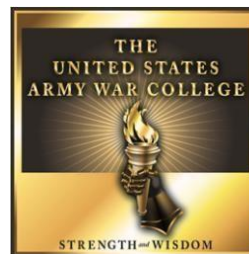


U.S. Army Changes Required to Counter Russian Military Aggression

by

Lieutenant Colonel Brendan C. Raymond
United States Army

Under the Direction of:
Colonel Douglas V. Mastriano



United States Army War College
Class of 2017

DISTRIBUTION STATEMENT: A

Approved for Public Release
Distribution is Unlimited

The views expressed herein are those of the author(s) and do not necessarily reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government. The U.S. Army War College is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

REPORT DOCUMENTATION PAGE			Form Approved--OMB No. 0704-0188		
The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 01-04-2017		2. REPORT TYPE STRATEGY RESEARCH PROJECT		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE U.S. Army Changes Required to Counter Russian Military Aggression			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S) Lieutenant Colonel Brendan C. Raymond United States Army			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Colonel Douglas V. Mastriano			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army War College, 122 Forbes Avenue, Carlisle, PA 17013			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution A: Approved for Public Release. Distribution is Unlimited. To the best of my knowledge this SRP accurately depicts USG and/or DoD policy & contains no classified information or aggregation of information that poses an operations security risk. Author: <input checked="" type="checkbox"/> PA: <input checked="" type="checkbox"/>					
13. SUPPLEMENTARY NOTES Word Count: 9365					
14. ABSTRACT The Russian military operations in Georgia (2008), Crimea and Eastern Ukraine (2014), and Syria (2015) demonstrate that the characteristic of Russian warfare is dynamic. Driven by factors of technological advances, changes in doctrine, and the incorporation of lessons from recent conflicts in the Middle East, Russia revolutionized their methods of conducting warfare artfully integrating lethality, coercion, and disinformation to achieve strategic effects on the modern battlefield. To deter Russia's aggressive behavior and interventionist agenda in Europe, Eurasia and the Middle East, the U.S. Army must increase the size and capability of its forces committed to Europe, incorporate lessons learned to transform current doctrine and training of decisive action, and develop new material to address challenges with joint force entry operations, joint combined arms maneuver, and the integration and delivery of joint fires. A focus on these improvements will enable the U.S. Army to provide a more credible deterrent in Europe, reassure America's partners and allies, and prepare the military for future conflict against similar near-peer competitors.					
15. SUBJECT TERMS Russia, Georgia, Crimea, Eastern Ukraine, Syria, Warfare, Deterrence, Doctrine, Training, Posture					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 49	19a. NAME OF RESPONSIBLE PERSON
a. REPORT UU	b. ABSTRACT UU	c. THIS PAGE UU			19b. TELEPHONE NUMBER (w/ area code)

U.S. Army Changes Required to Counter Russian Military Aggression

(9365 words)

Abstract

The Russian military operations in Georgia (2008), Crimea and Eastern Ukraine (2014), and Syria (2015) demonstrate that the characteristic of Russian warfare is dynamic. Driven by factors of technological advances, changes in doctrine, and the incorporation of lessons from recent conflicts in the Middle East, Russia revolutionized their methods of conducting warfare artfully integrating lethality, coercion, and disinformation to achieve strategic effects on the modern battlefield. To deter Russia's aggressive behavior and interventionist agenda in Europe, Eurasia and the Middle East, the U.S. Army must increase the size and capability of its forces committed to Europe, incorporate lessons learned to transform current doctrine and training of decisive action, and develop new material to address challenges with joint force entry operations, joint combined arms maneuver, and the integration and delivery of joint fires. A focus on these improvements will enable the U.S. Army to provide a more credible deterrent in Europe, reassure America's partners and allies, and prepare the military for future conflict against similar near-peer competitors.

U.S. Army Changes Required to Counter Russian Military Aggression

Russia is America's #1 threat...I want to be clear to those who wish to do us harm...we will stop you and we will beat you harder that you have ever been beaten before. Make no mistake about that.

—General Mark A. Milley¹

Russia presents a greater security challenge to the U.S and our European allies than at any time since the Cold War.² Russia has challenged the post-Cold War international order and abandoned agreed upon frameworks that fostered cooperation between the U.S., Europe, and Russia.³ Russia's 2008 conflict in Georgia, the annexation of Crimea in 2014, on-going clandestine military operations in eastern Ukraine, and the military intervention in Syria create a security dilemma stretching from western Asia to the Mediterranean Sea.⁴ Russia believes that these incursions will intimidate America's European allies and force the U.S. to recognize Russia as a regional hegemon.⁵ Russian aggression threatens America's enduring national interest of a "rules-based international order...that promotes, peace, (and) security."⁶ Deterring Russian aggression and protecting America's allies and partners is a vital U.S. national interest.

Russian military operations in Georgia, Crimea and Eastern Ukraine, and Syria demonstrate that the characteristic of Russian warfare is dynamic. Driven by factors of technological advances, changes in doctrine, and the incorporation of lessons from recent conflicts in the Middle East, Russia revolutionized their methods of conducting warfare artfully integrating lethality, coercion, and disinformation to achieve effects on the modern battlefield. To deter Russian aggression in Europe, Eurasia, and the Middle East, the U.S. Army must increase the size and capability of its forces committed to Europe, transform current doctrine and training of decisive action, and develop new

material to address challenges with joint force entry operations, joint combined arms maneuver, and the integration and delivery of joint fires. A focus on these improvements will enable the U.S. Army to provide a more credible deterrent in Europe, reassure America's partners and allies, and prepare the military for future conflict against similar near-peer competitors.

Observations of the Russo-Georgian War in 2008

Since the dissolution of the Soviet Union in 1991, revisionist factions of the Russian Federation have attempted to reestablish Russia's prominence as a global super power and recreate Russia's "sphere of influence" over non-NATO, former Soviet states.⁷ In August 2008, Russia acted upon this strategic goal when Russian military forces launched a cross-border incursion against their neighbor, the sovereign state of Georgia. Russia's political objectives were to topple the Georgian government, dissuade Georgia's acceptance in the NATO, and deter other former Soviet states from seeking similar relations with the West.⁸ By installing a pro-Russian regime in Tbilisi, Russia could control the border regions of Abkhazia and South Ossetia and establish influence over the energy corridor located in the South Caucasus region.⁹ Strategically, Russia's military control of contested Georgian areas would not only restore the Federation's regional hegemony, but it would also deny the U.S. critical access and influence in the Caucasus region.¹⁰

Geopolitical Context

Russia's meddling in Georgian affairs was not a new occurrence. Since the fall of the Soviet Union, ethnic Russian separatists in Abkhazia and South Ossetia sought independence from Georgia. In July 1992, fighting began between Georgian military forces and armed groups in Abkhazia resulting in an initial ceasefire agreement

brokered by the Russian Federation in September 1992.¹¹ As fighting resumed in late 1992, the United Nations (UN) established an initial presence in Tblisi to assess reports of human rights violations, and ultimately, the UN formed a multinational peacekeeping force to verify compliance with the 1994 ceasefire agreement through UN Security Council Resolution 858.¹² Designated the UN Observer Mission in Georgia (UNOMIG), the Russian Federation led a peacekeeping mission, consisting of Russian and Commonwealth of Independent States (CIS) forces, to monitor the ceasefire agreement, investigate violations, and secure a buffer zone in the conflict area.¹³

The region remained largely in a political stalemate for the next 14 years as diplomatic attempts at reconciliation failed. During this period, the size of Georgia's peacekeeping contingent significantly reduced while Russia's peacekeeping effort of approximately 500 Soldiers remained focused on countering attacks between separatists and Georgian forces.¹⁴ Tensions between the Russian and Georgian government steadily escalated through late 2007 and 2008, with Russian leaders citing Georgian aggression in the region and their desire to enter into negotiations to join NATO.¹⁵ On August 26, 2008, the Russian Federation officially recognized Abkhazia and South Ossetia as "independent states" and Russian military forces occupied the region two days later.¹⁶

Socio-Economic Dynamics

During the years leading up to the 2008 invasion of Georgia, Moscow supported the ethnic Russian separatist movement in Abkhazia and South Ossetia. To admonish Georgia for its pro-Western policies, Russia provided the separatists military support and equipment to further destabilize the region and maintain influence over Georgia.¹⁷ As Georgia attempted democratic reforms, the Russia strengthened their positions

within Georgia's breakaway regions.¹⁸ In Abkhazia and South Ossetia, Russia replaced politicians with intelligence operatives.¹⁹ To exacerbate tensions with Georgia, Moscow implemented "conferral of Russian citizenship to Georgian nationals and the provision of passports on a massive scale" to the breakaway region "without the consent of the Georgian Government."²⁰

Since the Soviet era, Abkhazia and South Ossetia maintained patron ties and an economic bond to the Russian Federation. Moscow "manipulated ethnic disputes to gain political advantages and encouraged minorities and regional leaders to express various grievances against the central government" in Tbilisi.²¹ The peoples of this region characterize their national identity as Russians not Georgians. These conditions made the area fertile to the influences of the Kremlin and facilitated Russia's political objectives during the 2008 invasion of Georgia. The gradual 'Russification' of Abkhazia and South Ossetia also included the introduction of the Russian ruble as the official currency, the implementation of a system of educational exchanges, and the targeted sanctions of Georgian products to undermine Tbilisi's authority in the region.²²

Military Confrontation

As Russo-Georgian relations deteriorated, it was clear that the situation in Abkhazia and South Ossetia would result in military conflict. The Russian Federation conducted extensive training exercises along the Georgian border and rehearsed the deployment of large-scale ground forces for operations in South Ossetia.²³ These exercises assured that Russian military forces were at a highest state of readiness.

On August 28, 2008, Russian forces attacked to seize the capitals of Abkhazia and South Ossetia. Although the seizing the initiative early during the swift execution of their invasion plan, Russian military faced considerable resistance from a well-equipped

and well-trained Georgian military force.²⁴ Having received training and military equipment from the U.S. and Western powers, Georgia's modern military had recent operational experience at home and abroad in Iraq and Afghanistan. Georgia leveraged these tactical advantages and their "tanks and infantry fighting vehicles were generally better equipped than were their Russian counterparts."²⁵ However, despite antiquated equipment and less effective training, the Russian military prevailed Georgia's defense forces by combining overwhelming numeric superiority with air and naval forces fire support to achieve operational objectives.²⁶

Following the conflict, Russian military leader conducted a series of after action reviews to address operational and combat support shortfalls. Senior leaders attributed failures in the conflict to the lack of modern equipment including global position systems for navigation, electronic warfare capability to counter enemy air defense systems, night vision devices for reconnaissance and nighttime operations, sophisticated and encrypted communications equipment, and a lack of adequate armor and protection on vehicles.²⁷ Operationally, poor command and control resulted in fratricide and the inability to conduct effective combined arms maneuver.²⁸ The Russian military lacked the ability to execute joint operations on the modern battlefield. Ground forces lacked the communications architecture to coordinate effectively with attack helicopters and fixed-wing aircraft.²⁹ These deficiencies coupled with the lack of modern precision munitions and unmanned aerial vehicles (UAV) made targeting Georgian forces extremely difficult.³⁰ Russian critics assessed that the Russian victory in Georgia was not achieved by technology but by "the overwhelming quantity rather than the quality" of their forces.³¹

Information and Cyber Warfare

Russia has a long tradition of employing information and psychological warfare to influence ethnic Russian outside its borders.³² Targeting pro-Russian separatist forces in Abkhazia and South Ossetia, Russia began a systematic escalation of political rhetoric in the months leading up to the conflict with Georgia. As Russian forces crossed the Georgian border in late August 2008, Moscow seemed to be on the “information defensive” as the Georgian government quickly established a media press center within 30 kilometers of the fighting in South Ossetia.³³ Although Russian government leaders professed the legitimacy of their peacekeeping efforts and response to Georgian aggression, Georgian leaders, aided by the media, were able to counter this Russian narrative. Anti-Russian publicity dominated the media until Georgian forces began suffering losses.³⁴ As the conflict ensued, Russian journalists and military officials reaffirmed the information offensive highlighting Georgia’s violation of international law and the indiscriminate targeting of civilians.³⁵

Russia’s cyber warfare strategy during the conflict with Georgia focused on the control of military and government lines of communication within the state.³⁶ Moscow “capitalized on the fact that Georgia did not have its own Internet Exchange Point (IXP)” and depended heavily on other countries for this support.³⁷ This made it relatively easy for Russian cyber teams to locate critical choke points and target key governmental websites of the Georgian government.³⁸ However, Russia’s initial employment of cyber-attacks against Georgia was ineffective.³⁹ Ultimately, Russia was able to couple cyber attacks with media interviews to gain an advantage in the conflict. However, for a majority of the 5 day incursion in Georgia, Russia’s information operations coupled with

its' psychological and cyber warfare failed to disrupt Georgia's command and control of military forces or achieve decisive effects.

Observations of Russian Military Operations in Crimea and Eastern Ukraine 2014

In the twilight of the Russo-Georgian war, "the minor international outrage and lack of any meaningful punishment" for Moscow's violation of Georgian sovereignty, international norms, and the balance of regional power provided the catalyst for Russia's aggressive posture with its close neighbor, Ukraine.⁴⁰ As the factions in Ukraine courted better ties with Europe and Western powers, Putin demonstrated his resolve to discourage Western-leaning sentiments and reinforce Russia's sphere of influence over former Soviet states. Russia's intense distrust of the West coupled with historic Russian interests in Ukraine and a compulsion to protect Russian separatists abroad ultimately provided Putin the rationale to commit military forces in Crimea and the Donbas region.

Geopolitical Context

Russia recognizes a special relationship with former Soviet states for many reasons; yet, the existence of resident ethnic Russian populations within these countries has created a belief in a "greater Russian World (*Russskiy mir*) that transcends Russia's state borders."⁴¹ More so than any other former Soviet state, the Russian Federation views Ukraine as an extension of Russia's identity and culture. As the birthplace of the Russian Orthodox religion, the headquarters of the Russian Black Sea Fleet, and a vital transit location for Russia's export of oil and gas to Europe, Ukraine is militarily, economically, religiously, and culturally significant to Russia.⁴² For this reason, the actions of Western powers to court a strong relationship with Ukraine at Russia's expense was unacceptable. Unlike Georgia, whose integration into NATO and

alignment with Europe would not add much to Western military strength, Ukraine's incorporation into "Western structures would shift the strategic balance in Europe, ending any residual Russian hope of...restoring Soviet hegemony" in Eurasia.⁴³

Following the Russo-Georgian conflict many Ukrainian officials expressed their misgivings for Russian intentions in Crimea and the Donbas region of Eastern Ukraine.⁴⁴ As the European Union sought better relations with Ukraine, Russian President Vladimir Putin, stated that any "extension of NATO to include Ukraine could lead to the disintegration of the country."⁴⁵ Consequently, Ukraine became "the target of Putin's dream to resurrect the Soviet Union, "to dissuade further western involvement in the region, and to reestablish Russia's sphere of influence over former Soviet states."⁴⁶ By "maintaining a permanent crisis" in Ukraine, the West would view the country as a failed state incapable of making the required reforms and initiatives for inclusion in NATO and the European Union (EU).⁴⁷ With Ukraine's likely reorientation back towards Russia, Central and Eastern Europe countries fear the loss of an important buffer to additional Russian aggression on the continent.⁴⁸

Socio-Economic Dynamics

Pro-Western social unrest in Ukraine caused great concern for Russia. With the exception of the ethnic populations in Crimea and the Donbas region, Ukrainian factions elsewhere pressed the Kiev government to explore a stronger relationships and better economic opportunities with European powers. To punish pro-Western sentiments, Russia introduced restrictions on Ukrainian exports causing economic difficulties and exacerbating the divide between Ukraine's government and its' citizens.⁴⁹ Internal crisis turned violent as pro-Western protests resulted in an agreement to hold early presidential elections that ousted the Kiev's pro-Russian regime and placed a

democratic president, Petro Proshenko, in charge of Ukrainian governmental affairs in 2014.⁵⁰

Similar to Abkhazia and South Ossetia, Russia took an active role to foment pro-separatist movements amongst the ethnic Russian populations in Crimea and the Donbas region of Eastern Ukraine. Russia officially recognized these diasporas by providing a passport policy and dual citizenship rights, as well as, military aid, training, equipment, and support to pro-Russian leaders in these areas.⁵¹ Following the elections that brought Proshenko to power, Russian forces initiated joint operations aimed at creating uncertainty in the internal affairs of Ukraine in Crimea and the Donbas region. Building on lessons from their experiences in Georgia, the Russian military efficiently accomplished their strategic objectives and effectively combined elite, Russian forces with proxy force support from pro-Russian personalities in the contested areas.

Military Confrontation

Russia's military operations in Ukraine may have been "a strategic surprise for much of the West, but this was despite a range of well-informed analysis...pointing specifically to Crimea as the next logical target for an assertive Russia."⁵² Following Ukraine's national election, Russia initiated a whole-of-government approach to support military operations against the new Proshenko regime. In February 2014, Russia deployed several hundred special operations forces to Crimea to instigate a 'popular uprising' amongst the pro-Russian ethnic population in support the annexation of the peninsula to Russia.⁵³

With the initiation of conflict on February 27, Russian forces seized airports, control sea ports of entry, and the Russian Black Sea Fleet blockaded Ukrainian ships

to isolate the region.⁵⁴ Over the next several days, unidentified Russian forces continued to fix Ukrainian forces in their bases while instigating popular support for regional regime change to install a new pro-Russian mayor in Sevastopol, Crimea.⁵⁵ Ultimately, Russian military forces were able to complete the transition of control from Ukrainian forces to pro-Russian forces without engaging in direct conflict. The seizure of Crimea did not adequately test Russian forces in combat, but the demonstration of Russian capability coupled with new equipment and a disciplined force set the conditions for Russia to further exploit Ukrainian sovereignty in the Donbas region in May 2014.⁵⁶

With the annexation of Crimea, the Russian military, once again, massed armored, mechanized, and motorized forces along a neighboring state's border. This time it was Ukraine. The Proshenko government directed the mobilization of 15 brigades to deploy east to protect Ukrainian sovereignty from the suspected Russian invasion.⁵⁷ Likely in response to the rapid mobilization of Ukrainian forces, Russian leadership decided on the covert option to continue aid to the separatist movement while Ukraine employed a "joint police-military counteroffensive against the growing separatist bastion in the Donbas."⁵⁸

In July 2014, Ukrainian Special Forces and the 95th Air Assault Brigade seized the city of Sloviansk from the Russian separatist movement with minimal civilian casualties and destruction of critical infrastructure.⁵⁹ Ukrainian forces capitalized on this and launched a subsequent offensive to seize key terrain east of Sloviansk to further isolate the separatist region from supporting Russian forces.⁶⁰ With the separatists cut off from their Russian lines of communication, Moscow ordered a series of artillery and

rocket strikes on Ukrainian forces and followed this with a counteroffensive across the Russian-Ukraine border in August 2014 at Iloviask.⁶¹ The combination of effective rocket and artillery fires with the speed of Russian armored and mechanized forces quickly overwhelmed Ukrainian forces in this battle forcing an immediate withdrawal.⁶²

Russian forces capitalized on their success and launched subsequent offensive operations against ill-equipped Ukrainian forces defending the port city of Mariupol, the Luhansk Airport, and the Donyetsk Airport.⁶³ With these key infrastructure hubs returned to Russian separatist control, Ukrainian forces established defensive positions to prevent Russian exploitation and further seizure of other key terrain. Ukraine heavily reinforced the critical Debal'tseve rail junction in late August 2014.⁶⁴ Russia again employed devastating rocket and artillery fires against Ukraine's 128th Mechanized Brigade while accompanying Russian armored and mechanized forces seized the area forcing a subsequent Ukrainian withdrawal.⁶⁵

Information and Cyber Warfare

With the onset of the conflict in February 2014, Moscow began an information operations campaign to discredit the legitimacy of Ukraine's pro-democratic, western administration. Russian media outlets sought to pervert events in Ukraine by referring to Ukraine's new government as a "facist junta and claiming they committed atrocities that never happened."⁶⁶ During the seizure of Crimea and subsequent cross-border attacks against Ukraine forces in the Donbas region, Russia repeatedly denied its presence in the country despite tremendous contradictory evidence.⁶⁷

Russia used cyber-attacks to disrupt power-supply facilities, transportation assets, internet technologies, and disseminate misinformation to perpetuate pro-Russian messages.⁶⁸ During the Crimean invasion, communications facilities reported

degradation of services on websites, landlines, internet, and mobile phones throughout the peninsula.⁶⁹ Although effective in Crimea, the Russian cyber warfare efforts to disrupt Ukrainian communications in Kiev and the Donbas region were less conclusive. However, when viewed from a larger perspective, Moscow's deception, misinformation, and disinformation campaign, coupled with targeted cyber attacks, permitted the state from avoiding a significant confrontation with Western powers despite obvious the violations of international law.⁷⁰

Russian Military Assistance in Syrian Civil War (2015)

Russia has long viewed itself as a great power. During the Cold War, the Soviet Union realized this superpower vision by establishing a counterbalance to Western ideals throughout the globe. In the Middle East, the Soviet Union befriended states like Syria and others that demonstrated a resistance to the West and promoted an adversarial policy towards the U.S. For the Soviet Union, the Soviet-Syrian alliance served many purposes, most notably, to provide them with an ally to reduce democratic and free market influence in the region.⁷¹ However, the 1990s marked "the decline of the Soviet Union's superpower status," and the Russian Federation largely withdrew from global affairs in an effort to address internal challenges and improve relations with the West.⁷² However, with the reemergence of Russia prominence, Putin seized the opportunity to extend Russia's influence back into the Middle East and restore "the country's position as a great power outside of the former USSR."⁷³

Geopolitical Context

Over the past several years, the U.S. has attempted to cooperate with Russia to confront global challenges. In the summer of 2013, Russia negotiated the removal of Syria's chemical weapons capabilities after President Al-Assad defiantly employed the

weapons against his own people.⁷⁴ As U.S. shifted focus in the region from the Syrian Civil War to a campaign to defeat ISIS, Putin seized the opportunity to establish himself as “the arbiter of the Syrian crisis.”⁷⁵ Putin agreed to renew Russian support to the Syria to reverse the gains attained by anti-regime forces threatening Bashir al-Assad’s control of the country. When viewed on a larger scale, Russia’s decision to provide direct military support to the Al-Assad regime “should be read under the backdrop of the ongoing competition between the West and Moscow” over influence in the Middle East.⁷⁶ If Russia took no action, Putin assessed that Syria would descend “into Washington’s direct or indirect sphere of influence (and this) was abhorrent to Moscow.”⁷⁷

Socio-Economic Dynamics

Russia encompasses a vast landmass stretching from Eastern Europe through Eurasia to the Asia-Pacific region. Within these sovereign borders resides an amalgamation of ethnicities and cultures that follow distinct traditions and practice differing religions. The recent migration of Muslims from Russia’s Northern Caucasus region to the far eastern portion of the country presents a significant national security challenge.⁷⁸ Russia considers this area vulnerable to radical Islamic fundamentalist beliefs as Islamic State (ISIS) recruiters are targeting migrants in the region.⁷⁹ This budding situation is reminiscent of Russia’s conflicts with radical Islamic fundamentalist insurgents in Chechnya during the 1990s. Russia views ISIS interference in the region and cultivation of Russia’s Islamic community as an existential threat. With nearly 20 million Muslims living within the borders of Russia, the possibility that radical Islamic rhetoric could inspire similar conflicts provides Russia a substantial motive to intervene in Syria’s Civil War and counter ISIS in the Middle East.⁸⁰

“Russia is a television culture” and since Russia’s involvement in Syria began, Russian media has completely shifted its focus from Ukraine to Syria.⁸¹ As domestic support for President Putin’s operations abroad improves, so does his position on the global stage. Russian intervention in Syria transformed the state from a “minor actor on the Syrian stage to the lead player” across the Middle East region.⁸² Allied with Syria, Iran, and Hezbollah forces, Russia’s ability to project power beyond its borders and neighboring states provides Putin with the ability to place Russia “on equal par with the power and prestige of the United States.”⁸³

Military Confrontation

In the summer of 2015, opposition forces in Syria had President Bashar Al-Assad’s government on the verge of defeat.⁸⁴ In September 2015, Russian military forces arrived at Humaymim Air Base and established operations in Syria. Deploying ground forces, air and naval forces, air defense units, Special Forces and intelligence units, the Russian military had a force capable of supporting Syrian forces with devastating effects.⁸⁵ Russian forces supported the Assad regime’s ability to retake Hama, Homs, Palmyra, Damascus and Aleppo. As Syrian and Iranian forces launched major attacks, the Russians integrated aviation and artillery fires, surveillance and targeting platforms, and special operations forces.⁸⁶ From cruise missiles, attack helicopters, long-range bombers, and strike aircraft, the Russian experience in Syria has provided an opportunity to showcase Russian innovation.

Although providing valuable combat experience, Russia’s involvement in Syria also gives insight into the limitations of Russian military capability specifically in their ability to integrate joint effects, the employment UAVs, and lack of precision strike

capability.⁸⁷ The vast devastation infrastructure and indiscriminate targeting of civilians demonstrates that Russia's methods of technological employment of capabilities on the modern battlefield lack sophistication.

Information and Cyber Warfare

From a strategic perspective, Russia stands to gain a great deal from their involvement in Syria. From brokering the removal of the Syrian chemical weapons in 2013 to their altruistic support of the global campaign against terrorism, Russia is using their incursion into Syria as a means to garner support from the West in recognition of their contribution as an emerging power. With the recent conclusion of hostilities in Western Syria, Russia's military intervention has reestablished their influence in the region. Brokering deals with Syria, Iran, and later Turkey, Russia has clearly emerged with new geo-political capital.⁸⁸ Putin's successful demonstration of power projection in the Middle East has permitted Russia to establish partnerships with regimes that rival American interests and influence in the volatile area.⁸⁹ Putin is clearly playing to domestic and international audiences that Russia is a great power and that the world order needs adapt to encourage multilateral solutions to address global and regional challenges. That said, Russia's application of deception, misinformation, and disinformation continues and these actions clearly lack the transparency expected of a global power.

Characteristics of Contemporary Russian Warfare

The Russian experience during the Russo-Georgian conflict and their analysis of "modern war with which the United States has been grappling for over a decade in Iraq, Afghanistan, and elsewhere," provided political and military reformers lessons to consider.⁹⁰ This combination of "asymmetric and modern forms of warfare" focus on the

weaknesses of Russia's opponents and apply non-linear or hybrid characteristics with modern weapons to achieve their objectives.⁹¹ Russia has restructured their military and introduced a new military doctrine that integrates elements of soft power to play a larger role in successful military operations.

Russian Military Reform

Following the 2008 Russo-Georgian conflict, Moscow began a systematic process to reform the military and invest in capabilities to modernize the force. Initial reform efforts focused on the reduction of personnel end strength and the restructuring of land forces from division-centric formations to brigades as the primary combat unit.⁹² According to the former Russian Minister of Defense, Anatoly Serdiukov, this reorganization provided the Russian Army with the capability to conduct multiple regional conflicts along Russia's border simultaneously.⁹³ Moscow recognized that the aged fleet of tanks, infantry personnel carriers, artillery, helicopters, and aircraft lacked the capabilities to match the technological advances of Western militaries. From 2009 to 2013, the Russian military made great strides to introduce and train their military on new weapon systems including modernized ballistic missile systems, tanks and armored vehicles, helicopters, aircraft, nuclear submarines, unmanned aerial vehicles, electronic warfare capability, and satellite communications and navigation systems.⁹⁴

Russian reformers also identified deficiencies with the military's ability to integrate joint operational capabilities during the Russo-Georgian War. Although from an overall perspective, the Russian Federation was able to deploy forces from different services, it was more the sheer numeric superiority of these forces that overwhelmed Georgia not the coordination and synchronization of its forces.⁹⁵ Similar to the United States' military transformation under the 1986 Goldwater-Nichols Reform Act, the

Russian military began the reorganization to incorporate joint interdependence between military services. Instead of depending solely on extremely detailed planning, the Russian military has focused their exercises to demonstrate more integration of joint concepts to build capacity through training and the education of their forces.⁹⁶

Russia's Gerasimov Doctrine

In addition to restructuring the military and increasing defense spending to achieve modernizing reforms, the Russian military renewed its efforts to advance a new method of warfare. For Russia, this new generation or “hybrid” warfare incorporates “conventional capabilities, irregular tactics and formations, terrorist acts...indiscriminate violence and coercion, and criminal disorder...to achieve synergistic effects in the physical and psychological dimensions of conflict.”⁹⁷ The Russian chief of the general staff, General Valery Gerasimov, “observing American and European experiences in the Gulf War, Operation Iraqi Freedom, and the intervention in Libya” noted the “political, economic, cultural, and other nonmilitary factors play decisive roles in these conflicts.”⁹⁸ According to Gerasimov, “intelligence and the domination of the information space” provides the vehicle to set conditions to achieve objectives.⁹⁹ This new doctrine of warfare “relies heavily on an element of information warfare that the Russians call reflexive control” a concept that “causes a stronger adversary (to) voluntarily choose the actions most advantageous to Russian objectives by shaping the adversary’s perception of the situation decisively.”¹⁰⁰

For Gerasimov, the nonmilitary engagements that precede conflict are more important than the direct military engagement aspect of state on state wars. Instead of traditional military action following a declaration of war, Russia characterizes conflict as the initiation of military action against an adversary during a period of perceived

peace.¹⁰¹ These “non-contact clashes between highly maneuverable” clandestine forces coupled with the indirect, covert, and asymmetric actions of “armed civilians” and collaborators disrupt the adversary’s political, “military and economic power” and permit Russia to deny involvement.¹⁰² Once conditions are set, the Russian military applies overt land, air, sea, and information warfare to strike the adversary’s infrastructure, military capabilities, and control of the government.¹⁰³ Finally, Russia integrates “symmetric and asymmetric warfare by a combination of political, economic, informational, technological, and ecological campaigns” that causes an “inner decay” of the opponent’s sovereignty.¹⁰⁴

The evolution of Russia’s new generation warfare coupled with the structural reform of military forces since 2008 has improved Russia’s ability to successfully project military expeditionary capability beyond its’ borders into contested and uncontested regions. An analysis of the Russian force entry operations, joint combined arms maneuver, and employment of joint fires during the Russo-Georgia War, Crimea and Eastern Ukraine, and in Syria provides insight into these improvements and highlights Russia’s application of its’ new generation warfare employing conventional and unconventional capabilities to achieve their objectives.

Evolution of Russian Force Entry Operations and Expeditionary Capability

In 2008, Russian military forces responded to the deployment of Georgian troops in South Ossentia by executing the preplanned invasion outlined in the Caucasus battle plan. In this war, Russian conventional forces were “relatively inflexible” deploying “in large numbers and relying on firepower and mass over speed, agility, and flexibility” to defeat the Georgian defense forces.¹⁰⁵ “Solid preparation leading up to the war and a strong superiority in numbers” contribute to Russia’s success in the conflict.¹⁰⁶ Russian

forces were able to rapidly deploy conventional and unconventional forces in order to translate “strategic preparations into operational advantage.”¹⁰⁷ However, Russian ground forces employment of “mass-mobilization techniques...increased the number of casualties faced by their forces.”¹⁰⁸ This fact coupled with Russia’s failure to “upgrade or refurbish (their) equipment since the end of the Soviet Union” limited the flexibility of Russian operations and maintenance problems placed significant constraints on the Russian military’s expeditionary effectiveness.¹⁰⁹ Finally, although multiple military services participated in the conflict, the Russian military’s lack of “unity of command” resulted in missed opportunities to effectively coordinate efforts between the services and the inability to achieve joint synergistic effects.¹¹⁰

In comparison, the Russian military drastically improved their ability to conduct joint force entry operations and execute expeditionary operations during the invasion of Crimea. In late February 2014, Russia swiftly deployed special operations forces (SPETSNAZ) along with elite airborne and air assault units to seize airports and isolate Crimean ports.¹¹¹ While arming and advising ethnic-Russian collaborators on the peninsula, Russian military forces based in Crimea coupled with expeditionary special operations forces employed the element of surprise “to take control of the peninsula before the Ukrainian government and the international community had time to fully understand what was happening.”¹¹² The invasion not only highlights the successful improvement in Russian force entry operations, but it also identifies enhanced joint coordination between elite special operations forces, conventional ground forces, naval units, and air component forces. Following the invasion of Crimea, Russia attempted a similar small-scale invasion of Eastern Ukraine. However, unlike in Crimea, where

Russian elite troops demonstrated their high level of training and synchronization, the Russian invasion turned more conventional.

In comparison to Georgia, Crimea, and Eastern Ukraine, Russia's deployment of expeditionary forces to Syria was a result of an agreement with Bashir al-Assad and not a contested operation. Russia obtained permission from Syria to deploy ground and air forces onto Syrian soil and initiate operations against Syrian rebels and Islamic extremists. Similar to Crimea, Russian forces deployed S-300 surface-to-air missile (SAM) systems to Syria to create anti-access area denial zones to deter Western attempts to limit Russian operations in the Middle East.¹¹³ This system provides a layered defense against an adversary's air-to-surface and surface-to-surface attack.

Evolution of Russian Combined Arms Maneuver

During the 5-Day War in Georgia, Russian "tactics broadly followed a Soviet pattern, with air and artillery attack followed by the deployment of large ground forces."¹¹⁴ The Russian military's lack of global positioning systems and modern navigation devices forced armored units to move "large forces in column formation" presenting lucrative targets to Georgian forces.¹¹⁵ The inability of Russian ground forces to integrate combined arms maneuver resulted in higher casualties.

In comparison, in the spring of 2014, the Russian military invaded Crimea and forced the surrender of 190 Ukrainian military installations over a period of three weeks without the loss of life.¹¹⁶ Similarly, in Eastern Ukraine, Russian conventional forces effectively employed maneuver to flank Ukrainian forces and their use of fire support set the conditions for successful operations. "Former Soviet states need to watch for Russian agents and collaborators working in their security and military forces."¹¹⁷

In Syria, Russia's use of special operations force advisors and fire support provided Syrian regime forces the ability to effectively integrate combined arms maneuver against opposition forces. Embedded Russian advisors provided critical capabilities to Syrian Regime Forces as they attacked and seized terrain against Anti-Regime militias.¹¹⁸ Reports indicate that these missions provided incredible operational experience to Russian special forces and advisory mission personnel.¹¹⁹

Evolution of Russian Employment of Joint Fires

During the Russo-Georgian War, Russia lacked sophisticated joint targeting capability to integrate precision strikes against Georgian forces. Reports indicate that due to poor weather effects of low ceilings and limited precision-guided munitions, Russian air forces and rotary-wing attack aviation employed conventional munitions and effects against Georgian forces.¹²⁰ This kinetic targeting lacked the ability to adequately mitigate the effects of munitions on collateral facilities and created unnecessary destruction of infrastructure. However, the Russian military has significantly increased the ranges and lethality of their field artillery systems. Specifically, in Ukraine, Russian multiple rocket launcher (MRL) battalions delivered thermobaric artillery strikes that produced "a lethal area 10 times greater than an American MLRS battalion firing conventional, single-point detonating warheads."¹²¹

In Syria, Russia reverted to the non-precision targeting of Syrian rebels.¹²² The lack of sophisticated strike techniques is a result of two things. First, to achieve massing effects, Russia demonstrated the propensity to saturate an area over precision targeting to achieve greater effects on the battlefield. Secondly, Russia realizes that there is no incentive to constrain their use of force through precision techniques. Over the last year, at no time has the host government, the international community, or domestic

audiences demanded Russia to discriminately target opposition forces alone. There is no evidence that Russia has sought to ameliorate the suffering on civilians or reduce the collateral damage caused by their joint application of fires.

Recommendations for the United States Army and Joint Force

Russia intends to develop the capabilities to conduct up to 3 small-scale military operations against neighboring European states at once.¹²³ Considering Russian military forces current operations in Syria and Eastern Ukraine, this future capability provides Russia the opportunity to open conflict in another area simultaneously. Drawing on lessons from recent Russian military aggression, Russia would likely be able to conduct these operations before Western powers could adequately respond.¹²⁴ Russia possesses or is gaining an advantage in three capabilities that could prevent the U.S. and NATO allied forces from responding to a new crisis: anti-access/area-denial (A2/AD), combined arms warfare, cyber and electronic warfare, and information operations.¹²⁵ As a result, the United States Army must make changes to its current force posture in Europe and incorporate lessons learned into doctrine, training, and material to support joint force entry operations, combined arms maneuver, and the employment of joint fires against Russia's military and other near-peer competitors.

Joint Force Entry Operations

Over the last several years, Russia has deployed anti-access, area-denial (A2/AD) systems in areas critical to American and allied force projection that include long-range air defense missiles, anti-ship missiles, and surface-to-surface missiles positioned along its borders, as well as, in the Arctic, Belarus, Crimea, and Syria.¹²⁶ The strategic positioning of these systems provides Russia "the ability to contest critical land, sea, and air pathways to the Baltic States, the Black Sea, and elsewhere in

Central and Eastern Europe.”¹²⁷ These forces present a unique threat for U.S. and NATO that presently possess limited “forward-positioned capabilities in Eastern Europe.”¹²⁸ In order to successfully conduct contested joint force entry operations in Europe and Eurasia, the Army must assess the necessary improvements required to provide a credible forward-based deterrent, determine the current material investment required, assess its’ current ability to implement the Joint Access Operational Concept (JOAC), and identify the training requirements.

Improving the U.S. Army’s Doctrinal Approach to Joint Force Entry Operations.

As a global power, the United States must possess the ability to project military power into any region of the globe to protect our interests.¹²⁹ Given the characteristics of contemporary warfare and the future operating environment, the U.S. expects its adversaries to contest American power projection and access in the five domains: air, maritime, land, space, and cyberspace. For the U.S. military to conduct joint force entry operations to seize and expand a lodgment in enemy territory, the Joint Force has developed the Joint Operational Access Concept (JOAC) that explains how the Joint Force will attain local and temporary “cross-domain synergy to overcome future access challenges.”¹³⁰ To mitigate the effect of distance on force projection, and exploit vulnerabilities of adversaries layered anti-access and area denial capabilities, the U.S. military must establish “forward and intermediate bases critical to the projection of military force into the region” and position supplies and equipment forward.¹³¹ This is clearly nothing new for the U.S. Army. However, with the reduction of forward deployed land forces abroad and the increased capability of adversary’s ballistic missile range and lethality, the U.S. Army needs to identify alternative methods to preposition equipment for a future conflict in Europe.

Historically, the U.S. Army has forward deployed and maintained equipment stocks in Europe and Asia to allow follow-on forces to build combat power and initiate operations. In lieu of only having fixed bases and locations to secure forward deployed personnel and equipment, the U.S. Army should establish mobile, maritime bases that provide the infrastructure and dispersion to survive an initial attack from an adversary.¹³² These mobile, maritime bases would provide the ability for Army unit's to conduct joint, reception, staging, on-ward movement, and ultimately integration of personnel and equipment at a sea point of debarkation that best supports the operational commander. Sea bases also provide the flexibility and maneuverability that permits forward-deployed forces to attack the adversary's anti-access/area-denial (A2/AD) systems from within the layered defense. With a decrease in the overall reliance on forward bases there is a greater likelihood that Army forces projected from sea bases could negate an adversary's responsive attack of a fixed staging area that prevents the endangerment of the mission's success.¹³³ The U.S. Army's application of mobile, maritime bases facilitates cross-domain synergy and allows the forward deployed forces and the deploying forces to "create pockets or corridors of local domain superiority to penetrate the enemy's defenses and maintain them as required to accomplish the mission."¹³⁴

In addition, to better approach its role as a land power force in support of the JOAC, the U.S. Army needs to revise its command and control doctrine to achieve cross-domain synergy. Although the functions of cross-domain maneuver, fires, sustainment, and protection appear to be challenging and increasingly dependent on technological advancement, research, and development, the concept of cross-domain synergy places a "heavy burden on command and control."¹³⁵ For the U.S. Army to be

successful as the prominent land power, it must revise its command and control doctrine to “support forces operating at global distances, deploying and maneuvering independently on multiple lines of operation from multiple points of origin” and “enable commanders to integrate operations across (all) domains.”¹³⁶

Currently, Army Doctrine Reference Publication (ADRP) 6-0 outlines the U.S. Army doctrine for command and control summarized in the concept of mission command. During Unified Land Operations (ULO), mission command doctrine “emphasizes centralized intent and dispersed execution through disciplined initiative.”¹³⁷ In an austere environment where the adversary will likely employ space and cyber attacks to limit communications, the Army’s application of mission command doctrine during JOAC clearly enables the function of command and control. However, due the complexity of JOAC, there are limits to how land component commanders can apply mission command to “capitalize on the human ability to take action to develop the situation and integrate military operations to achieve” the intent.¹³⁸

In an environment where the adversary will contest multiple domains simultaneously, the U.S. Army must improve command and control doctrine and systems to better facilitate joint interoperability, enable cross-domain integration, and create a shared understanding through a common operating picture across the domains. This will include the ability “to integrate cross-domain operations, to include at lower echelons, with the full integration of space and cyberspace operations” to limit the ability of the adversary to affect U.S. operations through the electromagnetic spectrum to deny command, control, communications, and intelligence sharing.¹³⁹

Improving the U.S. Army's Training Approach to Joint Force Entry Operations.

The U.S. Marine Corps has conducted a series of warfighter exercises to test American maritime forces ability to operate in an A2/AD environment. The Marine Corps Warfighting Laboratory (MCWL) conducted virtual training exercises, entitled Expeditionary Warrior 2013 (EF13), to explore methods to conduct maritime and littoral operations in a contested A2/AD environment.¹⁴⁰ EF13 applied a “fictional scenario set in 2035 Southeast Asia that presented operational challenges for a distributed joint force conducting engagement across the U.S. Pacific Command (USPACOM) area of responsibility.”¹⁴¹ In their findings, the Marine Corps realized that command relationships and interoperability between conventional forces, special operations forces, interagency organizations, along with other joint and partner forces, created a series of challenges at the operational and strategic level.¹⁴² When faced with a challenging A2/AD environment, the “ability to rapidly aggregate and disaggregate forces requires agile, adaptive command arrangements,” through dynamic task organization of joint and combined forces created many unforeseen issues.¹⁴³ The Marine Corps suggested further analysis of these command relationships through a warfighter exercise in 2015 designed to task organize conventional and special operations forces in a non-habitual, operational control (OPCON) manner.

In addition to command relationships, the Marine wargame identified several key concepts to enable joint combined arms maneuver, fires, protection, and sustainment that created unique challenges. The Marine Corps exercise indicated that the future joint force requires “multiple, diverse platforms to enable operational maneuver” including platforms that operate in the air, maritime, and ground domain to defeat a high threat A2/AD environment.¹⁴⁴ The exercise tested “precision kinetic fires” delivered from

“manned and unmanned systems with support from loitering munitions and over-the-horizon platforms.”¹⁴⁵ This exercise demonstrated unique challenges concerning the authorities, rules of engagement, communications, and synchronization of fires across multiple domains in the contested environment.¹⁴⁶ The exercise highlighted the key role that “space, cyberspace, and other non-kinetic activities will play...in the years ahead,” and it cited the use of “embedded and forward deployed cyber forces” as critical enablers to the operational and strategic fight.¹⁴⁷ Finally, the wargame identified the critical role that ballistic missile defense capabilities will provide to protecting forward and intermediate bases.¹⁴⁸

Strategically, the concept of A2/AD limits the U.S. ability to protect vital interests around the globe.¹⁴⁹ From an operational perspective, an adversary in possession of a robust A2/AD capability prevents the U.S. military to execute its preferred method of battle.¹⁵⁰ Finally, tactically, A2/AD presents a robust multi-domain defense with effective long-range offensive fires and capabilities that counter U.S. advantages.¹⁵¹ The U.S. Army, and the Joint Force, must invest resources in training and exercising wargames at all three levels of war adequately identify shortcomings to deal with the complexity of a near-peer competitor’s A2/AD capability.

The U.S. Army’s training approach to Joint Force Entry Operations remains at the tactical level of war. Whether it is at combat training centers or at the U.S. Army Maneuver Battle Lab’s Army Expeditionary Warfare Experiment (AEWE), the focus of joint force entry operations is on tactical units developing the tactics, techniques, and procedures to conduct reconnaissance, raids, and seizure of key terrain.¹⁵² Although, U.S. Army enablers integrate lethal and non-lethal joint fires across the domains to

facilitate combined arms maneuver, the scope of the adversary's contest of these is never realized. The U.S. Army must establish exercises to test the current forces joint interoperability in an accessed denied environment to identify challenges with cross-domain synergy at the operational and strategic levels of war. Like the U.S. Marine Corps' Expeditionary Force 2013, this training will identify critical lessons that will shape future changes in doctrine, training, and material requirements for the future force.

Improving the U.S. Army's Material to Support Joint Force Entry Operations.

The U.S. Army's force posture under the European Reassurance Initiative (ERI) does not pose a credible deterrent to Russia nor does it provide enough forces to delay Russian aggression to allow the deployment of follow on forces. Since the end of the Cold War, the U.S. Army has reduced its forward-based deterrent capabilities in Europe from 120,000 soldiers in 1992 to 30,000 soldiers.¹⁵³ The largest American forward-based combat arms units include the 2nd Stryker Cavalry Regiment and the 173rd Airborne Brigade consisting of approximately 9,000 soldiers.¹⁵⁴ Reductions of the 12th Combat Aviation Brigade in Germany has significantly decreased its' forward-based force structure.¹⁵⁵ Although the Army deployed an armored brigade combat team (ABCT) to Europe from Fort Carson, Colorado, this rotational force coupled with permanently based Army forces and prepositioned equipment for follow-on formations provide a nominal deterrent to a capable, numerically superior Russian military.

The U.S. views the commitment of landpower forces as the greatest level of American assurance to a region.¹⁵⁶ "There is no more unmistakable or unambiguous display of American resolve than the highly visible deployment of landpower."¹⁵⁷ For this reason, the U.S. must increase the size of its forward based forces in Europe to establish a credible deterrent capability and a force that can achieve initial operational

and strategic objectives if deterrence fails. This force must include a permanently based armor brigade combat teams (ABCT) in Poland and Germany. The rotational-based force model of an ABCT is too expensive and it requires a heavy division worth of combat power to maintain a readiness cycle.¹⁵⁸

In addition, the U.S. Army must reestablish a Corps headquarters in Europe and a Division headquarters in Eastern Europe in order to better facilitate planning with special operations forces, the training and equipping of forward-based units, the maintenance of prepositioned equipment, and engagements with NATO partners and allies in the region. The Army must deploy a robust integrated missile defense (IAMD) systems, short-range air defense (SHORAD) capabilities, electronic warfare, directed energy, and counter-cyber technologies to counter Russian A2/AD capabilities, effective targeting with UAVs and devastating artillery strikes, space, and cyber domain operations.¹⁵⁹ Finally, the Army must enhance the logistics capabilities of the 16th Sustainment Brigade and deploy an expeditionary Echelon-Above Brigade (EAB) sustainment capability to Europe to oversee prepare for joint staging, reception, onward movement, and integration (JRSOI) for follow-on forces.¹⁶⁰

Combined Arms Maneuver

Recent examples of Russian aggression in Crimea and Syria indicate that Moscow “rely less on traditional force-on-force scenarios and more on principles of asymmetry” employing unconventional forces.¹⁶¹ However, Georgia and Ukraine demonstrate that while the Kremlin tends to prefer the employment of unconventional forces for specific situations they still maintain a sizeable conventional force structure with ability to integrate joint combined arms maneuver to achieve operational objectives. It is clear that the Russian military is uniquely balancing the missions assigned to their

conventional and unconventional forces while at the same time blending these capabilities to gain synergy to achieve operational and strategic objectives.

Improving U.S. Army and SOF Doctrinal Approach to Combined Arms Maneuver.

To integrate the lessons learned from recent Russian aggression in Eurasia, the U.S. Army and the U.S. Special Operations Command (SOCOM), must codify how conventional and unconventional forces will integrate in combined arms maneuver operations to defeat near-peer competitors in future conflicts. The Army Operating Concept (AOC), unveiled in 2013, highlights the importance of “tailorable and scalable combinations of special operations and conventional forces, regionally aligned and globally responsive combined arms teams, and foundational theater capabilities to enable joint operations.”¹⁶²

The interdependence achieved by coalescing conventional and special operations forces enables the success of joint operations across the spectrum of conflict.¹⁶³ Although the U.S. Army and SOCOM have operated in mutual support over the last 15 years of conflict in Iraq and Afghanistan, current U.S. Army and SOCOM doctrine lacks the level of specificity required to synchronize efforts and gain interoperability. Whether this doctrine outlines supported and supporting command relationships or Operational Control (OPCON) and Tactical Control (TACON) of forces, current doctrine fails to articulate how U.S. conventional and unconventional land forces will conduct combined arms maneuver when facing a dynamic near-peer competitor, like Russia.¹⁶⁴

Improving U.S. Army and SOF Training Approach to Combined Arms Maneuver.

The U.S. Army and USSOCOM must continue to train at the operational and tactical level to obtain better achieve integration, interdependence, and interoperability.

The U.S. Army's use of Regionally Aligned Forces (RAF) and SOCOM's use of the Global Special Operations Force Network (GSN) highlights two training and partnership initiatives by separate services intended to align U.S. land forces with allies abroad to build capacity and enable security cooperation.¹⁶⁵ In Europe, the U.S. Army and SOCOM have the opportunity to find efficiencies with security force assistance (SFA) and foreign internal defense (FID) training of NATO forces. With three Brigade Combat Teams along with the 10th Special Forces Groups committed to transforming NATO and partner nations' focus of training from counterinsurgency operations to decisive action training, the U.S. Army and SOCOM can leverage multi-national training exercises to counter Russia's new generation warfare tactics.

Improving the U.S. Army's Support to Combined Arms Maneuver

To establish a credible deterrent capability to counter Russian aggression in Europe and Eurasia, the U.S. Army must have prepositioned fleets of equipment to support a future conflict. Currently, the U.S. Army and Joint Force lacks the time, space, and resources required to adequately support the deployment of military personnel and heavy equipment to Europe in the event of a conflict with Russia.¹⁶⁶ The U.S. Army must improve its forward-based Army Prepositioned Stocks (APS) in Europe to include two additional armored brigade combat teams sets of equipment along with an additional sustainment brigade and fires brigade of equipment.¹⁶⁷ Finally, the U.S. Army should include the remaining equipment required to fully establish the 12th Combat Aviation Brigade, including AH-64 Apaches, UH-60 Blackhawks, and CH-47 Chinooks.¹⁶⁸

Employment of Joint Fires and Effects

Moscow's aggression in Georgia, Eastern Ukraine, and Syria indicates that its application of joint fires and effects remains highly indiscriminate and lethal. In the

Ukraine, the Russian military's ability to combine unmanned aerial vehicles with the highly lethal area indirect fires resulted in devastating effects on Ukrainian forces.¹⁶⁹ In addition, Russia's deployment of A2/AD capability in Georgia, Crimea, and Syria demonstrates their commitment to establishing an active layered defense to counter U.S. military power projection against these regions.¹⁷⁰ From a non-lethal perspective, the Russian military has innovated the use of disinformation and propaganda to confuse the international community and compel their adversaries to comply with their national objectives.¹⁷¹ Russia's operational and strategic approach in Georgia, Ukraine, and Syria have incorporated elements of non-lethal fires to integrate all elements of Russian 'soft power' to decisively achieve their objectives.

Improving the U.S. Army's Doctrine to Support Joint Fires.

The AOC highlights the need for Joint and Army fires to operate from the land domain to operate and influence the air, maritime, space, and cyber space domains. Joint and Army fires must "leverage cross-domain cueing to detect and engage in-depth to delay, disrupt or destroy enemy systems."¹⁷² For the JOAC, joint and Army fires must synchronize capabilities within the joint force to "locate, target, and suppress or neutralize hostile A2/AD capabilities in complex terrain with the necessary range, precision, responsiveness and reversible and permanent effects while limiting collateral damage."¹⁷³ Finally, that joint and Army fires must possess the capability to "conduct electronic attack and computer network attack against hostile A2/AD."¹⁷⁴ The U.S. Army must improve its doctrinal approach to achieve cross-domain synergy and joint interoperability to achieve the objectives outlined in the AOC and JOAC designs.

The Fires Center of Excellence (FCoE) at Fort Sill, Oklahoma is currently designing a concept for strategic and an operational fires command headquarters. The

purpose of these headquarters is to align joint, interagency, intergovernmental, and multinational (JIIM) capabilities into a single fires organization responsible to “integrate, coordinate, and synchronize space, cyber, intelligence, air-missile defense, and fire support functions” to support theater and operational level commands.¹⁷⁵ The current authorities of many of these functions reside outside the existing headquarters, and this concept better integrates many headquarters elements that provide enabling Echelon Above Brigade (EAB) capabilities to the joint force. Ultimately, FCoE’s concept organizes joint fires headquarters designed deliver “surface-to-surface fires, air and missile defense fires, shore-to-ship fires, and nonlethal fires” across multiple domains to enable strategic and operational freedom of action.¹⁷⁶

Improving the U.S. Army’s Training in the Integration and Delivery Joint Fires.

The U.S. Army must renew a focus on the training of personnel on the effective protection of information, use of the media, and hardening of information networks that will increase capabilities in the information domain and counter-Russian propaganda and cyber intrusions.¹⁷⁷ Incorporating cyber defense and attack units at the operational and tactical level increases the ability of units to gain parity with Russian military forces that demonstrate a keen ability to exploit these areas. The integration of Military Information Support Teams (MIST) and cyber teams at the lower echelons levels will improve operational capability.¹⁷⁸

Improving the U.S. Army’s Material to Support the Delivery Joint Fires.

Along with the deployment of a rotational ABCT to Eastern and Northern Europe, the Army must deploy a robust fires brigade organized with both multiple launch rocket system (MLRS) and high-mobility artillery rocket system (HIMARS) battalions and long-range target acquisition capability. In addition, the U.S. Army must continue to improve

the range capabilities of current tube artillery systems. A defense program is underway with General Dynamics to extend the current range of cannon artillery from 30 kilometers to 70 kilometers in order to achieve parity with current Russian tube artillery capability.¹⁷⁹ In addition to this initiative, the U.S. Army should continue to seek technological improvements to counter-fire radar, electronic warfare equipment, tactical and operational cyber equipment, and anti-GPS jamming capabilities. These capabilities should be integrated at the operational and tactical levels to increase target acquisition and force protection. Finally, in order to gain lethality and achieve parity with Russian rocket capability, the U.S. Army must commit to reintroduce cluster munitions to the artillery ammunition inventory.¹⁸⁰ Research and development for this program should focus on mitigating the dangers of dud-producing munitions “by developing fuses that self-destruct after a few hours on the ground.”¹⁸¹

Conclusion

Through an analysis of the progress achieved by military operations in Georgia, Crimea and Eastern Ukraine, and Syria, it is clear that Russia intends to apply its new form of warfare to shape the regional and global environments in their favor. Russia’s military transformation coupled with the application of a new style of modern warfare artfully integrates lethality, coercion, and disinformation to achieve an auspicious outcome on the modern battlefield. Putin’s interventionist agenda and aggressive military actions in Europe, Eurasia, and the Middle East, has thrust Russia into a new global and regional position that challenges U.S. interests, the status quo, and international rules and norms. To counter Putin’s agenda and deter further Russian aggression abroad, the U.S. Army must increase the size and capability of its forces

committed to Europe, transform current doctrine and training of decisive action, and develop new material to address challenges with joint force entry operations, joint combined arms maneuver, and the integration and delivery of joint fires.

The U.S. and NATO allies must commit additional modern combat power to establish credible deterrent force in Europe and Eurasia. Although the U.S. current policy to reassure European partners and allies through ERI has dedicated rotational forces to the region, these efforts are merely a demonstration of force that do not provide a formidable restraint to Russia's interventionist agenda. The U.S. must commit multi-functional forward-based capabilities in Europe and Eurasia including a Corps and Division headquarters, additional armor, aviation, artillery, and logistics commands. Although the U.S. has spent the last 15 years removing its military footprint abroad to reduce cost, forward-based military capability in Europe and the Middle East provides an unequivocal expression of American interests, intent, and national security objectives.

Finally, the U.S. Army must address shortfalls in doctrine, training, and material support to force entry operations, combined arms maneuver, and the employment of joint fires identified through evolution of contemporary Russian warfare. Doctrinal changes include a revision of strategic and operational command and control elements to counter symmetric and asymmetric enemy capabilities. In addition, the Army and SOCCOM must conduct training that accounts for more progressive command relationships and address emerging conventional and irregular threats to gain more joint interdependence between conventional and special operations forces. Army material research and development must focus on improving current military combined arms programs to increase platform range, lethality, protection, and communication. These efforts will improve the U.S. Army's capability

overmatch, offset the enemies' technological and numeric superiority, and eliminate the current competitive advantage our adversaries' enjoy today.

Endnotes

¹ Matthew Cox, "Army Chief Issues Stark Warning to Potential Enemies," October 5, 2016, <http://www.military.com/daily-news/2016/10/05/army-chief-issues-stark-warning-to-potential-enemies.html> (accessed December 16, 2016).

² Fiona Hill, "Understanding and deterring Russia: U.S. Policies and Strategies," February 10, 2016, <https://www.brookings.edu/testimonies/understanding-and-deterring-russia-u-spolicies-and-strategies> (accessed November 2, 2016).

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ Barack Obama, "Introduction," in *National Security Strategy* (Washington, DC: The White House, February 2015), https://www.whitehouse.gov/sites/default/files/docs/2015_national_security_strategy_2.pdf (accessed July 22, 2016).

⁷ Andrew E. Kramer, "Russia Claims its Sphere of Influence in the World," *New York Times Online*, August 31, 2008, http://www.nytimes.com/2008/09/01/world/europe/01_russia.html (accessed December 16, 2016).

⁸ Ariel Cohen and Robert E. Hamilton, *The Russian Military and the Georgia War: Lessons and Implications* (Carlisle Barracks, PA: U.S. Army War College, June 2011), 1-2, www.strategicstudiesinstitute.army.mil/pdffiles/pub1069.pdf (accessed December 16, 2016).

⁹ Ibid., ix-x.

¹⁰ Ibid., 3.

¹¹ United Nations, "Georgia-UNOMIG-Background," <http://www.un.org/en/peacekeeping/missions/past/unomig/background.html> (accessed December 16, 2016).

¹² Ibid.

¹³ Security Council Report, "Georgia (UNOMIG): January 2006 Monthly Forecast," December 22, 2005, http://www.securitycouncilreport.org/monthly-forecast/2006-01/lookup_c_gIKWLeMTIsG_b_1313231.php (accessed February 17, 2017).

¹⁴ Timothy L. Thomas, "The Bear Went through the Mountain: Russia Appraises its Five-Day War in South Ossetia," *The Journal of Slavic Military Studies*, 38, <http://dx.doi.org/10.1080/13518040802695241> (accessed October 21, 2016).

¹⁵ Ibid.

¹⁶ United Nations, "Georgia-UNOMIG-Background," 1.

¹⁷ "Russia: Why Moscow Will Not Recognize Georgian Regions' Independence," STRATFOR, February 15, 2008, 1, https://www.stratfor.com/analysis/russia-why-moscow-will-not-recognize-georgian-regions-independence?0=ip_login_no_cache%3D85c57018e01bc697b344e9c01e4d76c9 (accessed December 16, 2016).

¹⁸ Giorgi Gobronidze, "The Tragic Roots of the Five-Day War between Russia and Georgia," *Russia Direct*, 1, <http://www.russia-direct.org/opinion/tragic-roots-five-day-war-between-russia-and-georgia> (accessed December 16, 2016).

¹⁹ Zofia Studzinska, "How Russia, Step by Step, Wants to Regain an Imperial Role in the Global and European Security System," *The Quarterly Journal*, October 1, 2015, 38, <https://www.questia.com/library/journal/1P3-4003236961/how-russia-step-by-step-wants-to-regain-an-imperial> (accessed December 16, 2016).

²⁰ "Independent International Fact-Finding Mission on the Conflict in Georgia," *BBC*, September 2009, 18, http://news.bbc.co.uk/2/shared/bsp/hi/pdfs/30_09_09_iiffmqc_report.pdf (accessed December 16, 2016).

²¹ Janusz Bugajski, *Georgian Lessons. Conflicting Russian and Western Interests in the Wider Europe* (Washington, DC: CSIS, 2010), 45.

²² Zofia Studzinska, "How Russia, Step by Step, Wants to Regain an Imperial Role in the Global and European Security System," *The Quarterly Journal*, October 1, 2015, 25, <https://www.questia.com/library/journal/1P3-4003236961/how-russia-step-by-step-wants-to-regain-an-imperial> (accessed December 16, 2016).

²³ Carolina Vendil Pallin and Fredrik Westerlund, "Russia's War in Georgia: Lessons and Consequences," *Small Wars & Insurgencies* 20, no. 2 (June 2009): 400, <http://www.tandfonline.com/doi/pdf/10.1080/09592310902975539> (accessed December 16, 2016).

²⁴ Cohen and Hamilton, *The Russian Military and the Georgia War: Lessons and Implications*, 52.

²⁵ Ibid., 69.

²⁶ Pallin and Westerlund, "Russia's War in Georgia: Lessons and Consequences," 403.

²⁷ Thomas, "The Bear Went through the Mountain," 42.

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

³¹ Pallin and Westerlund, "Russia's War in Georgia: Lessons and Consequences," 410.

³² Jolanta Darczewska, *The Anatomy of Russian Information Warfare: The Crimean Operation, A Case Study* (Warsaw, Poland: Centre for Eastern Studies, May 2014), 8-9, https://www.osw.waw.pl/sites/default/files/the_anatomy_of_russian_information_warfare.pdf (accessed December 16, 2016).

³³ Thomas, "The Bear Went through the Mountain," 50.

³⁴ *Ibid.*, 52.

³⁵ *Ibid.*, 51-52.

³⁶ Jason Rivera, "Has Russia Begun Offensive Cyberspace Operations in Crimea?" *Georgetown Security Studies Review*, March 2, 2014, 1, <http://georgetownsecuritystudiesreview.org/2014/03/02/has-russia-begun-offensive-cyberspace-operations-in-crimea> (accessed October 16, 2016).

³⁷ *Ibid.*, 2.

³⁸ *Ibid.*

³⁹ Thomas, "The Bear Went Through the Mountain," 56.

⁴⁰ Maia Otarashvili, "Georgia and Moldova Remain Fragile as Russian Aggression Continues," *The FPRI Blog*, January 30, 2015, <http://www.fpri.org/2015/01/georgia-and-moldova-remain-fragile-as-russian-aggression-continues> (accessed December 20, 2016).

⁴¹ Igor Zevelev, "Russian National Identity and Foreign Policy," *Center for Strategic and International Studies*, December 8, 2016, 3, https://csis-prod.s3.amazonaws.com/s3fs-public/publication/161208_Zevelev_RussianNationalIdentity_Web.pdf (accessed December 20, 2016).

⁴¹ *Ibid.*, 4.

⁴² Nicholas Redman, "Russia's Breaking Point," *Survival* 56, no. 2 (2014): 235-44, <https://www.iiss.org/en/publications/survival/sections/2014-4667/survival--global-politics-and-strategy-april-may-2014-3f8b/56-2-17-closing-argument-6c05> (accessed February 17, 2017).

⁴³ Stephen F. Larrabee, "Russia, Ukraine, and Central Europe: The Return of Geopolitics," *Journal of International Affairs*, Spring 2010, 5, <https://jia.sipa.columbia.edu/russia-ukraine-and-central-europe-return-geopolitics> (accessed February 21, 2017).

⁴⁴ Zofia Studzinska, "How Russia, Step by Step, Wants to Regain an Imperial Role in the Global and European Security System," *The Quarterly Journal*, October 1, 2015, 29, <https://www.questia.com/library/journal/1P3-4003236961/how-russia-step-by-step-wants-to-regain-an-imperial> (accessed December 16, 2016).

⁴⁵ *Ibid.*, 30.

⁴⁶ *Ibid.*, 33.

⁴⁷ *Ibid.*

⁴⁸ Larrabee, "Russia, Ukraine, and Central Europe: The Return of Geopolitics," 9.

⁴⁹ Studzinska, "How Russia, Step by Step, Wants to Regain an Imperial Role in the Global and European Security System," 30.

⁵⁰ Ibid.

⁵¹ Ibid., 38.

⁵² Keir Giles, "Russia's 'New' Tools for Confronting the West: Continuity and Innovation in Moscow's Exercise of Power," 47, <https://www.chathamhouse.org/publication/russias-new-tools-confronting-west> (accessed December 16, 2016).

⁵³ U.S. Army Special Operations Command, *Little Green Men: A Primer on Modern Russian Unconventional Warfare, Ukraine 2013-2014* (Fort Bragg, NC: U.S. Army Special Operations Command, 2016), 54.

⁵⁴ Ibid., 56.

⁵⁵ Ibid.

⁵⁶ Giles, "Russia's 'New' Tools for Confronting the West: Continuity and Innovation in Moscow's Exercise of Power," 13.

⁵⁷ Phillip A Karber, *Lessons Learned from the Russo-Ukrainian War: Personal Observations* (Washington, DC: The Potomac Foundation, July 8, 2015), 34.

⁵⁸ Ibid., 35.

⁵⁹ Ibid., 35-36.

⁶⁰ Ibid., 36.

⁶¹ Ibid.

⁶² Ibid.

⁶³ Ibid., 37.

⁶⁴ Ibid., 38.

⁶⁵ Ibid.

⁶⁶ Maria Snegovaya, *Putin's Information War in Ukraine: Soviet Origins of Russia's Hybrid Warfare*, Russia Report 1 (Washington, DC: Institute for the Study of War, September 2015), 13-14, <http://understandingwar.org/sites/default/files/Russian%20Report%201%20Putin's%20Information%20Warfare%20in%20Ukraine-%20Soviet%20Origins%20of%20Russias%20Hybrid%20Warfare.pdf> (accessed October 16, 2016).

⁶⁷ Ibid., 14.

⁶⁸ Ibid.

⁶⁹ Rivera, "Has Russia Begun Offensive Cyberspace Operations in Crimea?" 2.

⁷⁰ Snegovaya, *Putin's Information War in Ukraine: Soviet Origins of Russia's Hybrid Warfare*, 18.

⁷¹ Ray Nothstine, "5 Facts You Need to Know about the Russia-Syria Alliance," *Christian Post Reporter*, November 27, 2015, 1, <http://www.christianpost.com/news/islamic-state-russia-syria-alliance-five-facts-150940> (accessed December 21, 2016).

⁷² Dmitri Trenin, "Russia in the Middle East: Moscow's Objectives, Priorities, and Policy Drivers," April 5, 2016, <http://carnegie.ru/2016/04/05/russia-in-middle-east-moscow-s-objectives-priorities-and-policy-drivers-pub-63244> (accessed January 23, 2017).

⁷³ Ibid.

⁷⁴ Itamar Rabinovich, "The Russian-U.S. Relationship in the Middle East: A Five-Year Projection," April 5, 2016, <http://carnegieendowment.org/2016/04/05/russian-u.s.-relationship-in-middle-east-five-year-projection-pub-63243> (accessed January 23, 2017).

⁷⁵ Ibid.

⁷⁶ Ibid.

⁷⁷ Can Kasapoglu, "Act of Desperation or Game Changer? Russian Deployments in Syria," September, 22, 2015, 3, <http://www.edam.org.tr/tr/lcerikFiles?id=2044> (accessed January 29, 2016).

⁷⁸ Alexei Malashenko and Alexei Starostin, "How Far Can the Islamic Threat Reach?" *Russia in Global Affairs*, no. 4 (2016): 2, <http://eng.globalaffairs.ru/number/How-Far-Can-the-Islamic-Threat-Reach-18398> (accessed February 23, 2017).

⁷⁹ Ibid., 8.

⁸⁰ Ibid.

⁸¹ Timothy Snyder, "Confused about Putin's Motives? Look at Ukraine," *Time Magazine Online*, September 30, 2015, <http://time.com/4054941/putin-russia-syria/> (accessed December 29, 2016).

⁸² Lyse Doucet, "Why is Russia engaged in Aleppo?" *BBC*, November 16, 2016, <http://www.bbc.com/news/world-middle-east-37995780> (accessed December 29, 2016).

⁸³ Ibid.

⁸⁴ Tim Ripley, "Analysis: Russia's Military Intervention in Syria, One Year On," *Jane's Defense Weekly*, September 20, 2016, 1, <http://www.timripley.co.uk/articles/2016/Tim-Ripley-Russia-Military-Syria.pdf> (accessed December 16, 2016).

⁸⁵ Ibid.

⁸⁶ Ibid., 2.

⁸⁷ Ibid.

⁸⁸ Rabinovich, "The Russian-U.S. Relationship in the Middle East: A Five-Year Projection."

⁸⁹ Trenin, "Russia in the Middle East."

⁹⁰ Michael Kofman and Matthew Rojansky, *A Closer Look at Russia's Hybrid War*, Kennan Cable Number 7 (Washington, DC: Wilson Center, April 2015), 3, <https://www.files.ethz.ch/isn/190090/5-KENNAN%20CABLE-ROJANSKY%20KOFMAN.pdf> (accessed December 29, 2016).

⁹¹ Janis Berzins, *Russian New Generation Warfare: Implications for Europe* (Latvia: National Defense Academy of Latvia, October 14, 2014), http://www.europeanleadershipnetwork.org/russian-new-generation-warfare-implications-for-europe_2006.html (accessed December 29, 2016).

⁹² Cohen and Hamilton, *The Russian Military and the Georgia War*, 86.

⁹³ Ibid., 87.

⁹⁴ Ibid., 87-88.

⁹⁵ Pallin and Westerlund, "Russia's War in Georgia," 406-407.

⁹⁶ Ibid., 413.

⁹⁷ Frank G. Hoffman, *Conflict in the 21st Century: The Rise of Hybrid Wars* (Arlington, VA: Potomac Institute for Policy Studies, 2007), 8, http://www.potomacinstitute.org/images/stories/publications/potomac_hybridwar_0108.pdf (accessed December 29, 2016).

⁹⁸ U.S. Army Special Operations Command, *Little Green Men*, 17.

⁹⁹ Snegovaya, *Putin's Information War in Ukraine*, 7.

¹⁰⁰ Ibid.

¹⁰¹ Berzins, *Russian New Generation Warfare*, 4.

¹⁰² Ibid

¹⁰³ Ibid.

¹⁰⁴ Ibid., 5.

¹⁰⁵ "Russian Federation – Army," *Jane's Sentinel Security Assessment – Russian and the CIS*, 3.

¹⁰⁶ Athena Bryce-Rogers, "Russian Military Reform in the Aftermath of 2008 Russia-Georgia War," *Demokratizatsiya* 21, no. 3 (July 2013): 352,

https://www2.gwu.edu/~ieresgwu/assets/docs/demokratizatsiya%20archive/GWASHU_DEMO_21_3/T0320R1173M61414/T0320R1173M61414.pdf (accessed December 16, 2016).

¹⁰⁷ Cohen and Hamilton, *The Russian Military and the Georgia War*, 26.

¹⁰⁸ Bryce-Rogers, "Russian Military Reform in the Aftermath of 2008 Russia-Georgia War," 355.

¹⁰⁹ Cohen and Hamilton, *The Russian Military and the Georgia War*, 33-34.

¹¹⁰ *Ibid.*, 35.

¹¹¹ "Russian Federation – Army," 6.

¹¹² Dmitry Gorenburg, "Crimea Taught Us a Lesson, But not how the Russian Military Fights," *War on the Rocks*, May 2014, 3, <http://warontherocks.com/2014/05/crimea-taught-us-a-lesson-but-not-how-the-russian-military-fights> (accessed October 16, 2016).

¹¹³ Andrei Akulov, "What the Deployment of Russian S-300 Air Defense Systems to Syria Really Means," *Strategic Culture*, October 7, 2016, <http://www.strategic-culture.org/news/2016/10/07/what-the-deployment-russian-s-300-air-defense-systems-syria-really-means.html> (accessed February 21, 2017).

¹¹⁴ Christian Lowe, "Georgia War Shows Russian Army Strong but Flawed," *Reuters*, August 20, 2008, 2, <http://www.reuters.com/article/us-georgia-ossetia-military-idUSLK23804020080820> (accessed December 16, 2016).

¹¹⁵ Bryce-Rogers, "Russian Military Reform in the Aftermath of 2008 Russia-Georgia War," 349.

¹¹⁶ U.S. Army Special Operations Command, *Little Green Men*, 57.

¹¹⁷ Gorenburg, "Crimea Taught Us a Lesson, But Not How the Russian Military Fights," 4.

¹¹⁸ George Friedman, "Why Russia Is Threatening the US in Syria," October 4, 2016, <https://geopoliticalfutures.com/why-russia-is-threatening-the-us-in-syria/> (accessed February 21, 2017).

¹¹⁹ Andrei Akulov, "Russia's Military Operation in Syria: What it Accomplished in One Year," *Strategic Culture*, October 3, 2016, <http://www.strategic-culture.org/news/2016/10/03/russia-military-operation-syria-what-accomplished-one-year.html> (accessed February 21, 2017).

¹²⁰ Cohen and Hamilton, *The Russian Military and the Georgia War: Lessons and Implications*, 51.

¹²¹ Bob Scales, "Bring Back Artillery Submunitions; Russian Threat Too Great," *Breaking Defense*, October 21, 2016, <http://breakingdefense.com/2016/10/bring-back-artillery-submunitions-russian-threat-too-great> (accessed February 21, 2017).

¹²² Tom Demerly, "A Russian Tactical Air Strike in Al-Bab, Syria Kills Three Turkish Soldiers: What May Have Gone Wrong?" *The Aviationist*, February 10, 2017,

<https://theaviationist.com/2017/02/10/analysis-russian-air-strike-in-syria-results-in-turkish-casualties> (accessed February 21, 2017).

¹²³ Adrian Croft, "Russia Could Soon Run Multiple Ukraine-sized Operations: U.S. General," *Reuters*, January 16, 2015, <http://www.reuters.com/article/us-nato-russia-idUSKBN0KP1F620150116> (accessed February 23, 2017).

¹²⁴ Ibid.

¹²⁵ Kathleen H. Hicks and Heather A. Conley, *Evaluating Future U.S. Army Force Posture in Europe*, Phase 2 Report (New York: Rowman and Littlefield, June 2016), X.

¹²⁶ Kathleen H. Hicks and Heather A. Conley, *Evaluating Future U.S. Army Force Posture in Europe*, Phase 1 Report (New York: Rowman and Littlefield, February 2016), 3.

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ U.S. Joint Chiefs of Staff, *Joint Forcible Entry Operations*, Joint Publication 3-18 (Washington, DC: U.S. Joint Chiefs of Staff, November 27, 2012), I-1, http://www.dtic.mil/doctrine/new_pubs/jp3_18.pdf (accessed February 23, 2017).

¹³⁰ U.S. Department of Defense, *Joint Access Operating Concept* (Washington, DC: U.S. Joint Chiefs of Staff, January, 17, 2012), ii, https://www.defense.gov/Portals/1/Documents/pubs/JOACJan%202012_Signed.pdf (accessed February 23, 2017).

¹³¹ Ibid., 18.

¹³² Colonel Roberto Gomez, USMC, interview by author, Carlisle, PA, January 3, 2017.

¹³³ U.S. Department of Defense, *Joint Access Operating Concept*, 19.

¹³⁴ Ibid, 23.

¹³⁵ Ibid, 28.

¹³⁶ Ibid.

¹³⁷ U.S. Department of the Army, *Mission Command*, Army Doctrine Reference Publication (ADRP) 6-0 (Washington, DC: U.S. Department of the Army, May 7, 2012), 1-1, https://fas.org/irp/doddir/army/adrp6_0.pdf (accessed February 23, 2017).

¹³⁸ Ibid.

¹³⁹ U.S. Department of Defense, *Joint Access Operating Concept*, 34.

¹⁴⁰ Taylor Teaford, "The 2015 Wargaming Program: Preparing for the Future Operating Environment," *The Marine Corps Gazette* 100, no. 2 (2016): <https://www.mca-marines.org/gazette/2016/02/2015-wargaming-program> (accessed February 23, 2017).

¹⁴¹ U.S. Marine Corps Combat Development Command, "Expeditionary Warrior 2013: Future Maritime Operations for the 21st Century Operating Environment," Final Report, June 6, 2013, 5.

¹⁴² Ibid., ii.

¹⁴³ Ibid., i.

¹⁴⁴ Ibid., ii.

¹⁴⁵ Ibid.

¹⁴⁶ Ibid.

¹⁴⁷ Ibid.

¹⁴⁸ Ibid., iv.

¹⁴⁹ Vincent Alcazar and Thomas M. Lafleur, "A Role for Land Warfare Forces in Overcoming A2/AD," *Military Review*, November 2012-December 2013, 79, http://usacac.army.mil/CAC2/MilitaryReview/Archives/English/MilitaryReview_20131231_art014.pdf (accessed February 23, 2017).

¹⁵⁰ Ibid.

¹⁵¹ Ibid.

¹⁵² Ibid, 81.

¹⁵³ John R. Deni, "U.S. Leadership and NATO: Modifying America's Forward Presence in Eastern Europe," *Parameters* 46 (Spring 2016) 36, http://www.strategicstudiesinstitute.army.mil/pubs/parameters/issues/Spring_2016/7_Deni.pdf (accessed December 20, 2016).

¹⁵⁴ Ibid.

¹⁵⁵ Ibid.

¹⁵⁶ William T. Johnsen, *Re-Examining the Roles of Landpower in the 21st Century and Their Implications* (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, November 2014), 36, <http://www.strategicstudiesinstitute.army.mil/pubs/display.cfm?pubID=1237> (accessed May 26, 2016).

¹⁵⁷ United States Army, United States Marine Corps, United States Special Operations Command, *Strategic Landpower: Winning the Clashes of Wills* (Washington, DC: TRADOC, September 2013), 7, <http://www.tradoc.army.mil/FrontPageContent/Docs/Strategic%20Landpower%20White%20Paper.pdf> (accessed January 29, 2016).

¹⁵⁸ Hicks and Conley, *Evaluating Future U.S. Army Force Posture in Europe*, Phase 2 Report, xi.

¹⁵⁹ Ibid., 15.

¹⁶⁰ Ibid., 60.

¹⁶¹ Ibid., 3.

¹⁶² U.S. Department of the Army, *The U.S. Army Operating Concept: Win in a Complex World, 2020-2040*, TRADOC Pamphlet 525-3-1 (Fort Eustis, VA: TRADOC, October 31, 2014), i, <http://www.tradoc.army.mil/tpubs/pams/tp525-3-1.pdf> (accessed February 23, 2017).

¹⁶³ Ibid., 24.

¹⁶⁴ Jason Wesbrock, Glenn Harned, and Preston Plous, "Special Operations Forces and Conventional Forces: Integration, Interoperability, and Interdependence," *PRISM* 6, no. 3 (December 7, 2016): 90.

¹⁶⁵ Scott W. Kelly and Chad A. MCGougan, "RAF and SOF Integration," in *Regionally Aligned Forces: Concept Viability and Implementation* (Carlisle Barracks, PA: U.S. Army War College, March 2015), 103.

¹⁶⁶ Hicks and Conley, *Evaluating Future U.S. Army Force Posture in Europe*, Phase 2 Report, 60.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid., 61.

¹⁶⁹ Karber, *Lessons Learned from the Russo-Ukrainian War*, 12.

¹⁷⁰ Hicks and Conley, *Evaluating Future U.S. Army Force Posture in Europe*, Phase 2 Report, 34.

¹⁷¹ Ibid., 9.

¹⁷² U.S. Department of Defense, *Joint Access Operating Concept*, 34.

¹⁷³ Ibid.

¹⁷⁴ Ibid.

¹⁷⁵ Fires Center of Excellence, "Strategic and Operational Fires Commands," briefing slides without scripted commentary, Fort Sill, OK, December 2016.

¹⁷⁶ Ibid.

¹⁷⁷ Nicholas Fedyk, "Russian 'New Generation' Warfare: Theory, Practice, and Lessons for U.S. Strategists," *Small Wars Journal*, August 25, 2016, 4-5, [http://smallwarsjournal.com/jrnl/art/russian-\"new-generation\"-warfare-theory-practice-and-lessons-for-us-strategists](http://smallwarsjournal.com/jrnl/art/russian-\) (accessed December 20, 2016).

¹⁷⁸ Hicks and Conley, *Evaluating Future U.S. Army Force Posture in Europe*, Phase 2 Report, 45.

¹⁷⁹ Lauren Poindexter, "Picatinny Engineers Seek to Double Range of Modified Howitzer," March 17, 2016, https://www.army.mil/article/164462/Picatinny_engineers_seek_to_double_range_of_modified_howitzer (accessed February 21, 2017).

¹⁸⁰ Scales, "Bring Back Artillery Submunitions; Russian Threat Too Great."

¹⁸¹ Ibid.