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MASON CLARK

# THE RUSSIAN MILITARY'S LESSONS LEARNED IN SYRIA



MILITARY LEARNING AND  
THE FUTURE OF WAR SERIES

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The background of the entire page is a detailed topographic map, showing contour lines and terrain features in a light brown or tan color. The map is oriented vertically, with the top of the page showing higher elevations and the bottom showing lower elevations. The lines are closely spaced in some areas, indicating steeper slopes, and more widely spaced in others, indicating flatter terrain. The overall appearance is that of a technical or military-style map.

Mason Clark, Institute for the Study of War

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Cover: DAGESTAN, RUSSIA - AUGUST 15, 2018: Vladimir Vasilyev, acting head of the Republic of Dagestan, Russia's Defense Minister Sergei Shoigu, Colonel General Alexander Dvornikov, commander of the Russian Army's Southern Military District, and Russian Deputy Defense Minister Dmitry Bulgakov (L-R) inspect the construction of the Caspian Flotilla's infrastructure in Kaspiysk. Vadim Savitsky/Russian Defence Ministry Press Office/TASS (Photo by Vadim Savitsky\ TASS via Getty Images)

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## ABOUT THE AUTHOR

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# THE RUSSIAN MILITARY'S LESSONS LEARNED IN SYRIA

## Executive Summary

**The Russian military identifies its deployment to Syria as the prototypical example of future war—an expeditionary deployment to support a coalition-based hybrid war.** The Russian General Staff cites Syria as highlighting the need for Russia to develop a new military capability—deploying flexible expeditionary forces to carry out “limited actions” abroad. The Russian Armed Forces are applying lessons learned from their experience in Syria to shape their development into a flexible and effective expeditionary force.

**The United States must avoid projecting its own modernization priorities—or those of other competitors such as China—onto Russia.** The Russian military is making discrete choices to concentrate on certain learning opportunities from Syria while rejecting or deemphasizing others. These choices are optimized to support a Russian concept of operations that is distinct from both pre-Syria Russian modernization efforts and the United States’ own modernization efforts.

**The Russian military is using lessons learned managing an ad hoc coalition and proxy forces in Syria to inform preparations to coordinate formal coalitions in future wars.** The Kremlin seeks to set conditions to ensure its next “limited action” based on Syria, as described by Chief of the Russian General Staff Valery Gerasimov, can leverage non-Russian forces. The Kremlin’s preparations in this regard include practicing coalition operations in exercises and expanding Russia’s international military ties—magnifying the Kremlin’s power projection capabilities.

**The Russian military’s main lesson from Syria is the need to gain “superiority of management” in future conflicts.** The Russians define superiority of management as making better decisions faster than the opponent and compelling the opponent to operate within a Russian decision framework. They assert that obtaining superiority of management will be commanders’ key focus in increasingly fast and complex conflicts. The Russian military

assesses that command and control (C2) efficiency is the key predictor of success in modern and future operations. Many Russian lessons on command and control are new to Russia, not novel innovations in modern warfare, but the Russian military is effectively leveraging learning from Syria to close its gap in C2 capabilities with Western militaries.

**The Kremlin optimized its deployment to Syria to instill combat experience throughout the Russian military.** Gerasimov considers the Syrian civil war to be the Russian military’s primary source of learning for the future of war and optimized Russian deployments to ensure as many officers as possible gained experience to contribute to this learning effort. Much of the Russian senior officer class now possesses the experience needed to contribute to the process of developing adaptations to lessons learned in Syria.

**Russian military exercises since 2015 have institutionalized and refined adaptations to lessons from Syria.** Russian discussions on learning from Syria evolved rapidly from 2015 to 2020, and many adaptations discussed in this report have likely been incorporated into doctrine, including in Russia’s classified National Defense Plan for 2021-2025.

**The Russian military’s chosen adaptations to its learning from Syria pose several challenges to the United States and its allies.** The United States cannot assume its ongoing modernization efforts will incidentally counter the Russian military’s



changing capabilities in command and control, expeditionary warfare, and coalition warfare. The Russian military still requires extensive investment and time to implement the lessons learned from Syria. **If the United States does not take action to counter these developments in the coming years, however, Russia's new toolkit of capabilities drawn from Syria will close several capability and technology gaps with the United States and NATO.**

- **The United States should not underestimate the Kremlin's intent to conduct expeditionary deployments modeled on its intervention in Syria.** The Kremlin identifies Syria as a highly successful—and replicable—operation and conceives of expeditionary deployments as a new addition to the Kremlin's policy toolkit. The Kremlin is already applying its lessons from Syria to its involvement in Libya and Nagorno-Karabakh.
- **The United States must maintain a global, flexible force posture to confront the Russian military.** The United States need not deploy its own military forces everywhere the Kremlin might conduct expeditionary operations, but it must find and develop allied and partner military forces to counter the Russian threat. The Russian military threat is not confined to Europe and cannot be countered by conventional deployments alone.
- **The United States must prioritize contesting Russian efforts to secure superiority of management.** The United States and its allies need not copy this concept but must develop an understanding of what the Russian military sees as the key combat task of its officers—increasing the speed of their own decision making and reducing their opponents' command and control capabilities.
- **The Russian military's new cadre of combat-experienced officers may transform Russian military thinking and effectiveness.** Every Russian military district commander and nearly all officers above the regiment and brigade level now possess experience from Syria. The Russian military's practice of transplanting entire Russian staffs

to Syria ensured Russian forces developed unit cohesion during advising missions.

- **The Kremlin will likely leverage coalition partners more effectively in future combat operations.** The United States should take steps to strengthen cooperation with NATO and extend outreach to other states to mitigate the Kremlin's ability to grow its network of military ties. The United States and its allies should also develop methods to disrupt enemy coalitions, a task the United States has not had to conduct in recent wars.

**The Russian military is leveraging learning from Syria to close several capability gaps with the United States and NATO.** The United States and its allies should prepare for the Russian military to further modernize several capabilities that, while not new to the United States and NATO, will empower the Russian military.

- **The Russian military's prioritization of networked command systems, if achieved, will erode one of the United States and NATO's key technological advantages.** The Kremlin's ongoing effort to modernize command and control systems will be a costly process, but the Russian military is already making rapid progress, testing systems in 2020 that were theoretical as recently as 2018.
- **The Russian military is supporting its technological modernization of command systems with a campaign to overhaul Russian command culture.** The Russian General Staff is embarking on a difficult generational effort to introduce initiative and creativity into the Russian officer corps. Future Russian officers will likely demonstrate greater creativity and flexibility than their predecessors, and the United States and its allies must avoid increasingly outdated assessments of Russian command culture rooted in the Soviet era.
- **The Russian military is developing doctrines to support increased precision-strike capabilities but achieving these goals requires further costly technological investment.** The United States and its allies must particularly take steps to harden logistics and command assets to mitigate the

Russian military's focus on developing capabilities to target rear areas as a key element of gaining superiority of management. The United States and its allies should additionally maintain sanctions pressure to deprive the Kremlin of the resources necessary to implement costly acquisitions programs.

- **The Russian military is likely developing capabilities to challenge the use of unmanned aerial vehicles (UAVs).** The United States and its allies should prepare to operate drones in an increasingly dangerous airspace. Modernization efforts must account for the increasing sophistication of Russian UAV and counter-UAV capabilities.

**The United States and its allies must prepare to confront an increasingly effective Russian military that is intent on further developing expeditionary capabilities and using them in coalition environments.** Russia is still involved in and still learning from the conflict in Syria. Additional Russian discussion and testing of ideas, not to mention further combat experience, will likely refine many of the adaptations that the Russian military is still developing from its lessons learned in Syria. The Russian military's learning from Syria is driving Russian modernization efforts; the United States must understand this learning and adaptation to confront the Kremlin effectively.

## Introduction

The Kremlin is using its intervention in the Syrian Civil War as the foundational shaping experience for the development of the Russian Armed Forces. The Russian military is generalizing learning from Syria to inform doctrinal development and training, instilling lessons from Syria into the education of the next generation of personnel. The Russian military views its deployment to Syria as the prototypical example of future war—an expeditionary deployment to support a coalition-based hybrid war—and seeks to improve Russia's expeditionary capabilities by studying this conflict. The Russian military's chosen adaptations to lessons from Syria expose several vulnerabilities, and many ongoing developments in the Russian military are new to Russia, though not to the United States. The Russian military is nevertheless successfully capitalizing on learning from Syria to shape its development into a flexible and effective expeditionary force.

This report evaluates Russia's lessons-learned process from Syria since 2015 to inform ongoing US modernization efforts to counter the Russian Armed Forces. Russia's lessons learned in Syria remain an understudied topic. Several organizations published excellent reports on Russia's lessons learned in Syria in 2020, including the Foreign

Policy Research Institute, MITRE Corporation, and the George Marshall Center for Security Studies.<sup>1</sup> These reports highlight many of the Russian lessons learned discussed in this report, including the identification of Syria as a prototype for future Russian expeditionary operations and the importance the Russian military places on the use of precision weapons and reconnaissance UAVs. This report highlights the Russian military's prioritization of improving command and control capabilities based on Syria—the primary focus of Russian doctrinal discussion and exercises since 2016. This report also contextualizes Russian discussion of Syria in broader Russian discussions of the future of war, the subject of ISW's previous report in this series.<sup>2</sup> The Russian military's institutionalization of lessons learned in Syria and conception of the future of war poses a different threat to the United States from that presented by other competitors such as China and Iran—and the United States and its allies must prepare to counter the unique Russian threat.

The Kremlin militarily intervened in Syria in September 2015 to preserve the Assad regime and advance Russian interests in the broader Middle East.<sup>3</sup> Russian forces established air and naval bases in Hmeimim and Tartus respectively, and Russian

aircraft conducted their first strikes of the war on September 30, 2015.<sup>4</sup> Russian forces intervened in Syria to augment faltering pro-regime forces with capabilities Assad lacked, including effective airpower, command support, and advising, to turn the tide of the war. The Russian military deployment to Syria has varied in size and composition since 2015. Russia's deployment is dominated by the Aerospace forces (VKS) but includes Special Forces, Military Police, Private Military Company (PMC) units, and a limited naval deployment. The Kremlin also deployed large numbers of Russian army officers—lifted as complete staffs from their parent units—in advising and observation roles down to the battalion level alongside the Syrian Arab Army (SAA) and other pro-Assad forces.<sup>5</sup> These officers' experiences are the key source of Russian military learning in Syria and are the focus of an ongoing unclassified discussion in the Russian military.

## The Russian Military Views Syria as a Case Study of the Future of War

The Russian Armed Forces view the war in Syria—both as a whole and the Russian intervention in it—as a prototypical case study of a hybrid war, as discussed in the previous report in this series, “Russian Hybrid War.”<sup>6</sup> Russian military writers have identified the war in Syria as an example of the changing nature of kinetic operations in relation to hybrid wars and the Kremlin-perceived strategic threat from the West. The Russian military considers this learning experience its priority source of lessons for the development of the Russian Armed Forces. Chief of the Russian General Staff Valery Gerasimov identified Syria as a prototype of “war of the new generation” in March 2018 and called for in-depth study of the conflict to prepare for future wars.<sup>7</sup> The Kremlin views its deployment to Syria as a success, with Defense

Minister Sergei Shoigu stating in September 2020 that the deployment “strengthened Russia’s prestige, strengthened its international influence, [and] neutralized the attempts of geopolitical competitors [the United States] to politically and diplomatically isolate our country,” explicitly framing the Syrian war as part of US-Russia competition.

Gerasimov further identified Syria as highlighting a new typology of Russian military action in a March 2019 speech. He stated the Russian military generalized learning from Syria to “single out a new practical area for development”—promoting national interests outside Russian territory through “limited actions.”<sup>8</sup> The basis of this concept is the creation of a highly mobile “self-sufficient group of troops based on... one of the services of the Armed Forces.” Gerasimov stated these deployments must focus on “seizing and retaining information superiority.” They require advanced management and support systems and rapid and covert deployment.<sup>9</sup> The Russian military is likely applying this model to its ongoing operations in Libya and is shaping its modernization efforts to support current and future expeditionary deployments modeled on Syria.<sup>10</sup>

Western militaries must prepare to confront a Russian military emerging from the war in Syria as a deadlier, more effective force. The Russian military is increasingly shaping its major exercises and doctrinal revisions to institutionalize and build on lessons learned in Syria. Russian General Alexander Dvornikov, the commander of the Southern Military District who also commanded Russian forces in Syria, highlighted that Russia’s Kavkaz-2016 exercise focused on the Black Sea and Ukraine, while Kavkaz-2020 simulated a conflict similar to Syria to better incorporate lessons from “the combat experience of modern armed conflicts, primarily the Syrian one.”<sup>11</sup> Central Military District Commander Alexander Lapin, who commanded in Syria, claimed in August 2020 that experience from Syria “has

*Whereas articles by Russian officers written before 2020 discuss the need to institutionalize learning from Syria, writing in 2020 explicitly called for officers to build on learning from Syria.*

been supplemented with new forms and methods of using troops” and called for further development beyond lessons learned in Syria.<sup>12</sup> Whereas articles by Russian officers written before 2020 discuss the need to institutionalize learning from Syria, writing in 2020 explicitly called for officers to *build* on learning from Syria.

## Russia’s Ongoing Studies of Lessons Learned in Syria

The Russian Ministry of Defense (MoD) is conducting both internal and public studies of the war in Syria and projections of the future of war.<sup>13</sup> Russia’s unclassified lessons-learned discussion will have a greater impact on the development of the Russian Armed Forces than the internal lessons-learned process. Unclassified publications will reach a larger audience in the Russian military than classified documents and influence the thinking of greater numbers of Russian officers. The lessons and priorities the MoD chooses to publish in respected journals and the priorities outlined by senior officers in speeches clearly demonstrate the Russian Armed Forces’ priorities. The theories and development priorities the MoD chooses to publish in respected journals and the public discussion of experience from Syria by senior officers are likely intended to reach as wide an audience as possible, dispersing lessons and perceived development priorities from Syria throughout the force.<sup>14</sup>

Open discussion of experience from Syria benefits the quality of the Russian learning process as well. The barrier to entry for authorship is lower in open-source publications than in classified discussions, which are likely limited to select groups of officers and planners. Inputs into the open discussion include officers with command experience discussing Syrian experience in military newspapers, military academics projecting the future of

conflict in military journals, lower-level officers discussing tactical insights, and retired officers and military professors providing historical contextualization for modern lessons, among others. The public discussion is also an iterative process, enabling authors to reference and learn from each other. The United States can thus learn a great deal about Russian thinking, learning, and preparations for future war from the public discussions on which this report is based even without access to the classified Russian studies.

Unclassified Russian military discussion primarily occurs in two types of sources—military doctrine journals and Kremlin-run news outlets. The Russian military mainly uses monthly journals as the forum for discussing past operations and planning future doctrine revisions. This report focuses

on two premier Russian journals, *Military Thought* (Voennaia Mysl’) and *Army Collection* (Armeiskii Sbornik).

*Military Thought* is the official journal of the Russian General Staff and the key Russian forum for debate on doctrine and projections of the future of war.<sup>15</sup> *Military Thought* primarily publishes content produced by professors or students at military academies and staffers in research and planning organizations, rather than work by active-duty officers currently in command or staff positions. Their articles pre-

dominantly focus on grand strategy and the future of war. Authors commonly discuss development priorities, theoretical tactical problems, and preparations for future operations. *Military Thought* authors frame their projections as informed by recent conflicts but rarely explicitly discuss discrete operations in Syria or Ukraine. Articles in *Military Thought* often discuss specific changes to formal Russian doctrine, proposing rewritten passages on specific topics and strategic policy suggestions for the Kremlin.

***The United States can learn a great deal about Russian thinking, learning, and preparations for future war from the public discussions on which this report is based even without access to the classified Russian studies.***

The Russian Ministry of Defense additionally publishes *Army Collection*, a comparably analytical but less theoretical journal.<sup>16</sup> Officers currently in command or staff positions, most commonly writing on behalf of their respective military branches, produce most of the articles in *Army Collection*. These articles tend to emphasize tactical problems and operational planning over strategic forecasting. *Army Collection* articles also commonly include references to specific campaigns in Syria, and each issue includes several news items on ongoing operations.

Kremlin-run media outlets, primarily military-run newspapers, are also forums for Russian military discussion. Content within these non-journal sources can be roughly divided into three groups: transcripts of speeches and lectures by key officers, including Defense Minister Sergei Shoigu and Chief of the General Staff Valery Gerasimov; news reports on Russian actions in Syria and domestic military exercises; and interviews with Russian military personnel on their experiences in Syria.

These sources include:

- [\*Red Star\*](#): The official newspaper of the Ministry of Defense, with a wide distribution within the Russian Armed Forces.<sup>17</sup>
- [\*VPK\* \(Military-Industrial Courier\)](#): A military newspaper that often publishes transcripts of key speeches by Russian generals, including annual speeches by Chief of the General Staff Valery Gerasimov and summaries of the learning objectives of major military exercises.<sup>18</sup>
- [\*Rossiyskaya Gazeta\*](#): The official newspaper of record of the Russian government.<sup>19</sup>
- [The Russian International Affairs Council](#): A Kremlin-run think tank founded by Vladimir Putin that publishes strategic analysis of the Syrian conflict.<sup>20</sup>
- [Kremlin-run media outlets including but not limited to \*TVZvezda\*, \*TASS\*, \*Ria Novosti\*, and \*Kommersant\*](#): Kremlin-backed outlets that often

publish stories on Syria or domestic Russian military exercises featuring interviews with active duty and retired Russian military personnel.

This report includes a chart of Russian officers with experience commanding the Russian deployment to Syria (Appendix A). Writing by these officers on their experience in Syria guides the Russian military's public study of its lessons learned in Syria.

Analysis of the Russian perception of their lessons, capabilities, and learning priorities provides greater value to analysts seeking to understand the shape of the Russian threat to the United States than a study of the lessons Russia should have learned. The West must understand Russian perceptions of the war in Syria, as these perceptions will determine Russia's military priorities over the coming years and decades. The amount of intellectual attention and development the Russian military is applying to each lesson varies and will be discussed throughout this report. Most Russian military discourse on Syria focuses on tactical issues and minor developments. This report distills these minor learning points and focuses on assessing the most impactful Russian lessons from Syria.

The Russian military is making discrete choices, discussed throughout this report, to concentrate on certain learning opportunities from Syria while rejecting or deemphasizing others. These choices expose several gaps and potential vulnerabilities but are optimized to support a Russian concept of operations that is distinct from both pre-Syria Russian modernization efforts and the US's own modernization efforts. The United States must avoid projecting its own modernization priorities—or those of other competitors such as China—onto Russian discussions and must understand the unique strengths and weaknesses the Russian military's ongoing learning process grant the Kremlin.

## Russia's Main Lesson from Syria: Improving Command and Control

The Russian military's main lesson from Syria is the need to ensure "superiority of management" in future conflicts. In the Russian view, superiority of management—making better decisions faster than your opponents—will be commanders' key focus in increasingly fast and complex conflicts. The Russian military assesses that command and control (C2) efficiency is the key predictor of success in modern and future operations.<sup>21</sup> Russia's modernization efforts that underpin superiority of management are similar to the United States' focus on network-centric warfare in the 1990s. Many Russian lessons on command and control are new to *Russia*, not novel innovations in modern warfare, but the Russian military is effectively leveraging learning from Syria to enable superiority of management to close the gap with Western militaries. This group of lessons and priorities drives Russian military development and supports all other Russian lessons learned in Syria.

*The Russian military's main lesson from Syria is the need to ensure "superiority of management" in future conflicts. In the Russian view, superiority of management—making better decisions faster than your opponents—will be commanders' key focus in increasingly fast and complex conflicts.*

### Russian Officers' Main Priority in Combat: Obtaining Superiority of Management

The Russian military's definitions of the internal process "command and control" and the related task of "management" are different from both US terms and pre-Syria Russian discussions. The Russian military defines command and control as an internal process conducted by commanders on one's own subordinates in combat operations.<sup>22</sup> **Management is contrarily a recurring, cyclical process carried out on both friendly and opposing forces.** Russian analysts state that management consists of three simultaneous and repeating components: commanders making a decision, reconnaissance assets gaining information about the operational environment, and executive elements carrying out decisions.<sup>23</sup> The Russian conception is both similar to and different from the American concept of the OODA Loop (observe-orient-decide-act). The object of this process is the entire battlespace, not just one's own troops, making achieving superiority of management a complex task involving shaping the opponent's actions.<sup>24</sup> The OODA loop concept also focuses on constraining the enemy's ability to respond intelligently, but the Russian idea of management has all three components occurring simultaneously rather than sequentially as in the OODA loop.

The Russian military defines superiority of management as a state in which one combatant's clear advantage in the speed and accuracy of its decision making enables it to achieve its combat objectives.<sup>25</sup> Effective and rapid command and control is an internal process that is a necessary

but insufficient condition for the external process of achieving superiority of management. Russian writers began highlighting in 2017 that most discussions of management leave out the ideal end state of achieving superiority of management, in which the clear advantage of one side allows complete shaping of the battlespace, directly enabling the achievement of objectives.<sup>26</sup> Russian writers consider achieving superiority of management a necessary first step to enable forces to achieve other objectives—for example, stating a commander must prioritize gaining superiority of management over the opponent before prioritizing taking a territorial objective.<sup>27</sup> Much like air superiority, superiority of management is a condition that forces can gain and lose tactically, operationally, and strategically. Superiority of management requires that one side not only make decisions faster but also make *correct* decisions faster.

Russian officers and analysts assess that management capabilities are increasingly the deciding factor in successful military operations. Russian analysts assess that the increasing speed of combat and growing prominence of unconventional combatants in warfare will make achieving superiority of management the primary task of officers.<sup>28</sup> They assess that the need to achieve superiority of management will supersede strictly internal command and control decisions, as shaping and constraining the opponent's ability to act becomes as important as controlling one's own forces.<sup>29</sup> Military District commanders stated that the learning objectives of all major exercises in 2020 were improving management capabilities by testing unspecified new communication systems and prioritizing putting commanders into challenging situations requiring quick decision making.<sup>30</sup> Central Military District commander Alexander Lapin asserted "competent and continuous management is the main guarantee of [a successful operation]" in August 2020.<sup>31</sup> **Russian discussions of management concentrate on the decision making phase** and often include the capability of Russian forces to carry out actions better than opposing forces as a lesser and included component of successful management.<sup>32</sup>

Russian officers routinely highlight the importance of modernizing "automated control systems"—a term used to describe all communication technologies intended to enable faster decision making—to support management capabilities. Russian discussions of automated control systems mirror US discussions of network-centric warfare and emphasize the need to operate all combat assets in a unified communications and command system. The Russian term "automated" refers to the use of information technology to improve the ability of officers to access information and give orders in real-time, rather than the "automation" of any process. Russian officers discuss automated control systems as essential to increase the speed of decision making by reducing the time required to access data and issue orders to subordinates. This focus on developing technologies to enable faster decision making supports the Russian military's conception of superiority of management as the ability to make correct decisions (informed by better data streams) faster than the opponent (using improved communications technology)—collectively referring to these technologies as "automated control systems." Commander of the Southern Military District Alexander Dvornikov stated in an assessment of the Kavkaz-2020 exercise that the speed of decision making depends on effective automated control systems and highlighted them as the most important new type of equipment the Russian military tested in 2020.<sup>33</sup> Russia's automated control systems are not a novel concept, but the Russian military is concentrating its modernization efforts on closing this gap with the United States and NATO and supporting a unified conception of how to achieve victory in future wars.

Not all Russian writers use the terms "management" and "command and control" with full clarity in their writing. Some writers discuss internal "command and control" or the action of disrupting enemy command and control without directly referencing their connection to achieving superiority of management. Numerous Russian authors discuss command and control at length and include only short or implied references to command and control as a component of management, leading to several quotes and entire articles discussing command and

control rather than management. These individual unclear uses, however, do not detract from the centrality of the concept of management to Russia's lessons learned in Syria and have been clarified throughout this report.

The Russian Armed Forces discuss a variety of developmental goals and battlefield tasks, discussed throughout the following section, as supporting efforts to management capabilities, including:

- **Creating a unified information space:** Commanders must have a modernized system to capture, process, and distribute relevant information to achieve superiority of management.<sup>34</sup>
- **Planning operations:** All operational planning must be conducted with the goal of enabling forces to achieve superiority of management.<sup>35</sup>
- **Achieving creativity and initiative:** Decision making must be efficient, and commanders must make non-standard decisions.<sup>36</sup>
- **Organizing coalition operations:** Superiority of management is particularly important and challenging in heterogeneous groups of forces.<sup>37</sup>
- **Winning information warfare:** On the battlefield, information warfare seeks to disrupt enemy control systems with the goal of enabling superiority of management.<sup>38</sup>
- **Conducting electronic warfare (EW):** Superiority of management is interactive with the enemy; commanders must disrupt the opponent's command structure with EW while protecting their own command and control assets.<sup>39</sup>

## Russia Perceives Syria as a Command-and-Control Success

Russian military writers argue that Russian forces successfully demonstrated two capabilities in Syria that will be essential in future wars: 1) a whole-of-government integrated command structure and 2) the ability to rapidly establish a flexible,

ad hoc, expeditionary military headquarters. The Russian military assesses that these two structures allowed it successfully to achieve superiority of management in Syria and directly enabled successful combat operations.

### *Russia's Whole-of-Government Command Structure in Syria*

Gerasimov partially credits the success of Russian operations in Syria to the use of the National Defense Control Center (NDCC). The NDCC is a whole-of-government management center under the auspices of the MoD, launched in April 2014 to fill a perceived gap in Russia's central planning and foresight capabilities following the collapse of the Soviet Union that the Russian Federation needed to recover.<sup>40</sup> Gerasimov claimed in December 2017 that the establishment of the NDCC "dramatically changed the approach to the management of the entire military organization of the state," particularly in terms of information availability and communication.<sup>41</sup> Russian officers consider the NDCC an automated control system on a strategic scale, acting as a central hub to enable commanders to operate in a unified data and communications space. Gerasimov later attributed the "uniqueness of the Russian operation" in Syria to the "well-structured management of a diverse group [of forces] both directly at the theater of operations and from the NDCC," demonstrating that he continued to perceive whole-of-government coordination as successful.<sup>42</sup> Defense Minister Shoigu claimed in January 2020 that the NDCC has become "not only the center for managing the daily activities of the Armed Forces, but the coordinator of all federal departments responsible for the security of the state."<sup>43</sup>

The Kremlin risks overestimating the utility of this structure and underestimating requirements for its further development. The Kremlin might easily fall into the cognitive trap of attempting to create a single nerve center to coordinate the operations of an entire modern state. Gerasimov's speeches are likely overly optimistic. Gerasimov cited an anecdote in which he and Defense Minister Shoigu used drone footage to watch an airstrike in



Syria in real-time with the Russian commander in-theater in Syria as an example of the Kremlin's claimed ability to reliably distribute information across command structures in all cases, ensuring all elements of state power coordinate to achieve superiority of management.<sup>44</sup> The Kremlin is likely overestimating its ability to coordinate aspects of the Syrian campaign from the NDCC to project it can run all future operations centrally.<sup>45</sup> The Kremlin has highlighted whole-of-government coordination as an important capability and is making advances toward that goal, but still likely requires further development.

### *The Necessity of a Flexible, Expeditionary Military Headquarters*

The Russian Armed Forces gained important experience in Syria establishing and coordinating a flexible expeditionary military HQ. Russian officers and analysts claim the Russian HQ at Hmeimim Airbase coordinated assets across all of Syria from a single location, dividing Syria into an unstated number of zones of responsibility that at their peak were each run by operational groups of 15-20 officers co-located centrally at Hmeimim.<sup>46</sup> Russian writing in the open-source does not discuss the number, territorial size, or duties of these operational groups. Dvornikov praises the flexibility of the Hmeimim command structure, claiming the composition of the HQ was frequently changed based on the needs of the combat situation and Russian assets in theater.<sup>47</sup>

The Russian Armed Forces lack a system similar to the US combatant command structure, as Russian military districts cover areas of Russia, not the globe. The Russian approach of rotating military district commanders and their staffs through Syria as discrete units, rather than establishing a continuous headquarters, achieved the Kremlin's objective of ensuring large numbers of high-echelon command

staffs gained combat experience as cohesive units, but likely impeded the ability of Russian officers to develop long-term understandings of the theater of operations. This rotational and temporary deployment may have sufficed for the scale

of the deployment to Syria, but the Russian military will likely struggle to manage larger or more complex operations using a similar model of detaching commanders and staffs from their units to command ad hoc expeditionary forces.

Dvornikov generalizes from the Russian command structure in Syria that detaching headquarters from their units to command ad hoc force groupings is necessary and effective. Dvornikov stated in July 2018 that based

on his experience in Syria, Russia must create a common understanding of how to establish such a command structure prior to future operations.<sup>48</sup> Russian officers do not acknowledge the difficulty of creating an integrated headquarters without a prior standard procedure. Gerasimov's March 2019 conception of "limited deployments abroad," for example, states that the command structures for future expeditionary deployments will be created on a case-by-case basis and not linked to an existing command structure.<sup>49</sup>

Russian writers commonly discuss Russian command experience in Syria and necessary capabilities for the future of war synthetically. Open-source Russian military writings on Syria understandably do not detail the precise structure of the headquarters in Hmeimim or its subordinate headquarters. However, Russian discussions of generalized lessons from Syria on command and control indicate the likely capabilities that this new headquarters will have and the requirements that it will fulfill. The first of these lessons and priorities is the creation of a single command system.

*The Kremlin has highlighted whole-of-government coordination as an important capability and is making advances toward that goal, but still likely requires further development.*

## The Russian Military Seeks to Unite all Forces under the Same Command System

The Russian Armed Forces prioritize creating a single command system between units and across the levels of war to adapt to the increasing speed of modern warfare and achieve superiority of management. The Russian military assesses it must create a “unified information and control space” for all units to enable superiority of management. Russian writers use “information,” in this case, to refer to data and intelligence, not the “information space” affected by information operations, and use “control space” to discuss the communications network used to carry out command and control, defined as “developing and organizing the implementation of decisions.”<sup>50</sup> This report utilizes the term “command system” for clarity and brevity. Russian planners and theorists assert that integrated command systems, not individual weapons or hardware, will be the key enabler of victory in future conflicts.<sup>51</sup> Russian writers highlight that data must be distributed among diverse groups of forces horizontally and vertically, ensuring that all commanders follow a common operating picture.<sup>52</sup> Russian planners highlight the need for better tactical communications equipment as well, specifically highlighting a lack of portable, secure communications equipment throughout the Russian Armed Forces in August 2017.<sup>53</sup>

Russian officers assert the Russian military largely achieved the goal of multi-echelon unity of command in 2020, after several years of discussing this capability as aspirational. Gerasimov repeatedly highlighted this priority in 2018 and 2019. Gerasimov stated in 2018 that the MoD was working to create structures from the military district to the regimental level to improve communication between units. He also called for “modern information and telecommunication technologies” to be used to create a unified command system.<sup>54</sup> Russia’s Kavkaz-2020 exercise prioritized simulating actions “to a great depth from [the front lines]” to practice using unspecified new multi-echelon communication capabilities.<sup>55</sup> Alexander Lapin claimed

by August 2020 that the CMD successfully practiced using a single unified system “from the military district to the brigade” which was first tested during the Center-2019 exercise.<sup>56</sup>

Russian officers praise the Syrian campaign as invaluable for developing a unified command system that Russia will employ in future conflicts. Dvornikov praises the united command center at Hmeimim for shortening decision making time and linking all commanders across the country through videoconferencing.<sup>57</sup> Shoigu stated in January 2017 that Syrian experience is being used to develop unified command systems.<sup>58</sup> Gerasimov stated the new command systems tested in the Vostok-2018 military exercise incorporated experience from Syria.<sup>59</sup>

The Russian Armed Forces are actively improving joint coordination capabilities based on lessons from Syria by holding multiservice military exercises.<sup>60</sup> This training effort is likely intended to support Gerasimov’s March 2019 conception of expeditionary operations involving diverse assets from different branches and services.<sup>61</sup> Russian army officers frequently serve as the overall commander of Russian forces in Syria, which includes large air and naval components.<sup>62</sup> The Russian military anticipates officers will increasingly command similar joint deployments. Russian officers are moving to close this perceived command capabilities gap through increased military exercises and calls to develop new joint command practices. Dvornikov claimed in May 2018 that he used his experience in Syria to reorganize the Southern Military District into a joint force grouping capable of operating effectively on land, sea, and air.<sup>63</sup> Lapin stated he oversaw a 39-percent increase in multi-service exercises in the Central Military District from 2017 to 2018.<sup>64</sup> Southern Military District Commander Gennady Zhidko, who additionally commanded in Syria, said the Eastern Military District’s main priority in 2018 and 2019 was improving joint operations, particularly highlighting the need to improve both tactical and strategic cooperation with aviation.<sup>65</sup> Russia’s Kavkaz-2020 exercise particularly focused on testing new communication systems in joint operations.<sup>66</sup>

The Russian Armed Forces will likely face significant difficulties increasing joint coordination, however. Russian discussion of joint coordination as a new problem in Syria indicates a past failure to learn lessons about joint coordination—despite Russian discussions dating to the Soviet War in Afghanistan in the 1980s highlighting the need to improve such coordination.<sup>67</sup> Expansion of the MoD’s whole of government command structure—the NDCC—to run larger operations will require more experienced leaders and a greater investment of resources than did the Syrian campaign, and the Kremlin risks taking on goals that exceed its management capabilities. Russian officers have correctly identified a need for improved communications equipment and procedures but meeting this goal will likely require a costly and time-consuming acquisition process. Russian analysts commonly highlight two competing priorities; joint forces should be controlled by a single commander, and the components of joint forces must coordinate at a lower echelon than the overall joint commander due to the increasingly mixed nature of combat groupings.<sup>68</sup> They attempt to resolve this tension by developing creativity and initiative.

## Russia Faces a Generational Requirement to Develop Creativity and Initiative in Officers

Senior Russian commanders assess operations in Syria demonstrated the need to increase creativity and freedom of action among junior officers to adapt to what Russia perceives as the evolving character of war. The Russian military has highlighted the need to reverse decades of ingrained Soviet/Russian structural hierarchies. The currently excessively top-down Russian command and governance culture faces a fundamentally generational requirement to adapt.

Russian officers and analysts interestingly assert that officer creativity only became important in recent conflicts. Zhuravlev stated in May 2019 that Syria confirmed that modern battle, compared to “previous conflicts,” with no precise time frame given, “requires commanders of all levels to display military ingenuity.”<sup>69</sup> Russian analysts echo Zhuravlev’s framing of creativity as a new, modern requirement, stating “tactical commanders are now required to exercise independence [in hybrid wars such as Syria], which is not required for conventional warfare.”<sup>70</sup> EMD commander Zhidko similarly stated in June 2020 that “the experience of local wars and armed conflicts” demonstrated the need for commanders to “make decisions on actions in a short time” and framed this as a new development.<sup>71</sup> They thereby accept that the regimented Soviet command structure, which discouraged initiative among junior officers, was appropriate for the wars of its time but not for today. Viewing creativity as necessary solely in unconventional combat will likely lead Russian officers to retain narrow views of decision making in many combat tasks and preclude broader transformations of command culture toward quick and creative decision making.

Unlike most lessons on command and control from Syria that Russian writers discussed as early as 2016, the need for creativity did not enter the Russian discourse until 2018. Russian officers discuss creative decision making as the antithesis of strictly following “doctrinal templates” or “cognitive stereotypes” for tasks in conventional warfare—a legacy of Soviet command culture that emphasized strategic and operational creativity but strict conformance to doctrinal tactical maneuvers.<sup>72</sup> Lapin in May 2018 credited skills gained in Syria for preparing units for non-standard (or non-doctrinal) forms and methods of warfare.<sup>73</sup> Dvornikov said in July 2018 that Suheil Hassan, commander of the Syrian 25<sup>th</sup> Special Forces Division (the premier Russian proxy force formerly known as the Tiger Forces) is effective due to Hassan’s creativity and willingness

*The currently excessively top-down Russian command and governance culture faces a fundamentally generational requirement to adapt.*

to break away from operational “templates.”<sup>74</sup> Gerasimov said in November 2018 that the most effective Russian commanders in Syria are those that demonstrate creative thinking, linking this trait to their ensuing career success.<sup>75</sup>

Russian analysts additionally highlight the need for officers to incorporate feedback from their subordinates in combat to improve flexibility. Russian analysts concluded, based on observing operations in Syria, that commanders need to improve the process of “giving instructions, listening to subordinate commanders and combining [a commanders’ initial instructions and feedback from subordinates].” Analysts consider this a new approach they name “constant interaction.”<sup>76</sup> The principle that commanders should internalize feedback and recommendations from subordinates is an important learning point. The fact that the Russian military only recognized this learning point in Syria, rather than in previous conflicts, demonstrates the difficulty Russia will likely face in changing its top-down leadership culture.

The Russian military is rapidly acting on this lesson to train and develop creativity. An internal Russian analysis of changes in Russian military exercises published by *Red Star* in April 2018 highlighted that training exercises increasingly put commanders in situations where they must “receive and analyze a large amount of information, quickly make non-standard decisions, [and] take the initiative;” Russian MoD statements on the learning objectives of exercises commonly echo this framing.<sup>77</sup> Zhidko said in March 2019 that he intends to apply his Syrian experience to developing “non-standard forms and methods of combat operations.”<sup>78</sup>

*The Russian Armed Forces have made the important but decades-late observation that they need to develop junior officer creativity based on experience in Syria.*

Zhuravlev similarly stated in May 2019 that he pays special attention to encouraging “unconventional thinking” and avoiding cognitive stereotypes among the officers in his military district.<sup>79</sup>

The Russian military is likely grappling with the conflict between two objectives, 1) centralizing all command and control across the levels of war and 2) promoting initiative below the strategic level, but is not discussing this tension openly. Russian discussions of command and control in future wars commonly stress the need for unity of intent and action across all echelons and between military and non-military assets.<sup>80</sup> The Kremlin’s key definition of a hybrid war, of which Syria is an example, is that it is a war in which all actions—including kinetic operations—are subordinate to a centrally planned and coordinated information campaign at the strategic level. Russian officers and analysts do not discuss how to reconcile promoting initiative at the tactical and operational levels with the need for all kinetic actions at these levels to support a unified strategic information campaign. This challenge may lead future Russian operations to restrict junior officer initiative to support a unified information campaign, or contrarily junior officers may disrupt the delicate information campaigns the Kremlin views as essential in modern warfare.

The Russian Armed Forces have made the important but decades-late observation that they need to develop junior officer creativity based on experience in Syria. Instilling creativity into the force is fundamentally a generational requirement. Russia can promote officers who show the rare natural skill of battlefield creativity; Gerasimov’s statements indicate this process is already ongoing. However, it takes a military career spent being raised in this way of thinking—20 or 30 years—to instill it in the force. Russian writers have identified the problem and are moving quickly to alter training to develop creativity, but the process of changing the deeply formalized nature of Russian command culture will span at least a generation.

## Russia is Optimizing for Coalition Operations and Deemphasizing its Successful Use of Proxy Forces

The Russian military's primary lesson learned from managing the pro-Assad coalition in Syria is the need to pre-plan coalitions of forces with other states, rather than replicate the patchwork of pro-Assad forces used in Syria. The Russian Armed Forces successfully adapted to managing a diverse pro-regime coalition in Syria, but do not want to replicate the experience. Previous reports in this series discuss the Kremlin's prioritization of developing a network of overlapping military coalitions to amplify its limited real power.<sup>81</sup> The Russian military is drawing on its learning in Syria and utilizing major exercises to practice operations leveraging these coalitions. The Russian military is developing a dangerous capability to conduct coalition operations with a wide network of other militaries in future wars.

The Russian military had difficulties managing vastly different partner forces in Syria. The Russian focus on building strong coalitions indicates disappointment with their coalition in Syria. The weakened condition of the SAA surprised the Kremlin in early 2016. Putin's initial framing of the Russian intervention focused on supporting the existing Syrian military, not managing large-scale combat operations.<sup>82</sup> Several Russian analysts and officers noted the lack of effective SAA units in 2016 and 2017.<sup>83</sup> Dvornikov commented in a retrospective essay on the war in Syria in July 2018 that demoralization and command inefficiency were pervasive in the SAA throughout the conflict.<sup>84</sup>

Russia adapted to the weakened state of the pro-regime coalition in Syria by creating an ad hoc coalition of "all forces allied to Damascus," run from the Russian base in Hmeimim, which they assert was highly effective.<sup>85</sup> Dvornikov stated in July 2018 that integrated operations with militias as well as "interested states," likely referring to Iran, were essential for success in Syria.<sup>86</sup> Dvornikov further

claimed the diverse pro-regime forces became an effective, integrated fighting force under the unified control and planning of Russian officers, and highlighted several irregular units as effective fighting forces.<sup>87</sup> Gerasimov praised the Russian deployment in December 2017 for preparing Syrian officers to defend their territory with Russian support.<sup>88</sup>

Russian officers additionally adapted to the weaknesses of pro-Assad forces by taking an unexpected level of control over individual pro-Assad units. Russia deployed advisers throughout partner forces, did not give coalition partners command flexibility, and struggled with the low quality of pro-regime forces. Russian advisers deployed down to the tactical level, both planning and actively commanding combat operations, in contrast to preliminary plans of providing air support and combat support elements for operations commanded and carried out by the Syrian military.<sup>89</sup> Gerasimov stated in December 2017 that Russian adviser groups provided almost all functions beyond frontline combat power, including scouts, gunners, engineers, translators, and other administrative roles.<sup>90</sup> Russian officers attempted to use traditional Russian operational approaches—most notably cauldron battles, a Russian term for encirclement operations, in the 2016 Aleppo campaign—and were frustrated by the inability of pro-regime forces to carry out operations to Russian standards.<sup>91</sup>

Russian officers did not plan for this adaptation and do not want to replicate the necessity of constructing a coalition during combat operations. Dvornikov notably stated in July 2018 Russia was "forced" to rely on militia and ad hoc forces due to the demoralization of the SAA.<sup>92</sup> Gerasimov stated in December 2017 that Russia adapted to enable "separate parts" of the SAA rather than support the weakened whole, as it initially planned.<sup>93</sup> Gerasimov further admitted it was difficult to integrate disparate pro-regime forces, rather than strictly the SAA, into the Russian command structure.<sup>94</sup> The Russian military seeks to mitigate these difficulties by emphasizing preplanned, formal coalitions.

Russian military planners and theorists extensively discuss the growing importance of coalition

operations. Russian assessments of Western military operations since the end of the Cold War commonly highlight the prevalence of Western coalitions. More recent discussions of the diversifying participants in war argue that conflicts increasingly involve multiple states on both sides in addition to non-state actors. Russian military professors Sergei Pechurov and Alexander Sidorin published a key article in *Military Thought* in April 2017 outlining Russian assessments of coalition operations.<sup>95</sup> Pechurov and Sidorin analyze what they frame as general principles of coalition operations and lessons from observing recent NATO operations and explicitly call for Russia to improve its coalition operations in Syria and future conflicts.<sup>96</sup> Pechurov and Sidorin's article provides an excellent overview of Russian views of coalition operations that are often repeated by other analysts and active-duty officers.

Russian writers argue all military coalitions must be preplanned and require substantial command preparation, while also needing to maintain strategic flexibility. Pechurov and Sidorin argue coalition partners must create a joint command prior to the start of hostilities and that this command ought to be led by a single commander who is respected both militarily and politically.<sup>97</sup> They stress that management styles must be reconciled between coalition members in advance.<sup>98</sup> This idealized concept rejects the ad hoc manner in which Russia came to lead the pro-regime coalition in Syria. Pechurov and Sidorin argue a "skillful, clearly calculated and reasoned propaganda preparation" is essential prior to the initial phase of military operations to ensure the successful outcome of the entire campaign.<sup>99</sup> Gerasimov and senior Russian military analysts discuss the need for Russia to construct established and lasting coalitions, including the Collective Security Treaty Organization (CSTO) and a network of bilateral military cooperation agreements, to reduce the time-consuming process of constructing coalitions in the early stages of war.<sup>100</sup> The Russian military seeks to mitigate the need to repeat its unplanned construction of a pro-Assad coalition in future conflicts.<sup>101</sup>

Russian analysts and officers state there cannot be any discontinuity of views and goals in a coalition.<sup>102</sup> Pechurov and Sidorin argue that coalitions must be based on "the principles of dedication to the common cause, reliability, and firmness" in achieving these goals.<sup>103</sup> They additionally stress that all coalition partners must be treated equally, both by respecting their objectives and treating their personnel with respect and importance to retain cohesion.<sup>104</sup> Pechurov and Sidorin further argue that partial or informal coalitions with other actors should be avoided at all costs to avoid varied objectives.<sup>105</sup> They state Russia must avoid placing personnel in command of partner forces, even when militarily expedient, to avoid creating fissures in the coalition.<sup>106</sup> This idealized view of future coalitions seeks to avoid the unpleasant experience of Russian officers managing a pro-Assad coalition in which Russia, Iran, and the Assad regime hold often conflicting goals—though Russian writers likely cannot discuss this fact openly.<sup>107</sup>

Russian military exercises drawing on learning from Syria prioritize operations in formal, pre-established coalitions—using lessons learned managing an ad hoc coalition in Syria to inform preparations to coordinate formal coalitions in future wars. The Russian military began emphasizing coalition training exercises in 2018. Zhidko claims the Eastern Military District's 2018 training exercises, which included Chinese and Mongolian forces, focused on creating and conducting operations with coalition groupings.<sup>108</sup> Lapin stated in March 2018 that the Central Military District would conduct several joint training exercises with Collective Security Treaty Organization (CSTO) member states throughout the year; one year later, he stated that Russia is explicitly sharing its lessons from coalition operations in "modern armed conflicts" with these partner forces.<sup>109</sup> The Russian MoD described Vostok-2018, Russia's largest military exercise of 2018, as a "generalized Syrian experience," explicitly including coalition operations as a learning objective.<sup>110</sup> By late 2020, Russian military district commanders and Defense Minister Shoigu praised the "unconditional positive movement" toward effective multinational operations.<sup>111</sup> All of these



**Above:** Marines from China take part at the International Army Games 2019 at the Khmelevka firing ground on the Baltic Sea coast in Kaliningrad Region, Russia, August 5, 2019. Photo Credit: Vitaly Nevar, Reuters

exercises focused on preplanned coalitions with conventional forces—rejecting the use of proxy forces as in Syria. The Russian military is successfully creating the capability to leverage a network of partner forces in future wars. The Kremlin’s next “limited action” based on Syria, as described by Gerasimov, will likely leverage non-Russian forces—magnifying the Kremlin’s power projection capabilities.

## Russian Superiority of Management Depends on Disrupting Enemy Command and Control

Russian writers argue that efforts to disrupt enemy command and control must be integrated into all operations down to the tactical level to achieve superiority of management. The Russian conception of disrupting command and control has three main components: information warfare, electronic warfare, and kinetic strikes against enemy command structures. Russian discussion of disrupting enemy

command and control focuses on future conflicts, with little overt discussion of EW and kinetic actions in Syria, likely due to the highly sensitive nature of methods used to disrupt enemy command structures.

Russian writers openly state the Russian military currently lacks the necessary capabilities and doctrine to disrupt enemy command and control systems in future conflicts. Russian military analysts describe the disorganization of enemy management as both a process and an ideal end state, much like achieving superiority of management.<sup>112</sup> The overarching goal of disrupting enemy command and control is stopping the enemy’s ability to coordinate different units, enabling defeat in detail.<sup>113</sup> Disrupting enemy command and control must be integrated into the actions of all commanders and units, rather than being treated as a discrete line of effort.<sup>114</sup> Russian authors highlight, however, that Russia lacks both a clear definition of “disorganization of command and control” and a single doctrinal principle for carrying it out due to the diverse assets required to achieve this effect successfully.<sup>115</sup>

Russian analysts assess the Russian military must increase investment in planning and intelligence gathering capabilities to enable commanders to disrupt enemy command and control. Russian analysts argue that identifying enemy commanders and infrastructure for targeting requires both masses of data and analytic teams to process it.<sup>116</sup> Russian analysts envision this as a whole-of-government effort involving “linguists, regional experts, psychologists, economists, and financiers” in support of military specialists.<sup>117</sup> Russian analysts assess this broad research should be paired with a center of gravity analysis of the specific structures of an enemy command system and how it will react to an attack.<sup>118</sup>

Russian analysts predominantly discuss lessons on disrupting command and control in Syria through strategies to combat specifically illegal armed forces and unconventional groups that lack traditional command and control structures to disrupt. Russian analysts note only that traditional principles apply but the particularly lax communication discipline of illegal armed forces should be exploited.<sup>119</sup> The Russian Armed Forces recognize they have not yet developed the command-and-control disruption capabilities they seek, unlike several other problems that they deem solved. Russia will likely heavily focus on developing these capabilities in a classified setting and prioritize learning through exercises to close this gap in learning from Syria.

## Russian Lessons Learned in Syria beyond Command and Control

The Russian Armed Forces are learning and prioritizing several other lines of effort based on experience in Syria with mixed results. The following sections discuss the lessons with the most impact on Russian thinking and the strengths and potential weaknesses of the Russian military’s chosen optimizations.

### The Kremlin Assesses It Achieved Air Supremacy in Syria by Shaping US/NATO Actions

The Russian Armed Forces prioritize enabling gaining and maintaining “air supremacy” in future conflicts and believe Russia successfully gained air supremacy in Syria. However, this claim is based on a limited definition of air supremacy that does not require the negation of enemy air capabilities—closer to what the United States would call “air superiority.” Russian lessons ignore differences between Syria and Europe that could cause difficulty in contesting NATO airpower in a future

conflict. The Russian military is instead attempting to address this capability gap indirectly.

The Russian Armed Forces believe the Russian deployment to Syria demonstrated airpower is becoming more crucial than land forces. Some authors assert this is already the case now. Former Commander of the Russian Air Force Peter Deinekin claimed in September 2019 that Syria proved “air supremacy is the most important manifestation of the military power of any state.”<sup>120</sup> Russian analysts conducting an after-action report of Syria in January 2016 similarly argued that the initial Russian intervention demonstrated the growing importance of air forces in modern conflict, and Russian officers with command experience in Syria routinely praise the effectiveness of the Russian Air Force.<sup>121</sup>

The Russian military asserts it achieved air supremacy in Syria. Russian General Staff researchers define air supremacy as the “decisive superiority” of one side’s air forces to allow unimpeded air, ground, and naval operations, and assert victory is impossible in modern war without air supremacy.<sup>122</sup> This definition crucially focuses on the capability



of one's *own* forces to carry out future operations, in contrast to the US Air Force's definition of air supremacy as "that degree of control in the air wherein the opposing force is incapable of effective interference within the operational area."<sup>123</sup>

Russia has not achieved air supremacy in Syria by the US definition. The Russian Air Force still lacks experience conducting contested air operations against an opponent willing to target Russian assets. Throughout the war in Syria, the United States has, if desired, held complete escalation dominance in the air against Russian forces.<sup>124</sup> Russian writers additionally ignore that Russia has not stopped US airstrikes entirely. Russia chose to not use its air-defense systems against US strikes on Assad regime facilities in retaliation for chemical attacks, and Israel regularly strikes Iranian targets in Syria without a Russian response. It is unclear from open writing if Russian analysts assess Russia could, if it attempted to, stop NATO and Israeli air operations in Syria. The Kremlin nevertheless achieved many of the effects of air supremacy through an accurate evaluation of Western will without having to incapacitate US air assets kinetically or electronically.

The Russian assessment of achieving air supremacy and preventing NATO action is rooted in the Russian concept of reflexive control. "Reflexive control" is a Russian term for shaping a stronger adversary's perceptions to make it voluntarily choose actions most advantageous to Russian objectives.<sup>125</sup> Russian analysts credit Russian actions and air-defense systems with preventing a full-scale NATO intervention in Syria. Russian Air Force analysts credit the S-400 system, naval air defenses, and EW with deterring US-led airpower from "invading" Syrian airspace.<sup>126</sup> Lapin stated in April 2019 that this Syrian "combat experience" in the use of air-defense systems against fixed-wing targets—despite the fact Russian air-defense systems at Hmeimim and Latakia have not been effectively used in combat—must be incorporated into further

development.<sup>127</sup> Russia successfully employed EW and short-range defense systems to defend against drone attacks on Hmeimim airbase, discussed further below, but never used the S-300 or S-400 air-defense systems in combat despite asserting these Russian forces gained "combat experience." Russian officers likely assess the deployment of A2AD systems and air assets to shape Western decision making constitutes "combat experience" despite not firing the systems in combat—only utilizing reflexive control.

Russian concepts of hybrid war help define success in air supremacy. The Kremlin initially defined success in Syria as preventing a perceived repeat of Libya, in which NATO airstrikes enabled the fall of a Russia-amenable regime.<sup>128</sup> Dvornikov, Gerasimov, and prominent hybrid war theorist Alexander Bartosh all frame Syria as an ongoing Western hybrid campaign, which Russian writers assess inevitably ends in the United States or NATO using conventional military force to topple a regime.<sup>129</sup> Russian analysts likely assess that their air assets and air defenses deterred this worst-case scenario. The Russian Armed Forces may assess that NATO could have destroyed Russia's air defenses and installations in Syria (though not without cost), but the fact that NATO chose not to constitutes success.

Requirements for Russian air operations in Syria would have been markedly different in contested airspace or a more challenging air-defense environment. Russian analysts stated in January 2016 that the greatest threat to Russian aircraft were man-portable air-defense systems (MANPADS), which Russian pilots quickly learned to negate by flying at higher altitudes.<sup>130</sup> This was a limited threat, however; Russia did not face either modern air-defense systems, hostile aircraft, or even MANPADS operated by an experienced force.<sup>131</sup> Russia could therefore use essentially any aircraft, including the older Su-24, as bomb carriers against vulnerable targets. Russian airframes

*The US should not overestimate the utility of Russian experience and perceived success in Syria, as it is heavily bounded to future deployments with a similarly lax air defense environment.*

dating to the 1970s could not operate with the effectiveness Russian writers are extrapolating from Syria in airspace contested by another modern force.

The Kremlin's focus on reflexive control vis a vis the United States and NATO was effective in Syria but can be mitigated with a willingness to contest Russian forces. The Kremlin learned it could shape Western decision making and achieve its objective of preventing a full-scale US/NATO air campaign with limited air defenses and a correct assessment of Western political will. It is not a given in a future conflict that the US or NATO will not contest Russian air assets as in Syria. Furthermore, enemy perceptions of the effectiveness of Russian combat systems like the S-400 could change rapidly—an overt, effective strike by an opposing force on these Russian defenses would quickly erase Russia's perception-based air defense. The US should not overestimate the utility of Russian experience and perceived success in Syria, as it is heavily bounded to future deployments with a similarly lax air defense environment.

## Russia is Doubling Down on Precision Weapons

Russian analysts assert the Russian deployment to Syria demonstrated the growing capability of precision weapons to destroy targets, echoing long-standing projections by both Russia and the West of the increasing importance of precision weapons in conflict. Gerasimov and senior researchers predict future conflicts will increasingly necessitate the widespread use of precision weapons for victory.<sup>132</sup> Russian analysts believe precision weapons will be used to target “select objects” (including specific positions, units, or weapon systems) to decrease enemy combat potential. Precision weapons will also increasingly act as a primary method to destroy opposing frontline forces completely.<sup>133</sup> The Russian military is leveraging learning from Syria to increase its precision strike capabilities but requires extensive modernization to achieve the effects it desires.

Russian analysts and officers with combat experience in Syria claim the Russian use of precision weapons

demonstrated the increasing importance of these weapons. Russian analysts claimed in 2017 that precision fire combat has already replaced close assault as the primary method for defeating an enemy force.<sup>134</sup> Lapin claimed in April 2018 that in most pro-Assad coalition offensives, Russian Special Forces and air and naval assets using “new generation weapons” destroyed the majority of opposition forces before Assad-aligned forces seized the cleared terrain.<sup>135</sup> Gerasimov stated in December 2017 that training based on tactical lessons from Syria focuses on integrating the use of precision weapons into all combat operations.<sup>136</sup> Russian analysts largely praise these efforts and assert that experience in Syria demonstrated Russia's capability to inflict damage anywhere on the battlefield and enable success for otherwise weak pro-Assad units.<sup>137</sup> Dvornikov claimed in July 2018 that Russian forces effectively coordinated precision strikes with tactical units in urban operations, using both aircraft and Kalibr cruise missiles in a close-support role.<sup>138</sup>

Russian officers and analysts additionally highlight Russia's ability to disrupt enemy supply lines and logistics with precision weapons as a key lesson from Syria. Dvornikov credited the coordinated Russian effort to destroy anti-Assad supply chains with disrupting opposition offensive capabilities and giving the pro-regime coalition the operational initiative in early 2016.<sup>139</sup> Russian officers and analysts state the early months of the Russian air campaign almost exclusively focused on enemy infrastructure and second echelons instead of frontline targets.<sup>140</sup> Lapin stated in April 2018 that Russian forces focused on targeting enemy command and control and logistics throughout the conflict rather than frontline support.<sup>141</sup>

Russian claims of the efficacy of precision weapons in Syria are likely aspirational. Effective use of precision weapons and airstrikes in a close air support role requires close coordination with ground forces. This coordination is difficult enough when working with one's own forces, and far more difficult when coordinating with often-unreliable partner militias. Russian writers do not reconcile statements that most Russian strikes hit rear-area targets with praise for the widespread use of precision weapons

to support tactical actions. The Russian use of precision weapons in this close-support role likely comprised a small portion of total Russian operations in Syria. Multiple Western publications have repeatedly assessed the Russian Air Force primarily uses unguided munitions in Syria, and primarily against civilian targets.<sup>142</sup> Russia did gain useful experience in the use of precision weapons in Syria, including its first-ever use of modern cruise missiles in combat, but did not make any notable leaps in capabilities.<sup>143</sup> The Russian military will draw on this experience to develop further precision weapon capabilities but is overemphasizing the current scale of its modernization.

## Russia has Again Failed to Develop a Theory or Doctrine for Counterinsurgency

Russia is gaining valuable experience fighting militant and insurgent groups, described with the catch-all term “illegal armed forces” (IAFs), in Syria. However, Russian writers and officers are misreading and overgeneralizing the experience of operations against ISIS and opposition forces as a subset of conventional warfare, focusing on ISIS' ability to hold terrain.

Russian writing on illegal armed forces attributes generalized strengths and weaknesses to a large variety of actors, potentially impeding Russia's learning efforts. Gerasimov claimed in December 2017 that Russia applied its experience fighting illegal armed forces in Afghanistan and Chechnya to the war in Syria.<sup>144</sup> Russian discussion about applying historical experience ignores the disparities between Afghan Mujahedeen, Chechen separatists, and the diverse constellation of anti-Assad actors in Syria including ISIS, Western-backed opposition forces, Turkish proxies, and insurgent groups. Russian analysts aggregate differences in command capabilities, weapons, tactics, and objectives into a single, simplified typology of illegal armed forces. Some Russian analysts, for example, generalize that experience in Chechnya shows decision making in all illegal armed forces largely depends on single individuals—while others conversely state all illegal

armed forces operate on a networked basis and will adapt to losing leaders.<sup>145</sup> Similarly, Russian descriptions of illegal armed forces assume they will employ suicide bombers and vehicle-borne IEDs in combat, ignoring that many militant or insurgent groups categorized as illegal armed forces—both worldwide and in Syria—do not use these tactics.<sup>146</sup>

The overuse of the general term “illegal armed force” is impeding Russian learning of valuable experience in Syria. Russian doctoral candidate Col. Alexander Vdovin published an article in May 2018 that is exemplary of the contradictions in the Russian discourse on combating illegal armed forces. His key points, and their corresponding fallacies, are as follows:<sup>147</sup>

- **Lack of a common goal and leadership** (applicable to some opposition groups but not to several unified organizations, and certainly not to ISIS)
- **Lack of coordination of illegal armed force operations at the operational level** (despite explicit statements by other Russian writers that ISIS successfully rotated reserves efficiently between Palmyra and Mosul and treated Palmyra and Mosul as a single theater)<sup>148</sup>
- **Aspiration of the local population under the control of illegal armed forces to a peaceful life and readiness to negotiate with the authorities** (assuming the population will by default not support opposition groups is a recipe for counterinsurgency disaster)

Russia continued to underestimate the capabilities of unconventional forces in Syria, as it had historically in Afghanistan and Chechnya. Russian officers and analysts consistently write about the capabilities of illegal armed forces, particularly ISIS, with alarm and surprise. Defense Minister Shoigu described ISIS as “the first full-fledged terrorist army” in September 2020 and stated Russia had never faced such organized fighters before.<sup>149</sup> Lapin notes Russian forces did not expect the opposition in Syria to be well-armed and well-trained.<sup>150</sup> Several officers and analysts noted after the fact that anti-Assad forces were stronger than pro-regime units in 2016,

demonstrating a lack of Russian awareness of the conflict they were entering.<sup>151</sup> Senior planner Valery Kiselev expressed surprise in 2016 that opposition and jihadist formations successfully launched offensives without air, artillery, or armor support.<sup>152</sup> A Russian helicopter pilot stationed in Syria from 2016–2017 expressed his surprise to Russian military newspaper *TVZvezda* that ISIS adapted to Russian targeting patterns and began conducting all logistical movement at night.<sup>153</sup>

The Russian military is recognizing discrete lessons from operations against illegal armed forces in Syria but is still in the process of cohering and institutionalizing these lessons. Russian officers and analysts commonly discuss learning about illegal armed forces in Syria as new and unexpected learning—unlike discussions on topics such as superiority of management and the use of precision weapons that are discussed as part of a trend already in progress before Syria. Almost all Russian learning on the capabilities of illegal armed forces is tactical or subtactical and repeats US learning in Iraq and Afghanistan, as well as Russian lessons from Afghanistan and Chechnya.<sup>154</sup> This learning is still valuable to the Russian military, however. The Russian military is recognizing the tactical challenges of modern insurgent and jihadist groups like ISIS for the first time based on experience in Syria and will likely learn to adapt to them in future conflicts.

The public Russian discussion of Syria does not mention counterinsurgency (COIN). The only reference to mitigating the threat of insurgency after enabling the regime to retake terrain in a prominent after-action report of the 2016 Aleppo offensive is a brief mention of pro-regime forces assigning 12,000 troops to guard a 120 km road from Aleppo to Homs.<sup>155</sup> Russian writers discuss “rear area security,” a problem to be solved with greater force density, and “humanitarian operations,” a line of effort focused exclusively on providing food and shelter to civilians, but do not unify these concepts. Vdovin's only insight into the threat of insurgency is that illegal armed forces may force governments to commit two-thirds of their forces to protecting infrastructure, which he frames as a static security problem.<sup>156</sup> Russian officers only discuss stabilization

and humanitarian operations as conducted after operations to retake terrain from illegal armed forces. Dvornikov claimed humanitarian missions in parallel to military operations were a “turning point” in Syria in July 2018 but did not elaborate further.<sup>157</sup> Gerasimov stated in March 2019 that Russia for the first time carried out humanitarian operations in Syria, again framing the problem as simply one of food distribution.<sup>158</sup> Russian military writers do not acknowledge that this separation of humanitarian operations from kinetic operations contradicts the stated view of hybrid war as a holistic effort.

The Russian military is repeating Soviet mistakes in Afghanistan by treating all non-conventional forces as a single type, ignoring counterinsurgency, and fixating on tactical lessons. Russia is actively grappling with tactical and subtactical lessons from Syria and will likely improve its ability to perform specific tasks. However, the Russian military is treating the challenge of fighting illegal armed forces as essentially conventional battlefield operations against a conventional force with slightly unusual capabilities, rather than as counterinsurgency. Russia is not learning how to conduct counterinsurgency operations, a likely contributor to the ongoing insurgencies across regime-held Syria.<sup>159</sup> If and when the Russian military finds itself in a similar campaign against illegal armed forces—as the Kremlin projects it will—Russian forces will likely improve at the tactical level but continue to misunderstand the deeper challenges posed by insurgencies without further successful development.

## Russia is Refining its Newfound Experience with Expeditionary Deployments

The Russian Armed Forces gained valuable experience conducting expeditionary deployments in Syria but still have much to learn. Russia holds an inherent advantage on this line of effort as the activity of redeploying troops across Russia for exercises rehearses strategic mobility. Russian analysts are overestimating how far they can scale what they have learned beyond the modest Russian deployment to

Syria. The Russian military is prioritizing refining this model in major annual exercises, however, and likely applied learning from Syria to ongoing operations in Libya and the deployment of Russian peacekeepers to Nagorno-Karabakh.

Russian officers and analysts uniformly agree that prior preparation and exercises enabled what they frame as Russia's rapid and surprise deployment to Syria. Russian officers and analysts highlight the surprise of the initial Russian deployment to Syria as a key operational success and prioritize the need for surprise in future expeditionary deployments.<sup>160</sup> Gerasimov and multiple military district commanders claim Russia was able to quickly deploy forces to Syria due to domestic exercises consistently rehearsing strategic redeployments.<sup>161</sup> The Russian military assesses that it adequately planned expeditionary operations and successfully executed them in Syria, in contrast to most lessons from Syria that are discussed as being newly assessed or part of an ongoing developmental process.

The Russian military intends to conduct further expeditionary operations and is explicitly practicing strategic redeployments. The MoD designed the Caucasus 2016 exercise to test the ability of Russian forces to rapidly redeploy to a new theater, taking into account the Syrian experience.<sup>162</sup> Several military district commanders are incorporating lessons from Syria into redeployment training exercises.<sup>163</sup> Lapin stated a March 2018 exercise in Kyrgyzstan, consisting of deploying a command post to an airfield and rapidly establishing a command structure, was explicitly meant to test the unit's ability to mirror the Russian establishment of the HQ at Hmeimim in late 2015.<sup>164</sup> Major exercises in 2018 and 2019, including Vostok 2018 and Union Shield 2019, were designed to test Russian strategic readiness to mobilize and redeploy units long distances.<sup>165</sup> The Russian military likely applied learning from Syria to the deployment of Russian military assets to Libya beginning in 2019, as well as the deployment of a contingent of Russian forces to Nagorno Karabakh in November 2020.

The Russian Armed Forces are developing a new, limited expeditionary capacity to support their conception of hybrid war that is not equal to US

capabilities—but does not need to be to pose a threat. Gerasimov stated in December 2017 that Russia's only previous experience redeploying troops to a non-border territory was Cuba in 1962, praising Russia's deployment to Syria as a comparable achievement.<sup>166</sup> The scale and distance of the two deployments, as well as the resources behind them, differ markedly, however. The Russian deployment to Syria is a valuable learning experience for expeditionary logistics but occurred over a relatively short distance and at a small scale. For comparison, Deputy Defense Minister Bulgakov proudly noted that Russia deployed more than 200,000 tons of cargo to Russian forces in Syria over five months in 2015 and claimed the US and NATO were astounded by the scale of the "Syrian Express."<sup>167</sup> Contrarily, the US deployed 300,000 troops and 2,300,000 tons of cargo from the continental United States to Kuwait in six months in 1990.<sup>168</sup> The scale of Russian expeditionary capacity remains far below US capabilities, but the Russian military's conception of limited deployments modeled on Syria does not need to match Western capabilities to be dangerous.

The Russian Armed Forces are actively developing the capability to conduct small expeditionary deployments. Russian capabilities will likely remain limited to the scale of small groups of advisers and Special Forces supported by air assets, rather than the full-scale conventional deployments the US is capable of. Limited Russian deployments can still be incredibly effective, as shown in Syria, and continuous redeployment exercises are likely improving the Russian military's expeditionary capability.

## Russia's Experience using New Equipment in Syria is Important but Overstated by Russia and the West

Western reporting on the Russian deployment to Syria often fixates on the Russian military's claims it used the campaign as a live-fire testing ground with profound impacts on Russian modernization. Russian analysts make similar arguments, but both they and Western commentators often

overemphasize the impact of this development.<sup>169</sup> The Russian Armed Forces took advantage of the ability to combat-test a wide variety of equipment and systems but are exaggerating the scale of development this testing enabled.

The Russian military assesses its use of new equipment in Syria allowed Russia to greatly shrink the technological gap between Russia and NATO. Russian writing on Syria often contains long lists of equipment used in theater, including new and upgraded aircraft, modernized air-defense systems, upgraded armored vehicles, new UAVs, and upgraded Soviet-era aircraft.<sup>170</sup> Russian writing on Syria heavily emphasizes these technical developments. Putin stated in January 2018 that 1,200 representatives from 57 military-industrial complex enterprises rotated through Syria to provide maintenance and feedback on equipment.<sup>171</sup> Russian Defense Minister Shoigu stated in August 2018 that Russian forces highlighted shortcomings in several pieces of equipment and made changes, ensuring weapons used by the Russian Armed Forces now “bear the name ‘perfect.’”<sup>172</sup> Russian analysts explicitly praise the

deployment to Syria for increasing foreign interest in Russian military equipment and expanding Russian influence on the global arms market.<sup>173</sup>

The Russian military successfully gained useful experience testing several modern systems for the first time but does not acknowledge limitations in the scale of testing. Russian analysts note Russian aircraft electronics operated in congested EW environments for the first time.<sup>174</sup> The Russian Navy operated carrier-borne aircraft in combat for the first time in its history.<sup>175</sup> Russia first used the Kalibr cruise missile from air, surface vessel, and submarine launch platforms in 2015 and 2016.<sup>176</sup> The Russian Air Force flew the next-generation Su-57 fighter jet in limited test flights in Syria in early 2018.<sup>177</sup> However, Russian military writing fails to detail the exact usage and amount of new equipment deployed to Syria. Russian newspapers repeatedly claimed the Su-57 fighter was “combat proven” after only a handful of test flights in Syria, likely against undefended targets.<sup>178</sup> Many of the pieces of equipment the Kremlin claims are combat-proven likely underwent similar limited use.



**Above:** Russian President Vladimir Putin and his Turkish counterpart Recep Tayyip Erdogan talk next to a Sukhoi Su-57 fighter jet as they visit the MAKS 2019 air show in Zhukovskiy, outside Moscow, Russia, August 27, 2019. Photo credit: Maxim Shemetov, Reuters

The West must ensure it does not overestimate the technological growth of the Russian military from the limited use of this equipment in Syria.

## The Russian Military Believes UAVs will be Crucial in Future Conflicts

The Russian military assesses UAVs will be increasingly important in future conflicts. Russian forces learned both offensive and defensive lessons on the use of UAVs, countering attacks by enemy drones, and using unarmed reconnaissance drones to improve reconnaissance and enable faster decision making.

The Russian Armed Forces learned valuable lessons in Syria about integrating reconnaissance UAVs into their force structure. Gerasimov claimed in December 2017 that Russian forces had 60-70 drones in the air daily in Syria, carrying out reconnaissance and EW.<sup>179</sup> The Russian military began actively integrating experience using UAVs in Syria into doctrine and training in 2018. Gerasimov called on the Russian military to create procedures to integrate UAVs throughout the force in March 2018. Zhuravlev stated in May 2019 that Russian troops are increasingly practicing coordination with UAVs in training exercises.<sup>180</sup> The Russian armed forces did not openly use, and do not discuss, armed drones in Syria. Gerasimov claimed Russia is developing armed UAVs in March 2018, however.<sup>181</sup> The Russian military will increasingly incorporate reconnaissance and surveillance drones into its operations to support its goal of enabling superiority of management.

The Russian military heavily prioritizes defending against UAVs in response to the threat of drone swarms to Russia's airbase at Hmeimim. Opposition forces began targeting Russia's Hmeimim Airbase with large numbers of drones carrying IEDs in January 2018.<sup>182</sup> The attacks have continued periodically through the present day. Russia created a separate counter-UAV command post and working group at Hmeimim in late 2017, coordinating air-defense and EW systems into a single defense complex.<sup>183</sup> Gerasimov stated in March 2019 that Russia will extrapolate this experience to create

a "strategic system" for countering UAVs.<sup>184</sup> The effective use of Turkish armed drones to destroy Russian-provided equipment in Nagorno Karabakh and Idlib in 2020 will add further urgency to this effort. Turkish drones decimated Armenian and Assad regime forces, respectively, particularly threatening rear areas.<sup>185</sup> Armenian and pro-Assad forces do not operate top-of-the-line Russian equipment, but Turkey's demonstrated ability to nullify Russian air-defense systems such as the S-300 will likely spur development to close this vulnerability.

Russian planners argue EW will be the primary method of countering UAVs and small targets in future conflicts, in addition to EW's previously discussed role disrupting enemy command and control. A Russian air defense researcher published an article in November 2018 arguing air defenses are currently undergoing a similar paradigm shift to the transition in the 1950s from anti-air guns to surface-to-air missiles in response to jet aircraft.<sup>186</sup> He warned Russian air defenses are not evolving quickly enough to counter the threat of drones and risk seeing current inefficiency become future inability to complete their mission.<sup>187</sup> The Russian Armed Forces are quickly adapting by integrating EW systems into their air-defense complexes. Open-source Russian writing does not go into detail on the status of new systems or approaches to air defense beyond stating the growing importance of EW and focus on countering drones. The US and NATO must prepare to face an increasingly contested air-defense environment when operating UAVs in future conflicts.

## Russia Expects Urban Combat to Increase in Importance but has Not Yet Cohered a Unified Approach

The Russian Armed Forces are beginning to recognize the challenges the US has confronted since 2003 in urban combat against militants in the Middle East. Russian military writers appear to have forgotten several key lessons on urban combat internalized by the Soviet military following World

War II. The Russian military is correctly observing many of the individual problems inherent in urban combat and is actively formulating solutions. However, the Russian military has not yet thought through how individual solutions interact with each other.

Russian officers assess operations in Syria demonstrated the increasing importance of urban combat against illegal armed forces in future conflicts. Russian analysts argue that Russian combat experience and observation of US operations in Palmyra, Aleppo, and Mosul demonstrate the increasing importance of urban combat.<sup>188</sup> Zhuravlev assessed in May 2019 that the main characteristic of conflict in the Middle East is that it is predominantly urban.<sup>189</sup> Several Russian military district and service commanders state that the Russian military built new training grounds to simulate urban environments in Syria to adapt to this expectation of conducting future urban operations in the Middle East.<sup>190</sup> Russian analysts link this threat to the perceived tendency of illegal armed forces like ISIS to concentrate in urban areas and “turn them into fortresses,” particularly highlighting the US experience in Mosul and Russian operations in Palmyra.<sup>191</sup> The Russian Armed Forces will likely increasingly prioritize practicing urban combat in simulated Middle East cities.

Russian discussion of urban combat focuses on granular, subtactical tasks drawn from Syria rather than a cohesive doctrine. Russian writing frequently includes generalized contradictory “rules,” similar to overly generalized discussions of illegal armed forces—for example, arguing both that artillery is essential to create entry points in buildings and that destroying buildings should be avoided due to the

impediments to movement created by rubble.<sup>192</sup> Similarly, many analysts argue all infantry groups must have integrated close armor support in cities down to the company level—but note that armor was only useful for long-range support fire in Syria due to Middle Eastern architecture.<sup>193</sup> Other emphasized lessons include the importance of information capabilities; the need for UAV support; the need for engineering troops to deal with tunnel complexes; and the importance of night fighting in urban environments.<sup>194</sup> Russian writing on Syria has not yet addressed a cohesive approach to modern urban combat, instead focusing on specific tactical tasks and the unique challenges of Syria.<sup>195</sup> The Russian Armed Forces are likely continuing to synthesize and institutionalize this learning, but its discourse on urban combat currently holds a narrow focus on urban combat against illegal armed forces in the Middle East and replicates much of US learning from 21st-century wars.

Truly effective urban combat is incredibly difficult and requires sustained costly practice. The Russian Armed Forces do not yet

appear to have the base layer of capabilities—effective infantry, good communications equipment, reliable precision fire, creative officers, etc.—to perform well in urban combat. Russian analysts are beginning to at least identify several of these issues. Russian officers do not yet appear to have reached the point of synthesizing new urban warfare doctrine, however. The Russian Armed Forces expect to conduct urban operations in the Middle East again and will likely face many of the same difficulties they have encountered in Syria, despite marginal improvement at performing specific tactical tasks.

*Russian military writers appear to have forgotten several key lessons on urban combat internalized by the Soviet military following World War II.*



## The Bounded Utility of Russian Learning in Syria

The Russian military is failing to publicly acknowledge several limitations in its learning from Syria. These limitations, and the failure to recognize them at least publicly, have likely introduced distortions and misconceptions into the Russian learning and development process.

### The Russian Military Prioritized Breadth of Experience over Depth of Knowledge in Syria

The Russian military gained valuable combat experience in Syria and at minimum developed a cadre of experienced military district-level officers. However, the Russian military is overestimating the level of its own experience.

Gerasimov incorrectly claims the deployment to Syria proves the entire Russian military is combat-capable. Gerasimov emphasized in December 2017 that Russian troops sent to Syria did not receive special training or selection and comprised a “slice” of the Russian military.<sup>196</sup> Gerasimov then made the logical leap that the Syrian campaign shows the entire Russian military is combat-proven since varied slices of the military did well. This statement radically stretches the scale of the Russian deployment to Syria. Gerasimov ignores the disparity between the scale of Russian actions in Syria and the actions entire Russian units would take, as well as the fact only Russian officers rotated through Syria, not full frontline units.

The Russian military is successfully developing a capable pool of combat-experienced senior officers. The Russian Armed Forces rotated every military district commander and several other key generals, including the commanders of the Air Force, airborne forces (VDV), and Military-Political Directorate, through commanding the Russian deployment in Syria for a minimum of 6 months each. Gerasimov

said Russian military district commanders brought the main structure of their operational staffs with them to Syria in December 2017.<sup>197</sup> Russian generals likely brought only a small personal staff, not a complete “main structure,” however. Each military district continued functioning normally and conducted exercises in the absence of the senior commander, likely under the control of the district chief of staff.<sup>198</sup> Every Russian military district and several services and key directorates are now led by officers with a minimum of 6 months’ experience commanding forces in combat, a key learning opportunity Russia simply could not have achieved without its deployment to Syria.

Military officers below the military district commander level gained useful but limited levels of experience. Gerasimov claimed in December 2017 that “almost all divisional commanders and more than half of the commanders of combined arms brigades and regiments passed through the grouping of troops [in Syria] with their collective staffs.”<sup>199</sup> He stated that, by December 2017, 43,000 officers and soldiers rotated through Syria, which increased to 63,000 by October 2018.<sup>200</sup> For context, the active-duty Russian military is around 1,000,000 strong—making this a small proportion of the total Russian military (although likely a larger proportion of the officer corps).<sup>201</sup> Russia’s Military Police, however, gained widespread experience, with Defense Minister Shoigu claiming in March 2020 that 98 percent of Military Police officers had deployed to Syria.<sup>202</sup>

The Russian Air Force gained the greatest amount of experience in Syria of Russia’s armed services. Russian analysts and officers note increasing experience levels of aircrews and technicians throughout the deployment to Syria, with analysts claiming by October 2018 that 87 percent of tactical and operational aviation, 60 percent of strategic aviation, and 91 percent of rotary-wing aircrews received combat experience in Syria.<sup>203</sup> Interestingly, Defense

Minister Shoigu repeated these same numbers in September 2020, indicating the Kremlin's prioritization of rotating aircrews through Syria likely ended in 2018.<sup>204</sup> The Russian operational tempo in Syria in 2016 and 2017 was relatively high, and the Russian Air Force doubled up crews on individual airframes to distribute experience to larger numbers of personnel.<sup>205</sup> General Alexander Chayko stated in November 2020 that Russian aircraft have carried out 44,000 sorties to date.<sup>206</sup> That said, Russian writing does not acknowledge the lack of experience operating against an advanced enemy in an actively contested air-defense environment.

The Russian Armed Forces intentionally prioritized the number of officers rotated through Syria over the depth of their experience. Gerasimov stated in December 2017 that the Russian General Staff intentionally halved the length of officer rotations to Syria from the usual 6 months to 3 months to increase the number of officers given the opportunity to rotate through Syria.<sup>207</sup> The Russian military made a conscious choice to develop a large but shallow pool of experience from limited actions. The Russian military could have instead prioritized rotating a smaller number of officers for the usual 6-month rotation or longer to deepen their understanding of conflict. The impressive percentages of Air Force pilots with experience are similarly based on short tours. A *Red Star* interview with helicopter pilot Major Seelyev in August 2018 stated he conducted four tours to Syria in 2016 and 2017 for a total of 8 months and credits Seelyev with possessing far more experience than most Russian pilots in Syria.<sup>208</sup>

***The Kremlin chose to prioritize breadth of experience, with the tradeoff of likely depriving the Russian military of a depth of knowledge that longer rotations of fewer officers could have provided.***

The Russian military's choice to prioritize dispersing experience to as many officers as possible has created a generation of Russian officers and aircrews with a shared combat experience. Gerasimov considers Syria the Russian military's primary source of learning for the future of war, and optimized Russian deployments to ensure as many officers as possible gained experience to contribute to this learning effort. Gerasimov ensured a large proportion of Russian units are now led by officers with limited but valuable combat experience—rather than empowering a smaller subset of the Russian military. Much of the Russian senior officer class now possess experience to contribute to the discussions of learning from Syria that are the subject of this report. The breadth of officers with experience from Syria additionally ensures their lessons can be mutually supporting in the exercises the Russian military is using to develop and institutionalize its learning. Gerasimov ensured an entire generation of Russian officers was involved in what he considers the foundational event for the character of the future of war—magnifying the capabilities of the Russian military.

Russian writers do not acknowledge the limitations of their choice to prioritize breadth of experience over depth, however. It is difficult to learn and adapt to a combat theater when deployed for the short periods comprising Russian rotations. No Russian officer beyond special forces units gained experience commanding full-sized Russian units in combat. There are still important lessons to be learned from advising, but the lack of Russian acknowledgment of this limitation will impede adaptation. While numerous officers gained experience, only military district commanders and above likely possess continuity of understanding over a long deployment. The Kremlin chose to prioritize breadth of experience, with the tradeoff of likely depriving the Russian military of a depth of knowledge that longer rotations of fewer officers could have provided.

Russian officers posit an equivalence between the rank of personnel deployed to Syria and gaining experience commanding operations they are normally responsible for at that rank. Most Russian

officers that deployed to Syria in advising roles were brigade or regiment commanders and staffs. Operations in Syria almost entirely occurred below this echelon, however. Russian analysts openly stated in 2016 that pro-regime offensives would deploy a brigade at most, with many offensive actions conducted by units of battalion size or smaller.<sup>209</sup> Russian writers do not acknowledge the limitation the smaller scale of operations imposes on learning. Russian military district commanders, whose formal level of responsibility is coordinating multiple armies, at most gained experience coordinating brigades in Syria. Russian brigade and regimental commanders, therefore, did not directly command forces at that echelon, and far more-senior officers commanded small force groupings. The Russian military is optimizing for deployments on the scale of Syria and will likely need to grapple with the challenge of shifting these command structures.

Senior Russian officers routinely discuss integrating Syrian experience into all aspects of training and development without any acknowledgment of the limitations—only the advantages—of the prioritization of breadth over depth of experience, raising the risk of proliferating incomplete or subpar learning throughout the force. Gerasimov stated in December 2017 that multiple manuals have been published summarizing experience from Syria.<sup>210</sup> Shoigu stated in February 2017 that the MoD is intentionally moving officers with experience in Syria into teaching positions.<sup>211</sup> The MoD described Vostok 2018, the largest Russian military exercise since the end of the Cold War, as a “generalized Syrian experience.”<sup>212</sup> Zhuravlev stated in May 2019 that lessons learned in Syria are being integrated as an “organic component” of all training, rather than being treated as a separate area of study.<sup>213</sup> The Russian Armed Forces are sharing any flawed or incomplete learning with partner forces, including the Chinese military, through joint international exercises.<sup>214</sup> The Russian Armed Forces are taking officers with shallow experience in Syria and treating them as experts and models for the next generation of Russian officers. This approach grants Russia several advantages, but the Russian military risks undermining its key learning effort without acknowledgment of its own limitations.

## The Russian Military is Omitting Several Lessons

The Russian military is choosing to obfuscate elements of learning from its deployment to Syria. The Kremlin cannot easily solve this problem. The Russian military cannot openly discuss its force posture and learning sources. Russian writers may actively hinder and distort otherwise successful internal lessons-learned processes due to disinformation intended to hide the true character of operations or self-promotion. Russian officers may apply incorrect “lessons” from Syria due to this obfuscation.

Russian officers do not openly discuss how they established and structured proxy forces and elements of the SAA, likely for both security reasons and to support the previously-discussed prioritization of coalitions with state actors. Russian officers commonly discuss the effectiveness of various pro-regime units in Syria, acknowledge the presence of Russian advisers, and the central role played by the Russian headquarters at Hmeimim, but do not discuss how these forces were supported and trained. For example, Dvornikov credits the success of the 25<sup>th</sup> Special Forces Division (formerly known as the Tiger Forces) to the skills of Brigadier General Suheil Hassan and unspecified support from Russian officers but does not discuss how Russian officers can learn from this success and apply it to supporting units in future operations.<sup>215</sup> The Russian military is choosing to not prioritize learning from this key element of its operations in Syria.

Russia cannot openly discuss its siege-and-starve campaigns that compel the surrender of opposition forces by using air and artillery to strike civilian targets—contrary to the laws of armed conflict and the Geneva Convention. Lapin highlights that local negotiations were critical to enabling pro-Assad forces to recapture Aleppo; he describes this approach as a break from “traditional” Russian strategy and emphasizes that opposition fighters and families were allowed to leave before neighborhoods were recaptured.<sup>216</sup> Lapin states this experience was invaluable in later Russian operations, such as the

pro-regime recapture of Southern Syria through reconciliation agreements.<sup>217</sup> Dvornikov similarly describes humanitarian operations as a “turning point” in the conflict when employed parallel to military operations.<sup>218</sup> Dvornikov claimed Russia evacuated 130,000 people, including 31,000 militants and their families, from Aleppo under the “personal guarantees of the Russian officers.”<sup>219</sup> However, Dvornikov obfuscates the Russian siege-and-starve campaigns against Aleppo and other cities.<sup>220</sup> Dvornikov claims that information operations against the local population enabled the liberation of “entire neighborhoods without a fight,” comparing this impact “to the results of a large-scale operation involving troops and forces.”<sup>221</sup> Pro-regime forces did not have to clear houses block-by-block in parts of Aleppo, but opposition forces and civilians only surrendered to the Russians after they deliberately starved besieged areas. Russian officers cannot openly state they repeatedly shelled and bombed civilian infrastructure until a neighborhood was forced to surrender and are overemphasizing the negotiation aspect instead.<sup>222</sup> The public but inaccurate Russian account of these campaigns as a triumph of non-military methods will complicate a potential internal (and more accurate) account of the “humanitarian operations” as a long, drawn-out (and illegal) intimidation campaign.

Russian writers do not acknowledge Russian officers predominantly learned lessons from actions undertaken by PMCs and proxy forces rather than by conventional Russian forces in Syria. Russian analysis of the Russian HQ at Hmeimim and actions by the Air Force and Navy discuss Russian actions in concrete terms without obfuscation, as the Kremlin is not attempting to obscure the presence of these assets in Syria. Much of the public

Russian lessons-learned discussion is likely drawn from a mix of Russian officers advising and observing pro-regime forces and the direct experience of PMC forces, however, which the Russian military denies it controls. Russian writers nonetheless uniformly discuss lessons from Syria as if operations were conducted by Russian forces. The Russian military can gain immense learning value from advising and supporting other forces, but risks introducing distortions into its learning—for example, not acknowledging the differences in force capabilities between partner forces and Russian units. The Russian failure to acknowledge the context of lessons learned presents difficulties, not the method of learning itself.

The Russian military is intentionally deemphasizing learning about conducting operations through partners and proxy forces—one of Russia’s self-proclaimed greatest successes in Syria. The Russian military discourse on Syria discusses and accurately identifies necessary changes to doctrine and equipment that will likely enable the Russian Armed Forces to improve. Russian authors fail to openly reconcile Russia’s own institutional projections that non-state forces will be the primary combatants

in future conflicts with discussions of how Russian forces will operate, however. The Russian military plans to leverage formal coalitions (ideally formed among states with completely aligned goals) rather than proxy-force operations in future conflicts, developing a new capability but not exploiting the opportunity learning in Syria provides to refine the capabilities needed to construct and manage proxy forces.

*The Russian military exercised several capabilities in Syria that had previously atrophied from lack of use and is leveraging its learning to develop new capabilities.*

## Implications

The Russian military has already implemented several lessons learned from Syria and has become a more formidable force since 2015. The Russian Ministry of Defense quickly retooled military exercises to spread lessons from Syria throughout the force. The Russian military is actively pursuing its priority of increasing command and control capabilities, implementing ideas in 2020 that were discussed theoretically as recently as 2019. Russian exercises increasingly emphasize placing commanders in unexpected situations, challenging them to coordinate joint groups, and increasing strategic redeployment readiness. Russian exercises increasingly also train specific tactical tasks based on learning in Syria. Russian military exercises now emphasize integrating Electronic Warfare and the use of drones throughout the force structure to support achieving superiority of management. The Russian military is fully advancing its set objective of learning from the deployment to Syria and is optimizing its implementation of these lessons to support a cohesive concept of future expeditionary operations modeled on Syria.

The Russian military has already incorporated many of its lessons from Syria into doctrine and is refining this learning in major exercises, but still requires time to execute these changes. Russian discussions on learning from Syria evolved rapidly from 2015 to 2020, and many adaptations discussed in this report have likely been incorporated into doctrine, including Russia's secret National Defense Plan for 2021-2025, which entered into force on January 1, 2021.<sup>223</sup> Integrating new doctrine into training—and readapting current officers and personnel to new guidelines—will take years, however. The Russian effort to increase initiative and creativity among officers is a generational undertaking requiring fundamental changes to Russian command and governance culture. Implementing armament changes drawing on learning from Syria, particularly developing next-generation communications and command equipment and increasing Russia's stocks of expensive precision weapons, will take both time and resources the Kremlin sorely lacks.

The Russian military's chosen adaptations to its learning from Syria pose several unique challenges to the US and its allies. The US cannot assume its ongoing modernization efforts will counter the Russian military's changing capabilities as a lesser included objective. The Russian military exercised several capabilities in Syria that had previously atrophied from lack of use and is leveraging its learning to develop new capabilities. The Russian military still requires extensive investment and time to implement its learning from Syria. If the US does not take action to counter these developments in the coming years, however, Russia's new toolkit of capabilities drawn from Syria will close several capability and technology gaps with the United States and NATO.

- ***Do not underestimate the Kremlin's intent to conduct expeditionary deployments modeled on its intervention in Syria.*** The Kremlin identifies Syria as a highly successful—and replicable—operation and conceives of expeditionary deployments as a new addition to the Kremlin's policy toolkit. The Kremlin is already applying its lessons from Syria to its involvement in Libya and Nagorno-Karabakh and is demonstrating a new willingness to exert military power internationally. The Russian military threat is not confined to Europe and cannot be countered by conventional deployments alone, although conventional deployments to Europe remain essential. The West must not underestimate the Kremlin's willingness to deploy expeditionary forces to challenge Western interests.
- ***A global, flexible force posture is necessary to confront the Russian military.*** The US need not deploy its own military forces everywhere the Kremlin might conduct expeditionary operations, but it must find and develop allied and partner military forces to counter the Russian threat. The US and its allies should be prepared to confront Russian expeditionary deployments and avoid establishing false red lines.

- **The US must prioritize contesting Russian efforts to secure superiority of management.** The US and its allies do not need to copy this concept but must develop an understanding of what the Russian military sees as the key combat task of its officers—increasing the speed of their own decision making and reducing their opponents' capabilities. US and allied commanders must understand how their Russian counterparts conceptualize their own priorities to properly counter them. US and allied commanders should be particularly aware of the Russian military's increasing emphasis on disrupting command and control as a necessary but insufficient component of all combat operations and increase their attention to maintain continuity of command and control as part of future planning.
- **The Russian military's new cadre of experienced officers acts as a dangerous force multiplier.** The Kremlin's chosen optimization of prioritizing breadth over depth of experience in its officer corps, supplemented with an intensive program of exercises to further disperse learning from Syria, acts as a dangerous force multiplier compared to the pre-Syria Russian military. Every Russian military district commander and nearly all officers above the regiment and brigade level possess experience in Syria. The Russian military's practice of transplanting entire Russian staffs to Syria ensured conventional Russian forces developed some degree of unit cohesion during advising missions.
- **The Kremlin will likely leverage coalition partners more effectively in future combat operations.** The Russian military is successfully applying its learning from managing a diverse coalition of state and proxy forces in Syria to greatly strengthen its ability to leverage partner state forces in future operations. The Russian military assesses future wars will predominantly involve coalitions of states and is proactively building coalition command structures. The

Russian military is particularly prioritizing the ability to leverage other states to project force in the former Soviet Union. The Kremlin's efforts to grow international military ties—including with other US competitors such as China and Iran—will additionally enable the Kremlin to project force internationally. The US should take steps to strengthen cooperation with NATO and extend outreach to other states to mitigate the Kremlin's ability to grow its network of military ties.

The Russian military is additionally leveraging learning from Syria to close several capability gaps with the US and NATO. The US and its allies should prepare for the Russian military to further modernize several capabilities that, while not new to the US and NATO, will empower the Russian military.

- **The Russian military's prioritization of networked command systems, if achieved, will erode one of the US and NATO's key technological advantages.** The Kremlin's prioritization of developing "automated control systems" and networked command systems is not a breakthrough in theory or technology—but rather a crucial breakthrough in investment. The Kremlin's ongoing effort to modernize command and control systems will be a costly process, but the Russian military is already making rapid progress, testing systems in 2020 discussed theoretically as recently as 2018.
- **The Russian military is supporting its technological modernization of command systems with a campaign to overhaul Russian command culture.** The Russian military learned the necessity of improving the flexibility and joint capabilities of its command structures in Syria. Russian exercises now prioritize increasing joint capabilities and testing the creativity of its officers to break them out of doctrinal formulae. The Russian General Staff is additionally embarking on a difficult generational effort to introduce initiative and creativity into the Russian officer corps. Future Russian officers will likely demonstrate greater

creativity and flexibility, and the US and its allies must avoid increasingly outdated assessments of Russian command culture rooted in the Soviet era.

- ***The Russian military is developing the doctrine to support increased precision strike capabilities, but success requires costly technological investment.***

While most Russian airstrikes in Syria utilized unguided munitions, the Russian Air Force and Navy utilized modern guided munitions and cruise missiles in combat for the first time and are developing the doctrine necessary to support a future Russian force with greater precision weapon capabilities. The US and its allies must particularly take steps to harden logistics and command assets to mitigate the Russian military's focus on developing capabilities to target rear areas as a key element of gaining superiority of management. The US and its allies should additionally maintain sanctions pressure to deprive the Kremlin of the resources necessary to implement costly acquisitions programs.

- ***The Russian military is likely developing capabilities to challenge the use of UAVs.***

The Russian military is prioritizing developing anti-UAV defense measures following drone attacks on its Hmeimim airbase in Syria and Turkey's use of effective drone strikes in Idlib and Nagorno-Karabakh. The Russian military has not yet demonstrated new anti-UAV capabilities implementing learning from Syria but is prioritizing this development in major exercises. The US and its allies should prepare to operate drones in an increasingly dangerous airspace and take the increasing sophistication of Russian UAV and counter-UAV capabilities into account in its own modernization efforts.

The Russian military still has time to adapt to many of the weaknesses of its own learning process. Russia is still involved in and is still learning from the conflict in Syria. Additional discussion and testing of ideas, not to mention further combat experience, will likely refine many lessons the Russian military has not yet developed adaptations for. The Russian Armed Forces will likely work to synthesize its lessons from Syria into a more cohesive whole over time through doctrinal revisions and training exercises. The United States and its allies must prepare to confront an increasingly effective Russian military that is intent on further developing expeditionary capabilities and using them in coalition environments. The Russian military's learning from Syria is driving Russian modernization efforts; the US must understand this learning to properly confront the Kremlin.

## Appendix A

### Russian Commanders in Syria

	<p><b>VALERY GERASIMOV</b></p> <p>12/2012 – Present:  <b>CHIEF OF THE GENERAL STAFF OF THE ARMED FORCES OF THE RUSSIAN FEDERATION</b><sup>224</sup></p>
	<p><b>ANDREI KARTAPOLOV</b></p> <p>02/2013 – 06/2014 Pre-Syria:  <b>CHIEF OF STAFF OF THE WESTERN MILITARY DISTRICT</b><sup>227</sup></p> <p>06/2014 – 10/2015 Pre-Syria:  <b>DEPUTY CHIEF OF ARMED FORCES</b><sup>228</sup></p> <p>10/2015 – 07/2018 Promotion concurrent with Syria:  <b>COMMANDER OF THE WESTERN MILITARY DISTRICT</b><sup>229</sup></p> <p>12/2016 – 03/2017 Experience in Syria: <b>COMMANDER</b><sup>230</sup></p> <p>07/2018 – Present Promotion Post-Syria:  <b>HEAD OF THE MILITARY-POLITICAL DIRECTORATE</b><sup>231</sup></p>
	<p><b>ANDREI SERDYUKOV</b></p> <p>10/2013 – 10/2016 Pre-Syria:  <b>CHIEF OF STAFF OF THE SOUTHERN MILITARY DISTRICT</b><sup>232</sup></p> <p>10/2016 – Present Pre-Syria and concurrent with Syria:  <b>RUSSIAN AIRBORNE FORCES (VDV) COMMANDER</b><sup>233</sup></p> <p>04/2019 – 09/2019 Experience in Syria: <b>COMMANDER</b><sup>234</sup></p>
	<p><b>ALEXANDER LAPIN</b></p> <p>01/2014 – 01/2017 Pre-Syria:  <b>CHIEF OF STAFF OF THE EASTERN MILITARY DISTRICT</b><sup>235</sup></p> <p>01/2017 – 11/2017 Experience in Syria: <b>CHIEF OF STAFF</b><sup>236</sup></p> <p>11/2017 – Present Promotion post-Syria:  <b>COMMANDER OF THE CENTRAL MILITARY DISTRICT</b><sup>237</sup></p> <p>10/2018 – 01/2019 Experience in Syria: <b>COMMANDER</b><sup>238</sup></p>





## ALEXANDER DVORNIKOV

04/2012 – 06/2016 Pre-Syria and concurrent with Syria:  
**CHIEF OF STAFF OF THE CENTRAL MILITARY DISTRICT**<sup>239</sup>

09/2015 – 07/2016 Experience in Syria: **COMMANDER**<sup>240</sup>

09/2016 – Present Promotion Post-Syria:  
**COMMANDER OF THE SOUTHERN MILITARY DISTRICT**<sup>241</sup>



## ALEXANDER CHAYKO

07/2014 – 01/2016 Pre-Syria:  
**COMMANDER OF 20TH GUARDS COMBINED ARMS ARMY WESTERN MILITARY DISTRICT**<sup>242</sup>

UNK time in late 2015 Experience in Syria: **CHIEF OF STAFF**<sup>243</sup>

01/2016 – 04/2017 Pre-Syria:  
**COMMANDER OF 1ST GUARDS TANK ARMY WESTERN MILITARY DISTRICT**<sup>244</sup>

04/2017 – 11/2018 Pre-Syria:  
**CHIEF OF STAFF - FIRST DEPUTY COMMANDER OF EMD**<sup>245</sup>

11/2018 – 02/2019:  
**FIRST DEPUTY HEAD OF THE MILITARY ACADEMY OF THE GENERAL STAFF OF THE ARMED FORCES**<sup>246</sup>

02/2019 – 09/2019:  
**DEPUTY HEAD OF THE GENERAL STAFF OF THE ARMED FORCES OF THE RUSSIAN FEDERATION**<sup>247</sup>

09/2019 – Present Experience in Syria: **COMMANDER**<sup>248</sup>



## SERGEI SUROVIKIN

04/2012 – 10/2012 Pre-Syria:  
**HEAD OF THE WORKING GROUP ON MILITARY POLICE**<sup>249</sup>

10/2012 – 10/2013 Pre-Syria:  
**CHIEF OF STAFF OF THE EASTERN MILITARY DISTRICT**<sup>250</sup>

10/2013 – 10/2017 Promotion pre-Syria and concurrent with Syria:  
**COMMANDER OF THE EASTERN MILITARY DISTRICT**<sup>251</sup>

03/2017 – 12/2017 Experience in Syria: **COMMANDER**<sup>252</sup>

11/2017 – Present Promotion post-Syria:  
**COMMANDER OF THE AEROSPACE FORCES**<sup>253</sup>

01/2019 – 04/2019 Experience in Syria: **COMMANDER**<sup>254</sup>



## ALEXANDER ZHURAVLEV

12/2013 – 05/2015 Pre-Syria:

**DEPUTY COMMANDER OF THE CENTRAL MILITARY DISTRICT<sup>255</sup>**

05/2015 – 03/2017 Promotion concurrent with Syria:

**CHIEF OF STAFF OF THE SOUTHERN MILITARY DISTRICT<sup>256</sup>**

09/2015 – 07/2016 Experience in Syria: **CHIEF OF STAFF<sup>257</sup>**

07/2016 – 12/2016 Experience in Syria: **COMMANDER<sup>258</sup>**

03/2017 – 10/2017 Promotion between Syrian deployments:

**DEPUTY CHIEF OF GENERAL STAFF<sup>259</sup>**

11/2017 – 11/2018 Promotion concurrent with Syria:

**COMMANDER OF THE EASTERN MILITARY DISTRICT<sup>260</sup>**

12/2017 – 09/2018 Experience in Syria: **COMMANDER<sup>261</sup>**

11/2018 – Present Lateral movement post-Syria:

**COMMANDER OF THE WESTERN MILITARY DISTRICT<sup>262</sup>**



## GENNADY ZHIDKO

01/2015 – 09/2016 Pre-Syria:

**CHIEF OF STAFF OF THE 2ND COMBINED ARMS ARMY, CENTRAL MILITARY DISTRICT<sup>263</sup>**

09/2016 – 11/2017 Promotion concurrent with Syria:

**COMMANDER OF THE 2ND COMBINED ARMS ARMY, CENTRAL MILITARY DISTRICT<sup>264</sup>**

07/2016 – 12/2016 Experience in Syria: **CHIEF OF STAFF<sup>265</sup>**

11/2017 – 11/2018 Promotion post-Syria:

**DEPUTY CHIEF OF THE GENERAL STAFF<sup>266</sup>**

11/2018 – Present Further promotion post-Syria:

**COMMANDER OF THE EASTERN MILITARY DISTRICT<sup>267</sup>**



## EVGENY USTINOV

09/2016 – 05/2019 Pre-Syria:

**CHIEF OF STAFF OF THE CENTRAL MILITARY DISTRICT<sup>268</sup>**

12/2016 – 04/2017 Experience in Syria:

**STAFF OFFICER DURING PALMYRA CAMPAIGN<sup>269</sup>**

05/2019 – Present Russian Airborne Forces:

**(VDV) CHIEF OF STAFF<sup>270</sup>**

03/2020 – Present Experience in Syria: **CHIEF OF STAFF<sup>271</sup>**

# Endnotes

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