ni-idUSKCN0QC1KM20150807.

⁶ Vladimir Frolov, "Signing In is Easier than Quitting," *Vedomosti*, September 29, 2016, accessed December 19, 2017, https://www.vedomosti.ru/amp/a00ffd6a64/opinion/articles/2016/09/29/658952-voiti-legche-viiti

Russian invasion of Ukraine, with the United States and Europe imposing sanctions, and Washington attempting to isolate Moscow internationally. In 2011, Russia sought to veto U.S. foreign policy and avert what its leaders expected to be an American attempt at regime change in Syria. But this contest with relatively lower stakes paled in comparison to the circumstances in which Moscow found itself in 2015. Facing an economic and political pressure campaign by the United States and its European allies, Russia's risk tolerance increased along with the stakes, making Syria much more significant as a front in that confrontation.⁷

Furthermore, Syria presented an opportunity to take the escalating political contest out of Europe to a flank theater like the Middle East, where terms were much more favorable to Russia. Moscow hoped that the intervention would outmaneuver the United States, force it to deal with Russia as an equal, and coerce Washington to abandon sanctions imposed over Ukraine. A successful expeditionary operation in Syria could also upgrade Russia's international standing and return it as a player in the Middle East, conferring the status of an indispensable actor. This might seem to read outcome as cause, but ambition creep is not

7 Section based partly on: Michael Kofman, "A Tale of Two Campaigns: U.S. and Russian Military Operations in Syria," in Пути к миру и безопасности [Pathways to Peace and Security], No 1 (52), IMEMO, 2017; and Michael Kofman, "US and Russia in Syria's War: Cooperation and Competition," in *The War in Syria: Lessons for the West*, Andis Kudors, Artis Pabriks eds. (University of Latvia Press, Riga 2016), pp. 65-88. Also, see, Samuel Charap, Elina Treyger, Edward Geist, "Understanding Russia's Intervention in Syria," RAND Corporation, 2019, p. 3-9, for a useful discussion on this subject.

8 This argument is based on the author's previous work in Michael Kofman and Matt Rojansky, "What Kind of Victory for Russia in Syria?," *Military Review*, January 2018, https://www.armyupress.army.mil/Portals/7/Army-Press-Online-Journal/documents/Rojansky-v2.pdf; but also analysis by Dmitry Adamsky, "Moscow's Syria Campaign: Russian Lessons for the Art of Strategy," *Russie. Nei. Visions*, No. 109, Ifri, July 2018, p. 6.

uncommon, with military success driving aspirations.

Russian Military Strategy

The first objective that the military campaign had to achieve was a restoration of the Syrian state's power, not necessarily Assad's personally. Hence, Russia intervened in the role of a "sovereignty provider" to avoid the collapse of the regime. There was never an intent to engage in nation building, reconstruction, or political transformation in Syria. This required a successful military campaign, followed by a political settlement, though the former would largely decide the outcome of the latter. Although Russia entered Syria with a deliberate strategy, it did not survive first contact with realities on the ground. Rather than stick to one enduring political and military strategy, Moscow would course-correct several times in Syria, announcing withdrawals, altering expectations based on the changed circumstances, and changing the direction of military operations.

The Russian approach could best be described as an emergent or "lean" strategy in this case, avoiding sunk costs and remaining flexible in the ways employed to achieve the desired ends. ¹⁰ In practice, this means changing key elements of the strategy, the means employed, ways, and adjusting the theory of victory in response to friction or failure. Emergent approaches favor pursuing multiple vectors simultaneously, with quick iterations in decision making to adjust course. Furthermore, operational objectives had to be reconciled

⁹ Andrey Sushentsov, for example, references Russia as a "sovereignty provider" in his commentary on the Russian deal with Turkey, permitting Turkey to further reduce its dependency on the United States. Andrey Sushentsov, "С-400 в Турции: зонт в дождливую погоду [S-400 in Turkey: an umbrella in rainy weather]," Valdai Club, August 5, 2019.

¹⁰ For more on emergent strategy in strategy making and foreign policy, see: Ionut Popsecu, *Emergent Strategy and Grand Strategy: How American Presidents Succeed in Foreign Policy*, (Baltimore: Johns Hopkins University Press, 2017).

with those of local allies, including the Syrian regime, Iran, and Hezbollah. As a result, the Russian military strategy had to be premised on flexibility and adaptability, operating in a coalition environment. The Russian theory of victory was governed by the principle of reasonable sufficiency, both imposed by objective constraints in means available for the expeditionary operation, but equally through discipline.¹¹

Importantly, Russian thinking was not means driven. The operation retained a small footprint, which was continuously managed in-country and calibrated even when the means and operating environment afforded a much larger presence. Sufficiency as a principle tends to privilege gradualism, and takes more time, but, in an operationally permissive environment, entailed fewer costs and risks. Beyond the initial surge of capabilities to execute the deployment into Syria, Russia never substantially increased the resources allocated to the conflict.

Moreover, the Russian strategy was premised on Syrian, Iranian, and other forces doing the fighting. These would subsequently be supplemented by Russian mercenaries, for example private military company (ChVK) Wagner Group, fielded in the form of several battalion tactical groups. Russia's military and political leaders sought to avoid getting sucked into Syria, and eventually being in a position where they were being used by local actors rather than having leverage themselves. Hence, the Russian task force regularly pulled forces out of theater back to Russia. This minimized Russian exposure to casualties, political costs, and the

¹¹ For further exposition on reasonable sufficiency as a guiding principle in Russian strategy, see, Michael Kofman, "A Comparative guide to Russia's use of force: measure twice, invade once," *War on the Rocks*, February 16, 2017; and Dmitry Adamsky, "Moscow's Syria Campaign: Russian Lessons for the Art of Strategy," *Russie.Nei.Visions*, No. 109, Ifri, July 2018, p. 11.

financial burden of maintaining a force larger than necessary in Syria. Some observed that it also reflected a change in Russian military attitude from previous conflicts, as retired General of the Army Petr Deynekin commented, "The most important thing is that we learned to value people." Moscow sought to represent the other actors as a broker in international discussions, but never to end up with ownership of the conflict.

Third, Moscow sought to neutralize opposition groups, making no distinction between al Qaeda affiliates, ISIS, or the so-called "moderate" Syrian opposition. The opposition groups were conveniently labeled as terrorist organizations, which made sense from the Russian and Syrian political perspective, making much of Syria a target for joint bombardment. Destroying the opposition was a battlefield necessity, but also an integral part of a coercion strategy to get external parties to the conflict to the negotiating table on favorable terms. The war would never end if powerful external actors, such as Turkey, the United States, and various Arab-majority states, continued to funnel weapons and fighters into the conflict zone believing that victory on the battlefield was possible. This approach was married with dissuasion towards others, namely, Israel, Iraq, Jordan, and convincing them that they did not need to oppose the Russian intervention in order to achieve their objectives in Syria. This part of the strategy was aimed at changing the strategies of other players by convincing them through coercion aimed at their proxies to abandon their existing theories of victory for the war.

There was also a diplomatic effort to wrap the Russian operation as part of a counter-terrorism coalition in support of the Syrian state

¹² Oleg Falichev, "СИРИЯ УРОКОВ, военно-промышленный курьер [a Syria of Lessons, Military-Industrial Courier]," No. 31, August 17, 2016.

and pressure the United States to join. That gambit began from the outset in September 2015 when Vladimir Putin addressed the United Nations General Assembly in an attempt to frame Russia's actions as part of a broader fight against terrorism, "We think it is an enormous mistake to refuse to cooperate with the Syrian government and its armed forces, who are valiantly fighting terrorism face to face. We should finally acknowledge that no one but President Assad's armed forces and Kurdish militias are truly fighting the Islamic State and other terrorist organizations in Syria," and "We must join efforts to address the problems that all of us are facing and create a genuinely broad international coalition against terrorism." ¹¹³

This continued through the Obama administration's tenure, as then-Secretary of State John Kerry and Sergei Lavrov negotiated throughout summer 2016 to upgrade bilateral interactions from deconfliction to a de facto cooperation agreement called a Joint Implementation Group. The Russian purpose was to use Syria to achieve objectives relevant to the bilateral relationship, ending the Western consensus on sanctions and reframing U.S.-Russia relations after Ukraine in a sort of forced reset as the outcome of this cooperation.

^{13 &}quot;Read Putin's U.N. General Assembly speech," *Washington Post*, September 28, 2015, https://www.washingtonpost.com/news/worldviews/wp/2015/09/28/readputins-u-n-general-assembly-speech/.

¹⁴ Josh Rogin, "Obama's Syria plan teams up American and Russian forces," *Washington Post*, July 13, 2016, https://www.washingtonpost.com/opinions/global-opinions/obamas-syria-planteams-up-american-and-russian forces/2016/07/13/8d7777cc-4935-11e6-acbc-4d4870a079da_story.html?utm_term=.21ebf154a418.

Deployment, Logistics, and Force Structure

The initial deployment consisted of 33 aircraft and 17 helicopters, primarily modernized Soviet workhorses such as 12 Su-24M2 bombers, 12 Su-25SM/UB attack aircraft, four Su-34 bombers, and four S-30SM heavy multirole fighters along with one reconnaissance plane. The helicopter contingent was composed of 12 attack helicopters (Mi-24P) and five transports (Mi-8AMTSh). As the campaign progressed, particularly after Turkey shot down a Russian Su-24 bomber in November 2015, this contingent was reinforced with an additional four Su-35 air superiority fighters, four Su-34 bombers, and upgraded Mi-35 attack helicopters. Russian air defense assets at Khmeimim Air Base were reinforced with a S-400 battery, electronic warfare units, and greater force protection.

Initially, a company of T-90A tanks deployed to the base along with Naval Infantry from the 810th brigade. Later, secondary air defense units would arrive, with a S-300V4 battery and another S-400 battery further afield to cover the eastern half of Syria. Beyond air-based fire support and strikes, artillery companies would also deploy to the combat zone for closer support, including towed MSTA-B batteries. Russia's Special Operations Command (KSO), which had been undergoing rapid evolution as a recently created special forces unit, took on an increasingly prominent role in supporting combat operations with diversionary operations, punitive raids, and target designation missions.

¹⁵ Ruslan Pukhov, "Russian Military, Diplomatic and Humanitarian Assistance" in *Syrian Frontier*, ed. M.U. Shepovalenko, 2nd ed. (Moscow: Center for Analysis of Strategies and Technologies, 2016), pp. 105–107, http://cast.ru/upload/iblock/686/6864bf9d4485b9cd83cc3614575e646a.pdf.

Russian operations were supported by sea via a standing squadron in the Eastern Mediterranean (although often most of the ships were support or logistical in nature), focusing on maintaining the sea lines of communication, which had been dubbed in earlier years of 2011-2015 as the "Syrian Express." Given limitations in availability and transportable tonnage via landing ship tank (LST) vessels, this capacity was supplemented by bulk cargo ships purchased from Turkey and an air link utilizing primarily Il-76 strategic airlifters, along with a few much heavier An-124 transports.¹⁶ These aircraft typically flew routes over the Caspian Sea and through Iranian airspace, which would also be used by Russian Long Range Aviation (LRA) when delivering strikes from the mainland.¹⁷ According to the Russian Minister of Defense, there were 342 supply trips by sea and 2,278 via air transport by 2018. A total of 1.608 million tons of supplies and equipment had been delivered. 18 The logistics were not scalable, but sufficient for the Russian deployment, and the combination of air and sea lift could be recreated elsewhere.

Command and Control

Russian military reforms from 2008-2012 had sought to flatten the number of echelons involved in combat operations, while increasing the situational awareness and timeliness of information flow between responsible command and control (C2) structures.

¹⁶ An-124s were used to deliver helicopters into theater.

¹⁷ These aircraft typically flew out of Mozdok airbase in North Ossetia, over the Caspian and then turned towards Syria, occasionally refueling in Iran. 18 The bulk of these supplies were delivered by sea lines of communications, much of it via four bulk cargo ships purchased from Turkey. "Операция в Сирии показала силы России [Operation in Syria showed Russia's strength]," *Red Star*, January 31, 2018, http://archive.redstar.ru/index.php/news-menu/vesti/v-voennyh-okrugah/iz-tsentralnogo-voennogo-okruga/item/35940-operatsiya-v-sirii-pokazala-silu-rossi?attempt=1.

At the top of this structure sat the National Defense Management Center (NDMC), integrating the operating picture between the mixed combat grouping in Syria, the Ministry of Defense, and national political leadership. This organization was a sort of Stavka, or high command.¹⁹ The Southern Military District, which provided logistics, controlled force flow, and long-range strikes from the mainland was a high echelon command in a supporting role. Coordination appeared to take place at the level of Deputy Military District Commander. The Russian contingent in Syria would typically be considered an operational level force, but, in that role, it was actually a strategic element with a senior commander.

At the beginning, the operational planning began with a cell in the Russian General Staff, details were filled in by the operational group commander in Khmeimim in charge of Russian forces on the ground. This process flow was also supposed to include the Syrian General Staff, as though Syria still had a functioning institutionalized military. However, the Syrian command proved incompetent for the task, and much of the operational-level planning reverted to the Russian commander in Syria. This was done in conjunction with a combat management group, which worked round-the-clock shifts at the NDMC and coordinated with other countries. Within Khmeimim, the lowest echelon was the planning cell, which collected representatives from different Syrian fighting formations at the command, dividing the country into zones of responsibility among the planning officers.

¹⁹ This characterization was made by Dima Adamsky in: Dmitry Adamsky, "Moscow's Syria Campaign: Russian Lessons for the Art of Strategy," *Russie. Nei. Visions*, No. 109, Ifri, July 2018, p. 18.

²⁰ Aleksandr Dvornikov, "штабы для новых воин [Headquarters for new warriors]," Military-Industrial Courier, 28 (741), July 24, 2018.

According to the recollections of Aleksandr Dvornikov, one of the generals who commanded the task force in Syria, initially these were staffed with 3-5 planners, but the cells eventually grew to planning groups of 15-20.²¹

Planning cells were formed around the operations being executed. For example, a naval aviation operations cell was formed at one point composed of 12 Black Sea Fleet and Northern Fleet officers. Task forces were created at the tactical level; for example, a counter-Unmanned Aerial Systems (UAS) group was formed within the force protection cell. Finally, the Center for Reconciliation of Belligerents in Syria was a lateral grouping and was an important attachment to the Russian operation, as this Center worked to organize ceasefires, monitor so-called de-escalation zones, and help turn entire towns to the Syrian regime side. This Center took on the responsibility for de-confliction with U.S. operations in theater. The entire C2 structure benefitted from new automated systems of command and control, steadily being deployed across the Russian forces at all echelons, and the march of digitization making its way through the military's communication infrastructure. A unified communications network increased combat management tempo, reduced decision-making time, allowed a steady data flow, and improved battle damage assessment.²²

²¹ Aleksandr Dvornikov, "штабы для новых воин [Headquarters for new warriors]," Military-Industrial Courier, 28 (741), July 24, 2018.

²² Dmitry Adamsky, "Moscow's Syria Campaign: Russian Lessons for the Art of Strategy," *Russie.Nei.Visions*, No. 109, Ifri, July 2018, p. 19.

Operational Design and Implementation

The initial Russian operation sought to restore ground lines of communication and main roads linking infrastructure with the goal of breaking out pockets of Syrian forces from encirclement. Russian forces targeted transport arteries linking Damascus, Hama, and Aleppo. They also sought to break through to Syrian forces at Kvaires Air Base. ²³ The Russian air campaign first attempted to change the momentum on the battlefield, halt the advance against Assad's forces, and bolster the morale of regime units and affiliated militias by providing them with combat air power. Russian airpower halted the advance of Syrian opposition forces, though early probing attacks organized with Syrian units made little headway. Most of the strikes focused on Syrian opposition, although there was an attempt at a punitive campaign against the Islamic State in November 2015 after the bombing of Russia's Metrojet flight 9268 out of Egypt. ²⁴

In the first several months, Russia had helped Syrian and Iranian forces recapture perhaps only two percent of the territory lost to the anti-Assad opposition. By February 2015, the campaign was showing results, placing the Syrian opposition on the back foot. Territorial control in Syria could quickly shift via agreements with local leaders, who would sign up with whoever was winning. Thus, large tracts of territory could flip quickly in a war with a relatively low density of forces. Operational planning took early adjustments. Initial enthusiasm dissipated as Russian elites saw that there would be no easy or relatively quick victory to be had in

²³ Aleksandr Lapin, "Сирийская Академия [The Syrian Academy]," Military-Industrial Courier, Number 16 (729) April 24, 2018.

²⁴ Anton Lavrov, "The Russian Air Campaign in Syria," CNA Occasional Paper series, June 2018, p. 5.

Syria.²⁵ Meanwhile, the Russian military discovered that there was no real Syrian Army left; they had, in effect, intervened too late. Syrian forces were completely exhausted and degraded, instead forcing Russian planners to rely on pockets of fighting power in the Desert Falcons, Desert Tigers, Hezbollah, and units belonging to individual commanders like Brigadier General Suhela.²⁶

The Russian approach was to launch offensive operations, pause, and then reinitiate combat operations to steadily take back territory. Tactical aviation was most useful when enemy forces were exposed in counterattack, but it was difficult working alongside the mixed groupings of local forces and pro-Iranian militias. They readily gave up terrain to counterattacks, and had little battlefield staying power much to the chagrin of the Russian advisors and officers planning operations. Hence, they began to terraform the local forces landscape, building the 5th Assault Corps out of disparate fighting formations and volunteers, plus hiring perhaps 2,000 mercenaries to fight as battalion tactical groups. Notably, the Russian approach to deploying advisors took complete staffs from regiments, brigades, and battalions, deploying them with Syrian counterparts. This method is quite different from, for example, the U.S. approach of forming a Security Force Assistance Brigade designed to assist partner forces.²⁷

²⁵ Anton Lavrov, "Russian in Syria: a military analysis, in Russia's return to the Middle East," Chaillot Paper No. 146, July 2018, p. 47-56.

²⁶ Aleksandr Dvornikov, "штабы для новых воин [Headquarters for new warriors]," Military-Industrial Courier, 28 (741), July 24, 2018.

²⁷ Analysis by Charles Bartles, and commentary on an article by Valery Gerasimov in OE Watch Commentary, Foreign Military Studies Office, https://community.apan.org/wg/tradoc-g2/fmso/w/o-e-watch-mobile-edition-v1/22715/general-gerasimov-on-the-syrian-campaign/.

Above all, Russian planners sought to keep their footprint small, retaining a mixed aviation regiment somewhere between 24-40 aircraft on average and about 16-40 helicopters. Total personnel likely did not exceed 5,000 and was probably less than 4,000 by 2018.²⁸ Notably, this number includes contractors and supporting personnel. An entire village of defense industry specialists was present to support Russian combat operations at Khmeimim. According to official figures, somewhere on the order of 1,200 representatives from 57 defense companies and defense research organizations were involved.²⁹

For Russia, the war in Syria consisted of a series of phased operations. Phase One focused on transport links and the attempt to push encroaching forces back in Latakia to create a buffer space around the Russian base of operations. Phase Two included the battle for Palmyra in 2016, but the campaign focus was the encirclement and siege of Aleppo in summer/fall 2016. Phase Three entailed consolidation over central regions in Syria, the second battle for Palmyra in 2017, but the operational objective was a drive east to seize Dayr al-Zawr from ISIS. Following the fall of Dayr al-Zawr, Russian forces supported drives to consolidate regime territorial control in the south in key cities or districts like Hama. Phase Four constitutes the steady capture of remaining territory in Idlib.

To deleverage, Moscow declared multiple withdrawals from Syria, including in March 2016, January 2017, and at the end of 2017. These were efforts to cast expeditionary operations in Syria into a series of one-year campaigns. Each one did follow a genuine rotation of forces whereby the Russian military sought to manage

 $^{28~\}mathrm{A}$ Russian registry of votes from those in Syria suggested the number was closer to 3,800 at the time.

²⁹ Aleksandr Tikhonov, "Операция в Сирии показала силы России [Operation in Syria showed Russia's strength]," *Red Star*, January 31, 2018.

and downsize their footprint. The most important of these was March 2016 when differences were visible between the Syrian and Iranian desire to drive towards Aleppo versus the Russian preference to push towards Dayr al-Zawr. Understanding that Syrian forces lacked the capability and mass to easily besiege Aleppo, Russia stepped back and settled in for the long haul in Syria, recognizing that the price of an "economy of force" mission meant that operational design would have to accommodate the political objectives of local allies.

Operational Performance of the VKS

The Russian Aerospace Forces (VKS) had no real combat experience, having been established in 2015, after the Russian Air Force previously flew a small number of sorties during the five-day war with Georgia in August 2008. Other air operations included limited support in 1999-2000 during the Second Chechen War. Since those wars, hundreds of new aircraft and helicopters had been procured, and modernized, as part of the State Armament Program launched in 2011. Yet, Russian crews had no actual combat experience in many of these aircraft. Much of the initial bombing was done by older Su-24M2 and Su-25SM aircraft, almost all with unguided area of effect munitions, with the exception of select systems on the Su-34, which was able to employ the KAB-500S satellite-guided bomb.³⁰

Russian fixed-wing aircraft lacked targeting pods to employ what few precision-guided munitions were available, and there were almost no precision munitions available initially because they had not bought them. Hence, only a tiny percentage of the weapons

³⁰ Michael Kofman and Matt Rojansky, "What Kind of Victory for Russia in Syria?," *Military Review*, January 2018, https://www.armyupress.army.mil/Portals/7/Army-Press-Online-Journal/documents/Rojansky-v2.pdf.

used in Syria could be considered precision-guided. Under the modernization program, the Aerospace Forces invested in a more accurate targeting system package called Gefest-SVP, which was supposed to provide much higher accuracy for existing unguided weapons. Forced to conduct strikes at altitudes above 4,000 meters to avoid ground fire and man portable air defenses, the Russian air force found that Gefest offered limited improvements in accuracy. Russia's Navy and Long Range Aviation also conducted combat strikes, a first for Russia's strategic bombers, employing long-range cruise missiles, such as Kalibr, Kh-555, and Kh-101. Meanwhile, sorties in Syria were supplemented by Tu-22M3 flights from Russia, which typically dropped 250kg or 500kg unguided FAB bombs from medium to high altitude.

However, Russian air crews demonstrated a high sortie rate, averaging perhaps 40-50 per day with peak times spiking to 100-130 as in early 2016.³¹ VKS used two crews per air frame both to sustain the intensity of operations, but also to give squadrons more experience. Compared to previous conflicts, the rate of mechanical failure was magnitudes lower, even among older Soviet models, and there were no friendly fire incidents of note. The main reasons for dramatically improved performance include better maintenance state of the platforms compared to the Russia-Georgia War in 2008. The platforms have undergone modernization and recapitalization as part of the the State Armament Program 2011-2017, thanks to a small village of defense industry technicians working to maintain the aircraft. Increased emphasis on training and exercises, noticeable beginning in 2013, undoubtedly played a positive role.

^{31 &}quot;Russian air group in Syria has destroyed more than 1,600 objects of terrorists in Syria in a month," *Interfax*, October 30, 2015, http://www.interfax.ru/russia/476571.

Drones were used heavily for the first time in Russian combat operations, flying more sorties than manned aviation, although most of these were light Russian Orlan-10 or Forpost (Israeli Searcher) drones. They provided intelligence and reconnaissance, battle damage assessment (BDA), and the ability to compensate for Russia's low availability of higher-end intelligence gathering assets, such as satellites or long endurance drone platforms. The integration of unmanned and manned aviation led to tactical adaptations, as Russian bombers struck targets individually, drones would provide real time BDA, which would allow the aircraft to repeat the strike within minutes if needed. That said, the absence of unmanned combat aerial vehicles (UCAV), and the relative backwardness of Russia's current UAV fleet, compounded the limitations of Russian air power when it came to the use of precision weaponry.

Although Russian Aerospace Forces were able to cut corridors for Syrian attacks, striking fixed targets and degrading enemy positions, they were ineffective in close air support or at hitting maneuver formations. Russian munitions were too big, too dumb, and ill-suited to the task of countering mobile forces. Air strikes were incredibly costly in civilian casualties, and evidence shows that targeting of critical civilian infrastructure, such as hospitals, in a number of cases was deliberate.³³ As the war progressed, Russian forces used more satellite- and laser-guided weapons of varying sizes, but much of this mission fell to rotary aviation, which could combine anti-tank missiles with the proper means of targeting. Helicopters proved essential, but their increased use came with a

³² Anton Lavrov, "The Russian Air Campaign in Syria," CNA Occasional Paper series, June 2018, p. 3.

³³ Nick Cumming-Bruce, "U.N. Panel Says Russia Bombed Syrian Civilian Targets, a War Crime," *New York Times*, March 2, 2020.

rise in casualties. Many of the few losses that Russia suffered in Syria were among rotary aviation. According to one count, Russian losses include 91 servicemen, of which 52 were combat-related, and another 39 lost aboard an An-32 transport aircraft that crashed. Equipment losses include 7 aircraft and 12 helicopters, of which only one aircraft was lost in combat compared to six helicopters.³⁴

Competitions in Risk Taking: U.S.-Russian Interactions in Syria

Several incidents took place between Russian and coalition forces that merit examination from the standpoint of compellence or deterrence. Russia sought to establish deescalation zones and zones for exclusive operations with the goal of securing an entire area for their own combat operations, thereby displacing the United States and coalition forces. In June 2016, Russian bombers struck with cluster munitions near the U.S. and British forces base at al-Tanf, on the Syrian-Iraqi border.³⁵ After being warned via the deconfliction line, Russian bombers struck again. Although mishaps happen in war, there was an observable pattern to Russian strikes in Syria near bases, or forces, they wished to displace. Al-Tanf was the clearest case, as Moscow had sought to wedge U.S. forces out of this position and had frequently voiced a desire to see the base gone.³⁶ There was an agreement to divide operations at the Euphrates River, but, in 2017, Russian aircraft bombed a position where coalition forces were supporting fighters from the

³⁴ Anton Lavrov, "Russian in Syria: a military analysis, in Russia's return to the Middle East," Chaillot Paper No.146, July 2018, p. 51.

^{35 &}quot;Russia Bombed Base Used By U.S. in Syria — Reports," *Moscow Times*, July 22, 2016, https://themoscowtimes.com/news/russia-bombed-base-used-by-us-in-syria-reports-54696.

³⁶ Barbara Starr, "Russia warns US of pending attack in Syrian area with US troops," *CNN*, September 7, 2018, https://www.cnn.com/2018/09/06/politics/syria-russia-attack-warning-pentagon/index.html.

Syrian Democratic Forces (SDF). U.S. forces signaled back that any repeat strikes carried the danger of direct conflict between the two sides' respective aircraft.

However, as Russian and Syrian forces approached Dayr al-Zawr, they sought modifications to conduct operations on the eastern side of the river. As Russian aircraft began flying east, there were numerous close calls and near misses. Although some were likely tactical errors, there was a discernible Russian pressure campaign against coalition forces, and a reasonably effective deterrence campaign on the part of the United States, based on messages backed by the credible threat of force. So called "dirt strikes" took place against U.S. partner forces in the SDF, in attempts to deter them from advancing in 2017. The clearest incident, and perhaps one of the more confusing episodes of the war, was an attack by two battalions of Wagner Group mercenaries, and local proxies on February 7, 2018 against a position held by SDF forces east of Dayr al-Zawr. The objective was a Conoco facility.

Syrian forces sought to reclaim valuable sources of revenue, namely the hydrocarbon extraction industries located in the eastern part of the country. Russian ground commanders knew the location of the facility and of U.S. forces present there. Yet, when U.S. forces warned the Russian commander via the deconfliction line, they disavowed any knowledge of forces operating in the area. U.S. air power was brought to bear, catching the mercenaries on unfavorable terrain, and killing upwards of 200 of the fighters out of a total of 500-600 men. It seemed to have been a raid gone bad and an opportunity for the United States to demonstrate its resolve in a case where there was no threat of escalation.

Although seemingly a coercive test by Moscow of U.S. resolve gone wrong, this is likely a self-validating interpretation of the Wagner

attack. A simpler explanation is that the entire episode was an operational fiasco, whereby the Syrian operational planning cell had no knowledge of the mercenaries' designs to seize a commercial facility on behalf of their Russian benefactor. Alternatively, Russian military intelligence (GRU) knew of the planned attack, but had no direct interest in it, and no authority to stop the operation. They missed every opportunity to take ownership of the attacking force and avoid a geopolitical embarrassment. That said, there was no real political fallout in Moscow or effect on public opinion from this attack, despite the high casualties. Russian decision making will remain a mystery in this regard, but the less likely scenario is that this was a sophisticated probing attack to see if the United States had the political will to use force against Russian mercenaries, especially because there was no prior Russian interest voiced regarding that facility.

Impact of Syria on Russian Armed Forces

The war in Syria will have tremendous influence on the future course of Russian military thought, modernization programs, and doctrinal adaptation to conduct expeditionary operations elsewhere. The conflict was used to bloody and harden the Russian military at a time when it was relatively fresh from a period of military reform (2008-2012), and in the midst of revising plans for the next State Armament Program (2018-2027) after large-scale modernization purchases began in 2011. There are also inklings of evolution in the Russian military's strategic culture, much of it at the tactical level, but Syria is likely to prove the most influential war for officers in the Russian armed forces in the post-Cold War period.

The impact on future developments in the Russian armed forces was considerable by the end of 2017. Chief of the Russian General

Staff Valery Gerasimov suggested that some 48,000 troops had rotated through Syria (a defense video suggested it was up to 63,000 in 2018).³⁷ In a discussion later in 2019, Russian Minister of Defense Sergey Shoygu claimed that 98% of transport aviation crews, 90% of operational-tactical and army aviation crews, and 60% of long-range aviation crews had participated in Syria.³⁸ Official statistics should always be taken with a grain of salt, but Russian forces have indeed used Syria to rotate a large percentage of crews from the aerospace forces, general officers, and senior commanders, deploying them in three month stints into the operation zone.

Syria is Russia's "good war," where the entire Russian military must now serve in order to progress in rank. All military district, combat arm, and branch commanders have served there along with a large percentage of division and brigade commanders. Putting aside statements from the top brass, these facts are reflected in interviews by army and lower unit commanders. For example, the commander of the 41st Combined Arms Army said in an interview that almost every single commander under him had served either in Syria or in other conflict regions (euphemism for Ukraine) and

³⁷ Viktor Baranets, "Начальник Генштаба Вооруженных сил России генерал армии Валерий Герасимов: «Мы переломили хребет ударным силам терроризма» [Chief of the General Staff, Valeriy Gerasimov: 'We Have Broken the Back of the Shock Troops of Terrorism']," *Komsomolskaya Pravda Online*, December 26, 2017, https://www.kp.ru/daily/26775/3808693; and "Russia says 63,000 troops have seen combat in Syria," *BBC*, August 23, 2018, https://www.bbc.com/news/world-middle-east-45284121.

³⁸ Chuck Bartles, translation in OE WATCH Syrian Combat Experience in the Aerospace Forces, original article with quotes Dmitriy Semenov, "Под руководством главы военного ведомства генерала армии Сергея Шойгу прошло очередное заседание Коллегии Минобороны России [The Latest Russian Ministry of Defense Collegium Session Took Place Under the Direction of Military Department Head General of the Army Sergey Shoygu]," Krasnaya Zvezda Online, June 21, 2019.

that their experience is regularly applied in training.³⁹ The conflict is creating an entire generation of Russian offices who have served in a war that they feel that they won and from which they see valuable tactical experience.

This ranges from learning to fight at night, a historic advantage of Western militaries, to important tactical-operational concepts, such as recon-strike and recon-fire loops, originally conceived during the late Soviet period. Recon-fires integrate sensors, means of intelligence, surveillance and reconnaissance (ISR) with communications, and fires into a functioning kill chain that can engage targets in real time at the tactical level. Fires are oriented towards tube artillery and MLRS, while recon-strike is designed to provide similar functionality at operational depths with precision-guided weapons, both ground- and air-based. The technology and exercises to deploy these concepts have long been in progress, but Syria was the first employment of a much more networked Russian military, where different services were expected to work together in executing fires and strike missions.

Some of the Russian lessons include the need to operate in "non-traditional circumstances," and make "non-standard decisions"—that is, to be more flexible at the tactical level. Furthermore, Russian forces need to handle asymmetric forms of warfare, including from undeclared adversaries that range from low-tech to highly advanced foes. Other senior commanders observed a relative flattening of the strategic, operational, and tactical levels of war, where operational objectives were being achieved by tactical combat formations. Understanding the complexity of working jointly with other governments and local units proved a major

³⁹ Taras Rydik, "Боевые приоритеты сибирских бригад [Combat priorities of Siberian brigades]," *Red Star*, May 15, 2019.

takeaway, while, on the other end of the spectrum, there is equal interest in evaluating the perceived efficacy of active informational and psychological pressure on enemy fighters to reduce their morale. Numerous commanders highlighted the utility of precision strikes against the adversary's economic potential, command and control infrastructure, and the importance of employing precision-guided weapons as part of a singular information environment. Others emphasized the role of information warfare and experience in modern urban combat that will require updating field manuals.⁴⁰ These lessons have subsequently been taken and applied in training, district exercises, and annual command-staff exercises like Vostok-2018.

One can see the impact of Syria simply by looking at the writing and statements of Gen. Gerasimov as a case study and lagging indicator of trends in Russian military thought. In a famous February 2013 article, he wrote, "Each war represents an isolated case, requiring an understanding of its own particular logic, its own uniqueness." Yet, by 2019, the Russian military appeared to be institutionalizing the lessons of Syria and developing a strategy of "limited actions" for defending its interests abroad in an expeditionary context. As the very same Gerasimov would come to explain, the main thrust of this doctrinal concept for expeditionary operations would be the "creation of self-sufficient combat groupings of forces on the basis of a formation belonging to one branch of the Russian armed forces (Ground Forces, Aerospace Forces, Navy), which would have high mobility and the ability to make the greatest contribution to the tasks set." His views appeared to evolve. While no single model may exist for such conflicts, the Russian military as an organism is very much an institutional enterprise. It was

⁴⁰ Timothy Thomas, "Russian Lessons Learned in Syria," MITRE, June 2020.

only a matter of time before the Syrian experience would become doctrinally assimilated into a template of sorts for how to deploy forces in future interventions.

Syria was a meeting ground for Russian and United States forces, offering invaluable intelligence-gathering opportunities. The Russian contingent employed various electronic warfare, radar, and signals intelligence and electronic intelligence platforms, including specialized aircraft for data collection. Russian forces collected immense amounts of data based on interactions with coalition aircraft, observing U.S. combat operations and collecting radar signatures and other information that will later be used to feed into air defense, electronic warfare, and other systems. Syria was not seen by the Russian military as a war against an irregular or ill-equipped opponent. Instead, a technologically superior adversary (the United States) was conducting daily operations in the combat zone, and Russian forces were interacting with that other element.

Being deployed in the midst of two U.S. cruise missile strikes certainly made an impression, and while official Russian military evaluations are not available, this certainly informed Russian thinking on aerospace defense. There are occasional references by generals who commanded in Syria, such as Colonel General Zhuravlev, on the importance of cruise missile defense in current Russian exercises.⁴¹ Retired commanders comment more freely on the need to focus air defense on low-flying cruise missiles, to integrate with electronic warfare, and to promote certain tactical platforms like Buk-M2/M3 over others in their ideas on how best to deal with a U.S. cruise missile strike akin to those conducted

⁴¹ Oleg Pochinok, "С учётом сирийского опыта [Taking the Syrian experience in account]," *Red Star*, May 27, 2019.

in Syria.⁴² Russian air defense systems couldn't do much about the strike since cruise missile defense is difficult and can only be executed at short ranges without external queuing and complex forms of cooperative engagement. However, the Russian Navy equally failed to be in position to intercept any of the cruise missiles fired, nor was the air component of much use although it could have attempted to degrade the strike. Undoubtedly, there would be lessons learned, and the subsequent Russian naval deployment ahead of a prospective offensive in Idlib (Fall 2018) suggested that they were adapting after failing to intercept any missiles during the 2017 U.S. strike in Syria.

Syria also offers useful inputs for Russian thinking on escalation management, including concepts such as deterrence via fear inducement/intimidation and deterrence through limited use of force. These experiments are implicitly present in cruise missile strikes conducted by Russian strategic bombers and the use of land-attack cruise missiles, surface-to-surface missiles, and other capabilities that fall within the "strategic deterrence forces" designation in the Russian military. Those capabilities offered little in operational utility relative to the cost of the weapons used and their limited availability. They were employed to manage escalation in Syria, dissuade external actors from increasing their involvement, and deter any potential attacks against Russian forces. In some cases, Russian bombers flew complex routes circling around Europe; in others, the Russian Navy would deploy to concentrate forces ahead of a potential offensive in Idlib.

⁴² For these arguments, see, Aleksandr Lyzan, "Tomahawks striking Syria. Valuable lessons." Aerospace Domain, No. 2, (91), June 2017; and Aleksandr Lyzan, "System of active protection for objects," Arsenal of the Fatherland, No. 5, (31), 2017.

The message was meant for the United States to illustrate the escalation potential in operations that could threaten Russian forces and to remind a watchful audience that capabilities employed in Syria could be used against their homelands. Simply put, Western nations did not have a monopoly on calibrated use of force, and Russia, too, could deploy standoff precision-guided weapons, though, unlike Western militaries, the Russian military has all the same missiles available with nuclear payloads.

From a capability standpoint, Syria helped settle an important debate during the years of the 2011-2020 State Armament Program, and the new one launched in 2018. It shifted the emphasis from platforms to capabilities and key enablers, precision-guided weapons, targeting systems, automated systems of command and control, electronic warfare, and space-based assets to enable intelligence collection. Since then, a host of contracts have been announced, procuring modernized versions of systems like Ka-52 and Mi-28N helicopters, along with other platforms, in part based on the experience of operating them in Syria. 43

Conclusion

The history of how the war in Syria ends, if it ends, remains unwritten. But the war has made a major impact on the Russian military at the tactical, operational, and strategic level. It should also do so on the United States, particularly at a time of perceived great power rivalry and transition in the international order. Russia demonstrated that the bar for entry in expeditionary operations is far lower than many previously perceived. Moreover, deliberate use of force was not only within Russia's capability, but Russian forces

⁴³ Anton Lavrov and Roman Kretsyl, "Защита для «Аллигаторов»: обновленные Ka-52M будут готовы к декабрю [Protection for "Alligators": updated Ka-52 will be ready by December]," *Izvestiya*, July 23, 2020.

were able to turn the tide for the Syrian regime with a limited application of military power. Similarly, the absence of organic sustainment or logistics proved a limiting factor, but only in terms of scalability for the conduct of operations. Russia's General Staff demonstrated that even though they could, they would not expand the size of the operation for reasons of political and military strategy.

Russian airpower was grossly underrated in Syria. From a tactical perspective, Western observers might argue with good reason. However, the tactical level of war has rarely been where Russian forces shine, especially in the case of air power, which traditionally had been relegated to a supporting role within the Russian military. Russia remains a ground force-dominated military, where air power is integrated with air and missile defense forces. Creativity and flexibility tend to concentrate at the operational level of war and in the area of military strategy. Nonetheless, the Russian military demonstrated a qualitative evolution over the course of its campaign in Syria. The force currently deployed there is characteristically different from the military that originally intervened in September 2015. It has been changed by the experience, acquired new capabilities, and continues to evolve.

From the Russian perspective, its military prevented the United States from achieving a foreign policy objective in the Middle East, drawing a red line on regime change when it came to Syria. In terms of Russian political aims, the military campaign proved a qualified success in achieving the desired political ends. Moscow did indeed destroy the Syrian opposition as a viable military force, and thereby coerce external actors to change their foreign policy in Syria, including the United States. Despite recent skirmishes with Turkey over Idlib, the Syrian regime appears to have largely won the conflict. Yet, Moscow was unable to parlay the intervention

into broader goals related to core interests in Europe. That is, Russia could not find a way to change its bilateral relationship with the United States in a positive manner as the result of this war or leverage the intervention for political gains with European nations.

However, Russian elites do perceive that the war has substantially upgraded the country's position in international politics and its own perception of its position, gaining a higher degree of confidence.⁴⁴ The war was a demonstration that Russia could successfully use force outside of its own region in defense of its interests and leverage that success to attain new interlocutors or potential partners.

⁴⁴ Oleg Falichev, "военно-промышленный курьер [A Syria of Lessons]," *Military-Industrial Courier*, No. 31, August 17, 2016.

This page was left blank for printing purposes

Chapter 4

THE RUSSIAN GROUND-BASED CONTINGENT IN SYRIA

Lester Grau & Charles Bartles

The views expressed are those of the authors and do not necessarily represent the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

The Syrian Civil War produces a new set of problems involving extended urban combat, intense fights for key resources (oil fields, water, and lines of communication and supply), conventional combat among irregular units, ethnic and religious cleansing, a large number of foreign combatants with varying motivations, and contending outside powers fighting a proxy engagement. The Russian Federation is not an expeditionary power, and its entry into Syria on the side of the regime has strained its logistical resources.

From the beginning of the Syrian campaign, it was clear that Russian involvement was initially envisaged to be through the Russian Aerospace Forces (VKS). Although the Syrian government was on the verge of collapse, and the Syrian military was on its hind legs and a shell of its former self, there was a sufficient number of Syrian ground units that were mission capable. With this understanding, the VKS was to be the principal supplier of Russian combat power aimed at disruption of the command

and control and leadership of the groups fighting the Bashar al-Assad regime through the provision of reconnaissance and target destruction. In particular, Russia's priority was the destruction of the Western-backed, moderate opposition groups, since it saw these as the greatest immediate threat to Assad. The Islamic State (ISIS) and other Sunni extremist groups were targeted, but sat lower on Russia's priority list.

As with other such operations, «mission creep" soon resulted in Russia's involvement quickly expanding past the provision of aerospace support to planning, and, in some cases, conducting ground operations. General Valery Gerasimov, Chief of the General Staff of the Armed Forces of Russia, confirmed this expansion of Russian involvement in a December 2017 interview.¹ Russia's ground-based contingent in the Syrian campaign involves a diverse set of forces and capabilities. Some of the key features of this expanded ground force mission included a Russian model of military advisors, integrated and modernized fires, mobility and countermobility operations, a featured role for military police, use of coastal defense, spetznaz, and private military company (PMC) forces. Russian ground forces have benefitted from the opportunity to provide combat experience to a large number of professional soldiers, conduct battlefield testing of new systems and observe the impact of different terrain on tactics. The forces opposing the Syrian government provide a different opponent than the "enemy" encountered in normal Russian peacetime training and much of the "Syrian experience" is discussed and disected in Russian

¹ Viktor Baranets, "Начальник Генштаба Вооруженных сил России генерал армии Валерий Герасимов: «Мы переломили хребет ударным силам терроризма» [Chief of the General Staff, Valeriy Gerasimov: 'We Have Broken the Back of the Shock Troops of Terrorism']," *Komsomolskaya Pravda*, December 26, 2017, https://www.kp.ru/daily/26775/3808693/.

professional military journals.

The Russian Ground Forces

The Russian Ground Forces effort in Syria includes an advisory effort; artillery support, reconnaissance, integration and training; engineer mobility and countermobility support and training; national and international military police support and hands-on actions; coastal defense forces support from coastal artillery and naval infantry; the controversial employment of private military companies; and special operations forces.

Advisors

Perhaps, the way that the ground-based contingent of Russian forces has had the most influence on the outcome of the Syrian conflict is through the provision of military advisors. Russian military advisors have been a key factor in saving Assad's regime from near collapse and enabling it to regain control of much of the country. The Russians take a different approach from other countries and coalitions. Instead of forming specialized units to train, advise, and assist local forces, the Russians take complete staffs from divisions/regiments, brigades, and battalions and place them with their Syrian counterparts. These complete staffs are likely rotated back to their units in Russia intact, in order to give them battle-tested staffs accustomed to working together. In 2017, General Gerasimov stated that over 48,000 Russian Ministry of Defense personnel had served in Syria: many Ground Forces commanders and staff officers, and including some from the Naval Infantry and Airborne forces, have received much valued combat

experience.2

Fires

Aside from the provision of military advisors to coordinate the tactical and operational levels of war, probably the most significant way that the ground-based contingent has influenced the outcome of the conflict is through the provision and coordination of fires and targeting data. Although Russian artillery is playing a major role, the gun crews are primarily Syrian. The most high-profile asset of growing importance in finding targets for these gun crews is the unmanned aerial vehicle (UAV). The Russians introduced Orlan and several other UAV reconnaissance systems that have proven their value. The Orlan has been used to detect groups of enemy combatants before they attack Russian and Syrian columns. Experience, going back to the Soviet war in Afghanistan, has shown the Russians that it is desirable for the formation staff and each artillery battalion to have aerial reconnaissance ahead and on the flanks of column movement with the objective of detecting ambushes and concentrations of combatants as well as destroying them before the forward detachment (movement support detachment) approaches them.3 In Syria, UAVs are easier to

² Viktor Baranets, "Начальник Генштаба Вооруженных сил России генерал армии Валерий Герасимов: «Мы переломили хребет ударным силам терроризма» [Chief of the General Staff, Valeriy Gerasimov: 'We Have Broken the Back of the Shock Troops of Terrorism']," Komsomolskaya Pravda, December 26, 2017, https://www.kp.ru/daily/26775/3808693/.

³ In providing close support to columns from Kunduz to Faizabad (a route 370 kilometers long) in Afghanistan in 1986, helicopters were used for active reconnaissance and coordinated closely with the artillery staff of the 201st Motorized Rifle Division. Such coordination permitted instantaneous reaction to detected guerrilla groups advancing toward troops' main movement route. V. Litvinenko, "Организация боевого применения подразделений воздушной разведки в интересах Ракетных войск и артиллерии [The Union of Earth and Air: Огganization of the Combat Use of Aerial Reconnaissance Subunits Supporting Missile Troops and Artillery]," Armeyskiy Sbornik, February 2018, p. 46.

deploy, do not require a trained pilot physically in the vehicle, can linger much longer than helicopters, are harder to detect and shoot down, and can provide accurate targeting information for near-real-time destruction of targets. The Russians have not weaponized their UAVs, preferring to capitalize on their reconnaissance value and leave the destruction mission to the artillery.⁴

One of the Russians' first tasks when entering the conflict in fall 2015 was establishing a combined command and control system in order to integrate Russian and Syrian fires. This development has reportedly enabled Russian and Syrian troops to respond rapidly to emerging threats, decrease incidents of fratricide, and better use precision fires. In addition to the artillery assets of the Syrian Arab Army, the Russian Federation has reportedly used a variety of artillery and missile systems. Russia has used many of its tube artillery systems, including the 152-mm Msta-B and 122-mm D-30 howitzers. The Russians have also used the 120mm Grad/Tornado-G, 220mm Uragan, and 300mm Smerch multiple launch rocket systems (MLRS), which can blanket about 10, 72, and 166 acres, respectively. The TOS-1A Solntsepyok heavy flamethrower system, in the Russian Nuclear Biological and Chemical Troops, has reportedly been quite effective. Although considered a "flamethrower" by the Russians, the Solntsepyok (Blazing Sun) is essentially a short-range (6km) MLRS system

⁴ V. Litvinenko, "Организация боевого применения подразделений воздушной разведки в интересах Ракетных войск и артиллерии [The Union of Earth and Air: Organization of the Combat Use of Aerial Reconnaissance Subunits Supporting Missile Troops and Artillery]," Armeyskiy Sbornik, February 2018, p. 46.

with thermobaric rockets mounted on a T-72 chassis.5

Perhaps, Russia's most interesting use of fires in Syria is its employment of operational-tactical fires assets. The Iskander Operational-Tactical Rocket Complex (OTRK) can fire two short-range ballistic missiles (SS-26 STONE), or two ground-launched cruise missiles (SSC-7), and is capable of hitting targets at ranges of up to 500 kilometers. The Iskander was designed to target enemy MLRS, missile and air defense system, airfields, command posts, and critical infrastructure. In Syria, the Iskander has been used against a number of small point targets to include ISIS command and control posts, arms and ammunition dumps, and communications centers.

Mobility and Countermobility

Russian engineer troops have been widely employed in Syria. Their biggest role has been to provide and gain exceptional experience in a broad range of mobility and countermobility tasks. In Syria, Russian engineers have planned and improved installation defenses, provided route reconnaissance, supervised road construction, provided water purification, and supported Syrian Army combat. The new PMM-2M tracked, amphibious bridging ferry is being introduced into Russian engineer battalions. It can carry 42.5 tons and be linked with other vehicles to form a bridge. It had a

⁵ Vladimir Chernov, "Боги живут не на олимпе: Ракетчики и артиллеристы осваивают новую боевую технику [The Gods Don't Reside on Olympus: Missile Operators and Artillerymen Are Mastering New Combat Hardware]," Na Strazhe Rodiny, November 23, 2018.

⁶ Ivan Petrov, "Сирийский полигон: как война помогла обкатать российское оружие Юрий Борисов рассказал о применении российской военной техники в Сирии [Syrian Proving Ground: How the War Helped to Break in Russian Weapons]," Gazeta.ru, December 17, 2018, https://rg.ru/2018/12/17/kakoe-oruzhie-i-tehnika-proiavili-sebia-v-sirii.html.

thorough, successful combat testing in Syria. Russian engineers, while under fire, constructed a 210 meter-long PMM-2M bridge across the Euphrates River in support of a Syrian Army advance in September 2017. The bridge remained in use until February 2018 when it was dismantled by flooding.⁷

Russia is a member of the United Nations Mine Action Service (UNMAS). According to the 2018 Land Mine and Cluster Munitions Monitor, Russia deployed several hundred military explosive and ordnance specialists from the Russian Ministry of Defense's International Mine Action Center supported by mine detection dog teams and Uran-6 mine detection robots. Deployments included 200 explosive and ordnance specialists sent to Aleppo governorate, 150 to Palmyra, and 175 who were due to be sent to Dayr-az-Zawr governorate. Russian explosive and ordnance specialists trained Syrian army engineers at Khmeimim Airbase and at training centers established in 2017 in Aleppo and Homs. By the start of January 2018, Russian armed forces reported that they had trained 900 Syrian engineers.8 With this effort, the Russian military reportedly cleared mines from more than 30km² in Syria between December 2016 and February 2017. Army engineers reported clearing some 20km² in Palmyra in 2016 and 2017, removing more than 24,000 mines and duds. A Russian Defense Ministry spokesman stated that Russian explosive and ordnance specialists had cleared an area of 3.6km² around Aleppo, along with 75 kilometers of road, destroying 1,000 mines

^{7 &}quot;Russia has deployed PMM-2M amphibious bridging ferry in Syria," Army Recognition Group, https://www.armyrecognition.com/september_2017_glob-al_defense_security_news_industry/russia_has_deployed_pmm-2m_amphibious_bridging_ferry_in_syria.html, September 27, 2017. Youtube has some good footage of the bridging at https://www.youtube.com/watch?v=xhkBYW1syc8. 8 Mine and Cluster Munitions Monitor, dated November 18, 2018, http://www.the-monitor.org/en-gb/reports/2019/syria/mine-action.aspx.

and duds, all in the span of one week. Russian and Syrian army engineers were also active around Damascus and its suburbs, where opposition-held areas became the target of a major Syrian-Russian offensive in early 2018.9 Overall, Russian engineers have received an exceptional scope of experience in this battlefield task.

Military Police

Arguably, Russian Military Police have been the "face" of the Russian presence in Syria, and the General Staff has used the deployment to advance operational experience and development. Russian Military Police duties in Syria include tasks that would be considered standard for these forces: providing base security, manning checkpoints and observation posts, ensuring passage to/from de-escalation and de-confliction zones, conducting security patrols, and guarding command posts. Military police traffic control activities include enforcing traffic regulations, issuing registration documents and state license plates, conducting mechanical inspections of military transport vehicles, and providing convoy security.¹⁰

Additionally, Russian military policemen in battalion and small unit-levels are monitoring ceasefire agreements and conducting humanitarian activities; they also are the main Russian contingents for the Russian version of peace support operations. These aspects of stability operations in particular have been well publicized by the Russian Federation. Their support to mine-clearing activities, escorting United Nations humanitarian convoys, and

⁹ Mine and Cluster Munitions Monitor.

¹⁰ Andrey Ontikov and Aleksey Zabrodin, "Военная полиция РФ отправится в зону деэскалации в Идлибе [Russian Federation Military Police Will Go to Deescalation Zone in Idlib]," *Izvestiya*, September 11, 2017, https://iz.ru/642260/andrei-ontikov/rossiiskaia-voennaia-politciia-otpravit-sia-v-zonu-deeskalatcii-v-idlibe.

protecting Russian medical units and mobile hospitals when they are rendering medical assistance to the civilian population are often covered by Russian and international media. But the most important role of the Russian military police in Syria is that of expeditionary peacekeeper. According to Lieutenant General Vladimir Ivanovsky, Chief of the Military Police Main Directorate of the Russian General Staff, about 60% of Russia's Military Police personnel have served in Syria.¹¹

In order to provide sufficient numbers of military policemen to support the Syrian campaign, the Russian Federation created two new Military Police battalions, with approximately 600 personnel each. An interesting aspect of these new Military Police battalions is where they are located. These battalions have been formed from Russia's predominantly Muslim regions and the same areas of Russia from which many ISIS fighters have emerged. This situation has been attributed to a few terrorism-related incidents in the Caucasus, in protest of Russian actions against ISIS. The Russian use of co-ethnics in these sorts of missions is not new. During the Tajik civil war and other conflicts in Russia and its near abroad, Russian-led local coalitions included belligerents in Russian peacekeeping and stability operations. With respect to

^{11 &}quot;60% of Russian military police officers have Syria service record," *Interfax*, February 18, 2019.

¹² The structure of these military battalions can vary, but at a minimum there are three companies (up to 100 servicemen each) plus operational and logistic-support elements. Vladimir Mukhin, "Москва усиливает военно-полицейскую группировку в Сирии [Moscow Is Beefing up the Military Police Contingent in Syria]," *Nezavisimaya Gazeta*, January 13, 2019, http://www.ng.ru/world/2019-01-13/2_7480_syria.html.

¹³ Yelena Milashina, "Нападение на Грозный. Что это было? [Attack on Groznyy. What Was It?]" Novaya Gazeta, December 20, 2016, https://www.novayagazeta.ru/articles/2016/12/20/70958-napadenie-na-groznyy-chto-eto-bylo. In a few cases, both fighters and military policeman have been drawn from the same extended families.

location, the fact that military service in the Muslim-populated Caucasus is highly sought after also likely plays a role. In fact, it is so prestigious that conscription quotas are usually exceeded, and some young men are turned away from compulsory military service. In addition, Head of the Chechen Republic Ramzan Kadyrov has stated: "Tatars, Russians, Chechens – together, they protect the Muslims there. They prevent different denominations from setting at variance among themselves."14 Kadyrov's statement implies that both Christians and Muslims from Russia are protecting Syrian Muslims and that these protectors can dissuade some of the ongoing sectarian violence in the country. Considering these battalions are already on their fourth rotation in Syria, it seems clear that Russia is deploying these predominately Muslim military police battalions to alleviate religious concerns in Syria and provide a suitable outlet for the martial cultures found in the Caucasus.15

Coastal Defense Troops

The Russian Navy's ground combat element in Syria is the Coastal Defense Troops, which consist of the Coastal Artillery Troops and Russian Naval Infantry. The Coastal Artillery Troops' primary purpose in Syria appears to be deterring Western interference from the sea, but in November 2016, a K-300P Bastion-P coastal defense missile system was used to engage an unspecified ground

^{14 &}quot;Kadyrov explains why he sends Chechens to Syria" *Crime Russia*, February 11, 2017, https://en.crimerussia.com/gover/kadyrov-explained-why-he-sends-chechens-to-syria/.

¹⁵ Vladimir Mukhin, "Москва усиливает военно-полицейскую группировку в Сирии [Moscow Is Beefing up the Military-Police Contingent in Syria]," *Nezavisimaya Gazeta*, January 13, 2019, http://www.ng.ru/world/2019-01-13/2_7480_syria.html.

target.¹⁶ (The Bastion-P has an advertised capability to engage "limited mobility" ground targets, such as command and control facilities, radar stations, airfields, helicopter landing areas, and artillery batteries.) 17

The Naval Infantry has been the most prominent component of the Coastal Defense Troops used in Syria and has been on the ground the longest of any of the ground-based contingent. They were first responsible for maintaining security at the Tartus Naval Base, and also later at the Khmeimim Airbase. 18 The Naval Infantry is hindered by the lack of sufficient modern Large Landing Ships (BDKs), much like its cousin the Russian Airborne Troops (VDV) are hindered by the lack of sufficient modern Transport Aviation (VTA). Although the Naval Infantry lacks large-scale offensive capabilities, Russia is augmenting other Naval Infantry capabilities by increasing the size and standardizing the composition of Russian Naval Infantry Brigades. Generally in the Naval Infantry, there will be six maneuver battalions in each brigade (three naval infantry battalions, one assault battalion, one tank battalion, and one reconnaissance battalion), a sniper company, and a UAV company. Although the Russian Naval Infantry currently lacks the necessary naval vessels and landing craft to conduct largescale forced entry amphibious operations, these reforms were

16 Sergey Ptichkin, "Бастионы" на всех флотах ['Bastions' in All of the Fleets]," Rossiyskaya Gazeta, April 26, 2017, https://rg.ru/2017/04/26/reg-szfo/ raketnyj-kompleks-bastion-predstaviat-zhiteliam-kamchatki-9-maia.html.

¹⁷ Aleksey Ramm, Aleksey Kozacheno, and Bogdan Stepovoy, "Отряд не заметят: Арктику защитят маневренные группы с «Бастионами» [Detachment Will Remain Unseen: Arctic Will Be Defended by Maneuver Elements with 'Bastions']," Izvestiya, August 12, 2019, https://iz.ru/908520/ aleksei-ramm-aleksei-kozachenko-bogdan-stepovoi/otriad-ne-zametiat-arktiku-zashchitiat-manevrennye-gruppy-s-bastionami.

¹⁸ Yaroslav Vyatkin, "Сила убеждения [Power of Persuasion]," Vzglyad, September 24, 2014, http://www.vz.ru/politics/2013/9/24/651799.html.

specifically made to enhance its capability to not only conduct a coastal defense against a well-organized amphibious or airborne assault, but also to support and conduct peacekeeping operations, as the Naval Infantry is envisioned to work closely with Russian Military Police units during these endeavors.¹⁹

Private Military Companies (PMCs)

Since the collapse of the Soviet Union, the Russian Federation has developed a burgeoning private security sector, by some estimates employing between 800,000-1,200,000 personnel, plus an estimated 200,000 people working in the industry without proper documentation.²⁰ Within the private security sector, there are elements and individuals associated with Private Security Companies (PSC) and Private Military Companies (PMC). Another related force are state-sponsored militias, such as Cossacks. Private security services cover a wide swath of activities, including personal protection, intelligence, counterintelligence, and facility protection. Although private security forces are common and legal in today's Russia, they have only been used for domestic purposes or for safeguarding Russian industrial interests abroad. Russian private security forces have traditionally not been found on the

19 Aleksandr Anatolyevich Khramchikhin, "Российская морская пехота сегодня: Возможности и задачи черных беретов [Russian Naval Infantry Today: Capabilities and Missions of the Black Berets]," Nezavisimaya Gazeta, December 6, 2019, http://nvo.ng.ru/forces/2019-12-06/2_1073_marines.html; and Aleksey Ramm, Aleksey Kozachenko, and Bogdan Stepovoy, "Выдадут броню: бригады морпехов усилят танковыми подразделениями [They Will Issue Armor: They Will Reinforce Naval Infantry Brigades with Tank Subunits]," Izvestiya, October 22, 2019, https://iz.ru/923772/aleksei-ramm-aleksei-kozachenko-bogdan-stepovoi/vydadut-broniu-brigady-morpekhov-usiliat-tankovymi-podrazdeleniiami.

20 Russia's gas conglomerate Gazprom's security service alone employs 20,000. Cindy Hurst, "The Militarization of Gazprom," *Military Review*, September-October 2010, https://apps.dtic.mil/dtic/tr/fulltext/u2/a529212.pdf.

battlefield. When private contractors are encountered in the Russian military, they are usually found in technical support roles and hired by a state-controlled company. Cossacks have functioned as alternative police and even as irregular fighters. Whenever they are present, they are usually visible to media and other observers. However, these PSC and Cossack elements and individuals are not apparent in service to Russia in the Syrian conflict.²¹

With regard to PMCs, the picture is different. In 2013, the first reports of Russian citizens serving in PMCs in Syria began to surface.²² Instead of providing simple physical security, Russian PMCs are actively engaged in combat by providing motorized rifle, tank, and artillery units. Perhaps, the most famous Russian PMC is the Wagner PMC. The Wagner PMC is the informal name of the private military company led by Dmitriy Utkin, a retired lieutenant colonel and former commander of a unit in the 2nd GRU (Main Intelligence Directorate) Spetsnaz Brigade. The Wagner PMC first gained notoriety in 2014 during the height of fighting in the Donbas, where it was actively engaged in fighting with the separatists against the Ukrainian government. Reports of Wagner being involved in the Syria campaign started to surface in October 2015. Since then, Wagner has been involved in the liberation of Palmyra from the Islamic State and the capture of Aleppo from a coalition of opposition groups. At one point, Wagner was estimated to employ 6,000 personnel, with approximately

²¹ Sergey Sukhankin, "War, Business and Ideology: How Russian Private Military Contractors Pursue Moscow's Interests," Jamestown Foundation, March 20, 2020, https://jamestown.org/program/war-business-and-ideology-how-russian-private-military-contractors-pursue-moscows-interests/.

²² James Bingham, "Private Companies Engage in Russia's Non-Linear Warfare," Jane's Military and Security Assessments Intelligence Center, 2018, https://www.janes.com/images/assets/018/78018/Private_companies_engage_in Russias_non-linear_warfare.pdf.

2,500 of them currently working in Syria.²³

According to Russian sources reporting from Syria, the Wagner PMC forces in Syria are organized into four reconnaissance and assault brigades, with each brigade having three companies, and each company having up to 100 personnel. In addition, there is an artillery battalion (three batteries, each with approximately 100 personnel); a tank company (50 personnel in three platoons, each with four tanks); a sabotage and reconnaissance company (about 150 personnel); a signal company (about 100 personnel); and staff and support (about 200 personnel). Although there is no official relationship between the Russian government and Wagner PMC, it is obvious that Wagner is at least supported, and likely partially funded, by the Russian government.²⁴ Wagner reportedly trains its personnel at the 10th Spetsnaz Brigade's military training ranges and other facilities. The personnel are equipped from government depots and transported to Syria on Russian Navy vessels and military aircraft. Russia's nonofficial recognition of Wagner's employees' activities have even gone to the extent of presenting

²³ Denis Korotkov, "Список Вагнера [The Wagner List]," Fontanka.ru, August 21, 2017, http://www.fontanka.ru/2017/08/18/075/.

²⁴ Irina Malkova, Anton Bayev, and Anastasiya Yakoreva, "Частная армия для президента: история самого деликатного поручения Евгения Пригожина [Private Army for a President: History of Yevgeniy Prigozhin's Most Deliate Mission],"The Bell, January 29, 2019, https://thebell.io/41889-2/.

PMC employees with government medals and awards.²⁵

Legislation fully legalizing PMC activities has not been forthcoming in Russia. Unlike the state-sponsored Cossacks, there is little appetite in Russian legislation to significantly loosen regulations regarding PMCs. Regardless of their current and future status, PMCs give the Russian government a modicum of plausible deniability about their activities. It is notable after the February 7, 2018 attack on a Conoco refinery in Syria, where at some 200 Russian PMC employees were killed by U.S. airpower, there was no official denouncement from Moscow, a testament to how valued this plausible deniability may be to Russia. ²⁶

Special Operations Forces

Russia's use of Special Operations Forces (SOF) in Syria is mostly unseen, but comes from a rich pedigree. The Soviets started experimenting with elite reconnaissance and sabotage units in the Spanish Civil War, and employed such units in the Soviet-Finnish War, and in Romania, Yugoslavia, and Belarus during the Second World War. But modern usage of the term "spetsnaz" started in the

25 Irek Murtazin, "Сирийская кампания загадочной «ЧВК Вагнера»: численный состав и вооружение, ключевые операции и конфликт в верхушке Минобороны [Syrian Campaign of Mysterious 'Wagner Private Military Company': Numerical Strength and Weaponry and Key Operations and Conflict in Defense Ministry Top Echelons]," Novaya Gazeta, October 9, 2017, https://www.novayagazeta.ru/articles/2017/10/09/74125-ih-prosto-net; Denis Korotkov, "Без «Щита»: Служба и смерть в еще одной частной военной компании, которой в России официально нет [Without a 'Shield': Serving and Dying in Yet Another Private Military Company Which Allegedly Does Not Exist in Russia]," Novaya Gazeta, July 7, 2019, https://novayagazeta. ru/articles/2019/07/28/81406-bez-schita; and Yevgeniy Berg interview with Denis Korotkov, "People Think It Doesn't Affect Them. But It Affects Everyone," Meduza, August 30, 2017, https://meduza.io/en/feature/2017/08/30/ people-think-it-doesn-t-affect-them-but-it-affects-everyone. 26 Pavel Felgengauer, "Разгром [Rout]," Novaya Gazeta, February 20, 2018, https://novayagazeta.ru/articles/2018/02/20/75571-razgrom.

1950s. The development of modern spetsnaz was the direct result of the U.S. introduction of tactical nuclear weapons systems into the European theater. Since conventional Soviet forces were ill equipped to handle the threat of tactical nuclear weapons, spetsnaz reconnaissance units were formed to identify and neutralize such targets quickly in the enemy rear. By the time of the collapse of the Soviet Union, the term "spetsnaz" when used in reference to the Soviet Union's elite combat units usually referred to the GRU's Spetsnaz Brigades and Combat Swimmer units (roughly the GRU's naval reconnaissance force with a saboteur/anti-saboteur capability), the Russian Airborne's 45th Spetsnaz Regiment (later brigade), or select elite anti-terrorist units such as the FSB's Alpha and Vympel.

In a more general context, the term "spetsnaz" also found use while referencing special purpose units such as certain signals intelligence, experimental, or other atypical sorts of troop formations. (In these instances perhaps a better translation would be "special troops" instead of "spetsnaz" to differentiate.) Various armed units subordinated to Russia's numerous government agencies also began to borrow the word spetsnaz for their own titles so as to sound more important, even though in many cases these units were just glorified guard and protection squads, to include some highly trained and well-armed police units, the Russian equivalent of America's SWAT teams.

In all, Russia has an estimated 50,000 personnel in "spetsnaz" designated units. Perhaps the biggest difference between American/Western Special Operations Forces (SOF) and Russian spetsnaz, referring specifically to personnel serving in the GRU Spetsnaz Brigades, is the perception of these forces as elites. In the United States, SOF have the highest prestige. This is in marked

contrast to the Russian system, where the true elite "trigger pullers" are members of the Russian Airborne (VDV). In general, this difference between American SOF and Russian spetsnaz can be attributed to very different origin stories, namely American SOF growing out of the American Vietnam experience as direct action forces, training guerillas, and conducting counterinsurgency versus the Russian usage of GRU spetsnaz as primarily intelligence, surveillance, and reconnaissance assets.²⁷

Due to the sensitive nature of special operations, there has obviously been little mention of their Syria operations in Russian mass media. However, what few accounts that have surfaced generally conform to the above description. The primary activities of these special operators in Syria appear to be that of deep reconnaissance and forward air control, for the calling in of artillery, missile, and air strikes. Some of these special operators are functioning like their Western brethren and conducting direct action missions. For instance, several have been recognized with valor awards, which on one occasion Russian Defense Minister Sergey Shoygu presented.²⁸ Noted scholar of the Russian military Timothy Thomas gives the following take on the use of Russian SOF in Syria:

²⁷ Lester W. Grau and Charles K. Bartles, "The Russian Way of War: Force Structure, Tactics, and the Modernization of the Russian Ground Forces," *Mentor Military*, 2018, pp. 272-284.

²⁸ Aleksey Ramm, "Мы здесь в командировке: А они уже шесть лет воюют [We Are Here on a TDY: But They Have Already Been Fighting for Six Years]," *Izvestiya*, October 24, 2017, https://iz.ru/648658/aleksei-ramm/my-zdes-v-komandirovke-oni-uzhe-shest-let-voiuiut; and Roman Kretsul and Aleksey Ramm, "Боевые преграды: как сирийская операция изменила разведку [Combat Obstacles: How the Syrian Campaign Changed Reconnaissance]," *Izvestiya*, October 24, 2018, https://iz.ru/803382/roman-kretcul-aleksei-ramm/boevye-pregrady-kak-siriiskaia-operatciia-izmenila-razvedku.

Russian spetnaz has focused its efforts in Syria's mountains and deserts while the Russian motorized rifle forces have focused on urban areas. While much of Russia's military thought, training and research and development has focused on preparation for a major conventional under nuclear-threatened maneuver conditions, Russia must also prepare for regional and local conflicts. Syria provides the opportunity to develop the Russian military for those 'other' conflicts. The Russian military has always been concerned with two threats—a threat from the West and a threat from the south. The Russian military has also had to help deal with the threat of internal insurrection and rebellion. The Syrian experience has prompted Russian forces to be more flexible and prepared for different types of armed conflicts in contrast to their preparation for conflict with NATO. The battlefield changes quickly and integrates numerous forces. In Syria, forces have included Russian, Iranian, Turkish, Hezbollah, Syrian, US, and others, including Russian private military companies.

In the past Spetsnaz forces were used for longrange reconnaissance missions and for sabotage or assassinations. These missions remain, but these operations are adapting. In Syria, Spetsnaz forces reportedly operated without going past the frontline due to new reconnaissance and weapon systems. Spetsnaz actions do not follow a model or template, but are planned for the specific situation. Transport vehicles, such as the Tigr armored motor vehicle, transport a team of four to the frontline and conduct limited actions using heavy weaponry, antitank guided missiles, and automatic grenade launchers. Using several Tigr or all-terrain vehicles simultaneously can soften up a frontline and stress an enemy force. Team members usually have a reconnaissance specialist, a forward observer, and a sniper pair. Some members have foreign language skills. The Syrian Desert makes ambush tactics difficult to conduct but increases the value of UAVs, which can fly deep into an enemy's rear area, accelerating detection time and the guidance of artillery and aviation strikes.29

The February 1, 2020 high-profile deaths of four Russian snipers in Syria also sheds some light on Russian SOF activities, and the Russian media has reported that the FSB Spetsnaz Center (TsSN FSB) has personnel in Syria on a rotational basis, actively engaged in combat operations. At least two, 2-man sniper teams were in an advance party to reconnoiter a potential meeting area for Turkish and Syrian military leaders on Turkish-Syrian Border, near Kasab. Major Ruslan Gimadiyev and Captain Dmitriy Minov from the TsSN "K" Directorate (unit focusing on the Caucasus) and Major Bulat Akhmatyanov and Lieutenant Vsevolod Trofimov from

²⁹ Timothy Thomas, "Russian Combat Capabilities for 2020: Three Developments to Track," occasional paper of the Mitre Corporation, December 2019, https://www.armyupress.army.mil/Portals/7/Legacy-Articles/documents/Thomas-Russian-Combat-Capabilities.pdf.

the TsSN "S" Directorate (counterterrorism unit) were killed in an ambush while returning from the mission. This was at least the second short-term rotation for the two sniper teams, as the Russian media mentioned that the teams had provided security for President Vladimir Putin's January 2020 visit to Syria. Anecdotal information gleaned regarding Russian Special Operations Forces and assets in the various security services and ministries indicates that they are being rotated through Syria for the same reasons the conventional forces are: to support Russian national interests in the region and gain valuable combat experience.³⁰

Conclusion

The Russian ground-based contingent in Syria has accomplished several goals. First, it sharpened the regional knowledge and expertise in the Russian military, especially the officer corps. Russian officers gained valuable experience serving with local forces as advisers, artillery planners, on-site engineers, logisticians, communicators, trainers, and special operations forces. Second, Syria provides combat experience to Russian military professionals. Russia's rotation of entire battalion and higher staffs into Syria provides an excellent way to expand their proficiency and test ways to improve their military decision making, intelligence analysis, terrain appreciation, and ability to work with allies and private military companies. Alongside the Ground Forces, Airborne and Naval Infantry elites and spetsnaz forces develop their tactical skills and improve interoperability in a very real environment. Russian

30 Irek Murtazin, "Их добивали, стреляя в упор: В гибели четырех офицеров спецназа ФСБ в Сирии не обошлось без предательства [They Killed Them, While Shooting Them at Point Blank Range. Betrayal Played a Hand in the Deaths of Four FSB Spetsnaz Officers in Syria]," Novaya Gazeta, February 4, 2020, https://iz.ru/648658/aleksei-ramm/my-zdes-v-komandirovke-oni-uzhe-shest-let-voiuiut.

engineers get to experience bridge-building under fire, mine removal, field fortification construction, field water purification, and on-site topographical work. The Syrian experience trains Russian professionals in regional tactics, urban combat, and tunnel warfare. Spetsnaz sharpen their skills in an actual environment. Third, Syria provides an opportunity to combat test a wide variety of Russian military equipment. Not only does this help with improving and testing this equipment and the techniques of its employment, but it also is an advertisement for future military sales.

One of the major lessons that the Russians relearned is that conflicts cannot be won by airpower alone. The recipients of air attack develop work-arounds and counters. Russia entered the conflict intending to primarily provide air support. Like Britain and the United States in World War II and the United States in South Vietnam and Afghanistan, Russia eventually realized that airpower alone is insufficient. Ground and naval support proved essential. While Russian military support to Syria has proved expensive and difficult to withdraw, Russian Ground Forces have, nevertheless, improved their expertise in many areas.

This page was left blank for printing purposes

Chapter 5

RUSSIAN AERIAL OPERATIONS IN THE SYRIAN WAR

Anton Lavrov

Before the start of the military intervention in Syria in 2015, even top Russian generals were uncertain what the result would be. Shortly before the start of the intervention, the Russian Aerospace Forces (RuAF) received hundreds of new airplanes and helicopters and new "smart" precision weapons. Almost all of them had never been tested in real combat. The pilots and commanders also did not have combat experience and were trained by textbooks filled with outdated concepts and tactics. The five years of war in Syria have been the most intense period of transformation for the RuAF since the war in Afghanistan in the 1980s. The Russian military not only gained an unprecedented amount of experience, but also made substantial improvements in tactics and strategy.

Evolution of the Russian Air Group in Syria

The Russian Federation began its Syria intervention on September 30, 2015, with 32 combat jets at the Khmeimim Airbase. The RuAF deployed 12 Su-24M bombers, 12 Su-25SM attack aircraft, four advanced Su-34 bombers, and four Su-a30SM fighters to the remodeled civilian airfield near the capital of Latakia province. The fighters and bombers were accompanied by four transport and 12 attack helicopters as well as a few transport and reconnaissance aircraft.

Subsequently, the composition of the Russian air group changed depending on the situation on the ground and the intensity of the fighting. After the shoot-down of a Russian Su-24 by Turkey in November 2015, the Russian command increased the number of fighters. Since then, it has kept 8-10 modern jets at Khmeimim at any given time and used them for typical fighter missions, like combat air patrol. They are also often involved in strike missions.

During the most intense periods of fighting in March 2016 and November 2017, the number of Russian jets at Khmeimim reached 40-44. Despite several attempts to claim "mission accomplished" in Syria¹ and reduce numbers, on average, there were 25-30 combat airplanes in the country and up to a dozen auxiliary ones. To support the military operations, the RuAf deployed to Khmeimim a few light and medium transport planes, such as the An-32 and Il-76, and Il-20 and Tu-214 reconnaissance planes. One or two A-50 early warning and control aircraft were also present at times.

Over time, the composition of the group has changed to include more modern aircraft types. Su-24M bombers, used during the

¹ Partial aircraft withdrawal was officially ordered on 14 March 2016, 29 December 2016, and 11 December 2017.

Cold War, were gradually replaced with newer Su-34s, about one hundred of which were acquired since 2009. Initially, the ratio of Su-24M to Su-34 was 12:4. By the end of 2017, it changed to 8:14.² In 2016, numerous old Su-25 attack planes were retired. A group of four simple and rugged Su-25 "Frogfoot" returned for several months in 2017 to operate from the forward T4 airbase, located in Syrian desert 60 kilometers west of Palmyra.³ No other types of Russian aircraft, except helicopters, were permanently stationed outside of Khmeimim.

By the end of major hostilities at the end of 2018, the number of jets was reduced to just 18—the lowest point of the entire campaign.⁴ By then, Russia had built concrete shelters for military aircraft and helicopters to protect them from crude and improvised drones that the opposition had built and used to target Russian aircraft.⁵ This development made it challenging to use open source satellite imagery to monitor the composition of the air group accurately. Even the second visit of Russia's most modern jet, the Su-57, for combat tests in 2019 went unnoticed by observers and became known after Russian Defense Minister Sergey Shoygu made a statement acknowledging their presence.⁶ But it's unlikely that more than 30 jets were there in 2019-2020 at any given time because this would exceed the shelter space built to protect the

² According to satellite photos of Khmeimim.

^{3 &}quot;Russia deploys Su-25 attack aircraft at T-4 Airbase in Homs," Al-Masdar Al-'Arabi, 21 July 2017, https://www.almasdarnews.com/article/russia-deploys-su-25-attack-aircraft-t-4-airbase-homs.

^{4 &}quot;Russian air group in Syria as of November 8," *Diana Mikhailova*, 25 November 2018, https://diana-mihailova.livejournal.com/3026747.html/

^{5 &}quot;Khmeimim 2.0: Large-scale renovation at Russia's airbase in Syria protects jets & allows deployment of even more," *RT*, 27 September 2019, https://www.rt.com/news/469715-khmeimim-russia-airbase-syria-renovations/.

^{6 &}quot;Su-57 tested new types of missiles and bombs in Syria," *TASS*, 24 December 2019, https://tass.ru/armiya-i-opk/7413645.

jets.

Several flight crews and technicians were stationed at the base for each aircraft. As a result, a single Su-24 could fly up to 6 sorties per day. This is more than typical for modern conflicts. Such a high tempo allowed a relatively small number of aircraft to make up to 88 attacks⁷ and strike more than 200 targets per day. This helps Russia to have a significant impact on the ground situation in Syria with limited resources.

From Latakia to Damascus: RuAF Impact on the Ground Situation

The effectiveness of the Russian air group was not constant. It increased with experience gained in the first months and during the assault on Aleppo. In later operations around Damascus, in the Syrian desert, and in the province of Idlib, the effect was noticeably improved.

In the first months of the operation, the effect of Russian airstrikes on the course of combat operations was surprisingly low. The start of the bombing campaign did not radically change the situation on the ground. The October 2015 government offensive in the mountainous part of Latakia province had little success, even though ground forces there were supported by the full power of Russian aviation and helicopters, which conducted 70-80 strike sorties per day from an airbase just a hundred kilometers away.

At first, Russian airstrikes were distributed over a vast territory in several Syrian provinces against many opposition groups at the same time. This lack of concentration of efforts impeded progress.

^{7 &}quot;Russian air force makes 88 sorties, hits 86 IS targets in Syria," *Reuters*, 13 October 2015, https://www.reuters.com/article/us-mideast-crisis-syria-rus-sia-sorties/russian-air-force-makes-88-sorties-hits-86-is-targets-in-syria-ifax-idUSKCN0S71DY20151013.

Even a strike with 26 ship-based cruise missiles on October 7, 2015 did not produce any noticeable military effect. As a political message, it was quite effective. For the first time ever, Russia demonstrated the possibility of delivering sudden and precise strikes by its Navy. The range of missiles used in the strike allowed Russia to project power onto a significant part of Europe and the Middle East from the Black and Caspian Seas.

The Russian command's fear of losses at least partially explains the early ineffectiveness of Russian air operations in Syria. Russian aircraft operated exclusively from the heights of five km or more, inaccessible to Man-Portable Air Defense Systems (MANPADs) and rebels and terrorist groups' air defense assets. Before Syria, such scenarios on exercises were not common. Equipped with mostly unguided bombs, strikes from such heights proved not especially useful for close air support and tricky for striking small and sturdy targets.

The first visible successes came in November 2015. In response to the Russian Metrojet Flight 9268 terror act by the Islamic State (ISIS), the Russian command conducted a massive retaliation operation against ISIS targets in Syria. For the first time, strategic bombers flying from Russia took part. The heavy and powerful Tu-160 jets and Tu-95MS turboprops used long-range cruise missiles X-102 and X-555. The smaller and shorter-range Tu-22M3 attacked targets with unguided bombs.

For several days, Russia concentrated all efforts on ISIS. The RuAF carried out a series of attacks on large, soft, and stationary targets: oil production and refining facilities, as well as columns of

^{8 &}quot;Putin's Navy Sends a Shot Across Obama's Bow," *Bloomberg*, 16 October 2015, https://www.bloomberg.com/opinion/articles/2015-10-16/russian-cruise-missiles-in-caspian-send-a-message-to-u-s-.

thousands of oil carriers engaged in oil smuggling for terrorists. Such objectives were much more similar to standard training tasks. The total damage to oil infrastructure was significant even with high-altitude airstrikes. In parallel, the United States was also engaged in attacks on the same targets. It is difficult to determine whose contribution was more substantial, but the economic base of ISIS in Syria was irrevocably destroyed.

This effort also coincided with Turkey's shootdown of the Su-24, which allegedly violated Turkey's sovereign airspace on November 24, 2015. The Russian command reacted by bringing an S-400 long-range air defense system to Khmeimim and deploying several of its newest and most capable Su-35 fighter planes there. For a while, fighters escorted bombers operating near the Turkish border. But in general, the incident did not have any meaningful impact on the subsequent Russian bombing campaign.

The list of targets attacked during the first month of the Russian campaign is indicative. According to the Russian Ministry of Defense (MoD), the air group performed 1,391 combat sorties engaging 1,623 targets, including 249 command and communication centers, 51 training camps, 35 car-bomb workshops,131 ammunition depots,371 strong points and fortified positions, and 786 field camps and bases from September 30, 2015 to October 30, 2015. These are exclusively stationary targets, and most of them are non-frontline. Vehicles are noticeably absent from the target list.

^{9 &}quot;U.S. Warplanes Strike ISIS Oil Trucks in Syria," *New York Times*, 16 November 2015, https://www.nytimes.com/2015/11/17/world/middleeast/usstrikes-syria-oil.html.

¹⁰ Briefing by Russian MOD, 30 October 2015, http://eng.mil.ru/en/news_page/country/more.htm?id=12062281.

After a brief period of concentration against ISIS, Russia returned to fighting against other Islamist and moderate opposition groups. The culmination and turning point of the entire war was the months-long battle for Aleppo. Success in this urban battle in summer-autumn 2016 was achieved not by high technology, but by the massing of aviation and a relentless bombing campaign largely directed at Western-backed opposition groups in the city. After the fall of Aleppo, a change in Russian strategy became evident in 2017 when the RuAF focused on the fight against ISIS in the Syrian desert and around the Euphrates River.

Improvement in reconnaissance capabilities and accumulated overall experience since the start of operations has allowed Russia to establish a more effective "kill chain" and to improve reaction time from detection to target destruction. Also, desert conditions made it possible to send helicopters for free hunting to established "kill zones" during day and night. The Ministry of Defense provided most of the rare video footage of the destruction of moving tanks and vehicles from these battles. The role of Russian aviation in the victory over ISIS south of the Euphrates was decisive.

In 2018, the battles for the suburbs of Damascus were supported by a much more experienced Russian Aerospace Forces. Using fewer planes and sorties than during the Aleppo battle, the RuAf significantly improved its effectiveness, lethality, and coordination with ground forces. The fight for these heavily fortified and well-defended cities went much faster than the fight for Aleppo.

Russia easily defeated the rare attempts by militants to mount counterattacks in 2018. An example is the Hayat Tahrir al-Sham (HTS) counterattack in Northern Hama on March 14 when the RuAF decimated entire armored battle teams. To do this, a force must have capability to quickly locate and destroy hostile mobile

targets on a dynamically changing front line. This is a different and no less difficult task compared to urban warfare. Success against opposition strikes demonstrated that the close air support capabilities of the RuAF also had grown significantly compared to 2015-2016.

Even Turkey's provision of MANPADS to militants in Idlib Province in 2020 did not change the overall picture. Turkish-backed fighters managed to stop the operations of Syria's helicopters completely. They also fired missiles at Russian planes. But MANPADS were ineffective against aircraft flying at high altitudes. Russian aviation did not suffer any losses and was able to deliver a sufficient level of attrition to the militants, thwarting their counterattacks.

During the battle for Idlib, the Turkish Air Force's F-16s shot down two Syrian Su-24 bombers and one L-39, but they did not attack Russian jets. Without direct intervention of a peer opponent, the RuAF became the most crucial factor that impeded the attempt of the opposition's revenge on the ground and saved regime forces from defeat.

Precision Problem

By the beginning of the Syrian operation, the RuAF had a limited inventory of guided weapons, especially modern high-precision weapons. There are no official numbers from the MoD, but judging by photos, videos, and reports from the initial period, the most common weapons were dumb high-explosive bombs weighing 500 and 250 kilograms.

To compensate for the insufficient accuracy of dumb bombs, the use of cluster and incendiary munitions, such as AO-2.5RTM,

ShOAB-0.5M, PTAB-1M, and SPBE, was common.¹¹ The precision weapon of choice in the first few months became KAB-500S satellite-guided bombs.¹²

Even old Su-24M and Su-25SM aircraft were modernized variants with advanced digital sights developed by the Gefest company and equipped with accurate satellite navigation systems. In theory, this technology allows the use of unguided bombs with near smart-weapons precision.¹³ But this system had never been tested in combat before and took months to master.

The typical attack scenario with the new sight mirrored the following pattern. The Russian forward air controller with the Strelets reconnaissance, command, control, and communications complex determined the exact satellite coordinates of the stationary target at the front line. Target information was sent through an automated communication system to the attack aircraft patrolling in the air. The coordinates of the target could also be obtained from reconnaissance drones or loaded before the flight from the target database on Khmeimim. Once the aircraft received the coordinates, the process was highly automated and took only a few minutes. The navigation and sight systems calculated the approach to the target and, at the precisely determined moment, dropped

¹¹ Marks Czuperski, Faysal Itani, Ben Nimmo, Eliot Higgins, Emma Beals, "Breaking Aleppo," *Atlantic Council*, 2017, https://www.publications.atlantic-council.org/breakingaleppo/cluster-munitions/.

¹² Michael Kofman. "Russia's Arsenal in Syria: What Do We Know?," War On The Rocks, 18 October 2015, https://warontherocks.com/2015/10/russias-arsenal-in-syria-what-do-we-know/.

^{13 &}quot;Russia's advanced technology helps use unguided munitions as precision bombs," *TASS*, 25 August 2017, https://tass.com/defense/962079.

¹⁴ Roger McDermott. "Russia's Network-Centric Warfare Capability: Tried and Tested in Syria," *Eurasia Daily Monitor*, vol. 15, issue 154, 30 October 2018, https://jamestown.org/program/russias-network-centric-warfare-capability-tried-and-tested-in-syria/.

one bomb. The result of the hit was studied by a drone or visually by the forward air controller. If necessary, the aircraft turned around and attacked again. Another approach to the target took 5-10 minutes. Sometimes, up to four approaches on one target were made. According to MoD statistics, in most sorties, more than one target was attacked (or, per MoD, "destroyed"), three on average. These numbers allow us to estimate that one, less often two, bomb(s) was spent on most objects. Such a sequence was typical for simple Su-25SM3 attack aircraft and advanced Su-35 fighters.

In 2019-2020, the Russian Aerospace Forces were still using a lot of unguided bombs. Even on videos published by the Ministry of Defense and loyal media, misses of 15-30 meters from a stationary object are not uncommon. With 500 kg high-explosive bombs, this is still enough to destroy most soft targets.¹⁶

Accuracy with dumb bombs nonetheless noticeably increased. Countless videos show that in recent operations the RuAF were able to reliably hit with unguided bombs a single house in an urban environment or a weaponized pick-up truck hiding in a shelter. The Russian Ministry of Defense's newspaper claimed even examples of direct hits by the Su-35 fighters from a height of five kilometers on standing tanks.¹⁷

^{15 &}quot;Russian Aerospace Forces during the operation in Syria destroyed 122 thousand objects of terrorists," Russian Ministry of Defense, 22 October 2018, https://function.mil.ru/news_page/country/more.htm?id=12200595@egNews 16 For example video "Airstrike against building at Alteh village," Russian Ministry of Defense, 24 August 2019, http://syria.mil.ru/war-on-terror/video/view.htm?id=9964.

^{17 &}quot;Impossible piloting over the Euphrates," *Red Star*, 12 January 2018, http://redstar.ru/nevozmozhnyj-pilotazh-nad-evfratom/.

At the same time, to hit high-priority targets, the Russian command often uses guided bombs. This is especially true for attacks on underground bunkers and similar hard targets. Use of short- and medium-range missiles was limited and not promoted as much as the long-range sea- and air-based cruise missiles.

In the late stages of the operation, a pattern in the distribution of weapons developed. The old Su-24 and Su-25 use almost exclusively unguided bombs. Newer Su-34 bombers specialized in the use of precision weapons. Modern Su-35 fighters also often use guided bombs and missiles.

One noticeable sign that the accuracy increased was the decline in the use of cluster and incendiary munitions by Russian aviation in 2019-2020. For the Idlib campaign, non-governmental organizations did not report a single case of their use. 18 By the standards of the Russian Air Forces during the wars in Chechnya (1994-2001) or Georgia (2008), such a performance is a great achievement. But this is clearly not enough to put Russian among the world's elite modern air forces.

The Russian Aerospace Force's biggest problem is its inability to hit moving targets. Even after more than four years of experience, the level of success here is very modest. This limitation dramatically reduces its capability to prevent the movement of small enemy groups. While it is able to decimate large groups of enemy forces as it did against the HTS counterattack in March 2018, the RuAF still had problems stopping smaller counterattacks by militant armored groups in 2020.

^{18 &}quot;The Syrian Regime Repeatedly Uses Cluster Munitions Against Residential Neighborhoods in and Around Idlib Governorate, Constituting War Crimes," Syrian Network for Human Rights, 27 February 2020, http://sn4hr.org/blog/2020/02/27/54699/.

This problem comes mostly from a lack of effective ammunition. According to traditional Russian doctrine, the elimination of armored and combat vehicles is the task of helicopters and Su-25 attack aircraft. But given the widespread presence of MANPADS in Idlib, the daytime use of helicopters is too dangerous. The Su-25 also operated mainly as a level bomber from a higher altitude, instead of the low-altitude attacks for which it was designed. Missile threats for aircraft in future conflicts will only increase, so we can expect that the task to defeat moving targets will be ultimately delegated to the new generation of Russian strike drones—one of many new weapons tried in Syria.

Syria as a Testing Ground

The list of weapons tested in Syria is vast. According to official figures, 359 types were used in real combat for the first time. ¹⁹ This number includes not only the latest models, but also fairly old Soviet equipment, such as the strategic bombers Tu-160 and Tu-95MS. Most of these weapons have been developed more recently.

The Russiam military sent to Syria not only systems already in service, but also those undergoing test and evaluation. Performance results from Syria have become an important criterion for making procurement decisions, so defense industry enterprises were interested in such trials. They sent their prototypes to the battleground with teams of engineers and technicians. These personnel actively interacted with the military and made changes and corrections on the spot.

Even the newest and secret Su-57, still under state trials, was sent to Syria. In February 2018, the arrival of two Su-57 at Khmeimim

^{19 &}quot;Russia tested 43 more new weapons in Syria," *RIA Novosti*, 24 December 2019, https://ria.ru/20191224/1562776515.html.

was spotted and filmed. Dissatisfied with the violation of secrecy, the Russian Ministry of Defense quickly withdrew these fighters from the country. Nevertheless, they managed to complete about ten flights and use weapons, specially developed for this aircraft, against real targets. In 2019, Su-57s went to Syria for the second time.

The Navy tested Kalibr missiles as well as several types of new warships, including cruise missile-armed diesel submarines, corvettes, and frigate. But most valuable was the first-ever trial of Admiral Kuznetsov aircraft carrier with new MiG-29K and the maritime version of the Ka-52K helicopters as well as modernized Su-33s with improved digital sights. After losing one of the MiG-29KUB and Su-33 fighters in landing incidents, all other planes were transferred from the carrier to Khmeimim and made most of the sorties from the ground. For carrier-based aviation, this obviously was a complete failure. The Kuznetsov was recalled home faster than anticipated and put on lengthy repairs.

A significant innovation for helicopters was the use of modernized Vikhr-M (AT-16 Scallion) missiles by the Ka-52 attack helicopter. For the first time, Russian Army Aviation developed the ability to reliably hit targets day and night from a distance of up to 8 kilometers. This is a significant improvement over the old missiles with a range of 5-6 km at the very best.

In 2019, Russia tested in Syria its first MALE-class strike drone Orion-analog of the MQ-1 Predator, weighing 1.2 tons.²¹ But the absence of unmanned combat aerial vehicles *en masse* is the

^{20 &}quot;Kuznetsov transits through English channel," *Armada International*, 31 January 2017, https://armadainternational.com/2017/01/kuznetsov-transits-through-english-channel/.

^{21 &}quot;New types of missiles and bombs tested on the Su-57 in Syria," *TASS*, 24 December 2019, https://tass.ru/armiya-i-opk/7413645.

most apparent capabilities gap for Russian Aerospace Forces. The contrast was especially evident in comparison to the successful operations of numerous Turkish attack drones in February-March 2020.

The situation with reconnaissance drones is better. The RuAf and Navy employed several MALE-class Forpost drones (licensed IAI Searcher II) and dozens of light ones. Up to 70 UAV were used daily, and they accumulated more than 25,000 flight hours in first three years of operation.²² In Syria, through extensive experience, very tight interaction was established between planes and drones. UAVs find targets, determine their coordinates, and monitor the results of airstrikes.

The use of drones also became a staple for the Ground Forces. The Russian Army has extensively used drones for artillery fire adjustment and reconnaissance. Since 2017, it has tested light drones with laser designators. They illuminate targets for the laser-guided artillery shell Krasnopol.²³ All modern modifications of larger UAVs, such as Forpost-R, will have similar and more powerful lasers, which will allow drones to direct heavy laser-guided munitions, such as the KAB-1500L aviation bombs, from great distances.

Russian media reported that in 2019 elements of the future S-500 air defense complex were transferred to Khmeimim. Launchers or missiles were not tested, but radars and control equipment did get

^{22 &}quot;Military operation of the Russian Armed Forces in the Syrian Arab Republic – in numbers," Russian Ministry of Defense, 22 August 2018, https://www.youtube.com/watch?v=viCiwbJG5Pk.

^{23 &}quot;Innovative UAV Technology Helps Syrian Army Offensive in Idlib," *Aviation International News*, 27 February 2020, https://www.ainonline.com/aviation-news/defense/2020-02-27/innovative-uav-technology-helps-syrian-army-offensive-idlib.

tested.24

Air Defense Experience

Surprisingly, the amount of experience gained in Syria for Russian air defense is second only to aviation. Initially, the Russian command did not expect serious air threats to its bases. Early in the campaign, Russia deployed to Khmeimim only short-to-medium range air defense systems with a reach of 20-40 kilometers. The military believed that several Pantsir missile systems (SA-22 Greyhound) would be enough to shoot down the small drones and unguided missiles used by militants.

The conflict with Turkey over the downed Su-24M bomber in 2015 forced Russia to strengthen its air defense. By order of Vladimir Putin, a partial battalion of the newest long-range S-400 complex was swiftly deployed to Khmeimim Airbase in November 2015. Later, an S-300 battalion was added to protect the naval base in Tartus, eventually replaced by a second S-400 battalion. Longrange air defense systems have yet to fire a missile; shorter-range systems have done all the work.

In early 2018, Russian bases faced an entirely new threat. Ten light homemade drones with bomblets attacked the Khmeimim base. Three more tried to strike the Tartus base. A combination of electronic warfare systems and Pantsir air defense systems successfully repelled the attack.²⁵ In subsequent years, drone raids became a regular and constant threat, as did long-range bombardments with unguided missiles.

^{24 &}quot;Prometheus ask for fire: S-500 systems tested in Syria," *Izvestia*, 02 October 2020, https://iz.ru/927353/aleksei-ramm-aleksei-kozachenko-bogdan-stepo-voi/prometei-prosiat-ognia-sistemy-s-500-ispytali-v-sirii.

²⁵ Briefing by the Head of the Russian General Staff's Office for UAV Development, Russian Ministry of Defense, 11 January 2018, https://syria.mil.ru/en/index/syria/news/more.htm?id=12157872.

The Ministry of Defense had to create a multilayered air defense system to ensure the complete security of the bases. The short-range SAM Tor-M2 (SA-15 Gauntlet) was added to the air defense systems. According to some Russian reports, they were more successful in the fight against small drones than the Pantsir.²⁶

The Ministry of Defense claimed that more than a hundred small enemy drones were shot down in two years. Initially, air defense systems had problems detecting targets with such a low radar signature and slow speed. According to the developer of air defense systems, they managed to cope with these challenges.²⁷

The Turkish operation, dubbed Spring Shield, in 2020 provided a significantly greater challenge. For ten days, Russian air defense observed the highly successful actions of medium Turkish strike drones and their duels with the Syrian Buk-M2 and Pantsir systems, which were largely ineffective against them at the outset, but scored kills towards the end of the brief flare up.

Russia collected a substantial amount of information from observing numerous Israeli, American, and Turkish air strikes. These lessons will make it possible to modernize Russian air defense equipment and adapt its tactics to modern realities.

Losses

In almost five years of combat operations, Russia has lost eight aircraft and eight helicopters. Seventy-three people on board lost their lives in those incidents. Only one airplane was shot down by enemy fire. Others were lost due incidents and technical problems.

^{26 &}quot;Tor-M2" or Pantsir-C1?," *Gosnovosti*, 28 June 2018, https://www.gosnews.ru/article/oboronka/tor_m2_ili_zrpk_pantsir_s1_.

^{27 &}quot;Interview with the chief designer of the Pantsir," TASS, 29 January 2020, https://tass.ru/interviews/7623815.

By contrast, most helicopters were hit by the enemy.

Date	Type		Aircraft	Notes
24 October 2015	Su-24M	1	plane	shot down by Turkish F-16
24 October 2015	Mi-8	0	helicopter	Hit by TOW-2 while on the ground
12 April 2016	Mi-28N	2	helicopter	piloting error in night flight
				shot down by ATGM while in-
08 June 2016	MI-35M	2	helicopter	flight
01 August 2016	Mi-8	5	helicopter	shot down
03 November 2016	Mi-35M	0	helicopter	hit by ATGM while on the ground
13 November 2016	MiG-29K	0	plane	accident on landing
03 December 2016	Su-33	0	plane	piloting error during landing
06 October 2017	Mi-28N	0	helicopter	technical problem
10 October 2017	Su-24M	2	plane	accident during take-off
31 December 2017	Mi-24	2	helicopter	technical problem
03 February 2018	Su-25SM	1	plane	shoot down by MANPAD
06 March 2018	An-32	39	plane	accident during landing
03 May 2018	Su-30SM	2	plane	accident during take-off
07 May 2018	Ka-52	2	helicopter	piloting error
17 September 2018	IL-20	15	plane	shoot down by Syrian air defense

Most casualties occurred from two incidents. In March 2018, an An-32 plane transporting Russian military personnel from Aleppo crashed while landing on Khmeimim, killing all 39 men on board. The reason for the second-largest incident was "friendly fire" by an S-200 as Syrian air defenses were responding to an Israeli air raid on September 17, 2018. Syrian air defenders misidentified a Russian reconnaissance aircraft and shot it down. The only combat loss of a combat jet occurred when an Su-25 used old tactics and attacked a ground target from low altitude with unguided

rockets.²⁸ The most substantial losses were suffered by helicopters. Russia learned that their use during daytime is excessively risky. The RuAf adjusted tactics and reduced their use until modernized models arrive.

Lessons Learned

For Russia, its Syria operation is its most prolonged and intense air campaign since the war in Afghanistan (1979-1989). In their first four years in Syria, Russian combat jets conducted more than 45,000 sorties²⁹ (most of them on strike missions), and reconnaissance drones completed over 25,000 sorties. The experience gain for the RuAf has been unprecedented.

RuAf command, military scientific institutes, and combat training centers immediately began to study lessons from the operation. Based on their analysis, recommendations were developed, and tactical changes were introduced into combat training. The RuAf, then, tested the new tactics in battle. Russia has demonstrated the ability to flexibly change its approach depending on the situation. This involved both the general strategy of the operation as well as the weapons and military equipment used in the field.³⁰

To maximize gains in experience, rotation of the staff at Khmeimim Airbase was significant. Pilots and staff officers serve in Syria in short shifts for two to three months. Some of them have made

^{28 &}quot;Lost vigilance. All about the death of the Russian Su-25 in Syria," *Radio Svoboda*, 05 February 2018, https://www.svoboda.org/a/29019535.html. 29 "Hmeimim airbase: stability factor," *Army Standard*, 02 October 2019, https://armystandard.ru/news/t/2019930173-buq0l.html.

³⁰ Michael Kofman and Matt Rojansky, "What Kind of Victory for Russia in Syria?," *Military Review*, 24 January 2018, https://www.armyupress.army.mil/Journals/Military-Review/Online-Exclusive/2018-OLE/Russia-in-Syria/fbclid/IwAR1Cc627O8fGTeq7SI0so6RpY405CeYQGURdxJJw4JcJZZ5w-MPfeuhE585Y/.

several rotations. At the beginning of 2019, the Russian Ministry of Defense reported that more than 68,000 military personnel had gained combat experience in Syria. By 2020, 90% of all RuAf aviation crews and 56% of air defense personnel were in Syria at least once. Some pilots made more than 200 combat sorties.³¹ Strategic aviation was less involved, but more than half of the crews nonetheless conducted at least one airstrike.

The prolonged air operation made it possible to test all types of aircraft and aviation munitions. The Russian Ministry of Defense does not like to acknowledge problems publicly, but its actions speak for themselves. Modernization programs were announced for 11 planes and helicopters.³² The most common point was an increase in combat capabilities and lethality: the integration of new precision weapons, better sights, and navigation systems. The Ministry of Defense ordered improvements even for new equipment, just recently adopted to service, such as Su-34 bombers or Mi-28N helicopters. Especially pressing was the combat helicopter problem. The effectiveness of the newest Mi-28N and Ka-52 in live-fire battles was not satisfactory, especially in night conditions.³³ These models were supposed to be the best helicopters available.

The Russian Ministry of Defense initiated a program to modernize the Mi-28N. The aircraft received new engines, sight, optics, radar, and longer-range weapons. Moreover, Ataka (AT-9 Spiral-2) basic missiles with a range of 5 km, Khrizantema-VM missiles

³¹ Sergey Shoigu address to the Parliament, 25 March 2020, https://function.mil.ru/news_page/country/more.htm?id=12283769.

^{32 &}quot;Russian aerospace forces evaluate the experience of the Syrian military campaign," *Interfax*, 28 October 2018, https://www.interfax.ru/russia/635353.

^{33 &}quot;Bondarev spoke about the "failed" Mi-28 electronics," *RIA Novosti*, 30 November 2017, https://ria.ru/20171130/1509918854.html.

(AT-15 Springer), with a range of 10 km, and the newest «Izdelie 305»³⁴ with the range of 15-20 km were also integrated.

In 2019, an upgraded prototype of the new Mi-28NM was sent for battle testing in Syria. Immediately after trials, the MoD signed a contract to purchase 98 units.³⁵ A similar modernization program is underway for the Ka-52. A deal for about one hundred modernized Ka-52M is expected in 2020.

After waves of raids by small drones, training to repel such attacks on air and naval bases has become a regular exercise all over Russia.³⁶ On the modern battlefield, this problem is becoming more and more relevant for all the militaries of the world. Intercepting cheap primitive drones and unguided rockets with anti-aircraft missiles proved not to be cost-effective. Therefore, after the first years of combat duty in Syria, research and design of a completely new specialized version of the Pantsir-S began. It will be much lighter, cheaper, and have a shorter range, but will have more ammunition and a better fire rate against such targets.

In the competition between the Navy and RuAF as instruments of projection of force, the Aerospace Forces gained a definite advantage. The result was the initiation of a large-scale modernization of all three types of strategic bombers: Tu-22M3M, Tu-95MSM, and Tu-160M. Serial production of the upgraded Tu-160 has resumed. The development of the future strategic bomber PAK DA gained

³⁴ Code name for the "Light multipurpose guided missile" currently in development.

^{35 &}quot;The Ministry of Defense signed a contract for 98 Mi-28NM helicopters," *TASS*, 27 June 2019, https://tass.ru/armiya-i-opk/6601643.

^{36 &}quot;About 20 'attacks' of drones of various modifications were repelled by military service personnel as part of the combat readiness check," *Interfax*, 13 February 2020, http://www.interfax-russia.ru/FarEast/print.asp?id=1104471&sec=1671&type=news.

new momentum. For all strategic aircraft, new precision mediumand long-range missiles, including hypersonic ones, are being developed and integrated.

By sending several dozen aircraft and a few thousand military personnel to Syria, Russia managed to turn the tide of the civil war. The financial and material price (as well as the price in life) of this experience for Russia was bearable, and the experience gained has been substantial. The benefits of the operation clearly outweighed the cost.

Nevertheless, this experience is somewhat limited. The campaign was more of a counterinsurgency operation than a modern conventional war with a peer or near-peer opponent. The RuAF gained no knowledge in air-to-air combat or fighting against sophisticated air defenses. This can be only partially offset by observations of the actions of the air forces of other countries, including the fifth-generation aircraft of the United States and Israel and the latest drones. Today's RuAF are much more effective and deadlier than in 2015, but even with all the recent improvements, the RuAF are still technologically behind in several key military technologies.

Chapter 6

RUSSIAN NAVAL FORCES IN THE SYRIAN WAR

Igor Delanoë

Since the late 2000s, the Russian Federation has expanded its naval footprint in the Eastern Mediterranean, and even resurrected its Mediterranean Squadron in 2013. The backbone of this operational squadron is provided by units coming from the Black Sea Fleet, complemented by vessels from other Russian naval formations (namely, the Northern, Baltic, and Pacific Fleets, as well as the Caspian Sea Flotilla) on a rotational basis. As the Russian State Armament Program for the period 2011-2020 was implemented, the Black Sea Fleet received new warships and new diesel-powered submarines. Consequently, by the outbreak of the Syrian crisis, Moscow's naval footprint in the Mediterranean had already been reconstituted. Yet, since the mid-2010s, a structural change occurred in the Mediterranean Squadron's order of battle. The Squadron has morphed qualitatively and quantitatively, and has become more capable. Featuring fewer ex-Soviet large platforms and more modern green water units, this naval task force has been assigned mainly a defensive objective: locally counterbalance navies

of the North Atlantic Treaty Organization (NATO) and protect Russia's southern flank from perceived instability emanating from the Mediterranean's southern shore, in the context of the Arab Spring. Moreover, Moscow's direct military involvement in the war in Syria has provided the Mediterranean Squadron with a new purpose while highlighting a conventional deterrence mission.

The Rebirth of Russia's Mediterranean Squadron

From a historical perspective, it is not a surprise that Russia resurrected a permanent naval task force in the Mediterranean. Starting from the second half of the 18th century, the Russian Empire permanently deployed a naval squadron in the Levant that patrolled the Greek Islands through most of the 19th century. During the Cold War, the Soviet *Fifth Eskadra*—or 5th Operational Squadron of the Black Sea Fleet—was tasked with projecting Soviet power and influence in the Middle East through the Mediterranean and exerting a permanent nuclear threat on NATO's southern flank. Amounting to 50 units in the late 1980s, including nuclear-powered submarines, the *Eskadra* enjoyed a good logistical base on the southern shore of the Mediterranean, with bases in Egypt (until the early 1970s), Syria, and naval facilities in Libya and in the Red Sea (Dahlak Archipelago).¹

After the collapse of the Soviet Union, it was not until the early 2000s that Moscow displayed a naval interest in the Mediterranean area. Russia's 2001 Maritime Doctrine, signed by then-newly elected President Vladimir Putin, called for a "sufficient" naval presence of warships in the Mediterranean waters. Furthermore, the text emphasized the need for Moscow to promote a "zone

¹ Norman Polmar, *The Naval Institute Guide to the Soviet Navy* (Annapolis, US Naval Institute Press, 1991), p. 19.

of politico-military stability" in the region.² However, Russia only gradually resumed the deployment of war vessels on a non-permanent basis during the 2000s. By the end of the decade, the Mediterranean became one of Russia's preferred theaters to project units and to show the flag.³ Although the capabilities of the current squadron are very different from those of the Soviet *Eskadra*, the purposes of Russia's reinvestment in the Mediterranean naval stage remain tied to Moscow's self-proclaimed status of a great power. At the end of the 2000s, Russia started to recompose a proto-Mediterranean Squadron through the deployment on a rotational basis of ex-Soviet platforms, including blue water warships, such as Project 1164 guided missile cruisers and Project 1155 large anti-submarine vessels. In 2013, the Mediterranean Squadron was formally reinstated and organically tied to the command of the Black Sea Fleet.

Russian Naval Forces' Early Involvement in the Syrian Crisis

In the early 2010s, Russia's Mediterranean task force supported Moscow's overall objective to impede the collapse of the Syrian regime and to prevent any NATO move to implement a "Libyastyle scenario" in Damascus. With that aim, Russia provided material and logistical support to Syria in the early stages of the uprising. Large ex-Soviet landing ships of Projects 775 and 1171 regularly departed Russia's Black Sea port of Novorossiysk for Syria's ports of Tartus and Latakia, creating a "maritime bridge"

^{2 &}quot;Maritime Doctrine of the Russian Federation until 2020," July 27, 2001. Text in Russian: https://legalacts.ru/doc/morskaja-doktrina-rossiiskoi-federatsii-na-period-do/.

³ See, Dmitry Gorenburg, "Russian Naval Deployments A Return to Global Power Projection or a Temporary Blip?" *PONARS Eurasia Policy Memo*, N° 57, May 2009, https://www.ponarseurasia.org/memo/russian-naval-deployments-return-global-power-projection-or-temporary-blip.

nicknamed "the Tartus Express." From July 2012 to January 2018, 318 rotations were carried out along this maritime route, shipping 185,500 tons of military cargo, 55% of which was transported on amphibious units of the Black Sea Fleet.⁴

As the conflict in Syria turned into a violent proxy war involving many more actors, sea lanes of communication became increasingly important for Russian security interests. In October 2012, Turkey intercepted and grounded a Syrian civilian airliner flying from Russia to Syria, which was believed to have military cargo on board. This move signaled that Ankara was not ready to tolerate Russian aid to Damascus flying through its airspace. With time, as VMF (Voyenno-Morskoy Flot, Russian naval forces) shipping capabilities proved insufficient, the Kremlin bought and reflagged old merchant civilian vessels to increase the flow of cargo to Syria. Among other tasks, the VMF fulfilled intelligence missions, mainly assigned to the Black Sea Fleet's 519th autonomous division of intelligence vessels.

It also undertook "gunboat diplomacy," aimed at deterring Moscow's opponents in Syria from undertaking any unilateral military adventure there. This "gunboat diplomacy" mission was carried out by large ex-Soviet platforms from the Pacific, Northern, and Black Sea Fleets, which were regularly deployed in

^{4 «}Rossiïskie dessantnye korabli sozdali 'dorogou jizni' dlia Sirii» ["Russian Large Landing Ships created a 'life line' for Syria"], Vzgliad, October 2, 2017, https://vz.ru/society/2017/10/2/888931.html

⁵ Ellen Barry and Rick Gladstone, "Turkish Premier Says Russian Munitions Were Found on Syrian Jet," *New York Times*, October 11, 2012, https://www.nytimes.com/2012/10/12/world/middleeast/syria.html.

⁶ Jonathan Saul and Maria Tsvetkova, "Russia supplies Syria Mission with old Cargo ships bought from Turkey," *Reuters*, December 15, 2015, https://www.reuters.com/news/picture/russia-supplies-syria-mission-with-old-c-idUSKBN0TY2BG20151215.

the Eastern Mediterranean to "flex muscles." Russia's sole aircraft carrier Admiral Kuznetsov (Project 1143.5, Northern Fleet) was deployed between December 2011 and February 2012, and again in late 2016. The Northern Fleet's flagship, the nuclear-powered guided missile cruiser Peter the Great (Project 1144.2), completed a combat mission in the Levant in May 2014, which was part of a broader deployment in the Mediterranean. Project 1164 missile cruisers, the Variag (Pacific Fleet's flagship) and Moskva (Black Sea Fleet's flagship), also fulfilled combat missions off Syria in 2013, 2015, and 2016. Project 1155 large anti-submarine vessels coming from the Pacific and the Northern Fleets complemented the task force, as well as one nuclear-powered attack submarine also coming from the Northern Fleet (most likely of Project 971 type). Their deployment supported Russia's diplomatic posture in Syria, such as when reports of chemical weapons use by the Syrian regime started to appear and the West threatened Damascus with retaliatory airstrikes.

Beyond "gunboat diplomacy," Project 1164 units also provided anti-air cover to Russia's military assets in Syria, first in Tartus, and later, the airbase in Khmeimim, via the S-300 Fort system (the naval version of the S-300 anti-air system). Even though Russia deployed S-300 systems onshore in the early stage of its military campaign, the *Moskva* was then still in charge of defending the maritime approach of the Syrian coast, suggesting that the S-300—and, later, the S-400—deployed onshore in Syria was covering other directions (presumably North, against the Turkish Air Force, and East, against the U.S. Air Force).

Russia's Littoral Warfare in Syria

When Moscow intervened directly in the Syrian war, the scope of the missions of the VMF in the Mediterranean expanded to include combat missions and missile strikes. It has also enhanced the protection of the approach of Syrian coasts, where Russian military assets are dispatched. Similarly, the activity of the Mediterranean Squadron highlighted another growing function: the projection of Russia's southern line of defense beyond the Black Sea region toward the Levant. By the time Russia started its military intervention in Syria, the Mediterranean Squadron had undertaken structural changes in its order of battle. The implementation of the 2011-2020 armament program proved relatively successful in the Black Sea Fleet, which received six new diesel-powered attack submarines (SSK) of Project 0636.3 (Kilo type), built at the Admiralty shipyard in St. Petersburg and commissioned between 2014 and 2016. Three new frigates of Project 11356M (of six originally planned) were commissioned between 2016 and 2017. The Black Sea Fleet has also received several small missile boats of Projects 21631 and 22800 from 2014 onward. All of these units are capable of firing Kalibr cruise missiles with a range of 1500-2500 kilometers. Singularly, Russia has deployed the surface version of the Kalibr (Kalibr-NK) on very light platforms like small missile boats, which have 900-ton displacement (the submarines are equipped with the Kalibr-PL variant).

Surface vessels and submarines were involved in combat missions, especially during the active phase of Russia's involvement in late

⁷ Igor Delanoe, "Russia's Black Sea Fleet: toward a Multiregional Force," *CNA Occasional Paper*, CNA, June 2019, https://www.cna.org/CNA_files/PDF/IOP-2019-U-020190-Final.pdf.

2015 to early 2016, when the objective was to destroy the various rebel and jihadi groups who threatened the existence of the Syrian regime. Beyond pure combat aspects, this was an opportunity for the VMF to test new units in real operational conditions. Syria proved particularly relevant for test-firing Kalibr cruise missiles. In the first attack mission in October 2015, surface vessels from the Caspian Sea Flotilla fired at targets in Syria. The frigate Dagestan (Project 11661K) and the missile corvettes Grad Sviazhsk, Uglitch, and Velikiy Ustiug (Project 21631) fired a salvo of 26 Kalibr-NK missiles on 11 targets via Iranian and Iraqi airspaces.8 This attack highlighted the direct security nexus between the Caspian space and the Levant, showing Russia's ability to carry out missile strikes from a water bastion located in the Eurasian landmass. On December 8, 2015, the Black Sea Fleet's SSK B-237 Rostov-Na-Donu fired a salvo of four Kalibr-PL cruise missiles from a submerged position in the Levant. This was the first operational fire-test of a cruise missile by a Russian submarine although Moscow had mastered the related technology in the 1980s.

The missions carried out by the Mediterranean Squadron in Syria mostly related to the projection of littoral warfare in the Eastern Mediterranean, challenging NATO naval supremacy in the Levant, interdicting access to Syrian waters and air space, and supporting combat operations in Syria. From Moscow's perspective, the VMF projected stability in the Levant and maintained the geopolitical status quo, which is consistent with Moscow's stark opposition to regime change or Western military intervention in the region after the wars in Iraq and Libya. Moreover, the permanent deployment of half a dozen platforms capable of delivering long-range missiles

⁸ Some of the Kalibr missiles, however, did not reach their targets and were lost during flight.

creates a latent conventional threat on NATO's Mediterranean flank while establishing the non-strategic deterrence highlighted in Russia's 2014 Military Doctrine.⁹

Limits and Constraints of the Russian Mediterranean Squadron

The involvement of the VMF in the Syrian campaign has highlighted four specific shortcomings and limits, which nevertheless have not impeded Moscow from reaching its goal of preventing the collapse of the Syrian regime. The Mediterranean Squadron suffers from limited anti-air capabilities, which is a long-standing, structural challenge in the VMF.¹⁰ Russia has therefore dispatched S-300 and S-400 anti-air systems in Syria to provide anti-air cover to its assets deployed onshore and offshore. The deployment of anti-ship coastal battery Bastion and electronic warfare systems combined with the various anti-air systems (S-300, S-400, and Pantsir-S1 for short-range anti-air warfare, and Buk-M2 for middle-range air defense) create multilayered protection for the Mediterranean Squadron. Moreover, the units featuring Kalibr cruise missiles are an integral part of Russia's anti-access/area denial (A2/AD) "bubble" in the Levant because they contribute to the interdiction mechanism. Therefore, they complicate NATO planning and compel Western navies and air forces to engage Moscow on deconfliction measures in and around Syria. This was highlighted during the retaliation strikes orchestrated by the United States, France, and the United Kingdom in April 2018, following the alleged use of chemical weapons by the Syrian regime in Eastern

^{9 &}quot;Military Doctrine of the Russian Federation," December 25, 2014. Text in English: https://www.offiziere.ch/wp-content/uploads-001/2015/08/Russia-s-2014-Military-Doctrine.pdf.

¹⁰ The Pantsir-M (for Project 22800) has a range of 15 to 20 kilometers, and Shtil-1 (for Project 11356M) SAM systems has a range of approximately 40 kilometers.

Ghouta, near Damascus.

Another constraint pertains to the VMF operational scheme in the Eastern Mediterranean, which depends on the freedom of navigation through the Turkish Straits. Passing through the Bosporus and the Dardanelles is regulated by the 1936 Montreux Convention that Turkey has scrupulously enforced. In the Black Sea security context, the Montreux Convention remains a powerful point of convergence between the Turks and Russians because it constrains the freedom of navigation of non-Black Sea navies, above all the U.S. Navy. 11 However, in the Levant context, agreement between Turkey and Russia is less guaranteed. Should tensions between Moscow and Ankara rise, with the Turks feeling threatened by Russia's growing military position, the VMF sea lane of communication between Russian bases in the Black Sea and Syria could be in jeopardy. 12 Moreover, recent developments regarding Russia's two submarines in the Eastern Mediterranean have highlighted the high degree of understanding coming from Turkey's side. In March and April 2019, Russia swapped the two SSKs previously deployed in the Levant (the B-268 Veliky Novgorod and the B-271 Kolpino) with two SSKs then stationed in the Black Sea (the B-265 Krasnodar and the B-262 Stary Oskol), which redeployed to the Mediterranean. The former two

¹¹ During the Russian-Georgian conflict (August 2008), Turkey prevented the United States from sending vessels in the Black Sea, citing the Montreux Convention.

¹² According to Article 20 of the Montreux Convention, "In time of war, Turkey being belligerent . . . the passage of warships shall be left entirely to the discretion of the Turkish Government." Furthermore, Article 21 stipulates, "Should Turkey consider herself to be threatened with imminent danger of war she shall have the right to apply the provisions of Article 20 of the present Convention." See, the text on the National University of Singapore, https://cil.nus.edu.sg/wp-content/uploads/formidable/18/1936-Convention-Regarding-the-Regime-of-the-Straits.pdf.

had to go through a planned period of maintenance in Sevastopol and therefore passed through Turkish Straits northbound in accordance with the Montreux Convention's terms. The B-262 and the B-265 sailed southbound, but did not pursue the mandated trip to a naval shipyard located outside the Black Sea, as required by Article 12.¹³ Ankara did not object, and it is likely that the two redeployed submarines will travel to a shipyard in Russia in the next 18 months to undergo planned repairs, in compliance with Montreux, while being replaced by two other Black Sea Fleet SSKs.¹⁴ Should Turkey decide to strictly enforce Montreux, Russia could face difficulties rotating its SSKs.

Third, one should not overestimate the firepower of platforms equipped with Kalibr missiles sailing in Levant waters. One Project 11356M-type frigate carries a maximum of eight Kalibr-NK missiles, as much as one small missile boat of Project 21631 (or of Project 22800), while one SSK of Project 0636.3 can fire a maximum of six Kalibr-PL cruise missiles. In late August 2018, while tensions were mounting around Idlib province with rumors about the possible use of chemical weapons, Russia dispatched a "kalibricized" task force to the Levant. The Mediterranean Squadron was then staffed with the three new Project 11356M frigates of the Black Sea Fleet (Admiral Grigorovich, Admiral Essen, and Admiral Makarov), two small missile boats from the Caspian Flotilla (Velikiy Usting and Grad Sviazhsk from Project 21631) and one from the Black Sea Fleet (Vichniy Volochek, also a

¹³ According to Article 12 of the Montreux Convention, Black Sea States' submarines (excluding Turkey) are only allowed to sail southbound to reach a naval shipyard located outside the Black Sea region. Yet, the article does not give any indication regarding the timespan that the submarine has to comply with the obligation.

¹⁴ The B-262 went under repair at the Kronsdat Naval Plant in the Gulf of Finland from late January 2020 to June 2020.

Project 21631-type small missile corvettes), as well as two SSKs (the B-268 *Velikiy Novgorod* and B-271 *Kolpino*, from the Black Sea Fleet). Thus, Russia's Mediterranean Squadron in late August 2018 had a theoretical firepower of 60 Kalibr cruise missiles, the equivalent of roughly two-thirds of the firepower of one Arleigh Burke-type guided missile destroyer. Although limited when compared to U.S. Navy destroyers, this firepower proved sufficient for the VMF in the Syrian war, complementing forces on the ground as well as Russian air assets.

Finally, Russia's naval presence in the Mediterranean is likely to face a structural challenge related to the orientation of the new State Armament Plan of 2018-2027. The completion of the 2011-2020 program prioritized naval rearmament, with roughly 25% of its budget going toward the modernization of the VMF. Yet, the priorities of the new armament plan focus on ground forces, air forces, airborne forces, and the manufacture of precision-guided munitions. The VMF is less of a priority. It is likely that Russian shipyards will continue to produce small- and medium-sized platforms, the biggest vessels being frigates, with perhaps a couple of large amphibious ships. Russia's naval plans have been further hampered by the termination of military-technical cooperation with Ukrainian and Western partners following the Ukrainian crisis. Russian Military-Industrial Company (VPK)

¹⁵ An Arleigh Burk-type destroyer features Mk 41 Vertical Launching System with 90 cells for Tomahawk cruise missiles.

¹⁶ Dmitry Gorenburg, "Russia's Military Modernization Plans: 2018-2027," *PONARS Eurasia Policy Memo*, N°495, November 2017, https://www.ponarseurasia.org/memo/russias-military-modernization-plans-2018-2027.
17 Yet, in Russia, vessels that qualify as "frigate" are more similar to a "destroyer" taking into account their displacement. The future "super-Gorshkov" frigate project should have a displacement of 8,000 or 9,000 tons and features 48 Kalibr-NK cruise missiles.

has faced tremendous difficulties overcoming the challenge of replacing gas turbines supplied by Ukraine's ZoryaMachProject (in Nikolaiev) and diesel engines (supplied by German contractors MTU and MAN). Project 11356M frigates were equipped with Ukrainian turbines, and the rupture in cooperation in 2014 has compelled Moscow to stop the production of the three last frigates of the batch and to sell two of them to India. 18 In the absence of a Russian solution, Russia has turned to China to acquire diesel engines for Project 21631. However, the Chinese engines did not prove sufficiently powerful or reliable.¹⁹ Also, the deployment of the Admiral Kuznetsov, Russia's sole aircraft carrier, off Syria (November-December 2016) proved ineffective. While the VMF lost two aircraft during approach maneuvers, the Kuznetsov's air wings were redeployed onshore on Khmeimim airbase. This demonstration proved that the attempt to reconvert the *Kuznetsov* to an offensive weapon (tasked with airstrikes against landtargets) from a defensive weapon (to interdict and deny access to a maritime zone, which is the original purpose of this type of aircraft carrier) failed.

Beyond Syria: What Horizons for Russia's Mediterranean Squadron?

Russia's naval involvement in the Mediterranean is set to grow in the coming years because it supports Moscow's geopolitical reinvestment in the Middle East and North Africa. From a

18 «Россия построит для Индии пару фрегатов к лету 2024 года» ["Russia to Build a Batch of two Frigates for India by Summer 2024"], Flotprom, February 6, 2020, https://flotprom. ru/2020/%D0%98%D0%BD%D0%B4%D0%B8%D1%8F10/.
19 «"Буяны-М" планируют ремоторизовать в начале 2020-х годов» ["Buyan-M type Small Missiles Ships to be re Motorized in the early 2020s"], Flotprom, July 9, 2019, https://flotprom.ru/2019/ЗеленодольскийЗавод15/.

political perspective, this expansion is based on the Kremlin's willingness to stick to the non-Western orientation in its foreign policy following the Ukrainian crisis. Moreover, given that the bulk of the VMF's newest vessels will be green water units, they will be unable to support sustained forward deployments in the absence of naval support points or facilities abroad. The Mediterranean Squadron will crystalize around a dozen surface units, with the two submarines stationed in Tartus and with one or two nuclear multipurpose submarines coming from the Northern Fleet. The VMF footprint can expand either way, toward the Red Sea or the Western Mediterranean Basin, while solidifying its presence in the Levant.

During the first half of the 2010s, the Kremlin sought alternatives to Tartus to maintain a naval support point in the eastern part of the Mediterranean. The Russians were troubled with their complete dependence on Syrian facilities, and unsuccessfully approached Montenegro (before it became a NATO member), Cyprus, and, later, Lebanon in search of facilities. In December 2017, Moscow and Damascus signed an agreement granting the VMF the use of Tartus for 49 years, with a mechanism to automatically extend the rent for another 25 years. Up to 11 vessels, including nuclear-powered ones, are authorized to dock at Tartus. Until recently, Russia's Material and Technical Support Point N°720 in Tartus only featured two floating docks and depots. Now, Moscow has started to upgrade the facility to turn it into a more robust naval base, something that will be completed during the 2020s. Considering the VMF's current order of battle and operational

^{20 «}Россия арендует на 49 лет сирийский порт Тартус» ["Russia to rent Tarsus for 49 years"], *RIA Novosti*, April 21, 2019, https://ria.ru/20190420/1552884890.html.

²¹ In Russian, «Пункт материально-технического обеспечения».

activity in the Levant, there is no need to expand dramatically the infrastructure in Tartus. In the Central and Western Mediterranean, Russia uses agreements with Malta, Spain (Ceuta), and Algeria for light logistical operations for the VMF. The only possibility for Moscow to potentially gain a substantial foothold in this part of the Mediterranean would be Libya, provided that the conflict is settled in terms favorable to Russia's interests.

Expansion towards the Red Sea remains another possibility. Several factors could help Moscow in this endeavor. The first is the presence of weak states that could offer Russia a naval base in return for a "life insurance" policy from Moscow. This is the kind of offer that Omar el-Bashir of Sudan apparently provided to Vladimir Putin while visiting Moscow in late 2017, before being toppled by a popular movement in April 2019.²² The same could apply in Somaliland, where Russia has reportedly been offered the possibility of setting up a naval base.²³ After its military success in Syria, Russia wants to crystalize its status as a reliable security provider in the Middle East, something it could do through a permanent naval presence in the Persian Gulf or the Arabian Sea. However, this would require a logistical support point in the Horn of Africa or in Yemen, where Moscow plays a discrete, but active, role in urging a negotiated solution to the conflict.

The Syrian crisis has catalyzed Russia's naval reinvestment in the Mediterranean. Based on the principle of sufficiency, the

^{22 «}Порт Судан: чем рискует Россия, возводя базу ВМФ в Африке» ["Port Sudan: what does Russia risk with a base in Africa"], *Moskovsky Komsomolets*, November 26, 2017, https://www.mk.ru/politics/2017/11/26/port-sudan-chemriskuet-rossiya-vozvodya-bazu-vmf-v-afrike.html.

^{23 &}quot;Somaliland seeks recognition by hosting naval bases," Anadolu Agency, January 11, 2019, https://www.aa.com.tr/en/africa/somaliland-seeks-recognition-by-hosting-naval-bases/1361649.

Mediterranean Squadron will in the years to come feature more light surface units potentially capable of delivering powerful strikes with their Kalibr cruise missiles. Its shape will follow the current tendency of the VMF to "littoralization" and "kalibrization," a rupture with the Soviet blue water navy of the 1970s and 1980s. The permanent presence of platforms equipped with long-range non-strategic weapons in the Mediterranean contribute to Russia's conventional deterrence and could be used in a conflict in the Middle East or North Africa. Tasked with the protection of Russia's southern flank, the Mediterranean Squadron projects the Russian line of defense into the Levant. This is aimed at deflating perceived pressure exerted by NATO on Russia's southwest flank. The projection of littoral warfare executed by Russia in the Eastern Mediterranean seems unlikely to be duplicated to other contexts outside the Mediterranean space. The VMF lacks proper projection capabilities, and Tartus remains Russia's sole naval base outside the post-Soviet space that Moscow can count on.

This page was left blank for printing purposes

Chapter 7

IMPLICATIONS FOR THE WEST

Robert E. Hamilton

The Russian Federation's intervention in Syria is a watershed event. However the war there ends, its impact on Russia is likely to be profound. For the first time in its post-Soviet history, Russia's military is fighting outside the borders of the former Soviet Union. In doing so, it is exercising military capabilities that had atrophied from long lack of use. Moscow is also rebuilding its diplomatic muscle through its role in Syria by managing a diverse coalition, leading a parallel peace process, and forcing the United States to take the Kremlin's preferences into account when making decisions in the Middle East. Through Syria, Russia has reemerged on the geopolitical stage. The war is not over, and there are many ways in which things could still go badly for Russia. Moscow may find that a return to geopolitical prominence entails costs and risks at least as great as the rewards that status brings. Nevertheless, the West will be dealing with a Russia that has changed fundamentally through its experience in the war.

Understanding these changes and their implications for Western governments is the focus of this conclusion chapter. This requires interrogating and drawing conclusions from the previous chapters in this volume. Accordingly, this chapter is structured around two questions. First, what does Syria tell us about how Russia fights its wars? Second, how has Russia's experience in Syria affected the capabilities of its armed forces? Answering these questions should increase our understanding of Russia as a geopolitical actor and allow Western governments to make more effective policy on issues where Russia is a factor.

Before answering these questions, a brief review of the reasons that Russia goes to war will be useful. Like all states, Russia goes to war for reasons that are complex and multifaceted. Yet, for Russia more than most states, decisions on war and peace are driven by the ideas that the world is a dangerous place, that Russia's security and even sovereignty are under constant threat, and that Russia is beset with external and internal enemies who collude against its interests. Coupled with these ideas is the belief that the U.S.-led "liberal world order" is not the rules-based, consultative arrangement that its supporters claim, but is actually a scheme designed to enshrine U.S. hegemony and keep Russia from assuming its rightful place as a center of power in a multipolar world.

Given this view of the world order, it is unsurprising that—as Anna Borshchevskaya notes in her chapter—the desire to overturn that order played a role in the Kremlin's decision to go to war in Syria.

But there were other reasons driving the decision, and these revolved around the idea that what was happening in Syria was a direct threat to Russia's own security. There are two reasons for this. First, as Michael Kofman argues in his chapter, Russian elites firmly believed that Syrian President Bashar al-Assad's fall—an event

that looked likely in late summer 2015—would end with Islamic State (ISIS) and al Qaeda affiliates in charge of a dismembered Syria, allowing Sunni extremism to spread to neighboring states and eventually threatening the Caucasus and Central Asia, both areas that Russia has long seen as its "soft underbelly."

Next, as both Borshchevskaya and Kofman note, Russian leaders saw what was happening in Syria as part of a larger pattern. In the Kremlin's view, Syria was not an isolated case, but simply the latest instance of the United States engineering "regime change" in states friendly to Russia. Particularly chilling for Russian President Vladimir Putin was the fate of Libyan leader Muammar Gaddafi, executed in the street by rebels after a North Atlantic Treaty Organization (NATO)-led intervention there in 2011. Putin directly blamed the United States for Gaddafi's murder, claiming that after a NATO airstrike on his convoy, U.S. "commandos, who were not supposed to be there, called for the so-called opposition and militants by the radio, and he was killed without an investigation or trial." When the United States began accusing Assad of war crimes and saying that he had to be removed from power, the Kremlin's leaders saw and dreaded a potential repeat scenario in Syria.

But Russia's fear and suspicion of U.S.-backed regime change extend far beyond the Middle East. Kremlin leaders routinely point to the movements that overthrew authoritarian governments in Georgia (2003), Ukraine (2004, 2014), and Kyrgyzstan (2005), which the Kremlin collectively labels the "Color Revolutions," not as popular revolts against authoritarianism but as coups backed

¹ Maxim Tkachenko, "Putin points to U.S. role in Gadhafi's killing," *CNN*, December 15, 2011, https://www.cnn.com/2011/12/15/world/europe/russia-putin-libya/index.html, accessed June 17, 2020.

and directed by U.S. intelligence services.

As far-fetched as it may seem to Western observers, the Kremlin's obsession with Color Revolutions is based in the fear that America's ultimate goal is to unleash one in Russia itself. Indeed, Putin said this in late 2011 when Russians took to the streets to protest his planned return to the presidency and Duma elections were labeled fraudulent by international and Russian observers. The protests, said Putin, began after the U.S. had sent "a signal" to "some actors in our country." Putin continued, "They heard the signal and with the support of the U.S. State Department began active work."² In the aftermath of the 2014 Maidan Revolution in Ukraine, the Color Revolution threat again loomed large in Putin's mind. In an address to Russia's Security Council later that year, he reminded them of the government's duty to prevent such an outcome. "We see what tragic consequences the wave of socalled color revolutions led to," he said. "For us this is a lesson and a warning. We should do everything necessary so that nothing similar ever happens in Russia."3

In Syria, then, Russia's fundamental insecurity and its rejection of the legitimacy of the U.S.-led world order combined to make military intervention an attractive option. As Anna Borshchevskaya writes in chapter 2, the Kremlin has always perceived a link between external and internal threats and fixated on its own sovereignty, which it sees as permanently under threat. Regime

² David M. Herszenhorn and Ellen Barry, "Putin Contends Clinton Incited Unrest Over Vote," *New York Times*, December 8, 2011, https://www.nytimes.com/2011/12/09/world/europe/putin-accuses-clinton-of-instigating-russian-protests.html, accessed June 17, 2020.

³ Darya Korsunskaya, "Putin says Russia must prevent 'color revolution," *Reuters*, November 20, 2014, https://www.reuters.com/article/us-russia-putin-security-idUSKCN0J41J620141120, accessed June 17, 2020.

survival is the primary goal, and this means deterring the West from interfering in Russia's internal politics. Syria provided a stage to do exactly that. As it did in Ukraine the previous year, Moscow saw Syria as a place to draw a line against further Western-backed "regime change" in a state important to Russia, thus ensuring that the contagion of the Color Revolution never threatened its own hold on power. In the Russian view, saving Assad was also critical to ensuring another contagion—that of violent Sunni fundamentalism—never threatened Russia's soft underbelly. Finally, Syria provided an opportunity for Russia to erode the "unipolar" nature of the U.S.-led world order by reestablishing itself as a geopolitical player in the Middle East.

How Russia Fights

Like all modern militaries, Russia entered the war in Syria with a strategy in mind. One way to define strategy is "a calculated relationship among ends, ways, and means—informed by an assessment of risk." In this definition, ends are the objectives the state pursues, ways are methods it uses to pursue those ends, and means are the resources it puts toward the effort. Another way to define the relationship among these terms is that means are nouns (people, things) and ways are verbs (actions a state takes, using the means available, to achieve its ends). For Russia, getting the strategy right in its first foray into the Middle East since the collapse of the Soviet Union was critical. It could not afford to allow the Syrian government to fall, nor could it allow itself to be drawn into a morass that it would struggle to escape.

^{4 &}quot;War, Policy and National Security Course Directive," U.S. Army War College, Academic Year 2020, p. 13.

Russian Ends

The ends that Russia pursued in Syria were largely negative or preventive. Put simply, Russia deployed its military to Syria to prevent the collapse of the government there. As Kofman notes, the Russian political elite believed that the collapse of the government would lead to a surge of ISIS- and al Qaeda-affiliated militants into neighboring states and eventually into Russia itself. Both Kofman and Borshchevskaya observe that drawing a red line to prevent further "Color Revolutions" was also on the minds of Kremlin decision-makers. Restoring the sovereignty of the Syrian government was a necessary precondition to both of these goals and therefore should be seen as Russia's primary end in Syria.

Moscow has, to this point at least, lived by the maxim "the perfect is the enemy of the good enough." It has been content with enough restoration of sovereignty to preserve Russia's strategic position in the eastern Mediterranean and the Levant, embodied in its air base at Khmeimim and its naval base at Tartus. It has shown little appetite for supporting Assad's pursuit of his periodic pledges to reestablish control over all of Syria. As Borshchevskaya notes, Russia also lacks the means and the inclination to rebuild Syria once the fighting has stopped, something the Assad regime clearly needs and hopes for. Whether or not Moscow is able to manage this divergence in preferences between it and Damascus remains to be seen.

Russian Ways

Like most strategies, Russia's initial strategy did not survive first contact with reality. As a result, Moscow showed impressive adaptability and flexibility. It continuously adapted the ways it fought to adjust to realities on the ground. As Kofman says,

the Russian military pursued multiple vectors—or ways, in the strategy model used here—reinforcing those that had success and abandoning those that did not. Over time, the following ways showed success and emerged as the core of the Russian campaign strategy in Syria.

The first way was a deliberate, geographically phased effort that allowed Russia and its allies to fight in key areas while holding the line in others. As Kofman notes, this effort had four main phases. In the first phase, from fall 2015 through spring 2016, Russian armed forces established transport and logistics links and created a buffer zone in Latakia to protect the Russian base at Khmeimim. In the second phase, which lasted through fall 2016, Russian and partner forces captured Palmyra from ISIS and eastern Aleppo from a coalition of Western-backed opposition groups. The third phase lasted until early 2018. In this phase, Russian and partner forces recaptured Palmyra from ISIS for the second time, captured Dayr-az-Zawr and towns to its south along the west bank of the Euphrates, and consolidated control over key southern Syrian districts like Hama. In the last phase, still ongoing, Russia and the Assad regime hope to regain control over Idlib Province.

Russia supported this geographically phased effort in two key ways. First, it used de-escalation zones as economy of force measures to reduce fighting in some areas, allowing it to focus its efforts according to the above plan. Moscow convinced much of the opposition to sign agreements to stop fighting in areas that they controlled. While the opposition saw these de-escalation agreements as steppingstones to ending the conflict and a political settlement, Moscow used them as temporary, tactical measures to allow it to focus its military efforts in other areas. As soon as the situation allowed and the forces were available, Russia and its

partners broke the de-escalation agreement in a particular area, attacked the opposition force there, and defeated it.

Another way Russia pursued its ends of restoring state power was indiscriminate air attacks. These attacks were indiscriminate in two ways. First, they did not discriminate between United Nations-designated terrorist groups and other opposition groups, many of which were UN-recognized and signatories to the cessation of hostilities agreement under UN Security Council Resolution (UNSCR) 2254. Russia bombed ISIS, al Qaeda affiliates, and Western-backed moderate opposition groups alike. Early in the campaign, Moscow actually targeted primarily the latter, largely ignoring ISIS and al Qaeda-affiliated groups. As Borshchevskaya says, Russia's use of air power against all Sunni groups in Syria—terrorist or not—actually strengthened ISIS in some ways by destroying some of the moderate Sunni groups that were its adversaries.

Russia's bombing also did not discriminate between legitimate military targets and those outlawed under the Geneva Conventions. The United Nations and multiple independent investigations found that Russian and Syrian aircraft routinely hit markets, hospitals, camps for displaced persons, and other protected sites. Russia also routinely denied humanitarian aid to rebel-held areas under siege by Russian and Assad regime forces, often citing the security situation as a justification. This combination of indiscriminate bombing, military siege, and the denial of humanitarian aid allowed under UNSCR 2254 gave rebel groups a choice between surrender

⁵ Nick Cumming-Bruce, "U.N. Panel Says Russia Bombed Syrian Civilian Targets, a War Crime," *New York Times*, March 2, 2020, https://www.nytimes.com/2020/03/02/world/middleeast/united-nations-syria-idlib-russia.html, accessed June 18, 2020.

and death, either by airstrike or starvation. Once that choice had become clear, Russia generally offered to open corridors for surviving opposition fighters to leave the area, usually transporting them to Idlib Province. Unsurprisingly, this tactic worked: in city after city, opposition fighters surrendered or left for Idlib, where many of them remain today.

The next way that Russia pursued its ends in Syria was the deliberate escalation of tensions with the United States. Shortly after the Russian intervention in September 2015, the U.S. and Russian militaries established a channel to de-conflict their air operations over the country. In July 2017, as U.S. and Russian ground forces and their partners found themselves operating in close proximity to one another, they established a parallel ground de-confliction channel. When it wanted to signal its displeasure with the military situation in Syria or force the United States into a conversation on a specific issue, Russia used these channels to announce that it was preparing to strike areas where U.S. and partner forces were operating, claiming it had evidence that ISIS fighters were there. This would force a high-level conversation between U.S. and Russian commanders, which the Russian side could then use to raise other issues that it wanted to discuss. Russia also deliberately struck areas ahead of where U.S. and partner forces were advancing in attempts to slow or halt their advance. Finally, the Russian military sent the U.S. military multiple proposals for "de-confliction agreements" that would have forced the United States and its partner forces to withdraw from areas that they had already liberated from ISIS. In this way, Russia sought to minimize the areas in which U.S. forces were present.

Russia used diplomatic and informational campaigns to support its military strategy for Syria. The approval of UNSCR 2254 in early

2016 established Russia and the United States as co-chairs of the International Syria Support Group, based at the UN in Geneva. Russia hoped to steer this group into ending the war on terms favorable to the Assad regime and then portraying its efforts in Syria as part of an international effort to fight terrorism. There was even a short-lived effort to establish a joint U.S.-Russian military headquarters in Geneva, where intelligence officers and military planners from the two countries would coordinate their attacks on ISIS in Syria. This effort at cooperation broke down over Russia's attack on Western-backed opposition groups that were protected from attack under UNSCR 2254 and the cessation of hostilities it put in place. Unable to achieve its diplomatic goals through the UN peace process, Russia launched the Astana Process in 2017. Participants include the Assad regime, Russia, Turkey, Iran, and occasionally some Syrian opposition groups. The main purpose of the Astana Process is to end the war on terms favorable to the Assad regime, Russia, and Iran by sidelining the United States and other supporters of the moderate Syrian opposition.

Russia has also used information and disinformation to support its campaign in Syria. Consistent themes of Russia's information operations have been that the Assad regime is the legitimate government of Syria, that Russia is in Syria legally while the U.S. presence there is illegal, that all groups opposed to Assad are terrorists, and that the United States is assisting ISIS in Syria. Russian information and disinformation tactics range from the diplomatically deft to the absolutely absurd. As an example of the former, Russia frames its intervention as a response to a request from the legitimate government of Syria and as a part of a war on terrorism. Its information operations contrast clean-shaven, Western-dressed Syrian government representatives with breaded radicals that Russia claims represent all opposition to the

government.

An example of the latter is the Russian "evidence" of U.S. support to ISIS, a picture purporting to show a U.S. vehicle leading a convoy of ISIS vehicles from southern Syria across the border to safety under U.S. protection in Iraq. The picture was later proven to be a screenshot from a video game. Russia's information operations in Syria fit the mold described in a 2016 RAND report on Russian propaganda: they are high-volume and multi-channel; they are rapid, continuous, and repetitive; they contain no commitment to objective reality and no commitment to consistency of message.⁶ As with much of Russia's propaganda, Moscow's messaging on Syria is less about convincing audiences that the Russian position is true, than about muddying the waters with so much conflicting information that the entire idea of truth seems implausible.

To summarize, Russia settled on the following ways to pursue its ends in Syria: a deliberate, geographic phasing of its operations; the use of de-escalation zones to allow it to focus in some areas and hold the line in others; the deliberate targeting of Western-backed groups and indiscriminate attacks on population centers to induce opposition groups to abandon them; deliberate escalation with the United States to hamper U.S. operations, followed by de-escalation to ensure no direct conflict between U.S. and Russian forces; a parallel diplomatic process designed to end the war on terms favorable to Damascus, Moscow, and Tehran; and an information/disinformation campaign against the United States and its partners.

6 Christopher Paul and Miriam Matthews, "The Russian 'Firehose of Falsehood' Propaganda Model: Why It Might Work and Options to Counter It," RAND, 2016, https://www.rand.org/pubs/perspectives/PE198.html, accessed June 29, 2020.

Russian Means

Limiting the means dedicated to the effort in Syria was a key consideration, both in the sense of not becoming overextended, and in the sense of not "owning" the conflict. Kofman notes that Russia's Syria strategy was not means-driven: Moscow never substantially increased the resources dedicated to the mission there. It maintained a relatively light footprint, probably never exceeding 5,000, and less than 4,000 by 2018. The original Russian plan called for the Syrian Arab Army to do the ground fighting with Russia providing much of the air support, long-range fire support, and other key enablers. Again, as Kofman notes, Russia soon found that the Syrian Army was incapable of assuming this burden, so Moscow turned to irregular forces like the Desert Tigers, Desert Falcons, Hezbollah, and Shia militias from Iraq to assume the burden for the bulk of the ground operations early on, as it worked to rebuild the combat capability of the Syrian Army. The Russian Army provided artillery, combat engineers, military police (MPs), Special Forces, and advisors to support local ground forces.

The Russian Aerospace Forces were the primary military means that Russia used to implement its strategy in Syria. Even though it carried much of the load, Russian planners endeavored to keep the air contingent as small as possible. Kofman estimates it averaged between 24-40 aircraft and about 16-40 helicopters. The small number of aircraft deployed necessitated a high sortic rate, which the Russian Aerospace Forces managed to maintain for an extended period of time with relatively few maintenance or safety problems. Means employed by the Russian Navy consisted primarily of supply ships that maintained the logistical support lines, as well as surface ships and submarines that maintained air

defense coverage and fired cruise missiles at high-value targets.

Conclusions

Russian strategy in Syria is summarized as follows:

Ends

- Immediate: prevent the collapse of the Syrian government
- Long Term: restore the sovereignty of the Syrian government

Ways

- A geographically phased approach
- Instrumental use of de-escalation agreements as an economy of force measure
- Intentional lack of discrimination between terrorist groups and opposition groups that were UNSCR 2254 signatories
- Intentional lack of discrimination between military and civilian targets
- Intentional escalation and de-escalation with the United States to minimize U.S. control or influence of areas
- An information campaign designed to portray the U.S. presence in Syria as illegitimate and the United States as an ally of ISIS
- A parallel diplomatic channel designed to shut the United States and United Nations out of the Syrian peace process

Means

- Light footprint with airpower as the primary Russian contribution
- Use of militia forces and a reconstituted Syrian Army as the primary ground fighting force
- Russian enablers: artillery, combat engineers, military police, Special Forces, and advisors to support local ground forces.
- Naval forces for resupply, long-range missile strikes, and air defense

In terms of the ends of Russian strategy, Western observers should understand that Moscow is often comfortable with protracted, low-level conflict and unclear outcomes in ways that Western governments are not. Russia's war in Syria is a limited war, and the Kremlin is comfortable with the fact that limited wars often end inconclusively—if they end at all. Western governments often strive to conclusively defeat an adversary, set the country where the war happened on the path to security and stability, and bring the troops home. This is a very tall order and is one of the reasons Western wars of the 21st century have largely been seen as failures.

Russia does not need such an outcome to see its intervention in Syria as a success. An outcome that restores the government's sovereignty over most, but not all, of Syria is acceptable, as long as Damascus and the areas around Russia's air base and naval base are stable. Similarly, Moscow has neither the appetite nor the means to engage in post-war reconstruction and stabilization in all of Syria. It may assist in the areas important to Russia, but will be content to let the rest of the country languish in post-war misery.

As noted earlier, it bears watching to see if these minimalist goals are acceptable to the Assad regime. If not, then a rift could develop between Moscow and Damascus.

For Western audiences, the main lesson that emerges from an examination of Russian ways in Syria is this: Moscow's lean, flexible approach solved immediate problems, but, in doing so, it created other problems more difficult to solve. For example, the "surrender or die" strategy the Russian military used in oppositioncontrolled cities, combined with the offer to let opposition fighters withdraw to Idlib Province, enabled Russia and the Assad regime to capture these cities without doing the hard, bloody work of urban fighting and without running huge prisoner camps for captured fighters. However, this strategy created another problem: Idlib Province is now a "petri dish" of terrorists, Turkish-backed opposition groups, and the remnants of Western-backed groups. The Assad regime's attempt to resolve this problem by destroying all opposition in Idlib in early 2020 was met with a vicious Turkish counterattack that severely hobbled Syria's military capability. An early March summit between Vladimir Putin and Recep Tayyip Erdogan resulted in a tenuous ceasefire, but did nothing to resolve the problem that is Idlib.

The means that Russia used to achieve its objectives in Syria also hold implications for the West. Many of these will be examined in the next section of this chapter, but two points are relevant here. First, as Kofman notes, Russian strategy was not meansdriven. Moscow never substantially increased the means devoted to Syria, and refused to allow itself to be drawn deeper into the conflict than its limited objectives warranted. For example, when confronted with the fact that the Syrian Arab Army had essentially disintegrated and was unable to provide the ground force to do the

fighting, instead of deploying large numbers of Russian ground forces, Russia patiently cobbled together a ground force from local and regional militias while it reconstituted the Syrian Army. If this pattern holds, then the Kremlin is likely to be able to avoid "quagmires" of the type that the United States encountered in Vietnam and Afghanistan. Patience, deliberately limited ends, and a refusal to throw more resources at the problem may allow Russia to retain its leverage and not "own" the conflict the way that Western governments often do.

Effect on the Capabilities of the Russian Armed Forces

Russia has always been primarily a land power. Even at the height of its Cold War naval power, the Soviet Navy never rivaled the U.S. Navy's ability to project power globally. The Red Army and its allies, by contrast, dwarfed their NATO adversaries, at least in terms of the sheer number of forces and equipment. In 1975, the Warsaw Pact had some 58 divisions facing 27 NATO divisions, and 19,000 tanks facing 6,100 NATO tanks in Central Europe. Today, the balance of land power in Europe looks drastically different. NATO armies today total some 1.75 million soldiers and 9,460 tanks against some 230,000 soldiers and 2,600 tanks for Russia, now stripped of its former Warsaw Pact allies, all of whom have joined NATO.

Despite NATO's clear superiority in land power, some Western politicians, military leaders, and analysts continue to worry about a Russian land invasion of Europe. Concern peaked after the 2014 Russian seizure of Crimea and support for separatists in eastern Ukraine. This concern is overstated: Russia can pose operational

^{7 &}quot;NATO and Warsaw Pact: Force Comparisons," North Atlantic Treaty Organization, https://www.nato.int/cps/fr/natohq/declassified_138256.htm, accessed June 25, 2020.

dilemmas for NATO, for example by closing the Suwalki Gap between Belarus and Kaliningrad or cutting off NATO forces in the Baltics. Assuming NATO members possess the political will to fight, a major war between Russia and NATO only ends one way: NATO victory. And there is no indication that Russia intends to start a war with NATO, in the Baltics or anywhere else. Some NATO members might have misgivings about the sanctity of the Alliance's Article 5, but Russia shows no sign of wanting to test NATO here. Add to this the facts that Russia's State Armament Plan 2011-2020 prioritized modernization for the Aerospace Force and the Navy, and the fact that these are the services that gained the most experience in Syria, and the focus by some Western analysts on the threat of a Russian land invasion of Europe looks misplaced.

Where Russia does seem poised to challenge Western interests is in the Black Sea and eastern Mediterranean. All of Russia's three most recent military interventions—Georgia in 2008, Ukraine in 2014, and Syria in 2015—have occurred in this region. Of these, Syria is the only intervention that has been both overt and long term: the Russia-Georgia War was over in five days; Russia's war in Ukraine is undeclared and unacknowledged, so Moscow has been careful to limit the extent of its involvement. The fact that it is taking place where the Russian challenge to the West is greatest and that it has been an overt, long-term war means that the Syrian war's effect on the Russian armed forces deserves serious study.

Ground Forces

In their chapter, Lester Grau and Charles Bartles note that Russian ground force operations revolved around a Russian model of military advisors, integrated and modernized fires, mobility and counter-mobility operations, a featured role for military police, and use of Special Forces and private military company (PMC) forces. While the Russian Army was the least affected of the services by its experience in Syria, it nevertheless improved its capabilities in these areas. As Grau and Bartles argue, Russia's ground force advisors played a significant role in saving the Assad regime from collapse. Russian military advisors soon realized the army that they were supposed to be advising existed largely in name only. In reality, by the time Russia intervened in September 2015, the Syrian Arab Army was close to collapse. Instead of falling in on coherent units, Russian advisors found themselves relying on militias like the Desert Tigers, Desert Falcons, and Hezbollah, while working to rebuild the Syrian Army. Kofman gives an example of this, noting that Russian advisors built the 5th Assault Corps "out of disparate fighting formations and volunteers, plus hiring perhaps 2,000 mercenaries to fight as battalion tactical groups."

In contrast to the U.S. model of advising, which uses Special Forces or Security Force Assistance Brigades (SFABs) specifically trained in the task, Russia deployed entire staffs from combat units to Syria in advisor roles. While this meant that the Russian advisors were less familiar with advising partner forces than a U.S. unit would be, the Russian model has the advantage that it produced entire staffs of combat units with advising experience. In an era of warfare where fighting with partner forces is increasingly common, the ability to advise and fight at the same time may provide advantages that the U.S. model lacks since U.S. SFABs are not meant to be employed as combat units.

Russia employed its artillery extensively and effectively in Syria. Grau and Bartles note that the Russian Army learned to use unmanned aerial vehicles (UAVs) to spot targets for its artillery and to protect lead and flanks of columns of Russian and Syrian

forces. The long loiter time and relative invisibility of UAVs give them considerable advantages over helicopters—Russia's previous platform of choice—in this role. The Russian Army also established a combined command and control system in order to integrate Russian and Syrian fires, something it had little experience in since the collapse of the Soviet Union. Russia used almost the entire inventory of its tube and rocket artillery systems in Syria, as well as the Iskander Operational-Tactical Rocket Complex (OTRK). Iskander fires two short-range ballistic missiles (SS-26 STONE) or two ground-launched cruise missiles (SSC-7), and is capable of hitting targets at ranges of up to 500 kilometers. The use of UAVs to find targets and do battle damage assessment and the integration of Russian and partner force fires are capabilities that Russia largely developed in Syria. And the use of nearly the entire inventory of the Russian Army's artillery over a long period of time in the Syrian desert doubtless revealed much about how to maintain the capabilities of these systems in a harsh and austere environment.

Russian Army engineers and MPs also played significant roles in Syria. Engineers gained experience in constructing installation defenses, route reconnaissance, road construction, and water purification, among other capabilities. Perhaps most significantly, Russian engineers demonstrated the ability to bridge rivers under fire. In September 2017, after several failed attempts by Syrian forces to do so, Russian engineers constructed a float bridge across the Euphrates just south of Dayr-az-Zawr, allowing Russia and the Syrian regime to establish a foothold east of the Euphrates, which had long been an operational objective. Russian MPs gained experience in a wide range of standard and non-standard MP tasks. Standard tasks exercised include maintaining base security; manning checkpoints and observation posts; ensuring

passage to and from de-escalation and de-confliction zones; conducting security patrols; and controlling civilian traffic. They also monitored ceasefire agreements, escorted humanitarian assistance convoys, and conducted peace support operations, none of which are standard tasks for Russian MPs.

Russian Special Forces and PMCs were also active in Syria. In contrast to U.S. Army Special Forces, whose missions are unconventional warfare, foreign internal defense (training and assisting partner forces), direct action (raids and attacks on important targets), special reconnaissance, and counterterrorism, Russian spetznaz in Syria performed a more limited mission set. Grau and Bartles note that the primary spetznaz missions in Syria were long-range reconnaissance and spotting targets for artillery, missile, and air strikes. Russian spetznaz have also had a geographic focus that is unlike the Western Special Forces model. While Western Special Forces are trained to work in any environment, spetznaz in Syria have generally operated in the deserts and mountains, leaving the cities to conventional forces.

Russia used PMCs, especially the Kremlin-linked Wagner Group, extensively in Syria. Grau and Bartles conclude that at the high point of its activities, Wagner was estimated to employ 6,000 personnel, with some 2,500 of them working in Syria. Russia's use of PMCs in Syria also does not follow the Western model, in which PMCs generally perform personal security detail (PSD) and guard duties. Russian PMCs in Syria were configured for combat and performed full-scale combat operations. Grau and Bartles provide a picture of the Wagner Group's organization for combat. Wagner deployed four reconnaissance and assault brigades to Syria. Each brigade had three companies, and each company had up to 100 personnel. Wagner also deployed an artillery, armor,

reconnaissance, communications, staff, and support units.

PMCs provide the Kremlin "off the books" and "non-attributable" combat power in Syria. Augmented by PMCs that do actual fighting, the Kremlin can claim a smaller official footprint in Syria, and it can allow PMCs to conduct missions that it prefers not to be associated with. The best example of this is the February 2018 incident near the town of Khasham in the Dayr-az-Zawr governorate. Wagner Group and allied Syrian forces attacked toward a unit of the U.S.-allied Syrian Democratic Forces (SDF), where U.S. Special Forces Advisors were present. When the U.S. ground de-confliction cell called the Russian headquarters at Khmeimim, Russian officers claimed no knowledge of the attack or control of the attacking forces.8 The resulting U.S. counterattack killed over 200 of the attackers. Kofman argues that poor coordination—and not a deliberate Russian attempt to test U.S. resolve—is the likely reason for the attack. Given the number of informal armed groups fighting in Syria and the difficulty of controlling or even monitoring their activities, this is a reasonable conclusion. Whatever the level of Russian military knowledge of or control over the incident, the Russian headquarters in Syria learned a valuable lesson about the resolve of the United States to protect its forces in Syria.

The level of coordination between Russian PMCs and the Russian military is increasing. The best evidence for this is the recent deployment to Libya of Russian fighter aircraft to support Wagner Group fighters there. U.S. intelligence observed 14 Russian MiG-29 and Su-24 aircraft fly from Russia to Khmeimim, Syria, where they were repainted to conceal their Russian markings, before

⁸ Email exchange between the author and the Director of the CJTF-OIR Russian Ground Deconfliction Cell.

flying on to Libya. Increased coordination between the Russian military and Russian PMCs could bolster the Kremlin's ability to influence conflicts that it claims it is not involved in. This will come at a cost to the Kremlin's reputation for veracity, but denying things that are clearly true is something that it has done routinely and will continue to do.

Aerospace Forces

Kofman describes Russian airpower as "grossly underrated" in Syria. Grau and Bartles argue that Russia learned that airpower alone was incapable of turning the tide in the war. These seemingly contradictory statements are both true. Russian airpower was necessary but insufficient for success in Syria. Without the deployment of Russian airpower in September 2015, the Assad regime probably would have collapsed by the end of the year. And without the deployment of Russian ground forces to rally and reassemble the disintegrating Syrian Army, Russian airpower alone would have been insufficient to regain and consolidate control over most of Syria.

Since none of Russia's adversaries in Syria had an air force, the primary measure of effectiveness for Russian airpower there is its effect on the ground situation. Anton Lavrov argues that Russian aircraft had little effect on the ground fight in the early stages of Moscow's campaign in Syria. He gives two reasons. First, Russian aircraft simultaneously attacked many different opposition groups spread over a vast area. Second, the fear of losses led Russian

⁹ Diana Stancy Correll, "Russian aircraft deploy to Libya to back private military contractors, AFRICOM says," *Military Times*, May 26, 2020, https://www.militarytimes.com/news/your-military/2020/05/26/russian-aircraft-deploy-to-libya-to-back-private-military-contractors-africom-says/, accessed June 26, 2020.

aircraft to operate from high altitudes and to drop mostly unguided bombs, making their attacks ineffective against moving targets, hardened targets, or point targets. It also limited their ability to provide close air support to ground forces in contact. As Kofman says, Russian bombs were "too big, too dumb, and ill-suited to the task of countering mobile formations."

It was a tragedy that jolted Russia into changing the way it used airpower in Syria. After the November 2015 ISIS bombing of Russian Metrojet Flight 9268, Russia conducted a massive retaliation campaign against the terrorist group. Instead of dissipating the effect of its airpower by attacking a diverse array of mostly Western-backed groups, it focused on punishing ISIS. It used not only the air contingent deployed to Syria, but also strategic bombers flying out of Russia itself. As Lavrov says, the Russian Aerospace Forces conducted "attacks on large, soft, and stationary targets: oil production and refining facilities, columns of thousands of oil carriers engaged in oil smuggling for terrorists." The effect of these attacks, combined with the ongoing U.S.-led air campaign against ISIS, destroyed the economic base of the terrorist group and began the process of wresting much of Syria from its control.

It was not long, however, before Russian Aerospace Forces reverted to the original strategy of attacking Western-backed groups, which it saw as the most immediate threat to the Assad regime. In summer and fall 2016, it conducted a relentless, indiscriminate bombing campaign against opposition-held eastern Aleppo. Focusing on Western-backed groups, Russian airpower decimated the city while Syrian and militia forces attacked it from the west, cutting the Castello Road, a key line of supply for opposition forces. When Russia and the Syrian government denied humanitarian

aid to the eastern half of the city, rebel groups there had no choice but to accept Russia's offer of safe passage to Idlib Province.

With the fall of the Western-backed opposition's self-declared capital in Aleppo, Russia felt comfortable directing its attacks against ISIS again. Throughout summer and fall 2017, Russian aircraft supported the drive of Syrian and militia forces across the central Syrian desert to the Euphrates River. A key victory in this part of the campaign was the liberation of Dayr-az-Zawr, under ISIS control for three years. In this part of the campaign, the Russian Aerospace Forces improved their abilities to support advancing ground forces and to hit targets quickly. As Lavrov observes, "The improvement in reconnaissance capabilities and accumulated overall experience since the start of operations allowed Russia to establish a more effective 'kill chain' and to improve reaction time from detection to destruction of the target."

In early 2018, with Syria east of the Euphrates under control of the U.S.-backed SDF, and the ISIS caliphate reduced to a small area of desert in central Syria, the Russian Aerospace Forces switched focus to eliminating the remaining pockets of resistance in the west of the country. This part of the campaign showed how much their capabilities had improved. Lavrov says of Russian airpower in this stage of the campaign, "Its effectiveness, lethality, and coordination with ground forces significantly improved. The fight for these heavily fortified and well-defended cities went much faster than the fight for Aleppo." By this time, improvements in tactics and the accumulated experience of several years in Syria gave Russian pilots the ability to hit moving enemy forces, something they lacked at the outset of the conflict. Again, to quote Lavrov, "Russia easily defeated the rare attempts by militants to mount counterattacks in 2018. An example is the Hayat Tahrir al-Sham

(HTS) counterattack in Northern Hama on March 14, when the RuAF decimated entire armored battle teams."

The Russian Aerospace Forces have had a decisive effect on the ground situation over the course of the intervention. After a slow start in fall 2015, Russian airpower steadily improved its ability to influence the situation on the ground. Reduced times from detecting to engaging targets, an improved ability to strike targets in support of ground operations, and the ability to hit moving enemy forces are three of the most important improvements. While the Russian Aerospace Forces still lag behind their Western counterparts in these areas, they are much closer to equality than they were at the start of Russia's intervention in Syria. The biggest remaining capability gap between Russian and Western air forces is in the area of precision munitions, but even here Russia has made progress.

Western experts estimate that only about 20% of the munitions dropped by the Russian Aerospace Forces in Syria were precision-guided. Russia made up for this deficiency in two ways. The first was the use of larger bombs, incendiary bombs, and cluster bombs. Lavrov says that as late as 2019-2020, large, unguided bombs were still the weapons of choice, especially for soft, stationary targets, where their explosive power made up for their lack of accuracy. The use of unguided munitions poses little problem when civilian casualties and collateral damage are not major concerns. And there is little evidence that Russia cared much about avoiding either. In fact, in the 2016 campaign to capture eastern Aleppo, it appears that indiscriminate bombing to induce terror was part of the

campaign strategy.11

The second way that Russia compensated for its lack of precisionguided munitions (PGMs) was the use of the Gefest bomb sight, which allowed Russian pilots to drop unguided bombs with theoretically PGM-like accuracy. Early in its deployment, the Gefest had limited effectiveness due to the lack of training in its use by Russian pilots and the requirement to fly above 4,000 meters to avoid short-range air defense weapons. Lavrov concludes that as Russian pilots became more proficient in its use, the Gefest performed well, allowing them to hit a "single house in an urban environment or a weaponized pick-up truck hiding in a shelter." By late 2019, Russian pilots were proficient enough in using the Gefest that they were able to rely less on cluster and incendiary bombs. Lavrov claims that in the Russian air attacks on Idlib Province that lasted from December 2019 until March 2020, not a single Russian use of these munitions was recorded. Given the fact that Turkish forces were deployed to Idlib at the time, Russia's ability to be more accurate from the air might have prevented an unintentional conflict between Russian and Turkish forces.

Russian Aerospace Forces maintained a much higher sortie rate over Syria than Western observers expected, given the number of aircraft deployed there. Despite never having more than 40-44 jets in Syria, the Russian Aerospace Forces maintained a daily sortie rate of 40-50, with a peak of 100-130 in early 2016. Kofman notes that the Aerospace Forces often deployed two crews for each aircraft to sustain the high sortie rate. And perhaps surprisingly, given the track record of Russian aircraft safety and maintenance,

^{11 &}quot;Russia/Syria: War Crimes in Month of Bombing Aleppo," Human Rights Watch, December 1, 2016, https://www.hrw.org/news/2016/12/01/russia/syria-war-crimes-month-bombing-aleppo#, accessed June 26, 2020.

they did so while maintaining a rate of mechanical failure much lower than in previous operations. Some of this is doubtless due to the fact that many of the aircraft deployed to Syria were newer models, but Kofman's observation that even older aircraft proved safer and more reliable than they have in past Russian operations implies systemic improvements in safety and maintenance.

Syria provided two more significant benefits to the Russian Aerospace Forces. First, it functioned as a test ground for the newest and most advanced Russian aircraft and equipment. As Lavrov notes, the Su-57 fighter, the AT-16 Scallion anti-tank missile, the MiG-29K, the maritime version of the Ka-52K helicopter, and the Orion armed drone all made their debut in Syria. But even some platforms like the Tu-160 and Tu-95MS strategic bombers, which had been in service for years, saw their first combat use over Syria. In all, Lavrov estimates that some 359 pieces of Russian military hardware saw their first combat use in Syria. Their performance allowed the Russian Ministry of Defense to make improvements to platforms already in service and informed procurement decisions on those still in the test and evaluation stage. Finally, Syria was the formative combat experience for a large majority of the Russian Aerospace Forces. As Kofman notes, Russian Defense Minister Sergey Shoygu claimed in 2019 that 98% of transport aviation crews, 90% of operational-tactical and army aviation crews, and 60% of long-range bomber crews had fought in Syria. Lavrov describes a continuous loop, whereby the lessons learned in combat over Syria were integrated into the curricula of Russia's professional military educational system. This resulted in changes to doctrine and tactics, which were then tested in Syria, and, if necessary, further refined.

The Russian Aerospace Forces are Russia's center of gravity in

its Syrian campaign. Without it, the Kremlin would probably have been unable to achieve its primary campaign objective of preventing the fall of the Assad regime. Although it was necessary for preventing the collapse of the Syrian government, airpower alone was insufficient for the restoration of government control over most of Syria. That required the deployment of ground forces that helped reconstitute the Syrian Army, instill a modicum of discipline into the many irregular forces fighting on the government's side, and provided key enablers like artillery, engineers, and MPs.

Maritime Forces

The effect of the intervention on the Russian Navy has been more uneven than in the other branches of the Russian military. On the one hand, the Navy oversaw an impressive logistical sustainment effort and demonstrated its ability to deliver precision cruise missile strikes from very long range. On the other hand, its lone foray into carrier aviation operations was close to disastrous, and it revealed deficiencies in its air and missile defense capabilities. But navies are unique among military services in their ability to exercise geopolitical—and not simply military—power. And it is here that the Russian Navy's experience in Syria may have the greatest effect on it and the country it serves.

The Russian Navy coordinated and implemented a logistical support effort unique in Russia's post-Soviet history. As Igor Delanoe notes, from July 2012 through January 2018, there were 318 rotations between Novorossiysk and Syrian ports, delivering 185,500 tons of cargo, 50% of which was delivered on Black Sea fleet vessels. When the logistical needs of the Syrian campaign outstripped the capabilities of the Navy, it quickly leased or purchased commercial vessels. This "Syrian Express," as it came

to be known, continues to meet the logistical requirements of the Russian contingent in Syria.

Russia's Navy has also showcased its ability to strike targets at long range with the Kalibr cruise missile. Russia's first Kalibr strike came in October 2015 when surface vessels from the Caspian Sea Flotilla fired 26 Kalibr-NK missiles on 11 targets in Syria, overflying Iraqi and Iranian airspace to do so. The fact that Russia carried out this strike from the Caspian Sea showcased the Kalibr's 2500 km (1500 mile) range. In December of the same year, a Russian submarine fired four Kalibrs while submerged in the eastern Mediterranean, marking the first firing of the Kalibr by a submerged submarine. While the use of the Kalibr by the Russian Navy showcases a new capability, Delanoe cautions against overestimating Russia's cruise missile firepower. He notes that the "kalibricized" task force that Russia deployed in the Levant in August 2018 consisted of nine ships (three frigates, three small missile boats, one small missile corvette, two submarines) with a combined capability to fire 60 Kalibr cruise missiles. While this may sound impressive, it represents only about 2/3 the number that a single U.S. Arleigh Burke class destroyer can fire.

The aircraft carrier *Kuznetsov* represents the most visible failure of the Russian Navy in Syria. Its highly anticipated 2016 deployment proved a debacle. It arrived in the eastern Mediterranean carrying the new MiG-29K and the maritime version of the Ka-52K helicopter as well as modernized Su-33s. Almost immediately after arrival, it lost a MiG-29KUB and Su-33 in landing accidents. Rather than continue to conduct high-risk takeoffs and landings from the carrier, the Navy decided to fly the aircraft ashore and operate them from the Russian air base at Khmeimim, making the carrier redundant. The *Kuznetsov* steamed home to Murmansk

and began extensive repairs that continued into mid-2020. Even in dry dock, the ship has continued to be cursed with mishaps. In October 2018, a floating dry dock servicing the *Kuznetsov* sank, "dropping a 70-ton crane that tore a 215-square-foot hole in the carrier's flight deck." A December 2019 fire aboard the ship while in dry dock added \$6.6 million to the cost of the repairs, which may now total \$1.5 billion. The deployment of Russia's sole aircraft carrier to the eastern Mediterranean, where it played no useful role in the Syrian campaign, put it out of action for four years and counting.

Air and missile defense is an area where the Russian Navy showed both strength and weakness. On one hand, as Delanoe notes, the Navy provided air and missile defense coverage for Russian forces in Syria via the ship-borne S-300 FORT system. It used this to defend the maritime approaches to the Syrian coast, allowing the air and missile defense systems ashore in Khmeimim and Tartus to focus in other directions. On the other hand, the Mediterranean Squadron's vulnerability to other threats forced the Russian military to deploy air defense and anti-ship systems ashore. As Delanoe says, "The deployment of anti-ship coastal battery Bastion and electronic warfare systems combined with the various anti-air systems (S-300, S-400, Pantsir-S1 for close-in anti-air warfare and Buk-M2 for middle range air defense) created multilayered protection for the Mediterranean Squadron." However, this limits the distance that the squadron's ships can operate from shore since if they stray too far from shore they will be unprotected by landbased systems.

¹² Michael Peck, "The Repair Bill for Russia's Aircraft Carrier: \$1.5 Billion?," *The National Interest*, December 28, 2019, https://nationalinterest.org/blog/buzz/repair-bill-russias-aircraft-carrier-15-billion-109001, accessed June 26, 2020.

As noted earlier, navies are unique in that they play a geopolitical role, not just a military one. And it is in this role that the Russian Navy's Syria experience may prove most important. The Navy's Mediterranean Squadron, resurrected in 2013, is here to stay, as is a Russian naval presence on the eastern Mediterranean. To again quote Delanoe, the Kremlin sees the Mediterranean Squadron as a way to "locally counter balance NATO navies and protect Russia's southern flank from perceived instability emanating from the Mediterranean's southern shore, in the context of the 'Arab Spring."

The agreement with the Syrian government to extend the lease agreement for Russia's naval base at Tartus for 49 years with a possible extension of 25 years means that Russia is in the region for the foreseeable future. The agreement allows 11 vessels to dock there, and Russia is currently upgrading Tartus to make it more robust as a base. Western navies will need to adjust to a much larger Russian naval presence and geopolitical role in the eastern Mediterranean. The good news for the West is that this is likely the extent of Russia's ability to project maritime power. As Delanoe notes, "The projection of littoral warfare executed by Russia in Eastern Mediterranean seems unlikely to be duplicated other contexts outside the Mediterranean space. The VMF lacks proper projection capabilities, and Tartus remains Russia's sole naval base outside the post-Soviet space that Moscow can count on."

The story of Russia's maritime operations in support of its campaign in Syria is a mixed one. The Navy quickly organized an impressive logistical operation and has sustained it for over five years. It also showcased new long-range strike capabilities in the Kalibr cruise missile. But its lone foray into carrier aviation operations was a debacle, and the Mediterranean Squadron

revealed weaknesses in its ability to protect itself unless covered by assets ashore. This essentially makes it a littoral, or "green water," unit. Furthermore, as Delanoe concludes, the Russian Navy is not a priority for future investment. Since Russia's State Armament Program 2011-2020 "prioritized naval rearmament, with roughly 25% of its budget going toward the modernization" of the Navy, the priorities through 2027 will "focus on the ground forces, air forces, airborne forces, and the manufacture of precision-guided munitions." Add to this Lavrov's conclusion that through their performance in Syria, the Russian Aerospace Forces bested the Navy in the competition to be Russia's premier force projection arm, and it is clear that Russia's Navy will not fare well in the competition for scarce budget rubles in the near future.

Conclusion

Five years on from its intervention in Syria, Russia presents a different and more formidable set of challenges for the West. Western policymakers will need to get used to the idea that Russia is intent on establishing itself as a force to be reckoned with in the geopolitical region that extends from the Black Sea to the eastern Mediterranean.

Whether Russia has "won" in Syria is an open question. It certainly achieved its immediate goal of preventing the collapse of the Assad regime, but it has yet to restore the government's sovereignty over large parts of the country and seems to have no idea how to do so. The two states standing in Moscow's way here are the United States, which controls the Al Tanf region and much of Syria north and east of the Euphrates, and Turkey, which has forces deployed in Idlib protecting its allies there. Russia seems to have neither the means nor the will to dislodge American and Turkish forces from their perches inside Syria. But it may not need to. Russia's

intervention is a limited war in pursuit of limited objectives, and Moscow may be comfortable with the status quo, as it serves those objectives. What remains to be seen is whether the Assad regime and Iran, Russia's primary partners in the war, will accept such an inconclusive outcome.

Syria holds important lessons for how Russia fights. As Kofman notes, Moscow "grew hungrier from the eating" in Syria. After achieving its initial goal of preventing the collapse of the Assad regime, Russia then decided to make Syria the centerpiece of its regional presence. But this does not reflect an expansion of the Kremlin's ends in Syria as much as the logical outgrowth of its initial success. Having saved the Assad regime from collapse and stabilized the western part of Syria, it was natural that Russia would try to gain geopolitically from its efforts. What it will not do is engage in nation-building or significant reconstruction in Syria, as Western states might be tempted to do. The Kremlin will be content with a client state that is just stable enough to protect Russian interests there.

Russia's strategy in Syria was minimalist in the means that it devoted to the effort and flexible in the ways it chose. The number of forces deployed was never more than 5,000 and was below 4,000 by 2018. Moscow was patient in Syria. Rather than deploy more Russian ground forces when they understood the incapacity of the Syrian Arab Army, Russian military leaders chose to rely on local and regional militias in the immediate term as they rebuilt Syria's ground fighting forces over the long term. The overriding concern was to avoid "owning" the ground fight and to avoid being more committed to Syria's success than Syrians themselves were.

As Kofman concludes, Russia pursued multiple routes to success in Syria, reinforcing those that showed promise and abandoning those that did not. It finally settled on a geographically phased approach, with the use of de-escalation agreements to allow it to pause fighting in certain areas so that it could focus on others. Russia also chose not to discriminate between the UN-designated terrorist organizations in Syria and Western-backed moderate opposition groups that were parties to the cessation of hostilities agreement pursuant to UNSCR 2254. The Russian military in Syria also intentionally escalated the situation with the United States in a mostly unsuccessful attempt to deter the United States and its partner forces from moving into areas that Russia hoped to secure for the Assad regime. Finally, Moscow launched diplomatic and informational campaigns designed to support the military one.

An examination of the ways that Russia pursued its ends in Syria leads to the following lessons for Western observers. First, Russia is more risk-acceptant than most Western governments would be. Russian forces in Syria intentionally escalated the situation with the United States to deter it from taking action counter to Russian interests, confident that they could manage the level of escalation, and de-escalate successfully when required. Russia does this because in Syria and globally, it knows that the United States is the more powerful party and the party more interested in preserving the status quo. Intentional escalation and other forms of risk-acceptant behavior are a way for Moscow to equalize the power imbalance and to cause general disruption of the order the United States leads and hopes to preserve.

Next, Russia is less concerned about reputational damage than Western governments would be. Put simply, Russia is willing to commit war crimes in Syria because they serve the ends of Russian strategy and because Moscow believes its propaganda

efforts will muddy the waters enough that it will pay no real price. Finally, Western policymakers should understand that Russia sees all agreements that it concludes in Syria in instrumental terms. Whether it is UNSCR 2254, de-escalation agreements with opposition groups, or de-confliction agreements with the United States, Russia will violate the agreement the moment that it sees an advantage in doing so.

Finally, the Syria experience was transformational for the Russian armed forces, but the extent of that transformation was uneven. The Russian Aerospace Forces was the most transformed by its experience in the war. As Lavrov says, through its performance in Syria, the Aerospace Forces won the competition with the Navy to determine which service would be Russia's premier power projection force. Russian pilots are more experienced and more confident in their equipment than they have been at any time since the collapse of the Soviet Union. U.S. pilots who have flown over Syria express great respect for the capabilities of some of the Russian aircraft they have seen there, especially the Su-35.¹³ Deficiencies remain, especially in the availability and performance of precision-guided munitions, but the Russian Aerospace Forces are a more formidable adversary than Western air forces have faced in decades.

The Russian Army was partially transformed by its experience in Syria, with the greatest gains coming in its staff operations and among those branches that had the most direct contribution to the fight. The Russian model of advising, which transplanted the entire staffs of combat units to Syria, should make those staffs better able to plan and oversee complex ground operations in any

¹³ U.S. Air Force pilots, conversations with the author, August-October 2017.

future conflict. And branches such as the artillery, engineers, MPs, and Special Forces gained much from their experience in Syria. Russia's tank and motorized rifle regiments, long the centerpiece of its land power, were largely left out of the war.

The Russian Navy's performance was uneven. It showed agility and staying power in establishing the "Syrian Express," which has met the logistical needs of the Russian military contingent for five years. Its Kalibr cruise missile strikes on Syria from the Caspian and Mediterranean Seas demonstrated a new Russian capability that Western militaries will have to contend with from now on. But the Navy's 2016 attempt to contribute to the air campaign from its lone aircraft carrier was a debacle that has essentially taken that capability off the table for the time being. Instead, as Delanoe says, Russia will put to sea a "littoralized" and "kalibricized" navy.

The final lesson for Western observers from Russia's experience is that it may have changed the way in which the Russian military views war. Kofman notes that in 2013 Russian Chief of the General Staff Valery Gerasimov wrote, "Each war represents an isolated case, requiring an understanding of its own particular logic, its own uniqueness." In other words, before Syria, the Russian military rejected the idea of a "template" for waging a certain type of campaign. This is very different from the way that Western militaries operate. In the West, it is the type of warfare that determines how the war is to be fought, not the environment it is to be fought in. If, as Kofman says, Russia is moving away from the idea that each war is an isolated case and is moving toward the idea that the lessons of Syria can be "doctrinally assimilated into a template of sorts for how to deploy forces in future interventions," the implications for those who study the Russian way of war would be profound.

Key Takeaways

- Russia has not won conclusively in Syria, but may not need to in order to achieve its objectives.
- Russia hopes to make Syria the centerpiece of its regional presence, but seeks to avoid engaging in reconstruction or nation-building there.
- Russian strategy has been minimalist in the means deployed and flexible in the ways it used those means; it pursued multiple vectors and reinforced those that had success.
- Russia is risk-tolerant, unconcerned about reputational damage, and sees all agreements in instrumental terms, violating them as soon as it is convenient.
- Syria was transformational for the Russian armed forces, but the transformation was uneven, with the Aerospace Forces the most transformed, and the Army and Navy less so.
- The institutionalization of the lessons of Syria may change the way in which Russia approaches warfare, from seeing each war as an isolated case to forming a doctrinal template for certain types of warfare.

This page was left blank for printing purposes

About the Editors and Contributors

Editors

Colonel (Retired) Robert E. Hamilton, Ph.D., is an Associate Professor of Eurasian Studies at the U.S. Army War College and a Black Sea Fellow at the Foreign Policy Research Institute. In a 30-year career in the U.S. Army, spent primarily as a Eurasian Foreign Area Officer, he served overseas in Saudi Arabia, Iraq, Germany, Belarus, Qatar, Afghanistan, the Republic of Georgia, Pakistan and Kuwait. He is the author of numerous articles and monographs on conflict and security issues, focusing principally on the former Soviet Union and the Balkans. He is a graduate of the German Armed Forces Staff College and the U.S. Army War College and holds a Bachelor of Science degree from the United States Military Academy, a Master's Degree in Contemporary Russian Studies and a Ph.D. in Political Science, both from the University of Virginia.

Chris Miller is the Director of the Foreign Policy Research Institute's Eurasia Program. He is also Assistant Professor of International History at the Fletcher School of Law and Diplomacy at Tufts University. His research examines Russian politics, foreign policy, and economics. His most recent book is *Putinomics: Power and Money in Resurgent Russia* which has been reviewed in publications such as The Financial Times, Foreign Affairs, The National Interest and the Times Literary Supplement. He is also the author of *The Struggle to Save the Soviet Economy: Mikhail Gorbachev and the Collapse of the USSR*, which was published in 2016. He is a regular contributor to publications such as Foreign Policy, Foreign Affairs, the Wall Street Journal, and The American Interest. He received his PhD from Yale University and his BA from Harvard University.

Aaron Stein is the Director of Research at the Foreign Policy Research Institute (FPRI). He is also the Director of the Middle East Program and Acting Director of the National Security Program. Previously, Dr. Stein was a resident senior fellow of the Atlantic Council, where he managed their Turkey-related research program, oversaw work on nonproliferation in the Middle East with a focus on Iran, and researched non-state actors in the Middle East, with a particular focus on Kurdish groups in Syria and Iraq. He also hosts the Arms Control Wonk and the Middle East Brief podcasts. He was a doctoral fellow at the Geneva Center for Security Policy (Switzerland), an Associate Fellow of the Royal United Services Institute (London), and Nonproliferation Program Manager at the Center for Economics and Foreign Policy Studies (Istanbul).Dr. Stein has published in such peer-reviewed journals as Survival and RUSI Journal, and in such periodicals as Foreign Affairs, War on the Rocks, and The American Interest.

He holds a BA in politics from the University of San Francisco and an MA in international policy studies with a specialization in nonproliferation from the Middlebury Institute of International Studies at Monterey. Dr. Stein received his PhD in Middle East and Mediterranean studies at Kings College, London.

Contributors

Dr. Anna Borshchevskaya is a senior fellow at The Washington Institute, focusing on Russia's policy toward the Middle East. In addition, she is a fellow at the European Foundation for Democracy. She was previously with the Atlantic Council and the Peterson Institute for International Economics. A former analyst for a U.S. military contractor in Afghanistan, she has also served as communications director at the American Islamic Congress. Her analysis is published widely in publications such as Foreign Affairs, The Hill, The New Criterion, and Middle East Quarterly. Until recently, she conducted translation and analysis for the U.S. Army's Foreign Military Studies Office and its flagship publication, Operational Environment Watch, and wrote a foreign affairs column for Forbes. She is the author of the February 2016 Institute monograph, Russia in the Middle East. She holds a doctorate from George Mason University.

Michael Kofman serves as Director of the Russia Studies Program at CNA and as a Fellow at the Kennan Institute, Woodrow Wilson International Center in Washington, DC. His research focuses on the Russia and the former Soviet Union, specializing in Russian armed forces, military thought, capabilities, and strategy. Previously, he served as a Program Manager and subject matter expert at National Defense University, advising senior military and government officials on issues in Russia and Eurasia. Mr. Kofman is also a Senior Editor at War on the Rocks, where he regularly authors articles on strategy, the Russian military, Russian decision-making, and related foreign policy issues. He runs a personal blog on the Russian armed forces at https://russianmilitaryanalysis.wordpress.com/

Mr. Kofman has published numerous articles on the Russian armed forces, security issues in Russia/Eurasia, and analyses for the US government. He holds an MA in International Security from the Edmund A. Walsh School of Foreign Service at Georgetown University.

Dr. Lester W. Grau is a Senior Analyst for the Foreign Military Studies Office (FMSO) at Fort Leavenworth, Kansas. He has served the U.S. Army for 52 years, retiring as an infantry Lieutenant Colonel and continuing service through research and teaching in Army professional military education. His on-the-ground service over those decades spanned from the Vietnam War to Cold War assignments in Europe, Vietnam, Korea, and the Soviet Union to the wars in Afghanistan and Iraq. As one of the U.S. Army's leading Russian military experts, he has conducted various assignments in Russia including collaborative research with the Russian General Staff's Military History Institute and with other Russian military officials. He has also conducted collaborative research in Afghanistan, Pakistan, and with numerous organizations in Europe.

Dr. Grau is the author of 18 books and 250 articles and studies on tactical, operational and geopolitical subjects, translated into several languages. He received his doctoral degree from the University of Kansas. His advanced military education includes the U.S. Army Command and General Staff College and the U.S. Air Force War College.

Charles K. Bartles is an analyst and Russian linguist at the Foreign Military Studies Office at Fort Leavenworth, Kansas. His specific research areas include Russian and Central Asian military force structure, modernization, tactics, officer and enlisted professional development, and security assistance programs. Chuck is also an

space operations officer and Major in the Army Reserve that has deployed to Afghanistan and Iraq, and has served as a security assistance officer at embassies in Kyrgyzstan, Uzbekistan, and Kazakhstan. Chuck has a BA in Russian from the University of Nebraska-Lincoln, an MA in Russian and Eastern European Studies from the University of Kansas, and is currently a PhD candidate at the University of Missouri-Kansas City.

Dr. Igor Delanoë is Deputy-Head of the French-Russian Analytical Center Observo (Moscow, French-Russian Chamber of Commerce). He holds a PhD in History from the University of Nice-Sophia Antipolis (France). After having defended his PhD dissertation (2012), he achieved a post-doctoral fellowship within the Black Sea Security Program (John F. Kennedy School of Government, Harvard University) in 2013. In 2014, he worked as a History Lecturer at the French University College of St Peterburg (University Paris 1 – St Petersburg State University) before joining the Analytical Center Observo in Moscow in 2015 as Deputy-Head.

His primary areas of research interest concern Russian defense and foreign policy issues, Russia's interests in the Mediterranean and in the Middle East, as well as the geopolitics of the Black Sea region. He is a Research Associate at the Center for International and European Studies (Kadir Has University, Istanbul) and at the University of Nice-Sophia Antipolis (Center for Modern and Contemporary Mediterranean Studies; Center for International and European Law). He was a consultant for the French ministries of Foreign Affairs and Defense, for DCAF - Geneva Centre for Security Sector Governance, and for the Center for Humanitarian Dialogue (Geneva). He is an invited speaker at the NATO Defense College (Rome).

Anton Lavrov is a graduate of Tver State Technical University. Currently, he is a military observer for the Izvestia newspaper covering Russian military developments and modern local conflicts. Since 2009 he was an independent military analyst, closely associated with Moscow-based Centre for Analysis of Strategies and Technologies (CAST). His primary fields of expertise are Russian military reform, the Russian defense industry, the 2008 Russian-Georgian War, the conflict in Eastern Ukraine, and the recent Russian operation in Syria. He is a co-author of 12 books (on Russian and English language), author of several papers and major publications on those topics. In 2018 Mr. Lavrov was a visiting fellow in the Washington-based Center for Strategic and International Studies.



OUR MISSION

The Foreign Policy Research Institute is dedicated to bringing the insights of scholarship to bear on the foreign policy and national security challenges facing the United States. It seeks to educate the public, teach teachers, train students, and offer ideas to advance U.S. national interests based on a nonpartisan, geopolitical perspective that illuminates contemporary international affairs through the lens of history, geography, and culture.

OFFERING IDEAS

In an increasingly polarized world, we pride ourselves on our tradition of nonpartisan scholarship. We count among our ranks over 100 affiliated scholars located throughout the nation and the world who appear regularly in national and international media, testify on Capitol Hill, and are consulted by U.S. government agencies.

EDUCATING THE AMERICAN PUBLIC

FPRI was founded on the premise that an informed and educated citizenry is paramount for the U.S. to conduct a coherent foreign policy. Through indepth research and events on issues spanning the geopolitical spectrum, FPRI offers insights to help the public understand our volatile world.

CHAMPIONING CIVIC LITERACY

We believe that a robust civic education is a national imperative. FPRI aims to provide teachers with the tools they need in developing civic literacy, and works to enrich young people's understanding of the institutions and ideas that shape American political life and our role in the world.

WWW.FPRI.ORG

Published by the Foreign Policy Research Institute September 2020 $\,$

Editors: Robert E. Hamilton, Chris Miller, Aaron Stein Contributors: Anna Borshchevskaya, Michael Kofman, Lester Grau, Charles Bartles, Anton Lavrov, Igor Delanoë

Edited by: Thomas Shattuck Design by: Natalia Kopytnik

© 2020 by the Foreign Policy Research Institute



This thorough and thoughtful book reveals how and why the Kremlin has abetted the Bashar al Assad regime's serial mass homicide under the guise of counter-terrorism. *Russia's War in Syria* should be read, discussed, and applied to counter Vladimir Putin's evolving style of warfare and subversion."

—**H.R. McMaster**, author of *Dereliction of Duty* and *Battlegrounds: The Fight to Defend the Free World.*

"Russia's War in Syria is an understated gem of a book: short, but comprehensive. Everything you need to know about Russian military strategy from the big picture to the small picture is here in detail. There is also a concise capsule history of the Syrian civil war that is incredibly useful for scholars and journalists. This book is not to be skimmed, but to be read closely."

—**Robert D. Kaplan**, Robert Strausz-Hupé Chair in Geopolitics, Foreign Policy Research Institute, and author of *The Revenge of Geography and The Return of Marco Polo's World*.

"In Russia's War in Syria: Assessing Russian Military Capabilities and Lessons Learned, the Foreign Policy Research Institute uncloaks Russia's military strategy and tactics in Syria, the latest flashpoint in U.S.-Russia conflict. From targeting western backed opposition with indiscriminate attacks to the Kremlin's imposition of de-escalation zones and intermingling of Spetsnaz with private military companies, the exceptional FPRI subject-matter experts deliver unmatched analysis, which will be of supreme value to Russia and Middle East watchers alike."

—Daniel Hoffman, former Director of the CIA's Middle East and North Africa Division.

This edited volume, *Russia's War in Syria: Assessing Russian Military Capabilities and Lessons Learned*, published by the Foreign Policy Research Institute, sets out to examine the Russian Federation's way of war in Syria five years on. It consists of seven chapters, authored by nine subject-matter experts from the United States and Russia. The authors closely examine the various roles that Russia and its military forces have played in the Syrian civil war and fight against the Islamic State (ISIS).

Editors

Robert E. Hamilton, Chris Miller, Aaron Stein

Contributors

Anna Borshchevskaya, Michael Kofman, Lester Grau, Charles Bartles, Anton Lavrov, Igor Delanoë



