

Hybrid Warfare: The 21st Century Russian Way of Warfare

A Monograph

by

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Abstract

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In 2014, Russia unleashed a new form of warfare, the likes of which had yet to be seen on the international stage. The form of warfare, called a variety of things to include, hybrid warfare or new generation warfare, is a whole-of-government approach to war that links the elements of national power and small-scale tactical action. Russian hybrid warfare, examined throughout this monograph, is a whole-of-government approach to warfare that seeks to operate covertly or through the use of partisan forces, but is more than capable and willing to operate overtly with conventional combat power to achieve its ends. To do so, Russian hybrid warfare synergizes conventional, unconventional, information, and cyber operations into an effective effects package that enables tactical formations to generate far greater battlefield effects than comparable formations in other armies. Russia uses the Russian Identity—ethnicity, language, religion, geography, and history—to build consensus and justify its provocations. The idea of hybrid warfare germinated in the Russo-Georgian War of 2008, but came into its own during the Russo-Ukrainian War, of which the annexation of Crimea and the seizure of the Donbas are the two most visible campaigns. Hybrid warfare, as demonstrated by Russia in Ukraine, is a powerful tool for an era of limited war, and is arguably the modern Russian way of warfare.

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Acronyms

ABCT	Armored Brigade Combat Team
ADRP	Army Doctrine Reference Publication
APC	Armored Personnel Carrier
ARCIC	US Army Capabilities Integration Center
ATO	Anti-Terrorist Operations
A2/AD	Anti-Access/Area Denial
BTG	Battalion Tactical Group
DPICM	Dual-Purpose Improved Conventional Munitions
DPR	Donetsk People's Republic
IBCT	Infantry Brigade Combat Team
IFV	Infantry Fighting Vehicle
GazProm	Gazovaya Promyshlennost (Russian natural gas company)
GRU	Glavnoye Razvedyvatel'noye Upravleniye (Main Intelligence Agency of the Russian Army General Staff)
JP	Joint Publication
LPR	Luhansk People's Republic
NATO	North Atlantic Treaty Organization
SBCT	Stryker Brigade Combat Team
Spetsnaz	Voyska Spetsialnogo Naznacheniya (Russian Special Purpose Forces)
TRADOC	US Army Training and Doctrine Command

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Introduction

As Montenegro sought to join NATO in 2015, an attempted coup erupted within the country in October of that year. The *Telegraph*'s Ben Farmer reported that, “An officer with Russia’s GRU military intelligence service, is accused of running a web of Serbian and Russian nationalists and paramilitaries who plotted to assassinate the Montenegrin prime minister.”¹ The failed coup and attempted assassination were conducted by Russian intelligence in support of Russian president Vladimir Putin’s vision for a modern Eurasia in which NATO discontinues encroaching on Russia’s sphere of influence and in which Russia ascends to regional hegemony.² Although unsuccessful, this covert operation—conducted by Russian intelligence working in conjunction with disaffected Russian partisans within Montenegro—to stymie NATO’s expansion captures the essence of modern Russian hybrid warfare. However, Montenegro is not unique, but instead is the most recent hybrid conflict propagated by the Russian government.

Russia’s operations in Eastern Europe and its Near Abroad since 2008 signal an evolving approach to the contemporary conduct of war. Speaking on the specter of Russian hybrid operations in Eastern Europe, Lt. Gen. Michael Williamson commented, “In terms of state-based challenges, Russia’s purported annexation of Crimea and invasion of Ukraine demonstrated a sophisticated combination of diplomatic, informational, military, and economic means to achieve objectives below a threshold that the Russian leadership believe would elicit a concerted NATO response.”³ Russia’s contemporary approach to war is characterized by the use of information,

¹ Ben Farmer, “Montenegro to Indict Russian Spy Behind Coup Plot,” *The Telegraph*, February 26, 2017, accessed March 5, 2017, <http://www.telegraph.co.uk/news/2017/02/26/montenegro-indict-russian-spy-behind-coup-plot/>.

² Gordona Knezevic, “Montenegro’s NATO-Russia Chess Match,” *Radio Free Europe/Radio Liberty*, January 2, 2017, accessed March 5, 2017, <http://www.rferl.org/a/montenegro-nato-russia-chess-match/28210094.html>.

³ Lt. Gen. Michael Williamson, Lt. Gen. H. R. McMaster, Lt. Gen. Joseph Anderson, and Lt. Gen. John Murray, statement to the Subcommittee on AirLand, Committee on Armed Services, United States Senate, on Army Modernization in Review of the Defense Authorization Request for Fiscal Year 2017, Second Session, 114th Congress, 5 April 2016.

unconventional forces, conventional forces, cyber operations, electronic operations, and partisan forces to achieve military objectives aligned with political aims. Russia's actions have gone beyond the exclusive use of military force and have steadily increased the employment of the other instruments of national power in the pursuit of political objectives, thus shrinking the distance between the strategic and tactical levels of war. Furthermore, Russia's actions indicate a temporal component which seeks to operate within the international community's reaction time. Simultaneously, Russian actions embody restraint through the employment of covert methods to achieve its political and military objectives. However, what makes Russia's actions unique is the role that conventional forces and conventional combat play within its hybrid model of warfare.

Military theorist J. F. C. Fuller suggests, "If secure frontiers cannot be gained by peaceful methods, powerful nations will seek to secure them by war."⁴ War, in the historical sense of the concept, was on display during the Russo-Ukrainian War, as was Fuller's concept of "secure frontiers." Conventional Russian operations in Ukraine, as a sub-component of Russian hybrid warfare, demonstrate the return of high-intensity combat operations, characterized by a rapid sensor-to-shooter fire support structure, the use of offensive field artillery and multiple-launch rockets, in conjunction with robust combined arms formations that have one "foot" in the operational level of war and the other in the tactical level. The byproduct of Russian hybrid warfare is the reemergence of siege warfare and an attrition-based operational and tactical approach to battle. Russia's conventional warfighting capability, reinvigorated by large capital investment since 2003, yielded a ground combat force with capability not seen on European battlefields since the end of the Cold War.⁵ Specifically, recent analysis by Andrew Monaghan indicates that:

⁴ J. F. C. Fuller, *The Foundations of the Science of War* (London: Hutchinson, 1926; reprint, Fort Leavenworth, KS: Combat Studies Institute, 1993), 317.

⁵ Jonathon Masters, "How Powerful is Russia's Military," *Defense One*. November 14, 2014. Accessed May 9, 2016. <http://www.defenseone.com/threats/2014/11/how-powerful-russias-military/99062>.

Russia invested more than \$640 billion to modernize its force, increasing its capabilities by more than 700 modern attack aircraft, 2,000 tanks, and 2,000 tracked and self-propelled guns. This includes major upgrades to conventional Russian ground combat platforms such as the T-72B3, T-80, T-90, the BMP-3, and MT-LB family of infantry fighting vehicles and personnel carriers, and the introduction of the T-14 Armata.⁶

Tucked within the \$640 billion modernization effort are hidden improvements in cyber, electronic, and drone capabilities, all of which work in tandem with the conventional and unconventional forces of Russia's military. However, Russian hybrid warfare is deeply rooted in its geopolitical history, its military history, its ethnic composition, and its trial with Communism during the twentieth century. Russian expert Bettina Renz suggests that strong military power has always been central to Russia's self-perception and has been central to each of the major Russian polities throughout its history.⁷ What is more, Russia's hybrid warfare is inherently rooted in its national means and its ability to keep money flowing into its economic system. In addition, Russian hybrid warfare is influenced by contemporary technology as well as by the conflicts of the late twentieth century and early twenty-first century, to include US involvement in Afghanistan and Iraq, and revolutions that overturned the political order of the Middle East, Europe, and Eurasia.

Nonetheless it is imperative to understand that Russia is not the sole proprietor of hybrid warfare. Russian actions have many implications not only for Europe and the United States, but for nations and polities the world over. The Russian model of hybrid warfare illuminates several critical innovations to warfare that transpired while the United States was committed to operations in Afghanistan, Iraq, and throughout many other parts of the world. The most powerful implication is not necessarily in a resurgent Russia, but in providing the world with a modern approach to warfare that merges the instruments of national power within operational design—all of which is nested in time, space, and purpose to achieve political objectives. The approach

⁶ Amos C. Fox, "Russian Hybrid Warfare and Its Relevance to the US Army's Infantry," *Infantry* 105, no. 2 (April-July 2016), 13.

⁷ Bettina Renz, "Why Russia is Reviving Its Conventional Military Power," *Parameters* 46, no. 2 (Summer 2016): 26.

aggregates **Information Age technology** within this construct in an effort to achieve victory without the formal commitment of forces. Information Age technology can cover a wide variety of items, but for purposes of discussion herein, Information Age technology includes improvements to information and communications technology, nascent and improved cyber and electronic capabilities, and improved anti-area/area-denial capabilities. In short, hybrid warfare is a burgeoning theory of warfare that exploits adversarial vulnerabilities.

Many of the peculiarities of hybrid warfare described herein are inextricably linked to Russia's social, political, and economic conditions. Yet **Russia's success, coupled with the international community's inability or unwillingness to meaningfully deter its aggression**, could embolden other nations or polities with comparable means to institute a similar approach. In doing so, **Russian hybrid warfare possesses the potential to reshape the face of modern war in such a way to make war perpetual, in the shadows, but always capable of escalating to full-scale attritional combat.**

The Russo-Ukrainian War, predominately fought between April 2014 to March 2015, is the most noticeable example of hybrid warfare. Prior to analyzing the war, the thoughts of Gen. Valery Gerasimov, Chief of the Russian General Staff, must be evaluated. Gerasimov's thoughts, known as the "**Gerasimov Doctrine**," form the intellectual foundation of Russia's approach to hybrid warfare. The Gerasimov Doctrine describes the evolving character of war in relation to evolving technology, international policy, strategy, and international relations. Furthermore, it reflects Russian experience, education, and adaptation following the post-Soviet conflicts with Transnistria, Chechnya, and Georgia.

Russian hybrid warfare, as illustrated by the war in eastern Ukraine, is the embodiment of Information Age warfare. Many of the war's operations lurk in the shadows of unconventional operations, or in the zeros and ones of the digital domain. Yet as the war unfolded a very conventional war presented itself. The physical battlefields of the Russo-Ukrainian War resemble

those of World War I's Western Front, more so than one would expect to find in the twenty-first century.⁸

Hybrid warfare has one foot in the past, with its ability to wage conventional war, and it has one foot in the future. The hybrid way of war is a whole-of-government approach to war that seeks to integrate all the instruments of national power through campaigns in which the distance between strategic and tactical levels of war are condensed to the point that the operational level of war is razor-thin. Hybrid warfare, as practiced by Russia in Ukraine, can be best understood by examining it in relation to the ideas and theories of such preminent theorists as Sun Tzu and Carl von Clausewitz, and also lesser known theorists such as Robert Leonhard and Everett Dolman. Collectively, these theories define modern hybrid warfare as a theory of warfare which is distinct from other theories of warfare. This theory is unique due to its distinctive packaging of the components of force with how it employs those components in relation to the domains of war and the levels of war, while simultaneous synchronizing the use of force in time, space, and purpose.

The potential influence of hybrid warfare on modern conflict is vast, and yet fundamentally dependent on the observer's analytical perspective, or at which level of conflict they choose to focus their attention. At the strategic level, the hybrid theory of warfare can be seen as the employment of information operations and diplomacy in conjunction with cyber and electronic operations to weaken an opponent, or to sow the seeds of chaos in relation to an adversary. Russian hacking into US political parties during the 2016 presidential campaign is an example of this idea. Several US intelligence agencies assess that Russia utilized cyber and electronic forces to locate information which could be used to influence the US election. Then they utilized various means of media to distribute that information with the goal to discredit the US political process and political institutions, and politically weaken the United States. Similarly, the strategic component of hybrid warfare in relation to Ukraine can be seen during the precursor

⁸ Thomas Gibbons-Neff, interview by Ryan Evans, *War on the Rocks*, August 26, 2015, accessed September 29, 2016, <http://warontherocks.com/2015/08/podcast-infantry-combat-from-modern-ukraine-back-to-world-war-i/>.

to annexation of Crimea and offensive action in the Donbas, as **Russia used information operations and diplomacy to weaken the government in Kiev.**

Operationally, the hybrid theory of warfare can be seen as the arrangement of tactical actions in time, space, and purpose in pursuit of strategic objectives. In hybrid warfare, tactical actions are more than just the combination of offensive, defense, and stability operations. In several key respects, these actions include cyber and electronic operations targeting an opponent's movement of troops, targeting an opponent's ability to communicate across the front, and targeting an opponent's information. In fact, many of the operational cyber and electronic operations prey on the same targets as operational fires, albeit with different means. Concurrently, hybrid operational level operations are not solely found in the cyber and information domains, but also found on the ground and in the area. The battalion tactical group, or BTG, is the sole Russian land formation present in Ukraine. The BTG, while a tactical formation, is also capable of achieving operational effects and employing operational capabilities normally found at echelons far above a tactical battalion. Robert Leonhard suggests, "As the Cold War receded into the history books, the day-to-day reality of operations was making it clear that political, economic, and cultural factors were intruding further and further into the operational level and down into the ranks of even tactical formations."⁹ The BTG personifies the idea of the diminished distance between the strategic and tactical levels of war as conflict advanced beyond Cold War stratagems.

Tactically, hybrid warfare represents a return to high-intensity combat operations in which armor, infantry, and artillery fight for local dominance of significant terrain. In the hybrid theory of warfare, tactical action is a continuance of a campaign in the event that information, cyber, electronic, and unconventional operations are unsuccessful in achieving the operational and strategic objectives. The absence of tactical conventional action during the annexation of

⁹ Robert R. Leonhard, "From Operational Art to Grand Strategy," in *Rethinking the Principles of War*, ed. Anthony D. McIvor (Annapolis, MD: Naval Institute Press, 2005), 214.

Crimea signifies this concept, while Russia conventional warfare in the Donbas illustrates the latter. While not discussed within this monograph, other tactical actions, such as guerrilla warfare, are also related to the tactical component of hybrid operations. Nonetheless, to gain a better appreciation for hybrid warfare, it is imperative to analyze the theoretical underpinnings in which the construct develops.

Viewed collectively, hybrid warfare represents a whole-of-government approach to war, which is fought in multiple domains. Operationally and tactically, the concept represents the rebirth of siege warfare. Moreover, much like the phoenix rising from the ashes, the Russian flavor of hybrid warfare represents the return of attrition-based battle in which victory goes to the side that can exact the highest toll in men, materiel, and political capital.

Hybrid Warfare and Its Theoretical Underpinnings

Contemporary US Army and Joint definitions, in relation to military terminology, are used within this work. Nevertheless, the definition of hybrid warfare is a major point of contention. Neither US Army doctrine nor Joint doctrine defines hybrid warfare, whereas US Army doctrine provides a definition for hybrid threat, which it defines as “the diverse and dynamic combination of regular forces, irregular forces, terrorist forces and/or criminal elements unified to achieve mutual benefitting effects.”¹⁰ This definition, however, falls short of accurately defining modern hybrid warfare. Russia’s actions in Ukraine illustrate this shortcoming because they demonstrate the linkage of information operations, cyber operations, and the instruments of national power with the actors provided in the US Army’s definition of hybrid threat.

Recent TRADOC G-2 publications have attempted to further illuminate the character of hybrid warfare and the participants therein. TRADOC G-2 defines hybrid warfare as “the use of political, social, criminal, and other non-kinetic means employed to overcome military

¹⁰ Army Doctrine Reference Publication (ADRP) 1-02, *Terms and Military Symbols* (Washington, DC: Government Printing Office, 2015), 1-42.

limitations.”¹¹ However, this definition is far too loose to effectively capture the essence of hybrid warfare because it focuses primarily on social institutions as tools for overcoming military weakness, thus negating the role of military power in hybrid warfare. As Russia’s capital investment in its conventional military capabilities, coupled with its conventional combat during the war demonstrate, conventional military strength is a major component to hybrid warfare. Accordingly, a broader, more holistic definition is required.

Frank Hoffman, a contributor at the Potomac Institute, suggests, “Hybrid wars incorporate a range of different modes of warfare, including conventional capabilities, irregular tactics and formations, terrorist acts . . . and criminal disorder.”¹² Hoffman continues, stating hybrid wars are operationally and tactically synchronized and coordinated within an area of operation to achieve “synergistic effects.”¹³ While a good starting point, Hoffman’s definition of hybrid warfare is lacking because of its reliance on terrorist acts and criminal disorder. Many modern nation-states are using hybrid warfare, melding the instruments of national power with the use of force, in one or more of its manifestations, in the pursuit of interests. Throwing terrorist and criminal actions into the definition moves the idea of hybrid warfare away from a specific theory of warfare, and instead makes it a catch-all term, rendering the definition useless. These components of Hoffman’s definition (terrorist acts and criminal disorder) increase, rather than reduce, problems by adding abstract, intangible features to the definition. Additionally, these actions can be more broadly encompassed in a more inclusive term.

However, defense analyst and military theorist Robert Leonhard offers a different definition of hybrid warfare. Leonhard suggests that hybrid warfare and its supporting operations

¹¹ TRADOC G-2, *Threat Tactics Report Compendium: ISIL, North Korea, Russia, and China* (Fort Leavenworth, KS: TRADOC G-2 ACE Threat Integration, 2015), 94.

¹² Frank G. Hoffman, *Conflict in the 21st Century: The Rise of Hybrid Wars* (Washington, DC: Potomac Institute for Policy Studies, December 2007), 14.

¹³ Ibid.

are driven by the notion of obtaining **asymmetric advantages** to enable the attainment of political aims. Hybrid operations are characterized by **undeclared action**, that combines conventional and unconventional military operations, while coupling military and non-military actions in an environment in which the distance between strategy and tactics has been significantly reduced, and where information is critically important.¹⁴ Leonhard's definition best describes the unique attributes of the Russian brand of hybrid warfare. Furthermore, Leonhard's definition has more far-reaching applicability than other definitions analyzed, making it usable beyond the borders of Russia or its Near Abroad.

The connection between a theory of action, such as a theory of warfare, and the context of war cannot be underestimated. The two concepts are reciprocal and cannot exist exclusive of one another. Hence, prior to analyzing Russian hybrid operations in Ukraine, hybrid theory of warfare must be defined, and the context of war must be defined. Only then can logical deductions be made of Russia's hybrid warfare and the implications of hybrid warfare disaggregated from Russia's application thereof.

Contemporary hybrid warfare is a theory of action that is built upon the Information Age definition of force.¹⁵ The hybrid theory of warfare juxtaposes two interdependencies, each of which is anchored on the idea of "force." The first interdependency synchronizes the use of force with the domains of war, the levels of war, and the "components of force."¹⁶ The second interdependency synchronizes the use of force with time, space, and purpose. The byproduct of

¹⁴ Robert R. Leonhard and Stephen P. Philips, *"Little Green Men": A Primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014* (Fort Bragg, NC: US Army Special Operations Command, 2015), 17-18.

¹⁵ Charles K. Bartles, "Russia's Indirect and Asymmetric Methods as a Response to the New Western Way of War," *Special Operations Journal* 2, no. 1 (January 2016): 4.

¹⁶ "Components of Force" are defined by the author as conventional force, unconventional force, cyber operations, electronic operations, information operations, diplomatic operations, and economic operations. While this idea is similar to the concept of "Forms of Contact," they are different in that 'contact' implies the physical act of force to inflict compliance through subjugation, whereas Components of Force implies the both the physical act of force to inflict compliance and the intangible aspect of force seeking to influence the mind or actions of an adversary.

the approach is the creation of multiple assailable or vulnerable flanks which can be attacked or turned for exploitation. The aim of hybrid warfare is to use operations in one domain, with one component of force to set up actions in another domain, with a different component of force, to create favorable asymmetry at the time and place of one's choosing, while simultaneously keeping the preponderance of one's force outside of contact of decisive engagement with the threat or enemy. Concurrently, hybrid warfare is shaped by the era in which it resides.

Contemporary hybrid warfare is a theory of warfare that is a result of an era of limited war in which nuclear weapons serve as the governor to prevent nations or other polities from driving headlong into total war. What is more, hybrid warfare is a derivative of the Clausewitzian notion that war is a continuation of politics by other means. As such, the theory is sensitive to the political tempests associated with the overt use of military force; consequently, hybrid warfare seeks to operate on the margins, in the shadows, and in such a way that fosters deniability of action for the perpetrator. Nevertheless, when the conditions are right, contemporary hybrid warfare seeks to employ rugged ground forces for conventional operations that are capable of operating dispersed, conducting effective integrated (ground and air) reconnaissance, bring a suite of indirect fire capabilities to the bear at points of opportunity to achieve temporary local or zonal dominance, in pursuit of larger military and political objectives. Ground forces on the hybrid battlefield are able to operate dispersed through increasing capabilities in lower echelon formations, much like the Russian BTG.

Understanding the context of war is essential to understanding the evolution of theories of warfare, of which Russia's hybrid warfare is one of the most recent. Writing over two thousand years ago, Sun Tzu stated, "The art of warfare is deceit."¹⁷ Sun Tzu continued, stating that the "highest excellence" in war was not in winning every battle, but in subduing the enemy's force

¹⁷ Sun Tzu, *The Art of War*, trans. Roger Ames (New York: Ballantine Books, 1993), 104.

without having to engage it in battle.¹⁸ The point Sun Tzu is indirectly making is that war's goal is victory and the path to victory is through attaining a relative position of advantage before having to engage an enemy's force so that if or when those forces are engaged, the aggressor has created the conditions which will facilitate victory with the minimal amount of impact to its means.

Carl von Clausewitz indirectly expands upon Sun Tzu's thoughts. Clausewitz defines war as an inherently human endeavor—an act of which he defines as a duel, a contest of wills, and an act of force to compel the enemy to conform to one's will.¹⁹ Clausewitz's definition of war is underwritten by two ideas—that war is an extension of the pursuit of human interest, expressed through political objectives, and that the pursuit of political objectives sometimes involves the use of force.²⁰ Clausewitz defines the use of force only in the physical sense, but technological advancement has pushed the use of force beyond the physical world and into other domains, including the information, cyber, and electromagnetic domains. In taking Clausewitz's idea one step further, one can clearly see that war is the pursuit of political objectives and the pursuit is conducted through the use of force, which is applied in all available domains. Hybrid warfare's proclivity to operate in multiple domains with all instruments of national power provides the aggressor, or purveyor of the theory, both direct and indirect ways to unlock or achieve their respective political objectives.

In surveying military success and failure throughout history, military theorist B. H. Liddell Hart suggests, "Throughout the ages, effective results in war have rarely been attained unless the approach has had such indirectness as to ensure the opponent's unreadiness to meet

¹⁸ Ibid., 111.

¹⁹ Carl von Clausewitz, *On War*, trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1987), 75.

²⁰ Clausewitz, *On War*, 75.

it...in strategy, the longest way around is often the shortest way home.”²¹ Moreover, Liddell Hart contends that attacking along a cognitive and physical linear path allows the enemy to rebalance their force for the attack, increasing their capacity to resist in relation to the strength of the attack.²² Liddell Hart’s ideas suggest the indirect approach, employing force against an opponent at the time and location of one’s own choosing, in order to catch the enemy unprepared, is the acme of strategy in war and has often yielded the best results throughout history. The indirect approach is more successful because it allows an attacking force to achieve a relative position of advantage in relation to their enemy, allowing the attacker to dictate the terms and tempo of battle, thus preserving combat power, resources, and fighting spirit.

Moreover, Liddell Hart suggests leveraging an opponent’s momentum against them to enhance one’s own operations. Here, as with Clausewitz’s idea on the use of force, momentum now extends beyond the tangible world and can be found in multiple, intangible domains, such as the information, cyber, and electronic domains. To be sure, due to the Information Age technology and the contemporary operating environment, in which the digital, interconnected world is connected twenty-four hours a day, seven days a week, the idea of “operations” have shifted too. “Operations” are no longer just the realm of combat, but extend to targeted uses of force in the information, cyber, and electronic domains, seeking to influence populations, governments, and the international community. Therefore, the use of an opponent’s effort, or operations, which no longer reside only in the physical state of combat operations, can be turned against them, or as Liddell Hart states, “So that, as in ju-jitsu, his own effort is turned into the lever of his overthrow.”²³ The use of information operations in relation to hybrid warfare personifies Liddell Hart’s idea of the indirect approach and in using an adversary’s normalized

²¹ B. H. Liddell Hart, *Strategy* (New York: Meridian Books, 1991), 5.

²² Ibid.

²³ Ibid., 146.

response against them. These ideas lay the foundation for operations in the hybrid theory of warfare, but the real key in war is to be found in sequencing operations.

Theorist Robert Leonhard suggests that the best path to victory in war is through the sequencing of operations, a process he posits as the ordering of events in time, space, and purpose.²⁴ He suggests that the key to mastering the concept of sequence is to discard the idea that war will be won in a single powerful, decisive operation because history says that war is instead resolved in multiple, discrete engagements, battles, and campaigns.²⁵ Therefore, the imperative is not seeking decisive battles of annihilation, but in planning sequenced operations that apply pressure continually until the enemy has been depleted to the point of culmination. Furthermore, Leonhard posits, “Warfare consists of a series of activities—preparation, movement, and opposition—that recur until an end point is reached. The victor in war is the one that can control that series, and more specifically, can control the order of events that occur.”²⁶ Thus, victory in war is not throwing one’s army into one massive battle of annihilation. Instead, victory is the result of thinking clearly about the potential order of events and developing plans that both preserve combat power to enable sequenced action. Furthermore, victory is a result of employing force—in all its forms and in all its domains—in order to dictate the order of events to an enemy, striking them through multiple means and in multiple domains, to present them with more dilemmas than which they adequately address, while continually eroding their combat power and political will. Hybrid warfare, as Russian actions in Crimea, and to a lesser degree in the Donbas, demonstrates the power of sequence. Further, if one views the Russian idea of “victory” in terms of the continued existence of the people’s republics in Donetsk and Luhansk, coupled with a weakened Kiev, then Russian actions in Ukraine, as they relate to sequence, gain far more value.

²⁴ Robert R. Leonhard, *Fighting by Minutes: Time and the Art of War* (Westport, CT: Praeger, 1994), 92.

²⁵ Ibid.

²⁶ Ibid., 91-97.

Lastly, Lt. Gen. H. R. McMaster, former director of the US Army Capabilities Integration Center (ARCIC) and current National Security Advisor, posits that prevailing threats seek to evade capabilities, disrupt advantages, emulate successful advantages or capabilities, and push into new battlegrounds, which includes operating in nascent domains.²⁷ McMaster's remarks clearly make the case for hybrid warfare as a viable threat doctrine moving forward. Further, his remarks indirectly acknowledge the influence of the ideas of Sun Tzu, Clausewitz, Liddell Hart, and Leonhard. Russian hybrid warfare condenses those theories into a contemporary theory of warfare—one that is focused on covert action, neutralizing advantages, and capitalizing on vulnerabilities through indirect approaches in multiple domains while sequencing operations in time, space, and purpose.

Moving beyond military theory, it is instructive to identify the manner of wars in which the world is engaged. Clausewitz suggests that if left unchecked, the use of force will escalate to the point of absolute war.²⁸ However, history suggests that absolute, or total war, is an anomaly and most wars have been limited in ends, if not scope. Following the near-total warfare of the Second World War, the pendulum slowly swung back to those of limited aims. Nuclear weapon proliferation became the regulating force that eroded the political will to conduct large scale, interstate wars in the intervening years. Nuclear weapons are one of the most effective methods to defeat an enemy force. Yet nuclear weapons' potential progress has forced war to remain in the realm of limited conflict, relegating the use of force to focused application, seeking to be as non-disruptive as possible—at least for the aggressor—and seeking to not provoke retribution from other nations.

Historian Ronald Wright builds upon such an idea, warning that “progress has an internal logic that can lead beyond reason to catastrophe. A seductive trail of successes may end in a

²⁷ Lt. Gen. H. R. McMaster, “Harbingers of Future War” (lecture, Pritzker Military Museum and Library, Chicago, April 12, 2016).

²⁸ Clausewitz, *On War*, 75.

trap.”²⁹ As an example, Wright states that weaponry evolves, constantly striving for more effective means of killing the enemy. To illustrate this point, Wright discusses weaponry’s evolution—how man progressed from the bow and arrow to the cannon, from the stone arrowhead to the high explosive shell, and from high explosive shells to nuclear weapons. The pursuit of perfection in killing one another drove humanity’s arrival at nuclear weapons, to which Wright contends, “When the bang we can make can blow up our world, we have made rather too much progress.”³⁰

The spread of nuclear weapons created progress traps for modern nation-states in their willingness to wage total war. The progress trap embodied by nuclear weapons has served as modern governor to total war, which is the primary reason the international community finds itself in yet another period of limited war. Furthermore, nuclear progress traps have forced adversaries to seek other methods and areas in which to advance the pursuit of their interests, which has helped give rise to the use of force moving beyond the physical domain and into more intangible domains such as cyber, electronic, information, and space. This idea has also driven the primacy of the indirect approach as the primary conduit to accomplish one’s ends. The specter of nuclear engagement is critical to Russian strategy and hybrid warfare. As Israeli defense commentator Dmitry Adamsky writes, “The nuclear component is an inseparable part of Russian operational art that cannot be analyzed as a stand-alone issue” because it serves to embolden Russian aggression through its deterrence to adversarial counteraction.³¹

Technological innovation, coupled with the ideas Sun Tzu, Carl von Clausewitz, Liddell Hart, and Robert Leonhard, is at the epicenter of modern hybrid warfare. Integrating the ideas of Liddell Hart, Sun Tzu, and Clausewitz demonstrates that war is a continuation of politics by other

²⁹ Ronald Wright, *A Short History of Progress* (Cambridge, MA: Da Capo Press, 2004), 5.

³⁰ Ibid.

³¹ Dmitry Adamsky, “Cross-Domain Coercion: The Current Russian Art of Strategy,” *Proliferation Papers* 54 (Paris: Institut Francais des Relations Internationales Security Studies Center, 2015), 9.

means and that war is conducted through the use of force. Yet, the use of force no longer resides in only the physical domain, but in multiple domains. Deception is a central component to a successful war and applying force indirectly is vital to deceiving an opponent as to the true objective of one's aims. Furthermore, one must not destroy oneself in pursuing victory and one must not lose the advantage in the information domain. Nuclear weapons have placed parameters on the willingness of nations to engage in total wars, ushering in a return to limited warfare, focused on the incremental pursuit of limited political and military objectives. The aforementioned characteristics serve to energize modern hybrid warfare and give it form.

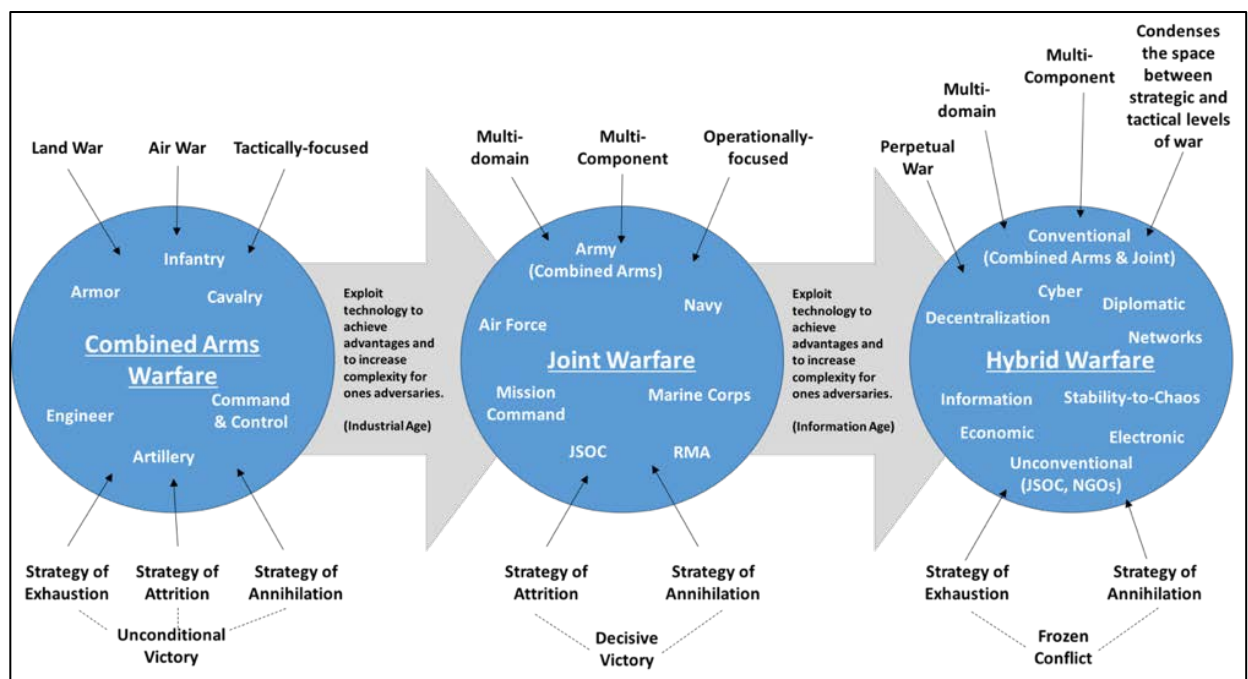


Figure 1. Evolution of Hybrid Warfare. Source: Author.

Russian Hybrid Warfare's Strategic Context

To gain a better understanding of hybrid warfare, one must be grounded in the fundamentals of strategy. One problem with strategy is that there is no clear or universally accepted definition of the term. Carl von Clausewitz defined strategy as the use of engagement to

achieve the objectives of war.³² US Joint doctrine defines strategy as, “A prudent idea or set of ideas for employing the instruments of national power in a synchronized and integrated fashion to achieve theater, national, and/or multinational objectives.”³³ Meanwhile, the US Army lacks a clear term for strategy, but heavily relies on the work of US Army War College professor Arthur Lykke. The US Army’s primary staff school, the Command and General Staff College, at Fort Leavenworth, Kansas, teaches Lykke’s model as its primary method for understanding and applying strategy. Lykke’s model is quite simplistic, stating that strategy is the balanced application of ends, ways, and means to accomplish or achieve policy aims.³⁴ However, neither of those discussions on strategy provide the granular insight to understand the how and why nations approach war in the way they do. A more detailed understanding of strategy will facilitate a better appreciation for the utility of the concept of hybrid warfare.

Historian Lawrence Freedman provides an enhanced model for understanding strategy. In his work, *Strategy: A History*, Freedman writes that the purpose of strategy is to transition from short-term, trivial thinking, to long-term and essential thinking in relation to a problem set and to address causes, rather than symptoms of those problems.³⁵ Freedman also states that most languages lack a word for expressing the idea of thinking about one’s actions in advance, in relation to one’s goals and capabilities to reach those goals, thus the reliance on the word “strategy.”³⁶ Moreover, Freedman contends there are three conditions in which strategy is required. The first condition is when the potential for conflict exists. The second condition is

³² Clausewitz, *On War*, 128.

³³ Joint Publication (JP) 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: Government Printing Office, 2011), 350.

³⁴ Arthur F. Lykke, Jr., “Toward an Understanding of Military Strategy,” in *The US Army War College Guide to National Security Issues* 2, ed. J. Boone Bartholomees, Jr. (Carlisle Barracks, PA: Strategic Studies Institute, 2008), 179.

³⁵ Lawrence Freedman, *Strategy: A History*, (New York: Oxford University Press, 2013), ix.

³⁶ *Ibid.*, x.

when actual conflict exists. The final condition arises when opposed interests intersect and resolution is required. Freedman contends that strategy must be amorphous and agile, taking shape from the starting conditions, and responsive to the inherent means of the polity for which it serves. Strategy must also be inherently tied to a political act, which is focused on extracting more from a situation than the starting conditions would suggest is achievable. Lastly, strategy is a study of the relationship between time, positions, means, and different interests.³⁷ Freedman's discussion of strategy provides the most useful tool in understanding the strategic context for Russia's employment of hybrid warfare. However, this utility is at odds with a useful version of applied strategy. In light of this, the continued discussion of strategy largely focuses around Lykke's theory of strategy.

Russian security thinking assumes that the nation is surrounded by enemies and therefore must maintain a territorial buffer to protect Russian sovereignty.³⁸ Additionally, Russia is seeking to bring about a new era of geopolitics to reshape the global balance of power and to tip the balance in its favor.³⁹ To do so, "the Russians believe they must counter the power and influence that was lost with the dissolution of the Soviet Union and the loss of former Soviet republics and buffer states," a TRADOC study notes. Key components of this are the protection of ethnic Russians, protection of Russian economic interests, and continued occupation of former naval and army bases."⁴⁰ Three strategic objectives are derived from Russia's political objectives: deter NATO expansion into Russia's historic sphere of influence, retain regional hegemony in Eurasia,

³⁷ Ibid., ix-xii.

³⁸ R. Reed Anderson, Patrick J. Ellis, Antonio M. Paz, Kyle A. Reed, Lendy Renegar, and John T. Vaughn, *Strategic Landpower and a Resurgent Russia: An Operational Approach to Deterrence* (Carlisle Barracks, PA: US Army War College Press, 2016), 13.

³⁹ Frederick W. Kagan and Kimberly Kagan, "Putin Ushers in a New Era of Global Geopolitics," *Institute for the Study of War*, September 27, 2015.

⁴⁰ TRADOC G-2, *Threat Tactics Report Compendium*, 94.

and demonstrate improvements to Russian military capabilities.⁴¹ Each of these strategic Russian objectives is emboldened by the strategic defense provided by its nuclear capabilities and its integrated air defense system throughout eastern Europe, which must be viewed in relation to the contemporary era of limited conflict.⁴²

In light of Russian security thinking, the country developed a whole-of-government, multiple domain approach to warfare – hybrid warfare – to accomplish its political and strategic aims. Russian hybrid warfare reflects experienced gained from its post-Soviet military conflicts, coupled with its observation of American capabilities development and American intervention throughout the world since the fall of the Soviet Union. Russian actions in Ukraine, which include the annexation of Crimea and the Donbas, clearly demonstrate Russia’s applied theory of hybrid warfare. However, to gain a deeper appreciation for why Russia acted so cavalierly with Ukraine one must understand the intersecting histories of the two countries.

Russia has never fully accepted Ukrainian independence, and instead views it as a subordinate state. Although it gained its independence following the collapse of the Soviet Union in 1991, Russia has continued to try and exert influence over the country—politically, militarily, socially, and economically. Additionally, many ethnic Russians are located within Ukraine, primarily located in the Donbas Region (Donetsk and Luhansk oblasts) and Crimea. Nevertheless, this situation is one largely of Russian creation. While Crimea has traditionally been part of the Russian empire, it was given to Ukraine for political purposes in 1954 by Soviet Premier, Nikita Khrushchev. On the other hand, the Donbas’ ethnic diversity was created by Joseph Stalin following World War II as he relocated thousands of Russian citizens to the area in order to create an enclave in the region which enabled social and political manipulation of Kiev.⁴³

⁴¹ James R. Clapper, director of National Intelligence, speaking to the Senate Armed Services Committee on Worldwide Threat Assessment of the United States Intelligence Community on February 9, 2016, 17-18.

⁴² For a more detailed description of Russian policy and military strategy, see Appendix 1.



Figure 2. The Donbas Region of Ukraine. Source: Author.

Russia's strategic objectives laid the foundation for its annexation of Crimea, which immediately preceded the Russo-Ukrainian War, this act is perhaps the apogee of the theoretical concept of hybrid war in that **Russia acquired its strategic objective of Crimea** with a minimal amount of kinetic activity. Both conflicts, the annexation of Crimea and the Russo-Ukrainian War, were a result of disagreements over the political direction of Ukraine. Ukrainian President, Viktor Yanukovich, who was seen by the Ukrainian people as a Russian puppet, opted for closer ties with Russia, whereas the citizens in western and central Ukraine advocated for closer ties with European Union. Most citizens in eastern Ukraine, specifically the Donbas Region, and Crimea, supported Yanukovich's position. This situation created political turmoil in Ukraine, leading to the political revolution, known as the Euromaidan movement, and the ousting of Yanukovich as president in February 2014. Yanukovich fled to Russia and was replaced as president by Yulia Tymoshenko, a far more Western leaning politician.⁴⁴

⁴³ TRADOC G-2, *Threat Tactics Report Compendium*, 111.

⁴⁴ Janis Berzins, *Russia's New Generation Warfare in Ukraine: Implications for Latvian Defense Policy*, National Defense Academy of Latvia: Center for Security and Strategic Research, Policy Paper no. 2, April 2014, 2-3.

Information warfare, the foundation of Russia's hybrid campaign for Crimea and the Donbas, began at this time. Russia used the political situation in Kiev to agitate ethnic Russians, alleging the western leaning government in Kiev was unresponsive to and unrepresentative of ethnic Russians in Ukraine. Russia used a variety of means to wage information operations—from television, to the Internet, to unconventional forces on the ground spreading the message word-of-mouth. Information operations were successful in further exacerbating the political situation, which Russia used as pretense to annex Crimea under the guise of seeking to protect ethnic Russians. Russia formally annexed Crimea on March 18, 2014.

Economics played a large role in the situation with Ukraine and Crimea. As the Euromaidan movement gained steam, Russia forgave \$15 billion in Ukrainian debt to help Yanukovich's political situation. However, when Yulia Tymoshenko was put in office, fearing that Ukraine would not remain within its sphere of influence, Russia eliminated the discounted rate at which it sold natural gas to Ukraine from GazProm.⁴⁵ In addition, GazProm incrementally increased its rates to Ukraine by forty percent in March 2014 and another ten percent by April 2014. Shortly thereafter, Russia cut all GazProm sales to Ukraine under the condition that it repay over \$2 billion in previous debts.⁴⁶

Unconventional operations were the primary method employed to seize Crimea. However, the annexation also occurred during pre-planned Russian military exercises in the area, which obscured troop movements during the annexation.⁴⁷ On February 27, 2014, a company of Russian infantry seized the Crimean parliament and cabinet ministers' headquarters in Simferopol, Crimea's capital. Later that evening, Russian special operations forces and airborne

⁴⁵ GazProm is a natural gas company headquartered in Moscow. It provides the majority of natural gas to the countries surrounding Russia. GazProm is an independent company, but the Russian government owns a majority state in its shares.

⁴⁶ TRADOC G-2, *Threat Tactics Report Compendium*, 112.

⁴⁷ Christopher Marsh, *Developments in Russian Special Operations: Russia's Spetsnaz, SOF, and Special Operations Command* (Ottawa, ON: 17 Wing Winnipeg Publishing Office, 2017), 21-22.

troopers seized airports in Simferopol and Sevastopol. On February 28, 2014, Russian forces and local partisans seized the state television company and primary telephone and internet service providers, allowing Russia to control the flow of information within the peninsula. The Russian navy surrounded the Ukrainian fleet at Novoozerne, on the western bank of the peninsula. They then sank a Ukrainian naval vessel, essentially sealing off the Ukrainian fleet at their naval base, thus removing them as a threat from the battlefield. The isolation of the Ukrainian fleet at Novoozerne allowed Russia's fleet at Sevastopol to dominate the Black Sea. On March 6, Russian forces continued their consolidation of media outlets by occupying all media outlets in Simferopol, enabling them to run an uninterrupted information operation. On March 15, Russian forces seized control of the only natural gas pipeline and distribution center that supplied Crimea, denying Ukraine the ability to influence the situation in Crimea through the manipulation of natural gas in the peninsula. By March 20, 2014, Ukraine officially ceded Crimea and withdrew its 25,000 soldiers from the peninsula.⁴⁸

Hybrid Warfare in the Russo-Ukrainian War

Russian operations in Ukraine's Donbas region ushered in a new approach to war, the likes of which had not yet been seen on the modern battlefield. A recent study suggests that, Russia's approach to hybrid warfare is "a truly synchronized whole-of-government approach to warfare" and that the lines between war and peace have become blurred.⁴⁹ Furthermore, Russia's operational approach synergized information, cyber warfare, electronic warfare, unconventional and conventional operations in all the domains of war, with all the instruments of national power, to achieve their military and political objectives while simultaneously maintaining deniability.

⁴⁸ TRADOC G-2, *Threat Tactics Report Compendium*, 117-123.

⁴⁹ Able Squadron, "Russian New Generation Warfare," *Journal of Asymmetric Warfare* 1, no. 2 (August 2016): 3-4.

As previously mentioned, the Russian General Staff synthesized these ideas—deniability, covert action, tapping into disaffected Russians, and overt action—and developed a framework around the construct in the Gerasimov Doctrine. In the doctrine, Gerasimov outlines an invigorated approach to warfare, leveraging history, technology, and the realities the contemporary operating environment. Gerasimov’s doctrine can be summarized in the following ideas.

First, Gerasimov states that modern wars are no longer declared because Information Age technology has reduced the distance (spatial, temporal, and informational) between forces and those who control the forces, a byproduct of which is the shrinking of distance between the strategic, operational, and tactical levels of war. Additionally, technology has increased the non-military means for achieving political and strategic goals, and those means have largely surpassed common weaponry in terms of utility in that environment. The Information Age has created a much larger information space than previously existed in the past; this space is largely nascent, ill-defined, and not well understood. Therefore, the information space creates an arena in which asymmetric advantages can be attained.⁵⁰

Russian military means, largely consisting of concealed operations through the use of unconventional forces, supplement the non-military means of waging war, the goal being plausible deniability for political leaders. However, the use of conventional forces, when employed, integrate technology, specifically drones and cyber capabilities, to enhance their effectiveness on the battlefield. Peacekeeping is a guise and pretense for the commitment for the employment of military means, leveraging information asymmetry and political or ethnic schisms in a given environment.⁵¹ Additionally, the use of unmarked conventional forces is another

⁵⁰ Leonhard and Philips, *Little Green Men*, 18.

⁵¹ Ibid.

method in which Russia attempts to hide its involvement and create the conditions for deniability.⁵²

Lastly, Gerasimov harkens to Russia's past which provides a guide for military operations. Gerasimov states that modern operations, like the forms and methods of Russia's past, must focus on rupturing the enemy's front, and conducting deep operations through the depth of the entirety of their being, whether that be a military formation or a non-military means.

Moreover, Gerasimov states modern deep operations are the framework for contemporary operations, but the approach must seek to leverage the capabilities of modern technology, and seek to strike from long distances, with contactless action.⁵³

Understanding Soviet doctrine of yore makes Russian hybrid warfare more digestible. Understanding the doctrinal environment in which many of Russia's central military leaders of today grew up assists in explaining the evolution of Russian doctrine. Further, it assists in understanding how Information Age technology, such as drones, cyber and electronic capabilities, and untethered communications, is interwoven with previous Russian doctrine.

Gerasimov's doctrine bears a striking resemblance to Soviet Marshal Mikhail Tukhachevsky and Brig. Gen. Georgii Isserson's thoughts on industrialized warfare. Tukhachevsky's concept, known as *deep operations*, was predicated on the idea that modern industrialized states were too vigorous to be defeated in a single, decisive battle, like those of Napoleon Bonaparte or Helmuth von Moltke. Further, Tukhachevsky contended that modern industrialized nations possessed the ability to rapidly move forces around the battlefield to stave off defeat or to exploit fleeting opportunities. Because of this, Tukhachevsky advocated for a tactical and operational doctrine (deep battle and deep operations, respectively) in which Soviet forces launched deep penetrating attacks on the enemy, with massive amounts of force focused on

⁵² Able Squadron, "Russian New Generation Warfare," 3-4.

⁵³ Valery Gerasimov, "The Value of Science is in the Foresight: New Challenges Demand Rethinking Forms and Methods of Carrying Out Combat Operations," trans. Robert Coalson, *Military Review* 96, no. 1 (January-February 2016): 24-25.

very narrow points on the enemy's lines.⁵⁴ Moreover, according to historian Robert M. Citino, deep operations doctrine postulated that the curative qualities of industrialized nations warranted continuous, "large-scale offensive operations, a series of consecutive blows that would not permit the enemy to recuperate."⁵⁵ Mobile, combined arms formations, blending tanks, mechanized infantry, artillery, and rockets were paramount for deep operations. Isserson's work expanded on that of Tukhachevsky by addressing the idea of sequenced action to generate cumulative effects. Specifically, Isserson states, "If no one takes advantage of the tactical breach made by the first echelon, if no one comes from the operational depths to prolong the depth-to-depth blow, and if tactical success doesn't become operational, the breach will soon close."⁵⁶ Arguably, Russian hybrid warfare, as articulated by Gerasimov, is conceptually Soviet deep operations and deep battle, enhanced with Information Age technology.

Understanding the context of hybrid warfare, the contemporary character of war, and Russia's political interests provide the stage setter for analyzing Russia's operations in Ukraine from March 2014 forward. Insights into how and why Russia operated in the manner in which it did can be drawn from their previous operations throughout the nineteen-nineties and into the twenty-first century. The argument has been made that Ukraine was not the first instance of Russian hybrid warfare, but that its conflict with Georgia in 2008 was the emergence of Russia's contemporary hybrid warfare.⁵⁷ Even if Georgia was not the first instance of Russian hybrid warfare it provided a host of lessons for the Russian military as they looked to improve

⁵⁴ Lloyd Clark, *The Battle of the Tanks: Kursk, 1943* (New York: Grove Press, 2011), 52.

⁵⁵ Robert M. Citino, *Blitzkrieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence: University Press of Kansas, 2004), 79.

⁵⁶ Georgii S. Isserson, *The Evolution of Operational Art*, trans. Bruce W. Menning (Fort Leavenworth, KS: Combat Studies Institute, 2013), 66.

⁵⁷ Able Squadron, "Russian New Generation Warfare," 3.

capabilities. Furthermore, Russia's recent wars have shown that they are not fearful of waging a conventional, land-based war.⁵⁸

Russia learned from its military shortcomings in Georgia and adjusted its strategy, operational approach, and tactics. Russia learned that conscript soldiers were unreliable and their deaths brought social and political instability, therefore, it needed professional soldiers in its combat formations. Russia learned that getting stuck in an overt stalemate, without plausible deniability, created unnecessary political pressure. Thus, it must obscure their actions to the highest possible degree and conduct operations to destabilize its opponent well before the commitment of ground forces. Finally, Russia learned that in order to not get bogged down, they must devise methods of fighting that disaggregates strike capabilities from strategic and operational headquarters.⁵⁹ Simultaneously, they must increase the speed in their sensor-to-shooter system, in order to develop an almost instantaneous system of target identification for outbound fires.⁶⁰

Russo-Ukrainian War Case Study

There are many ways in which to approach a study of the Russo-Ukrainian War and its connection with Russian hybrid warfare. For example, Russia's actions in the Donbas shed light on many nascent technologies in the cyber and electro-magnetic fields. Additionally, Russia's actions in the Donbas reveal innovative methods for manipulating public opinion and swaying the support of a given populace. Further, Russia's actions in eastern Ukraine demonstrate the manifestation of mechanized combined arms warfare on a contemporary battlefield by a world power—something which many pundits presumed to be dead for the foreseeable future.

⁵⁸ Anderson, et al., *Strategic Landpower and a Resurgent Russia*, 100.

⁵⁹ Phillip Karber, "The Russian Military Forum, Russia's Hybrid Warfare Campaign: Implications for Ukraine and Beyond" (lecture, Center for Strategic and International Studies, Washington, DC, March, 10, 2015).

⁶⁰ Ibid.

Nonetheless, the major question to answer in scrutinizing Russia's campaign in the Donbas is: "What is the character of Russian hybrid warfare?" Many of the topics associated with Russia's hybrid warfare in the Donbas quickly lead to problems with information classification. Therefore, the focus herein is on the implications that can be drawn from examining open-source information regarding the campaign in the Donbas, largely from the time period between March 2014 to March 2015.

Before beginning the analysis, a brief discussion on terminology is needed. The term "partisan" is used throughout the case study to define the Russian partners operating in Ukraine—this term is used instead of proxy or separatist, which is the term most often found in other analysis of the war. Nonetheless, the term "partisan" is used because it best defines the role of Russia's complicit partners in the Donbas. Political theorist Carl Schmitt offers a granular and definitive construct in his definition of the partisan. Schmitt argues that a partisan is an irregular fighter who works in conjunction with a regular force to achieve a similar political purpose. Schmitt also states that partisans are *telluric*⁶¹, mobile, and political in nature, all of which are characteristics that precisely describe the forces supporting Russia in the Donbas.⁶²

The partisan played a critical role in disorganizing Ukraine. In the seminal work, *The Foundations of the Science of War*, J. F. C. Fuller writes, "Tactical success in war is generally gained by pitting an organized force against a disorganized one."⁶³ Russia's hybrid operations in Ukraine epitomize Fuller's idea, specifically in the employment of partisans, non-traditional means, and conventional operations to disorganize the Ukraine response to Russian intervention. Disorganizing the enemy provided a window for tactical exploitation, which is the foundation for operational and strategic success. The initial goal of Russia's action was to disorganize Ukraine—

⁶¹ *Telluric* is defined as "being of the earth," or "terrestrial." Merriam-Webster Dictionary, s.v. "telluric," accessed April 1, 2017, <https://www.merriam-webster.com/dictionary/telluric>.

⁶² Carl Schmitt, *Theory of the Partisan* (New York: Telos Press, 2007), 14-17.

⁶³ Fuller, *Foundations of the Science of War*, 290.

politically, socially, and military. The conflict's initial stage was focused on achieving this aim through information operations employed to shape political and social conditions, and cyber and electronic operations employed to neutralize the Ukrainian government's ability to communicate with its citizens or to mobilize its armed forces. The partisans were organized at the battalion level in a similar fashion to the Russia ground forces. Russian military analyst Phillip Karber states that the partisans had over 31,000 troops at their disposal, while the Russians had 12,000 in the Donbas. The following table displays the forces and capabilities the partisans and Russian's had available for operations in the Donbas:

Table 1. Partisan and Russian Forces in the Donbas

	Proxy Forces	Russian Forces
Battalion Tactical Groups	10	16
Troops	31,430	12,000
Tanks	340	340
IFV / APC	329	720
Artillery	372	173
MLRS	372	173

Source: Phillip Karber, "The Russian Military Forum, Russia's Hybrid Warfare Campaign: Implications for Ukraine and Beyond" (lecture, Center for Strategic and International Studies, Washington, DC, March, 10 2015).

Russia, under the guise of supporting the interests of ethnic Russians isolated in the Donbas, employed partisans and unconventional forces, coupled with information operations to manufacture the crisis in the Donbas. The crisis focused on the plight of underrepresented ethnic Russians, with the solution being a breakaway, semi-autonomous region in the Donbas which was loyal to Russia. The breakaway region—epitomizing Putin's ambition of Novorossiia—consisted of the Donetsk People's Republic (DPR) and the Luhansk People's Republic (LPR). The Novorossiia movement was short-lived and floundered after a few months; however, the continued existence of the DPR and the LPR serves to advance Russian policy in the region.

Some commentators, to include historian Lawrence Freedman, point to the **failure of Russia to push beyond the Donbas as a failure of Russian strategy**.⁶⁴ However, a differing point of view argues that the Donbas, not Kiev, was the strategic objective supporting the policy of maintaining a weak, politically isolated Ukraine. The continued existence of the DPR and LPR perpetuates Russian policy and strategy in the region. To put it another way, **frozen conflict in the Donbas allows Russia to manipulate Kiev through social, military, information, and diplomatic means**.

Russian information operations are a critical component of their hybrid theory of warfare and serve as a primary link between strategy and tactics. **The goal of Russian information operations in the Donbas was to shape the battlefield, but to also influence Kiev in a way that undercut the Ukrainian government's standing with the Ukrainian population**. Specifically, the goal was to discredit the government by making it look incompetent and unable to adequately address the calamity in the region. **Russia sought to accomplish this through initially seizing terrain in the Donbas, then denying Ukraine the ability to retake the terrain**. In addition, they sought to advance their information operations objectives through the slow and steady bleeding of the Ukrainian armed forces that attempted to counter Russian aggression in the region. Russia possessed the ability to swiftly defeat anything the Ukrainians put into the field, but a **strategy of annihilation did not support the Russian information operations strategy, and so the Russians' use of physical force focused on a strategy of attrition**. **This approach allowed Russia to not only discredit the government in Kiev, but to demoralize Ukrainian troops and deter voluntary participation in the Ukrainian armed forces due to the manner in which they were being slowly destroyed on the battlefield**. This line of thinking led to siege warfare being a defining feature of Russia's operational approach and associated tactical actions.

Russia's operational approach was deeply rooted in multi-domain battle. **The approach was nested with Russian strategy and was therefore terrain-based, seeking to acquire and maintain**

⁶⁴ Lawrence Freedman, "On Strategy and Strategists," *War on the Rocks*, December 4, 2014, accessed September 29, 2016, <https://warontherocks.com/2014/12/on-strategy-and-strategists/>.

control of the Russian-friendly Donbas. The Russians viewed the airports at Donetsk and Luhansk as military objectives, in addition to the ground transportation infrastructure at Ilovaisk and Debal'tseve. The airports served as air lines of communication for Russia and their partisan supporters in the Donbas, while Ilovaisk and Debal'tseve were critical ground lines of communication critical to maintain operational reach and operational tempo. Media outlets and distribution centers in Donetsk, Luhansk, Ilovaisk, and Debal'tseve were also primary objectives of Russia and partisan forces, the possession of which enabled the execution of information operations to manipulate the operational environment in favor of Russian action. Ukrainian forces served as a supporting operational objective. Destruction of Ukrainian forces was focused on those forces which presented a direct threat to the preservation of Russian territorial acquisitions.⁶⁵

The unique nature of the conflict, underwritten by the Gerasimov Doctrine's axiom that modern war shrinks the space between the strategic and tactical levels of war, demanded that operational art be exercised at unconventional levels of command. Russian forces, seeking to obscure their true involvement in Ukraine, exercised operational art within the Southern Military District, the 49th Army, and at BTG-level.⁶⁶

In Ukraine, the higher end of operational art—the linkage of tactical actions with strategic objectives—occurred at the Southern Military District in Rostov-on-Don, which equates to the theater army headquarters and is commanded by Colonel General Alexandr Galkin.⁶⁷ Additionally, the Russian 49th Army in Stravropol serves as the primary operational headquarters

⁶⁵ See Appendix 2, Russian Elements of Operational Art and Appendix 3, Russian Operational Approach for more detail on the Russian plan leading into the invasion of the Donbas.

⁶⁶ Russian forces are currently devoid of division level headquarters per the 2008 military reforms. The regiment has largely been replaced by the brigade. Therefore, in most Russian formations, to include the Southern Military District, formations, from smallest to largest are: platoon, company, battalion, brigade, army, and military district.

⁶⁷ Timothy L. Thomas, *Recasting the Red Star: Russia Forges Tradition and Technology through Toughness* (Fort Leavenworth, KS: Foreign Military Studies Office, 2011), 92.

for the Donbas campaign. However, it must also be noted that Russia has continually rotated forces drawn from all its military districts, including forces from as far as away as the Eastern Military District's Vladivostok and the Kuril Islands-based units to support the campaign.⁶⁸

As a result of experience gained during the 2008 war with Georgia, Russia divested itself of deploying brigade or army headquarters into the Ukrainian theater, and instead developed BTGs to serve as a dual-hatted headquarters and fighting formation, capable of both operational art and tactical action, with reach-back to the theater army headquarters in Stravropol for assistance and logistical support. This formation and its associated doctrine is fundamentally tied to the nature of limited war, where Russia is seeking to not overwhelm the entire Ukrainian military, nor consume the entirety of the nation, but rather, to only achieve the limited objective of temporary physical dominance.

The Russo-Ukraine War consisted of four major phases. The initial phase began in mid-to late-February 2014. The phase consisted of unconventional covert actions and the establishment of the DPR and LPR in April 2014.⁶⁹ The second phase in the Russo-Ukrainian War found Ukrainian forces, to include the military and local police, seeking to regain equilibrium following the initial success of Russian forces and their partisan counterparts. Classifying the actions of the partisans as terrorist operations and the perpetrators as terrorists, the Ukrainian government launched a series of actions they called Anti-Terrorist Operations, to retake seized territory by the DPR and LPR. The second phase bled into the third phase, which consisted of a series of major battles between Ukrainian forces and those of Russia and their partisan supporters. The final phase, which is ongoing, is essentially a stalemate with forces from both sides dug into defense positions along the entirety of the front who engage in sporadic, small-scale skirmishes and artillery or rocket attacks. The third and fourth phases of the war, as

⁶⁸ Igor Sutyagin, "Russian Forces in Ukraine," *Royal United Services Institute Briefing Paper*, March 2015, 4.

⁶⁹ Leonhard and Philips, "Little Green Men," 58-60.

journalist Thomas Gibbons-Neff writes, are more reminiscent of World War I battlefields than of what one would expect to find in the twenty-first century.⁷⁰

The first phase of the Russo-Ukrainian War began covertly with Russian forces and their partisan allies seizing government buildings across the Donbas. These operations came on the heels of Russia's annexation of Crimea in March 2014.⁷¹ In both cases, **Russia used the existence of ethnic Russians in both territories as a pretext for involvement, in each case stating the Ukrainian government was not adequately representing those individuals and that Russia was obligated to support those people; thus, Russia exploited preexisting ethnic divisions to fuel separatist movements.** They did so through the mobilization of partisans, working in conjunction with **unconventional forces, whose goal was to destabilize the government of Ukraine in the hopes of getting a leader or government friendlier to Moscow in power.**⁷² Additionally, **Russian forces employed information and cyber operations seeking to influence public opinion in the region for the purpose of garnering support for their cause.** What is more, seeing that hybrid warfare is a whole-of-government approach to war, the **Russians manipulated Ukrainian supplies of gas and oil to put financial and diplomatic pressure on the government in Kiev.**

Deniability was critical during the initial phase because it allowed Russia to pursue its goals without drawing the ire of the international community, or as a recent report suggests, "Russia's ambiguous warfare creates challenges for deterrence because they do not invoke a NATO Article 5 response, nor does the West view Russia's actions as grave enough to intervene directly with the military instrument of national power."⁷³ While Ukraine is not a member nation of NATO, and thus, not entitled to protection from the alliance, it appears that Russia's actions in

⁷⁰ Thomas Gibbons-Neff, interview.

⁷¹ Leonhard and Philips, "*Little Green Men*," 55-58.

⁷² Orysia Lutsevych, *Agents of the Russian World: Proxy Groups in the Contested Neighborhood* (London: Chatham House, 2016), 33.

⁷³ Anderson, et al., *Strategic Landpower and a Resurgent Russia*, 13.

Ukraine are perhaps a rehearsal for employing in such a way to test the response capability and reaction of the international community. As such, Russian forces were not overtly conducting the seizure of government facilities—in most cases the Russian soldiers participating in these activities were from Spetsnaz, the GRU, or were unmarked soldiers, giving rise to the often-used term, “little green men”. Furthermore, the Russians relied heavily on partisan forces to assist with the annexation of the Donbas, using them as the face of the movement, while trying to minimize the presences of uniformed Russian soldiers.

Little direct combat occurred during the first phase, the only traditional combat being sporadic and limited uses of physical force. In most cases, Russian and partisan forces established road blocks, checkpoints, and blockades to prevent, or inhibit Ukrainian forces from retaking seized infrastructure. At the height of the Russian and partisan advance in April 2014, they had taken nearly all territory within the Donetsk and Luhansk oblasts and key political infrastructure in the Kharkiv and Dnipropetrovsk oblasts. The city of Mariupol served as an important objective due to its position on the Black Sea and its ports, which would allow it to augment the Russian Navy’s Black Sea Fleet based in Sevastopol, Crimea.⁷⁴ Additionally, Avdeevka, southwest of Debal’tseve and Schastye, northeast of Debal’tseve served as lucrative objectives due to the power infrastructure in those cities.⁷⁵ However, incremental, small-scale counter offensives in May 2014 saw Ukrainian forces reacquiring almost all territory outside the borders of the Donetsk and Luhansk provinces and by July 2014 they had completely reclaimed Kramatorsk and Sloviansk.⁷⁶

Countering the actions of the Russians and their partisan collaborators led to the second phase of the Russo-Ukrainian War. This phase, highlighted by Ukrainian anti-terrorist operations

⁷⁴ Thomas, *Russia Military Strategy*, 394.

⁷⁵ Ibid., 375.

⁷⁶ Thomas, *Russia Military Strategy*, 393.

was conducted from April 2014 through mid-July 2014. This phase focused primarily on covert Russian and partisan activity, while the Ukrainian government readied its armored forces to retake the lost territory. The battle of Zelenopillya, discussed later, is the transition point between the second and third phase. The third phase saw Ukrainian forces gaining momentum against Russian and partisan forces in the Donbas. These operations were run by Ukraine's Ministry of Internal Affairs and were a more soft-handed approach to dealing with the problem. In many cases these soft-handed techniques backfired as partisans would arrive, often at the behest of covert Russian ground forces, and would surround the Ukrainian forces, indirectly neutralizing their ability to retake political or economic infrastructure for fear of inflicting civilian casualties, or having their actions misinterpreted or misrepresented by the Russian-controlled media.⁷⁷ The dynamic of conflict during this phase of the war shaped how the conflict continued to unfold in subsequent phases.⁷⁸

⁷⁷ Leonhard and Philips, "*Little Green Men*," 59-60.

⁷⁸ More information regarding Russia's military strategy is located in Appendix 1. Appendix 2 and 3 discuss the role of the elements of operational art and Russia's operational approach in Ukraine, respectively. Appendix 4 provides further detail on the timeline associated with the Russo-Ukrainian War, to include highlighting battles not formally discussed or mentioned in the subsequent case study.

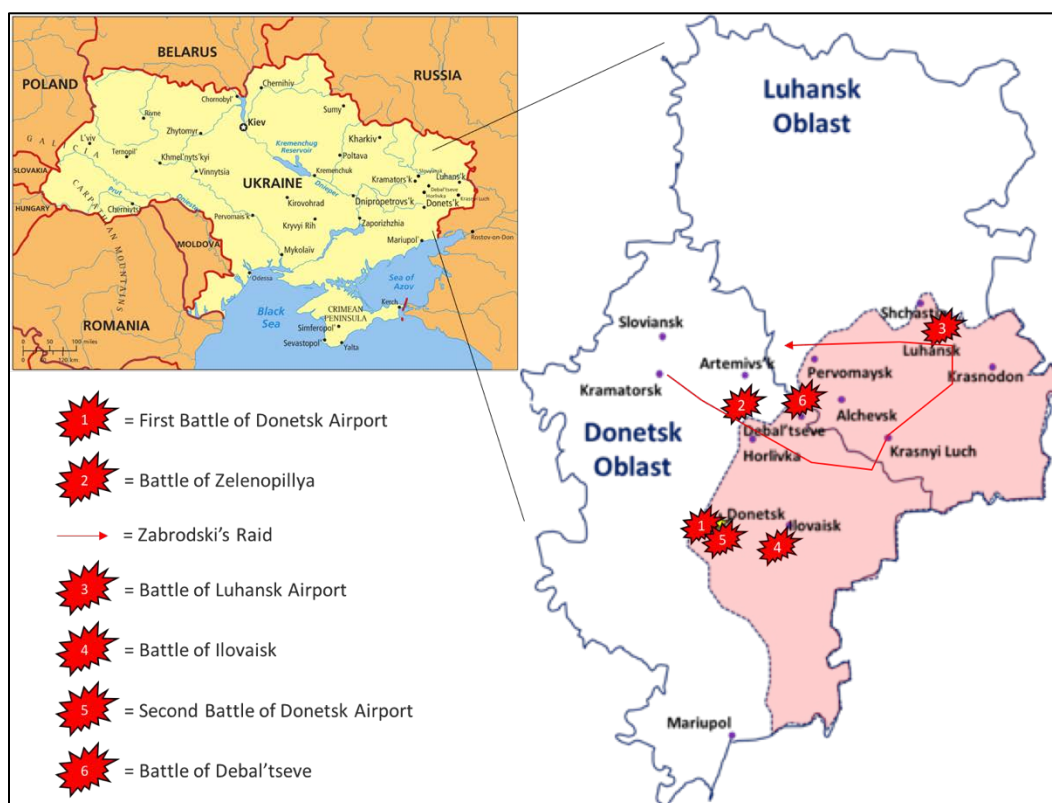


Figure 3. Major Battles of the Russo-Ukrainian War. Source: Author.

The First Battle of the Donetsk Airport: A Portent of Future Battles

One of the first major battles of the conflict was the first battle of the Donetsk Airport. The airport changed hands three times during the Russo-Ukrainian War, the first of which coming on the immediate heels of the DPR and LPR seizure of power in the Donbas. The other two battles for Donetsk Airport were far larger engagements, the second battle of Donetsk Airport being one of the largest battles of the conflict to date. Some analysts, to include the Potomac Foundation's Phillip Karber, combined the two battles into a 240-day siege, which ended with the airport in ruins and in the hands of Russian forces.⁷⁹

⁷⁹ Phillip Karber, "The Russian Military Forum, Russia's Hybrid Warfare Campaign: Implications for Ukraine and Beyond" (lecture, Center for Strategic and International Studies, Washington DC, March 10, 2015).

The Donetsk airport consisted of three primary areas: the old terminal, the new terminal, and the flight control tower. The first battle of Donetsk Airport occurred on May 26-27, 2014.⁸⁰ The airport, being a critical transportation hub for the Ukrainian government, the Donbas partisans, and Russia, was briefly snatched out of Ukrainian hands when a volunteer battalion guarding the airport was overtaken by Russian partisans on May 26.⁸¹ Ukrainian paratroopers cordoned off the airport and issued the partisans an ultimatum, which was flatly rejected. Ukrainian forces, supported by fixed wing and rotary wing air support, launched a swift counterattack, which resulted in the airport returning to Ukrainian control on May 27, 2014. However, Ukrainian control at the airport was tenuous at best. The airport remained in the hands of Ukrainian forces until the Minsk Protocol, which served as the precursor to the second battle of Donetsk Airport. The summer of 2014 saw small skirmishes between Ukrainian, Russian and partisan forces along the perimeter of the airport. The first battle of Donetsk Airport resulted in the death of approximately forty partisans and the wounding of dozens more.⁸²

What is significant about the first battle of Donetsk Airport is the emergence of the Vostok Battalion, which was a Russian formation composed largely of Chechen fighters provided to Moscow, courtesy of Chechen president Ramzan Kadyrov.⁸³ The Vostok Battalion, also reported as the 1st Mechanized Battalion of the 18th Motorized Guards Rifle Brigade, plays an

⁸⁰ “Ukrainian Crisis: Pro-Russian Rebels Seize Donetsk Airport,” *Telegraph*, last modified May 26, 2014, accessed September 15, 2016, <http://www.telegraph.co.uk/news/worldnews/europe/ukraine/10856406/Ukraine-crisis-pro-Russian-rebels-seize-Donetsk-airport.html>.

⁸¹ TRADOC G-2, *Threat Tactics Report: Russia*, 40.

⁸² *Ibid.*, 40-42.

⁸³ Alex Luhn, “Volunteers or Paid Fighters? The Vostok Battalion Looms Large in War with Kiev,” *Guardian*, June 6, 2014, accessed September 15, 2016, <https://www.theguardian.com/world/2014/jun/06/the-vostok-battalion-shaping-the-eastern-ukraine-conflict>.

obscure role at the first battle of Donetsk Airport, but resurface again at the second battle of Donetsk Airport.⁸⁴

The Battle of Zelenopillya: The Russian Reconnaissance-Strike Model Emerges

The early battles of the Russo-Ukrainian War demonstrated Russian advancement in cyber and electronic warfare capabilities, and a reorienting of focus towards information operations in order to influence public and political opinion, while covering military action. Few battles better exemplify the utility of these capabilities than the battle of Zelenopillya—although the term “battle” is a bit of a misnomer, as Ukrainian forces were destroyed without being able to get into the fight to counter Russian aggression. Further, the Potomac Institute’s Dr. Phillip Karber states that the strike at Zelenopillya clearly exhibits that, “The Russian’s have broken the code on reconnaissance-strike complex, at least at the tactical and operational level.”⁸⁵ The battle demonstrated power available by coupling reconnaissance with strike capabilities through modern technology, while decreasing institutional constraints toward the rapid employment of firepower. Specifically, the battle of Zelenopillya demonstrated that the absence of joint operations is not a vulnerability, but can in fact serve to enhance the lethality of one’s force through tightly coupled reconnaissance-strike packages that can employ massive salvos of devastating indirect fires.

The battle of Zelenopillya occurred on July 11, 2014. **This attack was a concerted Russian attempt to offset Ukrainian success, and became the impetus for the transition to full-scale conventional warfare.** The battle also ushered in the transition from the second phase of the war, to the third phase.⁸⁶ At approximately 0430 hours outside the town of Zelenopillya in the Luhansk oblast, Russian and partisan reconnaissance forces, in conjunction with reconnaissance

⁸⁴ Leonhard and Philips, *Little Green Men*, 42.

⁸⁵ Karber, lecture.

⁸⁶ Lukas Alpert, “Heavy Fighting Kills at Least 23 in Eastern Ukraine,” *Wall Street Journal*, July 11, 2014, accessed, September 12, 2016, <http://www.wsj.com/articles/rocket-attack-kills-at-least-30-ukrainian-soldiers-1405081318>.

drones identified a Ukrainian tactical assembly area consisting of elements from the 24th Mechanized Brigade, 72nd Mechanized Brigade, and 79th Armored Brigade.⁸⁷ Russian forces then launched cyber and electronic attacks on the Ukrainian brigades, which disrupted their ability to communicate.

With their communications systems disrupted, Ukrainian soldiers used their cellular phones to receive situation reports and issue orders. In doing so, they illuminated the electromagnetic spectrum which enabled Russian cyber forces to precisely identify the location of the Ukrainian forces. Russian forces, organized into the BTG and in conjunction with partisans from the LPR then launched a massive rocket attack, consisting of upwards of forty salvos of multiple launch rockets on the Ukrainian brigades. Reports differ, but it has been said Russian forces employed the BM-21 Grad and the 9A52-4 Tornado, both of which employed a mixture of DPICM and thermobaric warheads on Ukrainian forces.⁸⁸ High-explosive munitions were also employed from conventional self-propelled tube artillery. One survivor of the attack mentioned that it came in with such surprise and with such ferocity that almost no one was able to get away from their vehicles and move to cover.⁸⁹ Reports vary, but the attack left approximately thirty Ukrainian soldiers dead, another several hundred injured, and destroyed well over two battalions' worth of vehicles and equipment.⁹⁰ Russian and partisan forces suffered no casualties in the

⁸⁷ "ATO Troops near Zelenopillya Burnt to the Ground by Russian Grads," *Ukrainian Independent Information Agency of News*, July 11, 2015, accessed September 12, 2016, <http://www.unian.info/war/1099656-ukrainian-troops-near-zelenopillya-burnt-to-the-ground-by-russian-grads-year-ago.html>.

⁸⁸ BM-21 Grad is a 122mm, truck-mounted multiple-launch rocket system, with a range of approximately 30km. The 9A52-4 Tornado is also a 122mm, mounted multiple-launch rocket system with a similar range. The Tornado an upgrade to the BM-21 Grad and is replacing it in the Russian arsenal.

⁸⁹ Oksana Grytsenko, "Remembering Shelling: 'We Saw a Glow, They Were Burned Alive'," *Guardian*, February 15, 2015, accessed September 12, 2016, <https://www.theguardian.com/world/2015/feb/17/remembering-the-shelling-we-saw-a-glow-they-were-burned-alive>.

⁹⁰ Natalia Zinets and Maria Tsvetkova, "Ukraine Says Rebels Will Pay as Missiles Kill 23 Soldiers," *Reuters*, July 11, 2014, accessed September 20, 2016, <http://www.reuters.com/article/us-ukraine-crisis-idUSKBN0FG1A920140711>.

attack. The battle of Zelenopillya succeeded in stymieing Ukrainian success and tipping the initiative back to the Russians and their partisan allies.⁹¹

A series of themes in respect to Russian hybrid operations emerged at Zelenopillya. These themes demonstrated innovation in relation to doctrine, organization, tactics, and technology, which, according to historians Macgregor Knox and Williamson Murray, are the primary indicators of a revolution in military affairs.⁹² First, Russian reconnaissance was not conducted through the use of ground reconnaissance units like that of US Army cavalry formations, but rather, it was an aggregation of drones, Spetsnaz, GRU, partisans, and cyber capabilities.⁹³ Additionally, **Zelenopillya demonstrated that Russian forces were extremely effective in the employment of tactical level cyber and electronic attack**, and integrating those forms of warfare with conventional targeting processes to enable additional employment of conventional capabilities. Further, the battle of Zelenopillya demonstrated that not fighting as a joint force, something on which the US military prides itself, was ironically, an advantage because it increased the speed between reconnaissance and the weapon system, enabling fires to quickly be rained on Ukrainian forces well before they were aware what was occurring. Moreover, the battle demonstrated that Russian forces were unconcerned with the employment of precision weaponry, demonstrating their preference for area fire coverage. Additionally, the attack illustrated the Russian's appetite for employing a variety of munitions, to include DPICM, thermobaric munitions, white phosphorous, and high-explosive munitions. Lastly, the attack highlighted a shift in attitudes towards the latitude provided to soldiers and tactical formations. In Russia's Soviet past, control was highly centralized, but as the battle at Zelenopillya highlights, not only has decision making been pushed down to lower levels of command, which is guided by

⁹¹ Ibid.

⁹² Williamson Murray and Macgregor Knox, "Thinking About Revolutions in Warfare," in *The Dynamics of Military Revolution: 1300-2050*, ed. Macgregor Knox and Williamson Murray (New York: Cambridge University Press, 2001), 12.

⁹³ Bartles, "Russia's Indirect and Asymmetric Methods," 8.

a unifying purpose, but more significant, capabilities that are normally withheld at much higher echelons of tactical and operational command, have been entrusted to tactical, battalion-level units.

Zabrodski's Raid: The First Major Ukrainian Counteroffensive

Despite Russian efforts to confound Ukrainian counteraction, Ukrainian forces were successful at pushing back Russian and partisan forces to the boundaries of the Donetsk and Luhansk oblasts. Ukrainian success in these early operations triggered a transition in the war—Russia became far more aggressive in response. As a result, Russia unleashed conventional warfighting capabilities, techniques, and force structures not recently seen on modern battlefields. Likewise, the Russian army became more overt in its presence and began to funnel more armored and mechanized combat systems into the Donbas, to include the venerable T-80 and T-90 main battle tanks.⁹⁴ In response to the shifting momentum following the battle of Zelenopillya, Ukraine launched an armored raid into the Donbas, seeking to thwart Russian initiative, weaken DPR and LPR partisan forces, and assist a beleaguered Ukrainian formation isolated at the Luhansk airport. Analyst Phillip Karber called the raid the longest armored raid in history, as the Ukrainian 95th Air Assault Brigade, under command of Colonel Mykhailo Zabrodski, penetrated the Russian front and wreaked havoc deep within the Russian-controlled region. The raid resulted in a two hundred-mile excursion through Russian and partisan held territory in which Zabrodski's 95th Brigade scored a number of tactical successes.

"Zabrodski's Raid," as the mission became known, launched from the ATO headquarters in Kramatorsk and advanced south and east along highways H21 and E50. Zumbrowski's 95th Brigade fought conventional ground combat with Russian and partisan forces at Bakhmat, Debal'tseve, Saur-Mogila, and Luhansk. The 95th Brigade, being an Air Assault brigade, was

⁹⁴ Thomas, *Russia Military Strategy*, 394.

significantly augmented with tanks, mechanized infantry, and self-propelled artillery to support the operation.⁹⁵ Additionally, Zabrodski led the brigade through a contested river crossing on Highway 21 along the Mius River, outside Krasnyi Luch. Following the successful river crossing, the 95th Brigade fought its way through Krasnyi Luch in route to Luhansk.

The 95th Brigade's combat at Luhansk centered largely at the airport and was conducted from July 13-24, 2014.⁹⁶ Fighting at Luhansk, the 95th Brigade, consisting of approximately sixty to seventy tanks and infantry fighting vehicles had two objectives. First, it was to assist the encircled Ukrainian unit and prevent its destruction. Second, the 95th Brigade was to regain control of the airport from Russian and partisan forces.⁹⁷ On July 13, 2014, Zabrodski's brigade penetrated the Russian defensive perimeter, reached the airport, and made contact with the beleaguered Ukrainian forces defending the airport.⁹⁸ Ukrainian forces conducted joint operations, employing their air force in conjunction with the 95th Brigade to attack the Russian defenders at the airport. The unified action of the Ukrainian armed forces loosened the grip Russian forces maintained around the airport, allowing the trapped formation to extricate themselves. As part of this effort, Russian forces employed air defense missiles to deny Ukrainian forces resupply at the airport and to disrupt their ability to conduct joint operations. As a result, the Ukrainian air force lost two aircraft, an An-26 on July 14 and a Su-25 on July 16.⁹⁹ Additionally, two more Su-25 aircraft were downed by Russian air defenses on July 23 at Saur-

⁹⁵ Karber, lecture.

⁹⁶ These dates are deduced from assessing news reports from a variety of news sources about armored combat operations in and around Luhansk.

⁹⁷ "Ukraine Conflict: Fighting Flares Near City of Luhansk," *BBC News*, July 14, 2014, accessed September 11, 2016, <http://www.bbc.com/news/world-europe-28285208>.

⁹⁸ *Ibid.*

⁹⁹ "Ukraine Conflict: Airstrikes Hit Luhansk Targets," *BBC News*, July 14, 2014, accessed September 11, 2016, <http://www.bbc.com/news/world-europe-28292338>.

Mogila.¹⁰⁰ However, exhausted and out of supplies, Zabrodski's 95th Brigade culminated on July 23. Later that day the force withdrew from the Luhansk airport, returning to the relative safety of Kramatorsk. Zabrodski's raid succeeded in arresting Russian offensive action, but only briefly. The raid also succeeded in relieving the isolated Ukrainian force at Luhansk airport, but the mission failed to wrest the facility from Russian control.

The Battle of Ilovaisk: Emergence of Russian Siege Warfare

Fighting continued through the month of August, and reached its height with the battle of Ilovaisk, where approximately four thousand Russian and partisan forces killed more than one thousand Ukrainian soldiers during the fighting. The battle of Ilovaisk, and its large number of casualties, led to the Minsk Protocol on September 5, 2014. The battle also signaled the end of the Ukrainian government's anti-terrorist operations and a transition to full-scale conventional war.¹⁰¹

Ilovaisk, located in the Donetsk oblast, is a major artery along Highway 21 that links the DPR capital of Donetsk with Russia and is thus a critical line of communication for Russian and partisan forces in the Donbas. Ukrainian volunteer battalions quietly began to infiltrate Ilovaisk on August 7, 2014, to retake the city, consequently initiating the battle.¹⁰² During the early stages of the operation, Ukrainian forces continued to feed battalions into the fight, reaching a maximum of approximately seven to eight battalions consisting of both professional and volunteer soldiers. These forces were able to achieve considerable gains against the defenders of Ilovaisk, so much

¹⁰⁰ Olga Rudenko and Jim Michaels, "Two Ukrainian Fighters Shot Down in Rebel-Held Area," *USA Today*, July 23, 2014, accessed September 11, 2016, <http://www.usatoday.com/story/news/world/2014/07/23/ukraine-rebels-separatists-fighter-jet-shot-down/13034005/>.

¹⁰¹ Tim Judah, "Ukraine: A Catastrophic Defeat," *New York Review of Books*, September 5, 2014, accessed September 13, 2016, <http://www.nybooks.com/daily/2014/09/05/ukraine-catastrophic-defeat/>.

¹⁰² James Marson and Allen Cullison, "Ukraine Suffers Harsh Defeat in Eastern Town," *Wall Street Journal*, September 2, 2014, accessed September 13, 2016, <http://www.wsj.com/articles/ukraine-suffers-harsh-defeat-in-eastern-town-1409616541>.

so that on August 24, 2014 Russia committed additional troops from the Southern Military District to turn the tide in the deteriorating situation.¹⁰³

A major Russian counterattack was launched into Ilovaisk on August 27, 2014. The counterattack force consisted of several BTGs equipped with T-72B3s and T-80 tanks, BMP-2 and BMP-3 infantry fighting vehicles, plus self-propelled artillery and BM-21 Grad rockets. The BTGs were tasked to regain control of the situation and create a zone of dominance. The cumulative effects of the synchronized operation culminated with Ukrainian forces encircled within Ilovaisk. Ukrainian forces attempted breakouts on multiple occasions but by August 28, 2014, the Ukrainian government asked Moscow for peace in Ilovaisk and for the lives of the Ukrainian forces there to be spared. Putin agreed, stating a corridor would be provided to allow Ukrainian forces to withdraw from the city and that Ukrainian forces would be allowed to retain their weapons and equipment.¹⁰⁴

The withdrawal began on the morning of August 28, 2014, but Russian forces began engaging the withdrawing Ukrainians along the corridor, destroying over sixty-eight tanks, infantry fighting vehicles, and other vehicles. The slaughter along the corridor lasted until September 1, 2014, and directly led to the Minsk Protocol cease-fire agreement between Russia and Ukraine on September 5, 2014. The battle of Ilovaisk, the deadliest battle of the Russo-Ukrainian War, resulted in over one thousand Ukrainian soldiers, both professional and volunteers, killed in action, innumerable loss of Ukrainian weapons and materiel, and the town remaining firmly in control of Russian and DPR forces.¹⁰⁵ The second battle of Donetsk Airport—or “Little Stalingrad” to its Ukrainian defenders—began on the heels of the battle of

¹⁰³ “Ukraine Conflict: Fierce Battle for Town of Ilovaisk,” *BBC News*, August 20, 2014, accessed September 13, 2016, <http://www.bbc.com/news/world-europe-28866283>.

¹⁰⁴ Judah, “Ukraine: A Catastrophic Defeat.”

¹⁰⁵ Catherine Fitzpatrick, “The Battle of Ilovaisk: A Turning Point in Russia’s War in Ukraine,” *The Interpreter*, September 14, 2014, accessed September 15, 2016, <http://www.interpretermag.com/the-battle-of-ilovaisk-a-turning-point-in-russias-war-on-ukraine/>.

Ilovaïsk and continued the trends of battle which emerged at the Donetsk airport, Zelenopillya, and Ilovaïsk.

The Second Battle of Donetsk Airport: Further Evolutions in Siege Warfare

The second battle of Donetsk Airport began on September 28, 2014, shortly after the ceasefire of the Minsk Protocol. Russian and partisan forces took advantage of the pause in action afforded by the Minsk Protocol to quietly seed Spetsnaz, GRU, and BTGs into the area surrounding Donetsk and the airport. Prior to the Russo-Ukrainian War, the Donetsk airport was one of the most modern airports in Europe. However, the first battle of Donetsk Airport and the ensuing action of the second battle of Donetsk Airport would quickly reduce the compound to little more than rubble as Russian and Ukrainian forces jockeyed for control of the facility.

The battle began as BTGs from the Southern and Western Military Districts launched coordinated attacks that aggregated information collection, indirect fire, and ground forces to overwhelm the Ukrainian 98th Airborne Brigade, which was defending the airport.¹⁰⁶ The BTG saw its role expanded at the airport, as they conducted combined arms action throughout the battle, serving as a proof-of-concept for both the formation and its emergent doctrine. Analyst Phillip Karber reaffirms this position in remarking that the battle signified a reemergence of conventional ground combat to the modern battlefield, something that many other analysts, theorists, and pundits thought was a thing of the past. Moreover, Karber clearly states the battle of Donetsk airport was decided by tanks.¹⁰⁷

At Donetsk airport, Russian and partisan forces employed global-positioning systems and radio-equipped drone aircraft to saturate the area in order to identify the location of Ukrainian forces. Once identified, Russian BTGs employed their organic artillery and multiple launch rockets to inundate the area with artillery and rocket fire seeking to destroy as much of the

¹⁰⁶ TRADOC G-2, *Threat Tactics Report: Russia*, 40-42.

¹⁰⁷ Karber, lecture.

Ukrainian force as possible before launching the ground assault. The Russian artillery and rockets employed a mix of high-explosives, thermobarics, and top-attack, bomblet munitions. Russian BTGs also used their self-propelled artillery in a direct fire mode, often out to range of six thousand meters, to suppress or disrupt Ukrainian forces prior to launching attacks and to screen the movement of other BTG elements.¹⁰⁸ With Ukrainian forces pinned down, Russian forces launched tanks, BMPs, and anti-armor platforms to destroy the remaining Ukrainian armor and mechanized vehicles, before bringing in their infantry to clear any remaining enemy. Russians were reported to be employing the T-73B, T-80, and T-90, all of which were outfitted with reactive armor that could defeat all but tandem-warhead antiarmor capabilities.¹⁰⁹ The Ukrainians possessed only modest antiarmor capabilities, none of which were tandem warhead, making their infantry all but defenseless against Russian and partisan armor.

Shortly after the resumption of hostilities, the Vostok Battalion reemerged. The battalion, composed almost entirely of Chechens, is reported to have not taken prisoners, unlike their Russian and DPR-counterparts, but instead tortured Ukrainian soldiers they encountered on the battlefield. The Vostok Battalion was also rumored to have slit the throats of several helpless Ukrainian soldiers at the Donetsk Airport.¹¹⁰

By October 5, Russia and their DPR allies had established a foothold at the airport by establishing positions within the airports perimeter fence. Throughout the fall and into the winter both parties jockeyed for control of the airport, but the relative balance of power maintained equilibrium. However, a Russian assault on December 5 portended things to come, as the advance resulted in Ukrainian forces losing their stronghold in the old terminal. Additionally, major Russian attacks on December 29 and January 12, 2015, saw the new terminal and air traffic

¹⁰⁸ Phillip Karber and Lt. Col. Joshua Thibeault, "Russia's New-Generation Warfare," *Army* 66, no. 6 (June 2016): 62.

¹⁰⁹ *Ibid.*, 62-64.

¹¹⁰ Karber, lecture.

control tower pass to Russian hands. On January 17, Ukrainian forces launched a last-ditch counteroffensive, but by January 19, the attack faltered. The Ukrainian counterattack on January 19 had momentum and appeared as though it might expel Russian forces from the airport, but Russian reinforcements had been dispatched and additional BTGs arrived in the nick of time, thus stemming the tide of the Ukrainian counteroffensive. Russian and partisan forces continued to capitalize on the shifting momentum by sustaining pressure on the Ukrainians. By January 22, the Ukrainians could no longer hold out and the airport officially fell against the Russians and DPR partisans in the latter part of the day.

The impact of the airport changing hands was largely symbolic because it had been rendered useless by the time it fell to the Russians. The runways and terminals were destroyed and the air traffic control tower razed. However, the versatility of the BTG emerged as a result of the second battle of Donetsk Airport, as well as the importance of combined arms battle. Conversely, the Ukrainians walked away from the airport with an information victory in their own right. The battle for the airport demonstrated Ukrainian soldiers' willingness fight on in the face of overwhelming odds and with insufficient resources, against an overwhelming enemy; their action earned them the moniker, the "cyborgs" of Donetsk airport.¹¹¹

The Battle of Debal'tseve: The Russo-Ukrainian War's "Battle of the Bulge"

Concurrently, another fight for critical infrastructure and lines of communication was heating up in the Donbas. Debal'tseve was critical to Russia's forces, the partisans, and the Novorossiia movement. For Russia and the partisans, Debal'tseve was of critical importance because it was the joint which linked the DPR with the LPR. More importantly, Debal'tseve was a critical line of communication because it linked the Donbas with Russia via Highway M04, which runs directly from the city to Russia's Rostov oblast.

¹¹¹ Sergei L. Loiko, "How Ukraine's Outgunned 'Cyborgs' Lost Donetsk Airport", *Los Angeles Times*, January 28, 2015, accessed September 16, 2016, <http://www.latimes.com/world/la-fg-c1-ukraine-donetsk-airport-20150128-story.html>.

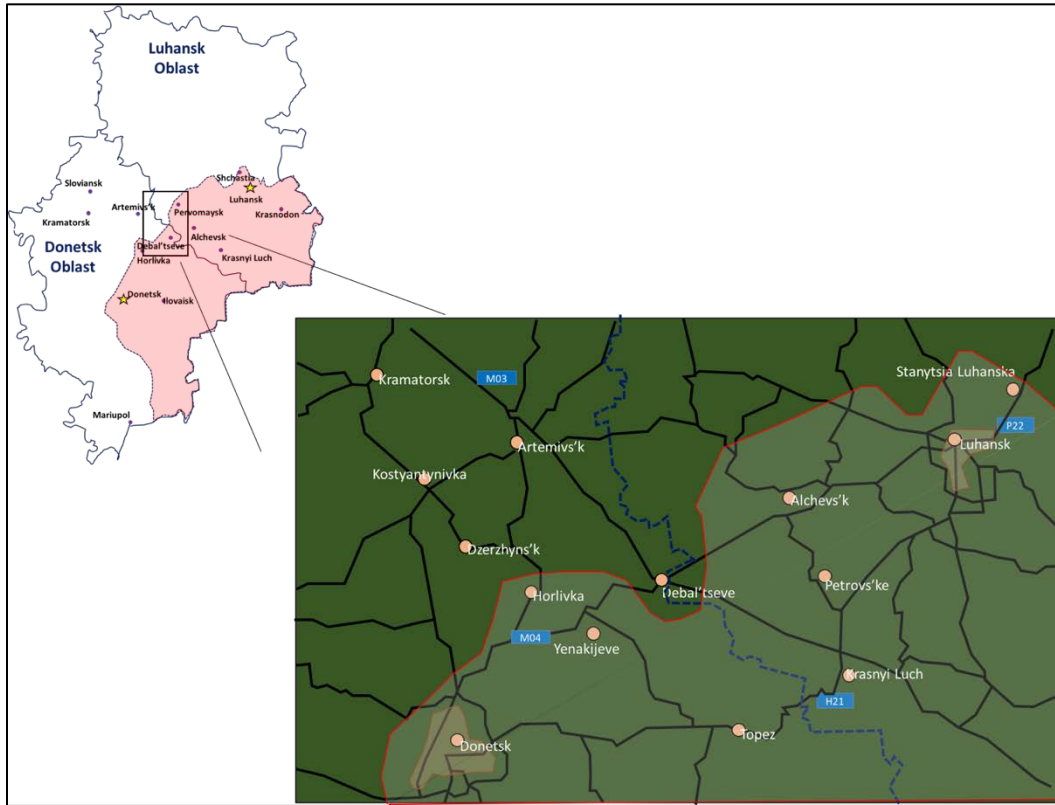


Figure 4. Map of the Debal'tseve Salient. Source: Author.

The city had been retaken from partisan forces in July 2014, who had initially seized control of the city during the chaos of April 2014.¹¹² The initial changing of hands was a minor affair, but as the war continued, the city's value to both sides increased. The value of the city drove the battle of Debal'tseve, which began on January 14, 2015. The battle culminated on February 20, 2015, and resulted in close to 300 Ukrainian soldiers killed, well over 100 Ukrainians captured, and upwards of 700 wounded. Russian and partisan casualty numbers are not clearly defined, but it appears that they lost approximately sixty soldiers. Furthermore, Debal'tseve, a city of 25,000 inhabitants, saw over 500 residents killed, 8,000 residents flee the city, and much of the city leveled in the fighting.¹¹³

¹¹² Karber, lecture.

¹¹³ "Ukraine Conflict: Rebels Celebrate Victory in Debal'tseve," *CBC News*, February 19, 2015, accessed September 17, 2015, <http://www.cbc.ca/news/world/ukraine-conflict-rebels-celebrate-victory-in-debaltseve-1.2962875>.

The battle of Debal'tseve began as DPR, LPR, and Russian forces moved to encircle the city. Debal'tseve was the last territorial piece needed to complete the goal of a unified Novorossiia. At the time, the northern portion of the city, which linked Debal'tseve to government-controlled territory was the only surrounding area under control by Ukrainian forces. The situation created a salient in the lines. Russia and its partisans sought to complete the encirclement of the bulge, severing the city from Ukrainian controlled territory. As the Ukrainian government became aware of the vise closing around the Debal'tseve, they sent in reinforcements, providing eight thousand soldiers in which to defend the city against fifteen thousand soldiers reported to be attempting to seize the city. The Ukrainian army's 128th Mechanized Brigade and the volunteer "Donbas" Battalion made up the preponderance of the defense at Debal'tseve.¹¹⁴

Similar to the battles at Luhansk and Donetsk airports, Russian and partisan forces encircled the city and conducted a siege instead of attempting urban warfare. Russian drones swarmed the area to identify Ukrainian positions, then BTGs launched salvos of artillery and BM-21 Grad rocket fire to destroy those positions. Russian forces also purposely targeted buildings and city infrastructure in their strikes to deny Ukrainian forces protection from the weather, which at this point had turned quite bad, with sub-zero temperatures and continual snowfall. Furthermore, the attacks on the city were an integral component of Russian information operations, showcasing to the citizens of Debal'tseve that their government was unable to adequately support them. Before sealing Highway M03, the main Ukrainian artery leading to safe territory, Russian forces seeded it with mines and dedicated artillery and rocket fire support, making it a death trap for anyone attempting to enter or flee the city and thus completing the physical isolation of the city.

¹¹⁴ Hugo Spaulding, *Putin's Next Objective in the Ukraine Crisis* (Washington, DC: Institute for the Study of War, 2015).

To make matters worse, Russian and partisan forces cut the city's utilities in mid-January, exacerbating an already deteriorating situation. The result of these actions was the death of 6,000 civilians, while an additional 8,000 civilians fled the city. In looking at those numbers it is critical to remember that Debal'tseve had a population of 25,000.¹¹⁵ Therefore, 56 percent of the city's inhabitants were either killed or displaced by the second week of combat in Debal'tseve, while Russia continued to ruthlessly pound the city's infrastructure with artillery and rocket fire. The city was essentially flattened by the end of January.¹¹⁶

The siege of the city and the attacks on Ukrainian defenses around the city continued into February, which in conjunction with other action in the conflict, led to the Minsk II agreement on February 12, 2015. However, the agreement did nothing to stop the fighting or siege of Debal'tseve and the fighting raged on as Russia launched another BTG from the Southern Military District, consisting of upwards of one hundred tanks, infantry fighting vehicles, self-propelled artillery, and multiple launch rocket vehicles into Ukraine on the night of the Minsk II signing. By February 17, Russian and partisan forces launched a full-scale assault into the city. The Ukrainians held out for a day, but surrendered shortly thereafter. The city of Debal'tseve fell to Russia, the DPR, and the LPR on February 18.

The governments in Kiev and Moscow came to an agreement to establish a corridor to allow the Ukrainian forces to peacefully withdrawal from Debal'tseve. However, much like Ilovaik, Russian and partisan forces failed to honor the agreement, and ruthlessly attacked retreating 128th Mechanized Brigade, Donbas Battalion, and other Ukrainian forces, causing many soldiers to abandon their vehicles and escape on foot through wooded areas.¹¹⁷ The

¹¹⁵ United Nations Office for the Coordination of Humanitarian Affairs, "Ukraine: Situation Report No. 29," February 27, 2015, accessed on September 29, 2016, <http://www.unocha.org/2015annualreport/2015annualreport.pdf>

¹¹⁶ Spaulding, *Putin's Next Objective in the Ukraine Crisis*.

¹¹⁷ Alec Luhn, "Ukrainian Soldiers Share Horrors of Debaltseve Battle After Stinging Defeat," *The Guardian*, February 18, 2015, accessed September 17, 2016,

withdrawal was yet another embarrassment for the government and armed forces of Ukraine, while serving to provide affirmation of the supremacy of the DPR and LPR, thus continuing to advance Russian information and diplomatic objectives.

Much like the second battle of Donetsk Airport, the defining feature of the battle of Debal'tseve is that it showcases the usefulness of the BTG organization. The battle demonstrates the linkage between drones, information collection, targeting, offensive use of artillery and rocket fire to set up the advance of ground forces and to soften the defense, and then the supporting armored strike to infest the objective. The use of the BTG, its organization, and equipment demonstrate the utility of conventional warfare within hybrid warfare, as it relates to the execution of limited wars. The BTG, as the battle of Debal'tseve illustrates, is ideally suited to operate in a multi-domain environment.

Continuing the Russo-Ukrainian War trend, the battle is yet another example of the role of the siege on the modern battlefield. Of the six battles analyzed herein, all but two were sieges, the exceptions being Zabrodski's Raid and the Battle of Zelenopillya. The Russians multi-domain capability packaged within the BTG, and when necessary, supported with fires or air defense by Colonel General Alexandr Galkin's Southern Military District, capitalized on the Ukrainian's willingness to act. This concept goes back to Liddell Hart's concept of ju-jitsu, or using an opponent's momentum against them. The Russians, having learned that Ukrainian forces quickly committed forces when an area was threatened, intentionally provoked a fight by threatening an area. The intention being to isolate the responders, and then slowly erode their capabilities and personnel over time, thus exhausting the Ukrainian ability to resist physically and morally.

The siege also benefited Russia from an informational and diplomatic standpoint. The battle of Debal'tseve demonstrated how exerting pressure through siege warfare on the local populace can benefit the aggressor by eroding the faith and confidence of people in their

<https://www.theguardian.com/world/2015/feb/18/ukrainian-soldiers-share-horrors-of-debaltseve-battle-after-stinging-defeat>.

government and their own armed forces. The compounding situation, for the civilians and soldiers in Debal'tseve, drove diplomacy between the two nations. The diplomacy, embodied in the Minsk II Protocol, facilitated Russia's continued pursuit of its policy objectives.¹¹⁸

Reflections on the Russo-Ukrainian War

To conclude the analysis of the Russo-Ukrainian War, it is critical to understand that definitions matter. The battle of Debal'tseve was the last major battle of the Russo-Ukrainian War. Many experts suggest that the conflict is now a "frozen conflict" and point to the Russian venture into the Donbas as a strategic failure. That point of view fails to understand the political and strategic goals of Russia. The People's Republics in Donetsk and Luhansk, while initially supposed to be united into Novorossiia, are Russian "allies" and serve as a counterbalance to Kiev. Russia has cleaved away a significant portion of Ukrainian territory. The DPR and LPR, coupled with the annexation of Crimea, serve to exert Russian dominance in Eastern Europe and show a willingness to fight both covertly and overtly to attain political and strategic objectives, namely the overturning of the Western dominated world order, the encroachment of NATO into Russia's Near Abroad, and achieving hegemonic status in Eurasia. All of this demonstrates that, while not victorious in the traditional sense of the word, Russia is certainly winning. Russia's actions in Ukraine have stopped NATO's advance to its periphery and has weakened Kiev politically.

The Russo-Ukrainian War brought modern hybrid warfare to the fore as a revised theory of action that incorporates Information Age technology, to operate in multiple domains, using all the components of force, within all the instruments of national power. The Russo-Ukrainian War embodies Gerasimov's idea of compressing the levels of war. The Russian military's exclusive use of the BTG is the physical embodiment of this idea as it is a tactical formation which

¹¹⁸ For further reading on the battle of Debal'tseve see the author's "The Battle of Debal'tseve: The Conventional Line of Effort in Russia's Hybrid War in Ukraine," *Armor* 128, no. 4 (Winter 2017): 45-52.

possesses operational fires and air defense, and operates both tactically and operationally by synchronizing tactical actions in time, space, and purpose in the pursuit of strategic objectives. The BTG, disaggregated from a headquarters on the Ukrainian battlefield, serves the theater headquarters in Russia's Rustov oblast. The Russian BTG's performance and participation at the battles of Donetsk airport, Luhansk airport, and the strategically vital cities of Ilovaisk and Debal'tseve demonstrate this feature, as does its participation at Zelenopillya.

The Russo-Ukrainian War, highlighted by cross-domain hybrid warfare, brings forth the idea of systems warfare in which competing national systems meet on physical and non-physical battlefields in the pursuit of primacy. In systems war, the diversified capabilities located throughout domains and levels of war create systems so robust that they all but neuter the traditional idea of centers of gravity. Further, open, adaptive systems, such as the militaries of contemporary nation-states, are fundamentally focused on survival because they serve no purpose if unable to fight. Therefore, open and adaptive systems possess the capability and intent to reallocate or reposition internal critical capabilities or vulnerabilities when those are threatened with destruction. In future battles, in which hybrid warfare is employed in multi-domain fashion, center of gravity analysis will likely be an exercise that is largely academic and not germane to defeating the adversary's system. Defeat of the adversary's system will likely involve slowly hacking away at its capabilities to the point at which the system has suffered irreparable damage and collapses. Put another way, hybrid, multi-domain battlefields of the future will likely be epitomized by attrition warfare.

Impact of Hybrid Warfare for War Today and Tomorrow

The Russian hybrid warfare model provides the operational artist many valuable lessons. First, it demonstrates that most nation-states are still inclined to invest in powerful conventional capabilities, centered upon rugged ground forces for the purpose of deterring potential threats,

lending legitimacy to the government, and defending their borders if threatened.¹¹⁹ Defense analyst Bettina Renz suggests the retention of powerful conventional forces is because modern nations feel these capabilities enhance their perception as a “strong state,” lending them more credibility as participants on the global stage; therefore, **Russia’s reinvestment in conventional capabilities largely seeks to adjust the balance of power in Europe back towards Moscow.**¹²⁰ Conversely, this action capitalizes on Europe’s divestiture of conventional forces since the fall of the Soviet Union. Moreover, investment in those capabilities, as demonstrated by the BTGs, show that conventional capability is a key part of hybrid warfare.

The Russian version of hybrid warfare demonstrates an evolution in warfare in which there is not a center of gravity. Russia has woven its political and military objectives together and is utilizing all the instruments of national power to pursue those objectives. At the operational level, **Russia is blending the use of force into a multi-domain approach that uses conventional, unconventional, cyber, information, and electronic warfare in a synergistic effort to overwhelm an opponent’s capacity to handle the quantity of presented dilemmas. At the tactical level, Russia has reorganized their ground forces into robust, highly integrated combined arms formations capable of finding the opponent, bringing vast amounts of firepower to bear in time and space to pulverize the opponent, and then rapidly exploit with conventional ground forces.**

It is critical to remember that the strategic, operational, and tactical levels of war are interconnected and actions or innovations in one level influence the other levels. Furthermore, these innovations do not occur in isolation and are often direct responses to conditions or perceived conditions from the battlefield or from threat analysis. In addition, it is critical to acknowledge Russia’s penchant for studying history, analyzing forms and methods of warfare in order to develop thoughtful strategies and operational approaches that balance ends, ways, and means. As paradoxical as it may appear, Russia’s pursuit of innovation largely aligns with the

¹¹⁹ Bettina Renz, “Why Russia is Reviving Its Conventional Military Power,” 24.

¹²⁰ Ibid.

conditions for successful innovation as articulated by Williamson Murray, who states that successful innovation lies in specificity to a condition or problem set, an officer corps that possesses a culture of honest reflection and analysis, an officer corps that makes good use of historical understanding, and a contemplative military culture that lacks rigidity in mind and habit.¹²¹ The point being that as other nation-states or up-and-coming polities look to solve their problems, or look for effective ways in which to achieve their interests, they will likely pursue innovation in a similar manner.

Hiding beneath the veneer of hybridity are powerful conventional capabilities, as Russia demonstrated in Ukraine in 2014.¹²² Russia's tactical innovation in relation to their ground combat formation as one such instance where tactical innovation influences operational thought, specifically in the area of campaign planning and the sequencing of operations. Analysts Philip Karber and Joshua Thibeault suggest that Russia has reorganized its tactical formations, specifically, their battalion and brigade level organizations to generate forces that possess the ability to punch well above their relative echelon.¹²³ Russia, recognizing the importance of tactical dispersion and the efficacy of maneuver warfare, coupled with the understanding of the increased lethality and range of modern weaponry, reorganized its ground combat formations. In doing so, they moved the battalion-level unit to the forefront, and developed BTGs that are equitable to US Army Armored Brigade Combat Teams (ABCTs) and capable of operating along comparable ranges, to include up to forty kilometers.¹²⁴ Karber and Thibeault report that the Russia BTG, mentioned throughout the case study, consists of one tank company, three mechanized infantry companies, an antiarmor company, two to three self-propelled artillery

¹²¹ Williamson Murray, "Innovation: Past and Future," in *Military Innovation in the Interwar Period*, ed. Williamson Murray and Allan R. Millett (New York: Cambridge University Press, 1996), 311-25.

¹²² Andrew Monaghan, "Putin's Way of War: The 'War' in Russia's 'Hybrid Warfare'," *Parameters* 45, no. 4, (Winter 2015-2016): 68.

¹²³ Karber and Thibeault, "Russia's New-Generation Warfare", 62-63.

¹²⁴ Ibid.

batteries, a multiple-launch rocket battery, and two air defense batteries. What is more, the Russian BTGs routinely use their self-propelled artillery in a direct-lay role, providing those formations with a direct, frontal fire capability that extends to up to six thousand meters, far exceeding the range of US Army direct-fire or antiarmor capabilities.¹²⁵

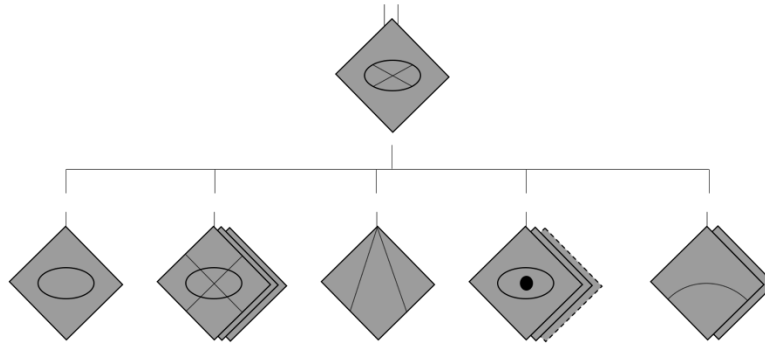


Figure 5. The Russian Battalion Tactical Group (BTG). Source: Author.

The nuance of the Russian BTG is where the real differences emerge between the BTG and the US Army's ABCT. The BTG's infantry fighting vehicles (IFV), predominately the BMP-3, possess inherent firepower capabilities that exceed that of the US Army's Bradley Fighting Vehicle (BFV), and almost equal that of the M1A2 Abrams tank. This reorganization has put the US Army's ABCT, Stryker Brigade Combat Team (SBCT), and Infantry Brigade Combat Team (IBCT) at an extreme tactical disadvantage.

Table 2. Quantitative Comparison Between US Army ABCT and Russian BTG

Quantitative Comparison – US Army ABCT & Russian BTG			
	US ABCT	Russia BTG	Advantage
Tank Company	4	1	US
Mechanized Infantry Company	3	3	-
Anti-Armor Company	0	1	Russia
Field Artillery Battery	2	2	-
Rocket Battery	0	1	Russia
Air Defense Battery	0	2	Russia
Engineer Companies	2	0	US

Source: Author's comparison given US Army ABCT MTOE and Karber's enunciation of the composition of the Russian BTG.

¹²⁵ Ibid.

The most important factors that can be deduced from examining hybrid warfare, as modeled by Russia in Crimea and Ukraine, are the relationship between limited war, nuclear deterrence, information operations, and conventional capabilities. The presence of nuclear weapons is perhaps the first critical component for modern hybrid warfare. Nuclear weapons provide insurance against a massive ground response to an incremental, limited war. The offensive nation that possesses nuclear weapons knows that the adversary or its allies will not likely commit large ground forces to a conflict for fear of the aggressor employing those weapons against ground forces. This dynamic emboldens the aggressor nation. In the case of Russia, its possession of nuclear weapons emboldens leaders to take offensive action because they know that even the threat of nuclear employment forces potential adversaries to a standstill.

Next, the idea of sequence surfaces. Leonhard suggests, “Victory in warfare is linked inextricably with positive control of sequence. Nor is the link spurious or coincidental: the side that successfully strives to order future events will be the side that emerges victorious.”¹²⁶ In periods of limited war, in which the rapid acquisition of limited objectives is of vital importance, the sequencing of operations gains even more utility because it necessitates quick action nested with a balanced use of ways and means. Modern technology, integrating contemporary limited war, and Leonhard’s musings on sequence, indicate that sequencing contemporary operations is no longer solely dependent on the ability for fuel and food to maintain pace with ground combat elements. Russian operations in Ukraine demonstrate how operations can be sequenced in time, space, and purpose in multiple domains. Sequence no longer rests on the ability to continue with the physical employment of force, but rather on layering operations in depth through the use a blending of information, cyber, electronic, unconventional forces, and unconventional forces.

Conversely, sequence is the key for defeating an integrated defense. As Russian operations illustrate, nation-states with integrated defense systems, typically established after incremental territorial advances over time, will be able to establish a robust defensive position to

¹²⁶ Leonhard, *Fighting by Minutes*, 103.

retain their territorial conquests and to retain freedom of maneuver. The US military has not had to account for this situation in decades and largely lacks the experience and requisite knowledge to plan accordingly.¹²⁷ Furthermore, operational and tactical planners have not had to plan for operations in contested environments in which air superiority or domain dominance is not guaranteed. Nor have US planners developed campaigns against ground forces that have such qualitative and quantitative advantage as the BTG. Therefore, the idea of sequenced operations to defeat integrated defensive networks must be a component of thinking in relation to hybrid wars of the future.

By extension, US forces could face a variety of options in dealing with hybrid opponents in relation to defeating them on the ground, but the options primarily boil down to two major approaches: a contested landing, close to primary military objectives, or an uncontested landing well outside of the integrated defense, knowing the fight that lays ahead. The answer to the question of which approach to take hinges upon the immediacy of the situation, the time available, and the theater's physical terrain. However, both cases warrant the need for a rugged, multi-domain advanced guard formation that is capable of defeating enemy counter-reconnaissance forces, answering the commander's information requirements, locating passable terrain, locating the enemy forces, fixing the enemy for follow-on forces, and covering the main body of friendly forces.

As discussed in Latvian defense documents, "To what extent is NATO's legal framework ready to deal with modern warfare?"¹²⁸ Specifically, Russian hybrid warfare, or to borrow the Latvia term "modern warfare," carried out in Crimea operated beneath the threshold of NATO Article 5 retaliation, but still constituted an attack and territorial acquisition of another nation. Although Ukraine is not a member of NATO, nor provided with Article 5 protection, the

¹²⁷ Gen. Mark A. Milley, "Priorities for Our Nation's Army" (lecture, Center for Strategic and International Studies, Washington, DC, June 26, 2016).

¹²⁸ Berzins, *Russia's New Generation Warfare in Ukraine*, 8.

effectiveness of the Crimean annexation will encourage future situations to unfold in a similar manner in which one nation or polity seeks a limited military objective within another and uses hybrid warfare to conceal the offensive, before quickly transitioning to an operational or strategic defense after achieving those objectives, to put themselves in a position of advance in pursuit of the political aim.

Coinciding with operating below the threshold of NATO retribution of that of the international community, is the idea of not operating as a joint force. The Russo-Ukrainian War illustrates the efficacy of non-joint operations in relation to hybrid warfare in that it minimizes an aggressor's footprint, increasing the ability to deny involvement in combat operations in pursuit of strategic or political objectives. The absence of joint operations is not to say that operations in the air domain are not being conducted, for hybrid warfare demonstrates quite the contrary. To make up for the absence of joint air power or army aviation, hybrid threats will increasingly rely on drone, unmanned aircraft. These drones will continue to serve as reconnaissance platforms and will likely become equipped with firepower as hybrid threats continue to evolve. Additionally, one can expect to see the use of armed drones exported to proxy or partisan forces to enable the hybrid aggressor to continue to pursue a policy of deniability. These armed drones will work in tandem with proxy, partisan, and unconventional forces for information collection and targeting purposes, in pursuit of strategic objectives.

Similarly, the BTG's viability on the hybrid battlefield will likely give rise to similar formations and force design adjustments for those nations or polities seeking to conducted offensive hybrid campaigns or operations. The BTG's capability to operate dispersed, while leveraging operational firepower and air defense capabilities, or physically concentrate its combat power at a time and place of its choosing makes it ideally suited to the ever-evolving hybrid operational environment. In fact, Russia has seen the importance of the BTG as a result of its action in the Russo-Ukrainian War and its looking to increase the number of BTGs in the Russian army. As of 2016, there are 66 BTGs in the Russian army, but General Gerasimov stated the

Russian army is increasing the number of BTGs to 125 by 2018, and all of those formations will be manned by professional soldiers, removing all conscripts and placing them in administrative units that will largely stay behind friendly lines in Russia.¹²⁹

Conclusion

The hybrid warfare paradigm is a theory of warfare, an offset strategy, and a tool to exploit an adversary's vulnerabilities, to include internal political, social, and economic divisions. Hybrid warfare is a theory of war that embraces strategist Everett Dolman's concept of strategy, which posits, "Strategy, in its simplest form, is a plan for attaining continuing advantage," the purpose of which is continued advantage for the state. Furthermore, Dolman's position postulates, "Stringing together anticipated outcomes is the essence of applied strategy."¹³⁰ The Gerasimov Doctrine closely aligns with Dolman's concept of strategy as Russia abides by the idea of perpetual conflict due to the presence of a permanent enemy, which currently is the United States, Western culture and its values, political system, and ideology.¹³¹

Hybrid warfare is a theory of warfare for periods of limited warfare in which nations do not pursue strategies of annihilation, but instead seek to impose their political will without destroying the political institutions of their adversaries. Hybrid warfare is a theory of warfare for the Information Age that seeks to operate in multiple domains to perpetually find methods to achieve a relative position of advantage in relation to an adversary, or perpetually conduct operations aimed at weakening the adversary, from the inside, out. Hybrid warfare seeks to do this by blending the instruments of national power, information operations, cyber and electronic operations, unconventional operations, and conventional operations, as needed or able to do so, in

¹²⁹ "The Number of Battalion Groups Consisting of Contractors in the Russian Army to Reach 125 in Two Years," *Military News-Russia*, last modified September 14, 2016, accessed September 20, 2016, <http://militarynews.ru/story.asp?rid=1&nid=425709>.

¹³⁰ Everett Carl Dolman, *Pure Strategy: Power and Principle in the Space and Information Age* (New York: Routledge Press, 2005), 5.

¹³¹ Berzins, *Russia's New Generation Warfare in Ukraine*, 5.

pursuit of this aim. Hybrid warfare is a theory of war that seeks to win without fight in the physical sense of the word, but to apply force in all domains and with all the instruments of national power to weaken political institutions of the opposition to the point that they fall in on themselves. In the event this is unsuccessful, hybrid warfare, at least as embodied by Russia, initiates a conventional line of operations to further advance their interests and to pursue their political and strategic agenda.

The concept of hybrid warfare is built upon the idea of perpetual conflict and that tactical or operational victory is less important than maintaining a position of perpetual advantage. Russia's Novorossiia movement in the Donbas reflects this idea by carving out a polity that is sympathetic, if not subservient to Russia in the Donbas while significantly weakening Ukraine. Some view the Russian expedition into the Donbas as a failure, its result being "frozen conflict." Others view the campaign and its resulting conditions a success as it has significantly weakened the Ukrainian government and its armored forces, providing a pliable neighbor on NATO's periphery.

Hybrid warfare is operates on the assumption that wars of annihilation are a thing of the past due to the governing factor that nuclear weapons play. Furthermore, wars of annihilation, or regime change, often create more turmoil for the aggressor, and therefore, the goal of hybrid warfare is to not topple existing regimes, but instead to create national ulcers, that perpetually suck resources and political power away from an opponent's capital. Additionally, these ulcers are tools in which the aggressor can ratchet up, as needed, to apply political pressure on its opponent. These ulcers, or frozen conflicts, are alive and well in many parts of the world and have been a tool of the Russians since the end of the Soviet Union. However, as more local powers seek to expand regionally and beyond, they will likely use hybrid warfare to create enclaves of support within their neighbors, using things such as similar ethnic heritage or interests as a pretense for involvement.

Finally, hybrid warfare represents a return to the past for Russia. Hybrid warfare is a contemporary perspective on Tukhachevsky's deep operations. Yet instead of being developed for industrialized nations, this mode of warfare incorporates Information Age technology and addresses Information Age vulnerabilities such as the importance of public opinion, the fragility of cyber infrastructure, and the diminished role of military forces in Europe.

Appendix 1: Russian Policy and Military Strategy

Russian Policy:

- Overturn US-led unipolar world.
- Increase national prestige.
- Deter further NATO advance east ~ buffer.
- Deter Ukraine from becoming more West-leaning.
- Achieve regional dominance ~ regain dominance over 'Near Abroad'.
- Maintain weak neighbors.
- Maintain patrimonial relationship with Ukraine, and with Near Abroad.
- Serve as protector to ethnic Russians throughout the world.
- Serve as protector of ethnic Russians in Ukraine ~ Donbas and Crimea. Annex Crimea and create an enclave in Ukraine in the Donbas ~ Novorossiia (Donetsk People's Republic and Luhansk People's Republic).
- Ensure survivability of enclave in Donbas.
- Ensure survivability of annexation of Crimea.

Russian Military Strategy:

Ends:

- Weakened Ukraine (politically, militarily)
- Disorganized Ukraine (communications and information)
- Undercut the faith of the Ukrainian people in their government and their armed forces
- Control the Donbas (Novorossiia)
- Control Crimea (part of Novorossiia)

Ways:

- Create social and political instability.
- Hybrid campaign to annex Crimea.
- Hybrid campaign to annex Donbas.
- Information campaign (control messaging in Ukraine).
- Create social and political instability.
- Siege Warfare – capitalizes on the Ukrainian's willingness to quickly commit forces in response to a stimulus.

Means:

- A2/AD 'bubble' to deter counteraction.
- Southern Military District (49th Army), led by Colonel General Alexandr Galkin.
- Battalion Tactical Groups (subordinate to 49th Army) – 16 BTGs; 12,000 troops.
- Partisan forces (DPR and LPR) – 10 BTGs; 31,430 troops.
- Media infrastructure.
- Cyber forces.
- Preexisting ground lines of communication (highway and rail network).
- Preexisting air lines of communication (Donetsk and Luhansk).
- Preexisting sea lines of communication (Sevastopol, Mariupol).

Elements of National Power

Diplomatic

- 'Novorossiia' to facilitate Russian support to underrepresented ethnic Russians within Ukraine.

- Gift of Crimea to Ukraine in 1954 was illegal ~ Crimea belongs to Russia and is predominately Russian.

Information:

- Plausible deniability.
- Russia is the protectorate of all ethnic Russians, regardless of where they are in the world.
- Ethnic Russian in Ukraine not adequately represented by Kiev.
- Control Ukrainian information and media infrastructure in Crimea and Donbas.
- Discredit government in Kiev (effectiveness, ability to manage situation)
- Discredit Ukrainian armed forces.

Military:

- See "Russian Military Strategy"

Economic

- Manipulate oil and gas available into Ukraine via directives to GazProm to weaken Ukrainian economy and to create social and political unrest.

Appendix 2: Elements of Russian Operational Art in the Russo-Ukrainian War

The Elements of Operational Art is developed based upon suppositions on the initial Russian plan prior to initiation of action in Ukraine, but after having annexed Crimea. Some of the items listed in the Elements of Operational Art were either never obtained, or were lost due to Ukrainian counteraction. This list is the best deductions that could be made given the limited information available on Russian operational art in relation to its actions in Ukraine. The goal was to focus at the operational level, and not allow strategic impacts seep into this work.

End State / Conditions

- Donbas in Russian hands.
- Ukrainian forces cleared from Donbas.
- Partisan face forward on all kinetic operations.
- Increased effectiveness of partisans.

Center of Gravity:

- Territorial: Donbas (Primary COG)
- Internal Support: Partisan forces (Supporting COG)
- Retention of Donbas: BTGs (Supporting COG)

Decisive Points:

- Control of Donetsk (Important air LOC)
- Control of Luhansk airport (Important air LOC)
- Control of port at Mariupol (Important sea LOC)
- Control of Kramatorsk air base (Important air LOC)
- Control of Debal'tseve (Important ground LOC)

Lines of Effort:

- LOE #1: Control LOCs (Ground, air, sea)
- LOE #2: Control Information Dissemination
- LOE #3: Clear Donbas of Ukrainian forces
- LOE #4: Achieve / maintain air superiority

Operational Reach:

- Forward positioned logistics in Southern Military District.
- Common, secure border between Southern Military District and the Donbas.
- Air superiority via A2/AD coverage and BTG-organic air defense capabilities.
- Air LOCs – Donetsk Airport, Luhansk Airport, Kramatorsk air base
- Ground LOCs – Rail and highway system in Donbas
- Sea LOCs – Sevastopol, Mariupol, Odessa

Basing:

- Permanent: Undisclosed positions within Russia's Southern Military District, leveraging sustainment system of the 49th Army.
- Nonpermanent: Donetsk airport, Luhansk airport, Kramatorsk air base, in urban areas

Tempo:

- Covert, unannounced unconventional operations to set conditions for conventional operations.
- Covert, unannounced unconventional operations to control critical infrastructure.
- Partisan operations to set the conditions for conventional operations.
- Always possess overmatch against Ukrainian forces (BTG).
- Recon-strike model.

Phasing:

- Phase I: Seizure of critical infrastructure with the Donbas with unconventional forces and partisans.
- Phase II: Counteroffensive against Ukrainian reaction to actions in Phase I.
- Phase III: Conventional seizure of infrastructure not gained in Phase I or Phase II.
- Phase IV: Defeat Ukrainian countermeasures or counterattacks.
- Phase V: Continued presence and partnership with partisan forces.

Culmination

- Unable to control air LOCs at Donetsk airport or Luhansk airport.
- Unable to control ground LOCs at Debal'tseve or keep highways in Donbas open.
- Too much negative pressure from the international community.

Risk

- International community reacts with military force to support Ukraine.
 - Mitigation: Use unmarked forces and equipment to create deniability of involvement.
- BTGs becoming isolated and destroyed piecemeal.
 - Mitigation: BTGs possess overmatch capability.
- Ukrainian air force or an assistance force providing air support capability.
 - Mitigation: BTGs possess air defense capability (used in conjunction with IADS).
- Southern Military District operating with single service (Army)
 - Mitigation: BTGs possess MLR and air defense capability to deny air superiority and provide long range fires in support of ground forces

Appendix 3: Russian Operational Approach

The Russian operational approach was deduced from assessing terrain, infrastructure, and Russia / partisan action early in the Donbas campaign. Some of the items listed above, such as control of the port of Mariupol were not achieved by the Russians.



Appendix 4: Selected Timeline of the Russo-Ukrainian War

Dates for timeline selected on the initiation of reported hostilities and the end of major battles and operations. The information for the timeline was pulled from a variety of sources, to include those listed in the bibliography, plus periodic information reports from the Institute for the Study of War.

February 2014 – Russian annexation of Crimea begins

- 18-23 February: Euromaidan Revolution
- 21 February: President Viktor Yanukovich flees to Russia
- 27 February: One company-size element of Russian infantry seizes the Crimean parliament and cabinet ministers' headquarters in Simferopol
- 27 February: Russian forces seize the airports in Simferopol and Sevastopol
- 28 February: Russian forces seize state television company, and telephone and internet providers

March 2014 – Russian annexation of Crimea concludes

- Russia increases GasProm rates by forty percent
- 3 March: Russian forces ("Little Green Men") seize political, administration, and military facilities in Kramatorsk, Sloviansk, Donetsk, Luhansk, and Kharkiv
- 6 March: Russian forces control all media outlets in Simferopol
- 15 March: Russian forces seize control of Crimea's only gas pipeline and distribution center
- 18 March: Russia annexes Crimea
- 20 March: Ukraine formally acknowledges annexation of Crimea; Ukraine withdraws its 25,000 soldiers on the peninsula

April 2014

- Russia increases GasProm rates by another ten percent
- Donetsk People's Republic and Luhansk People's Republic established
- Russian forces seize Debalt'seve
- 5-17 April: Separatists and Russian special operations forces seize control of critical infrastructure in Ukraine
- 12 April: Sloviansk captured by Russian forces
- 15 April: Kramatorsk airport recovered by government forces
- 18 April:
 - Kramatorsk television tower recovered by government forces
 - Battle of Sloviansk begins (First offensive)

May 2014

- Russia cuts all GasProm sales to Ukraine
- 2-5 May: Second offensive, Battle of Sloviansk
- 5-31 May: Battle of Sloviansk continues at a low level
- 6 May: Battle of Mariupol begins (continues through month)
- 26-27 May: First Battle of Donetsk Airport (Ukrainian victory)

- 26 May: Partisans capture Donetsk Airport
 - 27 May: Ukrainian forces retake Donetsk Airport
- People's Republics of Donetsk and Luhansk founded

June 2014

- 3-30 June: Third Offensive, Battle of Sloviansk
- 14 June: Battle of Mariupol ends (Ukrainian victory)
- Operation to reclaim Kramatorsk

July 2014 – Begins Russian “Summer Offensive”

- 5 July: Battle of Sloviansk ends (Ukrainian victory)
- Ukraine recaptures Kramatorsk and Debal'tseve
- 11 July: Zelenopillya rocket attack
- 13-23 July: Zabrodski's Raid
- 13-24 July: Battle of Luhansk Airport

August 2014

- 7 August: Ukrainian volunteer militia attempt to retake Ilovaisk
- 18 August: Battle of Ilovaisk begins
- 24 August: Russia commits reinforcements to Ilovaisk
- 27 August: Russian counterattack and siege at Ilovaisk
- 28 August: Political agreement reached for Ukrainian forces to retrograde
- 29 August: Retreating Ukrainian column is slaughtered

September 2014 – Ends Russian “Summer Offensive”

- Battle of Ilovaisk ends (Russian victory)
- 5 September: Minsk Protocol
- 28 September: Second Battle of Donetsk Airport begins (concludes on 22 January)

October 2014

- 5 October: Russian and DPR forces gain foothold at Donetsk Airport
- 5-31 October: Battle continues at Donetsk Airport

November 2014

- Second Battle of Donetsk Airport continues

December 2014 – Begins Russian “Winter Offensive”

- 5 December: Ukrainian forces lose control of old terminal to Russians at Donetsk Airport
- 29 December: Major Russian attack at Donetsk Airport

January 2015

- 12 January: Major Russian attack at Donetsk Airport
- 13 January: Volnovakha Bus Attack (DPR MLR attack on bus at checkpoint)
- 14 January: Battle of Debal'tseve begins
- 17-18 January: Ukrainian counteroffensive at Donetsk Airport (last gasp)
- 19 January: Russian BTG arrives to thwart the Ukrainian counteroffensive at Donetsk Airport; turns the tide of the battle to the Russians
- 22 January:
 - Second Battle of Donetsk Airport ends (Russian victory)

- Russian forces begin siege of Debal'tseve by cutting the city's electricity and utilities
- 24 January: Russian rocket attack at Mariupol

February 2015 – Ends Russian “Winter Offensive”

- 1 February: Russian forces control both shoulders around Debal'tseve
- 9 February: Russian forces seize Lohvyne, the last Ukrainian supply artery
- 10 February:
 - Russian offensive on the Debal'tseve salient
 - Battle of Shyrokyne begins
- 12 February: Minsk II Agreement
- 13-17 February: Ukrainian forces attempt to break out of encirclement in Debal'tseve
- 17 February: Russians launch major assault to seize Debal'tseve
- 18 February: 2,500 Ukrainian soldiers withdraw from Debal'tseve
- 19 February: Approximately 4,000 more Ukrainian soldiers withdraw from Debal'tseve
- 22 February: Battle of Debal'tseve ends (DPR, LPR, Russian victory)

March 2015

- Battle of Shyrokyne continues

April 2015

- Battle of Shyrokyne continues

May 2015

- Battle of Shyrokyne continues

June 2015

- 3 June: Battle of Marinka
- Battle of Shyrokyne continues

July 2015

- 3 July: Battle of Shyrokyne ends (Ukrainian victory)

August 2015

- Low-level operations continue

September 2015

- Low-level operations continue
- 30 September: Russia begins operations in Syria

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