RUSSIAN OPERATIONAL ART IN THE RUSSO-GEORGIAN WAR OF 2008

BY

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USAWC CLASS OF 2009

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REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

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 this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

1. REPORT DATE (DD-MM-YYYY)	2. REPORT TYPE	3. DATES COVERED (From - To)
25-03-2009	Strategy Research Project	
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER
Russian Operational Art in the Russ	so-Georgian War Of 2008	5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)		5d. PROJECT NUMBER
Colonel George T. Donovan, Jr.		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
Dr. Stephen J. Blank		
Strategic Studies Institute		
9. SPONSORING / MONITORING AGENCY U.S. Army War College 122 Forbes Avenue	NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
Carlisle, PA 17013		11. SPONSOR/MONITOR'S REPORT NUMBER(S)

Distribution A: Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

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15. SUBJECT TERMS

Russia, Georgia, Soviet Union, Strategy, Campaign, Cyberwar, South Ossetia

16. SECURITY CLASS	SIFICATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT UNCLASSIFED	b. ABSTRACT UNCLASSIFED	c. THIS PAGE UNCLASSIFED	UNLIMITED	42	19b. TELEPHONE NUMBER (include area code)

USAWC STRATEGY RESEARCH PROJECT

RUSSIAN OPERATIONAL ART IN THE RUSSO-GEORGIAN WAR OF 2008

by

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ABSTRACT

AUTHOR: Colonel George T. Donovan, Jr.

TITLE: Russian Operational Art in the Russo-Georgian War Of 2008

FORMAT: Strategy Research Project

DATE: 25 March 2009 WORD COUNT: 8,820 PAGES: 42

KEY TERMS: Russia, Georgia, Soviet Union, Strategy, Campaign, Cyberwar,

South Ossetia

CLASSIFICATION: Unclassified

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Overview of Soviet and Russian Operational Art

For over a century, Russian and Soviet military thinkers have developed the operational art and have produced quality works on the subject. They have prepared for and practiced operational art in a series of wars under widely varying conditions over the last 80 years. These wars are rich in lessons of success and failure in operational art. The campaigns and major operations within these wars reveal both the Russian military's conception of operational art as well as their capacity to craft it to achieve

strategic objectives at that time. The Russo-Georgian War of August 2008 is no exception. It reflects the current state of operational art within the armed forces of the Russian Federation. Furthermore, the reforms announced immediately following the war by the president and other senior leaders reflect the nation's and military's intentions to improve their capacity to effectively wage campaigns in the near future and present additional insights into some of Russia's strategic objectives.

In the 1920s and 1930s, Soviet thinkers developed the theory of operational art through an in depth analysis of the lessons of World War I and the Russian Civil War. They discovered that the then extant theory of war that divided war into strategy and tactics no longer accurately reflected the conditions of war. The industrial and French revolutions had fundamentally changed how wars were fought. Countries now fielded massive, mobilized armies equipped with large quantities of high quality weapons that increased the lethality and range of battle. New machines and weapons such as the railroad, trucks, airplanes, and tanks provided new capabilities as well as extended the reach of forces engaged in operations. These Soviet thinkers posited that a new domain of warfare existed between strategy and tactics and they named it "operational art".²

a component part of military art, concerned with the elaboration of the theory and practice of preparing and conducting front and army operations of the different services of the armed forces. Operational art is the connecting link between strategy and tactics. Proceeding from the demands of strategy, operational art determines the methods of preparing and conducting operations for the achievement of strategic goals and serves and the point of departure for tactics, which organizes the preparation and conduct of the combined arms battle in accordance with the operation's goals and tasks.³

These Soviet thinkers understood that operational art should not be an abstract concept, but rather, could be the product of any number of historical, economic, political,

cultural, geographic, and other factors extant in the society."⁴ It was important for these thinkers to develop a concept of operational art that was consistent with the Soviet Union's geostrategic situation, economic weakness, as well as its political aspirations. Amidst these ideas, two great debates developed on the appropriate way ahead for the Soviet Union. The first debate was between M. V. Tukhachesky and A. A. Svechin over which strategy best suited the Soviet Union, one of annihilation verses one of attrition. Tukhachevsky won this contest and then championed the second debate, the "mechanization of a mass army as the means to conduct decisive operations in a total war."⁵

For these Soviet thinkers the lessons of the First World War were quite stark.

New concepts were needed to not only explain war, but also to enable the Soviets to win with their limited resources. To these thinkers, the fundamental operational challenge seemed to be how to build success off of tactical victories. Recent wars indicated that a force could defeat the enemy in a battle, but could not exploit success before enemy reserves arrived, leaving the offensive to whither and stall at the tactical level short of decisive victory. The key problem to be solved was how to sustain the offensive until strategic objectives were achieved.⁶

The Soviet thinkers, especially V. K. Triandafillov, developed concepts within operational art of successive or sequential operations, simultaneous operations, and later, deep operations. Each of these operational concepts was an attempt to avoid the challenges faced when attacks bogged down after penetrating an enemy's tactical defenses.⁷ Additionally, to overcome this challenge the Soviets sought and developed new technologies to overcome tactical stalemates and attrition war. Armored forces,

airborne forces, long-range artillery, air power, and forward logistics played a decisive role in allowing penetrations and envelopments to continue into the operational depth of the enemy.

The experience of World War II codified these ideas into a cogent operational concept that dexterously wove together simultaneous and sequential front and multifront operations to drive the German Army out of the depths of the Soviet Union and back to Berlin, leading to the defeat of Germany. The Second World War also had another significant impact on Soviet thought on operational art. The disastrous experience of the first two years of the war burned into the Soviet military culture the necessity of being prepared for theater war in Europe. The Soviet Union geared their military theory, organization, and training towards a large-scale, high-intensity war in Europe. Other types of more limited or unconventional wars were largely ignored in terms of theory, doctrine, and the institutionalization of specialized organizations. This overbearing focus on theater war in Europe would severely impede the development of appropriate concepts for operational art as well as appropriate force structure after the fall of the Soviet Union.

After the development of nuclear weapons, the Soviets briefly modified their theory of operational art to fit their view of the chaos of the nuclear battlefield. However, the desire to be capable of fighting without nuclear weapons was strong and from the 1960s through the 1980s the military sought ways to fight on a modern battlefield conventionally. The focus in conventional war centered on the initial period of war when Soviet theorists thought it was necessary to execute those missions that would decisively influence the course or outcome of the war.⁸ Theorists believed that it was

important to achieve operational and strategic surprise through deception, higher tempos, and the development of operational maneuver groups that could operate deep in the enemy's rear, collapsing the enemy's ability to resist. These thinkers wanted to avoid the creation of mobilization signatures prior to a war that indicated an impending offensive. They sought ways to skip mobilization yet still generate the necessary force ratios for a successful operational offensive. Emphasis was placed on rapidly closing forces into a region at the start of a campaign or through the airlift of airborne forces into the combat zone. In the waning years of the Soviet Union, new concepts emerged, especially in response to the dramatic victory of US forces in the Gulf War of 1991. Ideas focused on tailoring forces to achieve maximum flexibility for specific missions, changing land only actions into air-land operations, establishing unified commands on a geographic basis, creating rapid deployment forces, and developing concepts for fighting on non-linear, non-contiquous battlefields.

When the Soviet Union dissolved in 1991, so did the Soviet military. Russia inherited a military that was in a terrible condition and struggled in the difficult economic and political trials of the 1990s. Although many of these new ideas of the 1980s remained alive, attempts at reform were hampered by the conditions of the time and by the convictions of the military's senior leadership, which still clung to the seminal lesson of World War II. The result was a military that was still focused on massive theater war with large, conscription-based mechanized armies requiring a huge industrial base to support. The Russian government was unable to support such a strategy, leaving the military ill-prepared for its wars, which the operations in Chechnya depicted to the world.

After the breakup of the Soviet Union, several attempts were made at military reform, each ending in failure. Under Yeltsin, weak attempts were announced, but each failed due to a lack of political will and the poor economic condition of the country. With Putin's rise to power, small steps were attempted initially with little meaningful progress, especially after the military's performance in Chechnya. Yet the military remained wedded to its concepts of large-scale, high-intensity conflict. The war in Georgia would help change that focus because it would give the Russian military a vision and an experience of what future war would look like.

Russia's Strategic Objectives in Georgia

Russia's strategic objectives in the war with Georgia can be divided into two categories. The first category includes those objectives that do not relate directly to planning a military campaign. With these objectives, Russia was signaling interests and intentions to other players in the international arena. Clearly, Russia wanted to send a strong signal to the West that Russia has returned to the world as powerful player, is "capable of effectively acting in its periphery," and is willing and able to use military force to protect its interests. Russia desired to send the West and Georgia as well as the former Soviet states that the former Soviet states are within Russia's sphere of influence. NATO expansion into these states is not without risk. A strong message was sent to Ukraine as well as other former Soviet states that have ethnic Russian populations that Russia will take steps to protect them and could use them as a means for expanding its influence and control in the region. 12

The second set of strategic objectives includes those that pertain directly to operational art since they articulate military requirements for the war. The Russian

military took these objectives and designed a campaign to achieve them. First, Russia wanted to gain control of the two breakaway regions of South Ossetia and Abkhazia.¹³ Second, Russia wanted to "demonstrate the tenuous authority of the Georgian government as well as Georgia's economic dependence on Russian cooperation" by shaking up and humbling Georga's government through a war and demonstrating that Russia could interdict Georgia's economy at will.¹⁴ Third, Russia wanted to destroy Georgia's armed forces in order to eliminate the threat to the two breakaway regions. Last, one could argue that Russia wanted to punish Georgia for its overall Western orientation.¹⁵

From the operations in August 2008, it is clear that the military analyzed these strategic goals and crafted an operational plan that would establish the military conditions necessary to support the strategic objectives. Additionally, it appears likely that the military was given some restrictions for the use of force so as not to overly provoke the international community. For example, although Russian armored formations approached the capital of Georgia, Tbilisi, they did not attempt to enter the city. The Russian approach towards the capital and the anticipation of an assault caused great stress within the city as well as a flurry of diplomatic activity, indicating the utility of the military's position. Additionally, the Russian army did not seize control of the Baku-Tbilisi-Ceyhan or the Baku-Supsa pipelines, but rather, placed forces close enough to it to threaten them. Finally, in the face of international condemnation and pressure but after achieving their strategic objectives, Russian forces withdrew from Georgia proper and back into South Ossetia and Abkhazia with the exception of small buffer zones south of those regions.

The military planners probably thought that the following problems were key to achieve the strategic objectives. Gaining control of the two breakaway republics was a straightforward military task, if not without its challenges. To decisively influence the Georgian economy, military force would need to be applied along the coast of Abkhazia to control the ports and isolate the country. Additionally, key communications and transportation infrastructure would need to be cut to fracture the country, and the two pipelines threatened. Transit fees from this pipeline are a considerable portion of Georgia's economy. 18 Chastening the regime was more problematic, especially without a direct assault on the capital. Essentially, the Russians would need to place their forces where they could threaten the capital and create a crisis, use information operations to discredit President Saakashvili, and employ cyber attack to put the government in disarray and create confusion. By creating a political crisis in the capital within the government and by demonstrating that the international community could not save Georgia, the Russians intended to achieve their goal of a humbled Georgian regime, less willing to pursue a Western orientation and more willing to acknowledge Russia's interest in its near abroad...

Russian Operational Art in Georgia

The Russian military campaign in Georgia was a skillful blend of classical Russian operational art melded with new Russian ideas and lessons learned from observing Western armies at war. The sequencing of multiple operations to achieve strategic objectives by keeping the enemy off balance and preventing his concentration is wholly within the classical concepts of Russian operational art. ¹⁹ Additionally, the Russian operations demonstrate that they developed some new innovations of their

own and by observing the United States military in action.²⁰ The war was a return to conventional 20th century warfare with cyber attacks and information warfare integrated into the concept, both for operational as well as strategic purposes.²¹ And for the first time in awhile, the Russians were able to execute a combined arms offensive, integrating air, naval, paratroop, and ground forces into one campaign under the control of a single headquarters.

Preparation

The rapidity of advance to objectives beyond the two breakaway regions, level of combined arms activities, accuracy of targeting, and scale of operational and logistical preparations strongly point to detailed preparation for the war. One author suggests that the decision to initiate the war was made in April of 2008 during a crisis in Abkhazia when the Russian air force shot down two Georgian drones that were monitoring Russian peacekeeping forces.²² If true, the Russian military had at least three months to prepare.

In addition to the preparations, the Russians leveraged other historical factors to their advantage. Soon after the Soviet Union broke apart in 1991, separatists wars broke out in various locations in the former Soviet states, Abkhazia and South Ossetia included. Russian forces participated in peacekeeping in those areas and ultimately ended up as members of the peacekeeping forces in both regions. Through these forces, Russia worked with local ethnic Russians to influence the region against Georgia and to build irregular security forces loyal to Russia. During the late Spring and Summer months probably after the decision to go to war, the Russians were able to add approximately an additional thousand troops to the peacekeeping forces in Abkhazia in

April and May of 2008, obviously providing them with more forces already within their future area of operations who would know the area. These additional thousand were paratroopers - some of the best trained and prepared forces within the Russian military.²³ These forces brought with them tanks, artillery, and air defense weapons, equipment not normally associated with the norms of peacekeeping missions.²⁴

The Russians even sent a battalion of railway troops into Abkhazia during the summer months to repair a disused railroad between Sukhumi, the capital of Abkhazia, and the coastal town of Ochamchire. Ostensibly there to improve the railroad infrastructure in advance of the 2012 winter games to take place at Sochi, the Russian troops entered Abkhazia without the permission of the Georgian government and worked from May 30th to July 30th, ending their work just a week prior to the invasion.²⁵

The Russians staged an exercise in the North Caucasus from July 15th to August 2d that presented an opportunity for a military build-up adjacent to South Ossetia. Included in the exercise, "Kavkaz-2008" ("Caucuses 2008"), were airborne formations from distant bases in Ivanovo, Pskov, and Novorossysk. ²⁶ The exercise focused on the relief of Russian peacekeepers in South Ossetia and offered an opportunity to organize their force, prepare their equipment, and rehearse the mission. ²⁷ The timing of the exercise, whether intentional or serendipitous, allowed some of the forces from distant places to remain in place for the invasion.

Another key factor in preparing the battlefield was the introduction or hiring of spies within South Ossetia and the Georgian government. It appears that this individual or group were able to determine that President Saakashvili intended to send the Georgian Army to seize Tskhanvali as well as all of South Ossetia. The time of the

Georgian attack was probably also passed on. These key pieces of information gave the Russian military several opportunities. First, they were able to conduct final preparations and marshal their forces for movement. Secondly, the Russians probably alerted the South Ossetian irregular forces, enabling them to not only bolster their defense of Tskhinvali but also to secure the vital Roki Tunnel. Thirdly, it allowed the Russian 58th Army to move into Georgia and through the Roki Tunnel while the Georgian army was occupied in Tskhinvali, gaining operational momentum and allowing additional echelons to being moving. The 58th Army was able to generate approximately 70,000 troops into the operation in South Ossetia, roughly twice the size of Georgia's entire armed forces.²⁸

On August the 4th, the 58th Army positioned about five battalions in vicinity of the Roki Tunnel. Additionally, the Russian government publicly admitted that Russian aircraft were overflying Georgia. This announcement gave Russia the cover to conduct more detailed reconnaissance over flights.²⁹ Lastly, the Black Sea Fleet was made ready for operations along the coast of Georgia and Southern Russia.³⁰

Strategic Surprise

The Russians achieved surprise at all levels with this conventional operation, a goal that they had long desired in operational and strategic planning but had been unable to reach in previous conventional wars, most notably, in Afghanistan.³¹ While world leaders were watching the Olympic Games in China, the Russians invaded Georgia and within five days, overwhelmed the Georgians through a series of operations designed to inflict shock on the Georgian government and military, making both unable to effectively or coherently respond to the offensive. Surprise was

necessary not only for the ability to attain strategic and operational shock on the Georgian forces, but also for other important reasons. Strategic surprise along with an effective information operation allowed the Russian forces, using a high tempo of operations, to seize key objectives and areas before the world could react. At the operational and tactical levels, surprise enabled the Russians to seize and maintain control of the Roki Tunnel, which connects Russia with South Ossetia, before the Georgians could respond.

The Russians used strategic communications in an attempt to further the lifespan of their strategic surprise and create more time for operational maneuver before other countries, especially the United States and European countries could respond. Amidst the confusion of which country started the war, the Russian governments continued accusations in the international press about Georgian acts of genocide in South Ossetia and the Russian response to safeguard the population assisted in providing time for Russian ground units to attack deeper into South Ossetia.

Worth noting is that the Russians probably intentionally inflated the size of the Georgian attack on Tskhinvali on the 7th of August, providing a rationale to the world for entering South Ossetia with a larger invasion force than necessary to secure the breakaway region. The larger force allowed Russia to move deeper into Georgia³² to achieve other strategic goals such as threatening the government in Tbilisi, rupturing the economy, and taking steps to further isolate Georgia from the outside world by cutting the east-west highway linking Tbilisi to the port of Poti as well as the railroad that carried oil from Azerbaijan to Poti.

To achieve strategic and operational surprise in their attack in South Ossetia, the Russians solved three problems in operational art. The first was the movement through the Roki Tunnel that connects South Ossetia with Russia. This critical transportation link was a single point of failure for Russian operations in South Ossetia since it sits on the only viable road between the two countries. If the Georgians could have blocked movement through it, the Russians formations would have faced enormous difficulties. Although the Russians have the largest amount of airborne forces in the world, to have staged an airborne assault deep to overcome this barrier may have proved too difficult logistically. Although there are airfields of sufficient size and capacity near Tbilisi, there are none in South Ossetia. Even if the airborne assault would have occurred, Russians typically want to open a ground line of communication to those forces as soon as possible for logistics reasons. The second problem solved was the throughput of forces from Vladikavkaz, the capital of North Ossetia in Russia, where operations began to Tskhinvali, the capital of South Ossetia and the site of the first major battle. The Russians were able to double the size of their force in Tskhinvali in 24 hours along this 167 kms of mountainous road. The third problem solved was the deployment of a large number of forces, mostly paratroopers, from throughout Russia in order to achieve sufficient force ratios for offensive operations without creating a large mobilization signature prior to initiating the war.³³

Initial Operation into South Ossetia

Russian forces entered South Ossetia through the Roki Tunnel on the night of August 7th to 8th as the Georgian forces were fighting an intense battle in Tskhinvali with Russian peacekeepers. Russian forces painstakingly infiltrated into Georgia prior to the

Elite formations of paratroopers followed by Spetsnaz spearheaded the column that included the equivalent of a motorized rifle division (MRD) of the 58th Army and supporting artillery. ³⁵ Of note, the armored battalions were actually combined arms battalions, consisting of armored personnel carriers, tanks, and artillery. These organizations, formed in advance of the invasion and providing much greater tactical flexibility, reflected lessons learned in Afghanistan but later rejected as a standing organization by the Soviets and Russians. ³⁶ The column linked up with South Ossetian irregulars and continued to Tskhinvali, the capital of South Ossetia. In three days of fighting, the Russians successfully integrated the different capabilities of these forces as well as a battalion of Chechens, the "Vostok" battalion, to seize the city. As Russian armored forces moved further into Georgia towards the capital Tbilisi, South Ossetian irregulars and the "Vostok" Battalion, a unit of Chechen nationals in Russia's Main Intelligence Directorate (GRU), remained in Tskhinvali to "mop up."³⁷

Operation into Abkhazia

On the following day, August 9th, the Russians began massing forces along the border with Abkhazia in preparation for a combined arms operation conducted between the army, air force, and navy and including irregular forces from Abkhazia. Abkhazian authorities had reported Georgian forces moving into the peacekeeping zone. This violation gave Russia the pretext for maneuvering into Abkhazia. The air force attacked several targets in Abkhazia including the Kodori Gorge, where aircraft supported the attacks of Abkhazian irregular forces against Georgian troops. The railway between Tbilisi and Zugdidi in western Georgia was bombed and destroyed,

assisting in isolating western Georgia and Abkhazia from reinforcements from the capital. The Black Sea Fleet sortied from its base in the Crimea towards the coast of Abkhazia.

On August 10th Russian forces moved from Southern Russia into Abkhazia opening a second front along the coast of the Black Sea.⁴⁰ The Black Sea fleet, consisting of 15 to 16 warships as well as three landing craft, arrived off the coast of Abkhazia and landed approximately 4,000 paratroopers at Ochamchire. These paratroopers linked up with their heavy equipment which had been transported down the recently repaired railroad from Russia and participated in the offensive in the Kodori Gorge – a remarkable act of operational maneuver.⁴¹ Forward moving Russian armored columns linked up with Russian peacekeeper troops previously in the region as well as Abkhazian irregular forces to secure the province. Additional peacekeeper reinforcements were air landed in Sukhumi as well, helping swell the ratio of forces well to Russia's advantage with a dominating force of 9,000 men and 350 armored vehicles.⁴²

The operation in Abkhazia has some classic characteristics of deep battle. First, the Russians inserted the forces deep into Abkhazia. In doing so, they appear to have cut the fastest route between the Kodori Gorge in Abkhazia and Georgia itself. The operational maneuver that landed paratroopers at Ochamchire not only had the advantage of dislocating any potential enemy north of Ochamchire, to include the Kodori Gorge, the area of severest fighting in the past, the move also enabled Russian forces to bypass the UN Peacekeeping headquarters located at Sukhumi, thus avoiding observation, and possibly, reporting to Tbilisi of the size and nature of the operation.

Moving the equipment down by rail at night further inhibited reporting. Lastly, the use of paratroopers instead of marines had one distinct advantage when it comes to remaining unobserved. The paratroopers that were part of the peacekeeping force wore the same uniforms as the paratroopers that were landed, making it extremely difficult for the UN Peacekeepers to differentiate between the two groups.⁴³

Overall, when one combines the operation in Abkhazia with the one in South Ossetia, one sees the practice of classic Soviet operational art: attacking with operations from multiple directions so that the enemy is faced with overwhelming challenges on where to concentrate its effort. The operation met little resistance as the Georgian Army was committed between South Ossetia and the capital, Tbilisi. Having successfully achieved their first strategic objective by securing the two breakaway provinces with their initial, nearly simultaneous operations on a noncontiguous front, the Russians now were poised to conduct sequential operations to attack deeper into Georgia to achieve other strategic objectives.

Follow-on Offensives into Georgia

On August 11th, the Russians attacked along two axes into Georgia proper (beyond the two dispute regions of South Ossetia and Abkhazia). Russian forces attacked out of South Ossetia towards the town of Gori with three operational goals. The first goal was to move towards Tbilisi to threaten the capital and the government. This operation directly supported the strategic goal of overthrowing Saakashvili. The second goal was to cut the East-West running highway and railway, denying the Georgian military forces in the East and West from supporting one another and also cutting the Western regions of Georgia off from the capital, Tbilisi. By cutting these

means of communication and trade, Russia gained a strong position to affect Georgia's economy. The third goal was to create operational depth around Tskhinvali in order to protect that city from indirect fire attacks and the threat of ground attack by Georgian forces, allowing more effective control not only in the capital of South Ossetia, but the entire breakaway region.

In the West, Russian forces executed a simultaneous operation along the Black Sea coast. Armored forces moved from Abkhazia into Georgia proper towards Senaki with related operational objectives, meeting little resistance. The first objective was to cut the East-West highway and railroad connecting the Western region to the capital (this was the second location for cutting these vital pieces of infrastructure). The second objective was to seize and control the Georgian Black Sea port of Poti, Georgia's largest port, giving Russia control not only of Georgian exports and imports, but also denying any other country the potential to reinforce. Thirdly, the Russian army was now positioned within an hour of the key, western Georgian city of Samtredia, which sits astride the Baku-Tbilisi-Supsa oil pipeline. Additionally, this city is where roads diverge to Georgia's other key ports, Supsa and Batumi. If Russia controlled Samtredia, it would essentially establish a blockade of the country from the land. The army was in a great position not only to further disrupt Georgia's economy, but also to send a strong signal to the West that Russia can control Caspian Sea basin energy routes. Lastly, the move also provided Russia with operational depth for securing Abkhazia.

Combined Arms

Combined arms operations, a classical Russian concept of operational art, were very evident in the campaign. The campaign included armored forces, airborne forces,

attack, bomber, and reconnaissance aircraft, irregular forces, and the Navy. Each played a role that, when combined, helped achieve the operational endstate necessary for the strategic goals. One may even be able to add cyber warfare to this concept.

The Russian Air Force was an integral part of the campaign plan. Aircraft conducted reconnaissance, close air support, air superiority missions, and interdiction missions to spoil Georgia's ability to respond militarily. With the initial phase of operations in South Ossetia and Abkhazia, Russian aircraft attacked airfields east and south of Tbilisi, command and control facilities, and military bases to achieve depth to the operation, attack follow-on echelons, and assist in isolating the battlefield. ⁴⁶ The radar at the international airport in Tbilisi was attacked to reduce Georgia's ability to track Russian aircraft. Additionally, attacks on the air infrastructure as well as the port of Poti on the first day of the war assisted in making Georgia more difficult to access by a country wishing to intervene. ⁴⁷ The Russian air force's counter air operations forced the Georgians to disassemble their aircraft and hide them, not attempting to wrest control of the air from the Russians. ⁴⁸ Transport aircraft assisted in moving a large number of forces, equipment, and supplies from around Russia into the zone of military action, enabling Russia to achieve strategic and operational surprise and also developing overwhelming combat power against the Georgians. ⁴⁹

Russia's Black Sea Fleet significantly contributed to the mission⁵⁰ providing operational maneuver and fires, establishing a blockade, landing paratroopers at Ochamchire, and fighting a short naval battle. A guided missile cruiser fired into the Kodori Gorge during fighting there, providing operational fires.⁵¹ Also on the 10th, the navy fought a short battle with four Georgian vessels, sinking one.⁵² The fleet

established a blockade or at least remained in the waters, deterring reinforcement of men or equipment from third-party countries into Georgia during the conflict.⁵³

Cyberwarfare

The newest Russian innovation in operational art demonstrated in this campaign was the inclusion of cyber attack. Indeed, one can argue that this began not on the ground with armored formations or in the air with bombers, but rather, in cyberspace with distributed denial of service attacks. Although cyber attacks are difficult to attribute and the Russian government denied involvement in the attacks, the crescendo of attacks that began on August 7th against the Georgian government leaves little doubt to some experts that the cyber attacks were of Russian origin.⁵⁴

Although the cyber attackers themselves may not have been members of the military, the Russian government has demonstrated in the past some ability to "herd its domestic hackers as well as bringing its own resources to bear in these scenarios". Some of the attacks appear to have originated from within the Russian government while others originated in a Russian hacker network. In one expert's opinion, the cyber attacks in Georgia "were too successful to have materialized independent of one another." ⁵⁵ For example, the means to attack "proliferated on Russian websites in a user-friendly form" for anyone desiring to participate. One expert stated that "he found 'copies of the attack script' posted in the reader comments section at the bottom of virtually every story in the Russian media that covered the Georgian conflict, complete with instruction on how the script could be used to attack a specific list of Web sites."

During the ground war, distributed denial of service (DDOS) attacks overwhelmed the Georgian government's websites, causing them to crash. The attacks,

many from hundreds of thousands of "zombie" computers or "bots" unknowingly infected with viruses, generated hundreds of millions of requests, attacking websites of the Georgian government, president, parliament, news agencies, and banks.⁵⁷ Although attacks began prior to the 7th of August, the intensity of attacks during the initial phases and even throughout the campaign was a significant challenge for the Georgian government.⁵⁸

It is important to recognize that the Russians not only used cyber attack against an opponent as they did with Estonia the preceding year, but they also appear to have attempted to integrate cyber attack with maneuver and deep fires. Russian aircraft attacked telecommunications infrastructure during the war, further inhibiting the ability of the Georgian government to communicate and get its message out.⁵⁹ It also should be noted that although the cyber attacks were successful from the perspective of intruding into the information systems of the Georgian government, it is not clear that they had any impact on Georgia's ability to fight. The pictures of Hitler that were placed on Saakashvili's website may have been embarrassing, but these attacks as well as the denial of service attacks did not have any known operational or strategic impacts on Georgia. Control was not gained over the Georgian military or the population through these actions. ⁶⁰ Also, although the level of integration between cyber and conventional operations is not clear, it appears that the Russians may have attempted to link the two together to produce effects. It is also clear that if the Russians did plan the integration of cyber attack with conventional warfare, they have gained some valuable experience as well despite the shortcomings.⁶¹

Information

The Russians did not achieve success in their information campaign, although the operations in Georgia reflect some new aspects of Russian thinking. Strategically, Russia was unable to convince the world, mainly the West, that its operations were justified and purely within the realm of peacekeeping. Russia was pilloried by the international community for its actions as well as its recognition of the two breakaway republics. At home, the Russian government was very successful in convincing its population of the rightfulness of the war, gaining large amounts of approval and little dissent.

Operationally the Russian military attempted a few new steps in support of an information campaign. Russian journalists were brought along to share with domestic and international audiences the progress of Russian troops in protecting Russian citizens and of propagandizing Georgian atrocities. The Russians were able to use television footage to achieve some psychological affect as well with the local population in the breakaway regions. The Russians were able to show on local television footage of their advancing forces liberating the local ethnic Russian population. Georgia, on the other hand, was unable to show any footage of its troops in action. Ea The Russian government also used a military spokesman in daily television interviews to provide information and answer questions on the conduct of the campaign, a first for Russia. Altogether, Russian information operations were mildly successful, but the attempts made demonstrate a Russian military that is aware of the need to conduct operations in the information domain.

Command and Control

During the campaign, all of Russian forces involved in operations within Georgia were under the command of a single headquarters, the North-Caucasus Military District, located in Vladikavkaz, Russia.⁶⁴ From reports, it appears that the ground, air, naval, and airborne as well as Ministry of Interior forces were all organized into one grouping and received their direction from the local, regional headquarters, under the command of an army general. The forces were specifically tailored for the mission assigned to them – a quick campaign in Georgia with limited aims.

A unified command is a major step in Russian operational thought that was discussed in the 1980s in the waning years of the Soviet Union, but only recently experimented with and put into effect. The Soviet command structure that the Russian Federation inherited focused on massive, combined arms formations optimized for large-scale, prolonged wars. Such organizations not only did not meet the demands of the new geopolitical environment Russia found itself in, but they also did not reflect the extant capabilities of the Russian army after 1991, which was largely incapable to fighting such operations. In recent years, a requirement for a more localized, tailored command and control system maintained in peacetime as well as wartime emerged. This system also included troops from other ministries or government agencies, so as to better defend Russian interests, especially against terrorist attacks.⁶⁵ The military has conducted experiments with these regional groupings of forces to include using rapid reaction forces to quickly deploy and begin cooperating with local law-enforcement agencies to counter terrorist threats.⁶⁶

Consolidation and Achievement of Strategic Objectives

On August 12, 2008, President Dmitry Medvedev accepted a peace plan brokered by French President, Nicolas Sarkozy and announced a halt to the fighting in Georgia. The Russian military had established such a strong position in Georgia that the Russian government was able to call the shots on when to end the war, despite international political pressure that grew with each day since the initiation. In five days of fighting, Russian forces were 40 miles from the Georgian capital and had split the country into three parts. The Georgian army was defeated and the air force and navy destroyed. Russia had occupied, destroyed, or blockaded most of Georgia's Black Sea ports and the army was postured along the coast to prevent, or at least dissuade, intervention from a third country in the war. Reinforcements had not come from outside the country, other than the redeployment of a Georgian Brigade from Iraq too late to participate in the fighting.

Russian forces controlled much of "Georgia's most critical economic and transportation junctions" to include the east-west highway and railroad, the only land links that unite the country.⁷¹ Air links were blocked as well through the domination of the skies by Russian jets.⁷² In the west, Russian forces controlled the approaches to the port of Poti, the Senaki airfield, and the Kulevi oil export terminal, which is owned by Azerbaijan.⁷³ Russia's Black Sea Fleet patrolled off the coast, essentially an undeclared blockade, controlled both from the land as well as the sea.⁷⁴ The port of Poti was incapacitated through aerial bombing during the fighting, sinking three coast guard cutters in the harbor, and the destruction of a critical railroad bridge.⁷⁵

Russian forces and indigenous irregulars controlled South Ossetia and Abkhazia and were reportedly conducting ethnic cleansing to remove Georgians from the

territories. Soldiers and irregular forces pillaged and terrorized the local Georgian populations.⁷⁶ Cumulatively, this position attained by the Russian military enabled Moscow to threaten to dismember Georgia as a means to force a change of government in Tbilisi.⁷⁷

After the Georgian Army stopped resisting and after Russian President, Dmitrii Medvedev, announced the end of operations, Russian forces continued to implement their strategic goal of the destruction of the military potential of Georgia. The Russians were able to do this because of their dominating position within Georgia. Russian forces damaged or destroyed most of Georgia's military bases. Russian forces confiscated and transported back to Russia over 150 large pieces of equipment, to include tanks, air defense weapons, small arms, and captured American-made HMMWVs. Additionally, the Russians destroyed fifteen vessels of the Georgian navy and its coastal defense command point. The total materiel loss suffered by the Georgian forces was considered to be \$250 million.

The military had achieved all of its strategic objectives. Georgia and its president had been chastened in their western ambitions and agenda. The Russians understood that a prolonged occupation of Georgia proper would probably result in a guerilla war. Having experienced such a war in Chechnya, the Russians did not want to face one here. Facing greater international pressure and seeing no further strategic gains to be obtained by keeping Russian troops on Georgian soil, the Russians began withdrawing on August 22d. Buffer zones were established between the two breakaway regions southward into Georgia up to 40 km's. Additionally, Russian peacekeeping forces within the two regions were strengthened to solidify Russian control after the war. The strength

of the Russian military's positions within South Ossetia and Abkhazia contributed directly to the political conditions necessary for President Medvedev to recognize the two breakaway republics as independent states on August 26, 2008.⁸¹

Failures and Shortcoming of the War

One should not think that the Russian campaign in Georgia was perfect and without blemishes. This is far from the truth – and the Russian military and government recognized this as well shortly after the war in announcing major military reforms. Noteworthy in both the Russian as well as foreign press were the problems with soldier discipline during the war. Soldiers rode exposed on top of armored vehicles instead of protected within. Soldiers looted and terrorized the local Georgian population. And there were reports of public drunkenness.⁸²

Significant shortfalls were identified during the fighting in the ability of weapons and equipment to perform to desired expectations, many of these shortfalls are traditional areas of weakness in the Russian army. Russian forces proved incapable of suppressing Georgian artillery in the fight for Tskhinvali.⁸³ Units went into battle without their reactive armor. Some tanks that appeared on TV to be covered with such armor, actually had empty tiles installed.⁸⁴ The quality of as well insufficient quantity of night vision goggles led to an avoidance of night operations, providing opportunities to the Georgians to break contact under the cover of darkness.⁸⁵ Operations lacked cohesion due to an inadequate amount of Global Satellite Navigation Systems (GLONASS) to provide situational awareness. Effective command and control was impeded by poorly functioning radios that led to challenges in the close coordination of tank and infantry forces resulting in incidents of fratricide. At times, Russian soldiers used their cell

phones to communicate and a Russian general allegedly once used the satellite phone of a Komsolmolskaya Pravda correspondent.⁸⁶ The commander of the 58th Army, General Anatoly Khrulev, was wounded when his column ended up in an ambush vicinity of Tskhinvali, apparently unaware of the enemy in the vicinity.⁸⁷

Air forces and air ground integration also had their deficiencies. Electronic warfare systems performed poorly and were unable to effectively suppress Georgian air defense systems leading to the loss of six aircraft. Be The tactical forces failed to sufficiently use rotary and fixed wing aircraft and even when they did, maneuver units had challenges effectively integrating fixed and rotary wing aircraft into the tactical fights. A lack of experts in the air force who knew how to integrate rotary wing aviation, which had been removed from the ground forces and placed in the air force, into ground operations led to a lack of coordinated action between the two. Although the Russians had introduced air controllers for close air support into the ground forces, there were insufficient numbers to be everywhere needed, leading to poor air-ground coordination. A lack of precision munitions was evident in addition to a lack of unmanned aerial vehicles, leaving commanders unable to neither find the enemy nor attack it with accuracy. Possibly this lack of reconnaissance and precision bombs contributed to the large amounts of firepower employed on Tskhinvali during the battle there.

One could also note that despite the participation of air assault⁹³, airmobile, and airborne units, the 58th Army did not attempt a vertical envelopment to gain operational depth, seize key transportation nodes in advance of attacking forces, or to dislocate Georgian forces. One wonders if these forces were not employed in this manner due to

the challenges of the terrain, inadequacies in command, control and communication systems, readiness levels of the airmobile and air assault units, the requirements for close and detailed coordination between services, or a matter of training proficiency.

Military Reforms

The Russian military emerged from the conflict with a much clearer view of future war. Traditional thought about operational art was reinforced by the success of the war; conventional wars of maneuver in the style of the 20th century are still possible and can still achieve desired strategic objectives. Surprise and speed still matter in overcoming an opponent. A combined arms approach with overwhelming force is very effective. New and recent ideas also were more plainly visible. A different kind of army was needed to fight wars with limited aims in the periphery. Information operations need to be more subtle and credible to both domestic and international audiences. Emerging ideas in warfare also seemed evident, especially the value of cyber attack in a campaign plan to reinforce maneuver and fires. Most importantly, the Russians gained a view of future war as it applied to their preparation of their own forces and how it ought to be employed to defend and gain Russia's strategic interests in the near abroad.

In some ways, the results of this war may help put an end to a series of arguments ongoing within the Russian military since the fall of the Soviet Union. The arguments are an echo of the former debates in the 1920s and 1930s between Tukhachevsky and Svechin over which strategy was appropriate for the Soviet Union, annihilation verses attrition. Tukhachevsky argued that the Soviets needed an army that could wage with an annihilation strategy to effectively deal with an external threat. Since the fall of the Soviet Union, Russia has been engaged in a similar debate as it has tried

to grasp the nature of the threats they face, both internal and external, and how best to prepare for them. It appears that the large, mass, mechanized army advocates are losing to those that favor a more professional, competent joint force.⁹⁴ This war is hastening that shift.

President Dmitry Medvedev signed a major reform plan for the Russian military on September 15, 2008, roughly a month after the five-day war with Georgia. Initially, the plans for reform were kept secret; however, in October Defense Minister Anatoly Serdyukov announced five initiatives. The first was converting all units in the armed forces to a permanent readiness category. The second initiative was to improve the effectiveness of the command and control system of the armed forces. Third, military education and science needed improvement to meet Russia's strategic needs. Fourth, the armed forces needed reequipping with new, high tech weapons. Lastly, the military needed to improve the well-being of the service members in order to facilitate a professional army. 95

These reforms are a major step towards honing in a Russian way of war in consonance with current geopolitical realities that reflects classical Soviet operational thought, the developments of the last twenty years, as well as lessons learned from observing recent wars in other areas of the world. Moreover, these reforms reflect some fundamental conceptual aspects of operational thought that were fundamental to the development of operational art in the 1920s and 1930s. Then the Soviet thinkers understood that operational art was heavily influenced by the changing historical, economic, political, cultural, geographic and other factors extant in society. ⁹⁶ The current Russian military now appears to be embracing this idea by abandoning the

Soviet-era holdover thinking of focusing on large-scale conventional war in Europe and now focusing waging quick campaigns in local wars on the periphery of Russia. And for the first time since the fall of the Soviet Union, there appears to be the necessary political power as well as economic and financial resources to achieve this new vision.

In order to improve readiness, several major steps are planned. First, the military will be downsized to roughly one million soldiers and 150,000 officers organized into 70 brigade-sized units, abandoning the division and regimental structure. The General Staff would be cut from nearly 22,000 to 8,500.97 The number of generals will drop from 1,100 to 886. Already, many senior generals have been fired in order to clear obstructionists from the path of reform.98 The Russian military will focus on building a noncommissioned officer corps like that of the United States. Warrant officers will leave the service or become officers with responsibility. The military will transition to a volunteer force and will improve quality of life, pay, and other benefits commensurate to assist in recruiting.99 Measures will be taken to keep officers with combat experience in units.100

The poor state of readiness of the units in the Russian armed forces since the fall of the Soviet Union has been a reoccurring theme. Currently, Russian military forces have a "permanent readiness status" of about 20 percent¹⁰¹, which forces the military, as seen in both the Chechen Wars and the Georgian war to assemble composite units from various parts of the country in order to field a force at least marginally capable of fighting effectively. In the future, all units will be maintained in a high state of readiness, able to execute combat operations on short notice. Not only should this signify that the military should be more operational capable with better trained and equipped units, it

also means that the Russian military should be more capable of achieving strategic and operational surprise in potential conflicts in the "near abroad" because it will have a more agile structure and system to rapidly deploy capable forces.

Conclusion

When analyzing the campaign in Georgia, it is important not to walk away from this study thinking that the Russian military is now a dominant, conventional, military power. Such an assertion belies the facts of the campaign. To be straightforward, the Russian military overwhelmed a third-rate power by placing roughly four times as many soldiers in the combat zone than in the entire Georgian army. 102 The Georgian military made some key mistakes, not the least of which was the failure to block the Russian advance through the strategic choke point of the Roki Tunnel. If the Georgians had blocked the tunnel, it is interesting to speculate whether the Russians had a feasible alternative plan that would achieve in a timely manner the same strategic objectives before international condemnation increased to such a level that Russia would have chosen to cease using its military to achieve its goals. Additionally, assertions that the Georgian army should have fought better because it had American equipment and trainers miss the point of that assistance. The Americans, tragically for Georgia, were training the Georgian military for a different type of war, a counter-insurgency in Iraq which Georgia was participating in with one brigade. The Georgian military lost its focus on its vital task, to secure itself from foreign aggression and was unable to defend itself against a looming, resurgent adversary. The Georgian leadership underestimated the threat and possibly overestimated the assistance that the United States or NATO would provide if a conflict with Russia were to break out.

Many analysts who focus on Russia have commented on the strategic implications of the Russo-Georgian War of August 2008. Most Western analysts see the war as a breakdown of Russian policy or a harbinger of Russia's further withdrawal from accepted norms of international behavior. The strategic costs of the war far outweigh the gains that were achieved. However, there is another way to look at this war – at the operational-strategic level. In this view, it appears that Russia was successful. The armed forces, given a limited aim and clear, strategic tasks, were able to craft a campaign plan that integrated combined arms to achieve all of the strategic objectives with minimal cost in life and equipment. Moreover, they achieved these goals in five days, something they were unable to do in either war in Chechnya. The Russian military proved to be an effective means of national power in assisting its government in achieving its geopolitical goals in the near abroad.

The Russian military appears to be on a path to becoming even more operationally viable as a means of national power. It is taking valuable lessons learned in operational art from its Soviet past and slowly sloughing off the entrenched beliefs that hinder optimization for its present geopolitical situation. It is observing other militaries and trying to blend its operational thought and capability into an emerging, Russian way of waging war that is effective in achieving tasks proportionate with its geostrategic aims. And it is experimenting with new capabilities in operational art, mainly cyberwar, to grow its capacity and capability. This emerging combination of cyber and conventional war could be something for which most countries of the world are unprepared. As Moscow continues to aspire to the role of a great power, it will be interesting to observe how Russia further develops its version of operational art.

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