

The Battle of Grozny: Deadly Classroom for Urban Combat

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Best policy in war--thwart the enemy's strategy,
second best--disrupt his alliances through diplomacy,
third best--attack his army in the field,
worst strategy--attack walled cities.

-- Sun Tsu, *Art of War*

The battle for Grozny, the capital of the small Russian Republic of Chechnya, took place in January 1995. It pitted a hastily assembled and unprepared Russian force against a Chechen force of regulars and guerrillas equipped with Russian weapons and a belief in their cause. The Chechens held their own for three weeks but eventually lost the city to the Russian armed forces in late January (the Chechens retook the city in August 1996).

Both sides learned or relearned many lessons of urban combat, most of them the hard way.[1] This article examines the most important of those lessons, the interesting and perhaps surprising conclusions drawn by the Russians about modern urban warfare, and their implications for US soldiers and urban warfare theory.

Background

The Russian Republic of Chechnya is located in the southeastern part of Russia near the northwestern end of the Caspian Sea. Chechnya declared its independence from the Soviet Union in October 1991. This declaration by Chechen President Jokar Dudayev was not unexpected; the region's history is scored by episodes of intense Chechen-Russian battles that encouraged hatred toward Russia and a desire for independence. Further, Russia was in disarray at the time, with then Russian Republic President Boris Yeltsin in confrontation with Soviet President Mikhail Gorbachev over the issue of sovereignty. Yeltsin encouraged Soviet republics (but not semi-autonomous ones like Chechnya) to "take all the sovereignty they could swallow." Dudayev interpreted Yeltsin's words to fit his situation.

Grozny had nearly 490,000 residents in 1994. It included many multiple-story buildings and industrial installations and covered some 100 square miles. (By comparison, the Joint Readiness Training Center for urban combat in the United States covers less than a tenth of a square kilometer, offering but one indication of how urban training can differ from reality.) A Chechen opposition movement developed in 1993, finally attempting to overthrow President Dudayev in late November 1994 through an armed attack. The attack was repulsed by Dudayev's forces. Russian complicity was at first denied by Moscow, but then acknowledged when Dudayev paraded several captured Russian soldiers before TV cameras.

The indignity and embarrassment over the exposure of Russian involvement caused Russian Federation President Boris Yeltsin, in his third year in office after ousting Gorbachev, to order troops to start moving into Chechnya on 11 December. Planners had less than two weeks to move and position forces and supplies. By New Year's Eve, Russian forces had Grozny surrounded on three sides and entered the city from the north, moving headlong into hell.

The first unit to penetrate to the city center was the 1st battalion of the 131st "Maikop" Brigade, the latter composed of some 1,000 soldiers. By 3 January 1995, the brigade had lost nearly 800 men, 20 of 26 tanks, and 102 of 120 armored vehicles. For the next 20 days and nights Russian artillery rounds rained down on the city, sometimes at the rate of 4,000 an hour.[2] Local residents left the city or took refuge in basements while the Russian armed forces fought Chechen "freedom fighters" or "bandits" (depending on one's perspective) on the streets and in the buildings above them.

When more captured Russian soldiers were shown on TV, the mothers of some went to Grozny to negotiate their sons' release. Those negotiations took place in the center of the city without Russian government assistance and while under Russian artillery bombardment. Dudayev extracted a promise from the Russian soldiers he released of eternal indebtedness to their brave mothers.

The struggle continued until 20 January, when the Russians finally took the city center and raised the Russian flag over the Presidential Palace.

Before delving into the lessons learned from this battle, we may note several contextual factors that conditioned the outcome.

The Chechen armed force spoke Russian, had served in the Russian armed forces, and had Russian uniforms. This made it much easier to understand Russian tactics and plans, and to use deception techniques. The Chechen force was not a typical army but rather a composite force of armed home guards (guerrillas) and a few regular forces. Much of the equipment in their possession had been left by Russia's armed forces in 1993 when departing Chechnya. By one account the Chechens had 40 to 50 T-62 and T-72 tanks, 620-650 grenade launchers, 20-25 "Grad" multiple rocket launchers, 30-35 armored personnel carriers and scout vehicles, 30 122mm howitzers, 40-50 BMP infantry fighting vehicles,[3] some 200,000 hand grenades, and an assortment of various types of ammunition.

The Russian armed forces that attacked Grozny, while well-equipped, were not the same professional force that opposed the West during the Cold War. Russian Minister of Defense Pavel Grachev, in a top-secret directive, listed some of the problems of his armed forces just ten days before the start of the war. He noted that the combat capabilities of the armed forces were low, the level of mobilization readiness was poor, and the operational planning capability was inadequate. Soldiers were poorly trained. Their suicide rates as well as the overall number of crimes in the force were up. Knowing the situation so clearly, Grachev's bold prediction that he could take Grozny with a single airborne regiment in two hours is incomprehensible.[4] Perhaps Grachev privately understood the true problems in the force but put on the face of public bravado to support the presidential directive he had received.

Other analysts confirmed the dismal state of readiness, estimating the capability of the Russian armed force to carry out combat missions as five or six times lower than what it had been in just 1991.[5] Not only was the force poorly trained, it also was undermanned. On the eve of the operation, Grachev apparently had a force of some 38,000 men, only 6,000 of whom entered Grozny on New Year's Eve. Dudayev is believed to have had 15,000 men in Grozny. This means that the 6:1 force ratio desired for attacking a city (a doctrinal norm derived from combat experience in World War II) clearly was not attained. On the contrary, the correlation of forces was 1:2.5 *against* Russian forces at the start of combat. In addition, the force that entered Grozny was a composite force, with some battalions composed of members from five to seven different units. Crews often hardly knew one another. One Russian officer noted that a rehearsal for taking a built-up area had not been conducted in the last 20 to 25 years, which contributed to decisions such as sending the force into the city in a column instead of in combat formation.[6] These facts, combined with the bad weather, the hasty political decision to enter the city, and the lack of training, offered the Russian force little chance for quick success.

Lesson One: Know Your Opponent and His Turf

Societies are run by different methods. Some are governed by the rule of law, others by the rule of men. Some are governed by religious or local tradition, and still others by the tradition or customs of the clan. Chechnya was a society run by the rule of the clan.

Two traditions of the clan that unify the Chechen people are *adat* and *teip*. *Adat* is an ancient system of retribution, an unwritten code that is followed more closely than the Russian penal code or other imposed civil laws. The code is reputedly based on revenge, incorporating "an eye for an eye" sense of justice. For example, after two of their comrades had been killed, Chechen fighters took a building in Grozny and seized some Russian prisoners. They killed two and let the rest go.[7] They had their revenge.

The tradition of clan or tribe (*teip*) relationships is equally important and should have been stressed to Russian forces. *Teip* members fight fiercely to preserve their clan's independence, culture, and separate identity. Relations between *teips* "are based on blood feuds." [8] There are more than 150 *teips* in Chechnya, whose membership "ties a Chechen to a large extended family and to an ancestral piece of land." [9] If an opponent of the Chechens fails to take into account both *teip* and *adat* (as well as the long Chechen tradition of looking to older men for wisdom and to younger men for the "warrior" spirit), then he will not understand the fundamental issues uniting Chechen society and their will to fight foreign domination. Such will can outlast outside weaponry and presence. This lesson becomes more and more important to US planners as the American armed forces move to an expeditionary posture. An outside force can't stay forever, and the will of the local populace may win in the end.

In Chechnya there was even more at work than these internal cultural factors, however. There also existed an intense historical hatred of Russia and Russians among elements of the population, a reaction to the lack of respect shown by Soviet leaders and their Russian predecessors. In 1816, for example, Russian Caucasus commander General Alexi Yermolov insisted that "the terror of my name should guard our frontiers more potently than chains or fortresses." He launched a scorched earth policy, treating the Chechens with extreme cruelty to

perpetuate his claim. In 1949 Soviet authorities erected a statue of General Yermolov in Grozny. The inscription read, "There is no people under the sun more vile and deceitful than this one." [10] This unbelievably callous and calculated insult by Soviet authorities ensured the eternal hatred of many Chechens, demonstrating how poorly Soviet authorities understood their own people. During the 1970s and 1980s, the Chechens repeatedly attacked this statue.

Joseph Stalin earned the further enmity of the Chechen people by deporting the entire population to Central Asia in 1944. Many died during these deportations, which Chechens viewed as genocide. They returned to their homeland 13 years later during the premiership of Nikita Khrushchev.

Yeltsin and his military planners failed to consider the "receptivity" of the people in Grozny to their demands and intentions. The Russian army lacks civil affairs units, and this missing element compounded their problems. In the same manner, any force considering an attack in an urban environment must evaluate both the type of opponent it is attacking (guerrillas, regular forces, etc.) and its will. If the opposing force has deep and persistent antipathy toward the attackers, then it will be impossible to achieve victory without a decisive confrontation and military conquest. The local force has the advantage; if it can persevere, it can pick the attacker apart in both the short and long term, eventually wearing him out. In this sense, the moral-psychological orientation of the defenders adds an important element beyond mere weaponry to the "correlation of forces."

In addition to understanding one's opponent, an attacker must know the urban terrain over which he will fight. The Chechens obviously had a huge advantage in Grozny, as does any native defender. Not only did they know the city's sewer, metro, and tram systems intimately, they also knew the back alleys, buildings, and streets. Russian forces were not so prepared. They had 1:100,000 scale maps when a scale of 1:25,000 or even larger was needed. As a result they often got lost, finding themselves in Chechen ambushes or exchanging fire with friendly units. Chechens took down street signs and repositioned them in cleverly misleading positions to confound the Russians. Unit boundaries were almost impossible to coordinate because of the lack of adequate maps. Tactical maps were often made from plain blank paper by hand, with Russian soldiers filling in the sheet with the city vista (streets, buildings, etc.) in front of them.

Modern urban sprawl continues to make this aspect of military operations in urban terrain (MOUT) more appealing to the defender. The Chechens reverted to a battle of "successive cities" after the Grozny battle ended, hoping to recreate their Grozny successes elsewhere. They moved their operations base to Shali, Argun, and other city centers. They recognized that they could accomplish two things with this tactic: they could negate Russian advantages of firepower in the open from helicopters, fixed-wing aircraft, and tanks, and they could blend in with the local population to their advantage. This not only continued to make it difficult to distinguish combatants from civilians, but it also helped the Chechens get the local population on their side. This was usually the result when Russian forces entered a city, destroyed property and buildings, and killed or wounded civilians while searching for their armed opponent.

The average Russian soldier possessed neither the cultural savvy nor the street smarts for such confrontations. Since urban combat is resolved at the squad and platoon level, well-trained

soldiers are essential. Too often this fact is ignored by forces contemplating an urban action. For Western armies, particularly expeditionary forces, there must be civil and public affairs units attached to help the soldier prepare for urban combat. A cultural understanding of the battlefield can greatly assist both the commander in understanding his mission and the average soldier in fulfilling it. An understanding of the city infrastructure offers similar advantages.

Lesson Two: Don't Assume--Prepare, Prepare, Prepare

When planning for the intervention into Chechnya, the Russian force made several questionable assumptions. First was that the Chechen force would not resist or stand up psychologically to the concentration of large groups of state troops. Soviet forces had succeeded in Czechoslovakia in 1968 with such an operation, and they may have banked on a repeat performance in Chechnya. A second assumption was that qualified planners were still present on the General Staff. Much of the intellectual strength of the General Staff probably had atrophied along with the general dissipation of the armed forces over the previous five years. But even if the General Staff was fully operational and capable, any operation of this complexity may have been beyond their ability to prepare in two weeks (in preparation for the Czech invasion, for example, there were at least six extensive Warsaw Pact exercises over the course of several months to practice ground operations, air defense, logistics, and other elements before the intervention).[11] Finally, the plan presupposed a trained, coherent force that was as capable as the old Soviet military. None of the Russians' assumptions stood the test of reality.

Many outright errors were committed during the hasty preparation of the force as well. For example, the operations plan omitted technical support resources (such as communication equipment) and there was no coordinating agency linked with the president's administration to resolve political problems. The administration's information/propaganda machinery also failed to prepare the mass media to report positively on the reasons for the intervention or to illuminate the national interests at stake. Thus Russia lost the political and information battles in the first days of the conflict. Many of these problems were aggravated by the fact that at the time of the intervention, Russia did not have a national security concept, and only an outdated military doctrine.

In addition, three powerful ministers (Defense, Internal Affairs, and Internal Security) all had troops in the fight but failed to integrate their efforts.[12] As one source noted, "The enormous losses of the early days were caused by the poor level of professionalism of the command/staff element, which underestimated the enemy and was staggeringly negligent in coordinating actions among individual units and subunits as well as among the various types of forces." [13]

Other Russian problems included complacency as to the location of the main and reserve force, poor highway traffic control, a lack of knowledge of the area, and no clear-cut troop instructions on how or when to use their weapons. Soldiers were sometimes prohibited from massing fires and lacked clear rules of engagement and target adjustment criteria. Some troops had just arrived from training units and had no idea how to operate as part of a unit. All they knew were individual soldier skills.[14] According to one report:

In the 81st Motorized Regiment of the 90th Tank Division, out of 56 platoon commanders, 49 were yesterday's [civilian college] students. More than 50 percent of the men sent to war had never fired live shells with their tank cannons, and had no idea of how to do so. Military cooks, signalers, and mechanics were appointed to shoot antitank guns and missiles as well as machine guns.[15]

Just days before kicking off the operation into Grozny, a unit that was deployed at the Mosdok staging area conducted the following training: assembly and disassembly of equipment; range firing and field training; company tactical exercises and driving combat vehicles; battalion field training; driver testing; and alert drills.[16] Not a word about training on combat in cities.

Perhaps the most serious deficiency in the preparation phase was in intelligence data. The Russians had almost no information about the situation in the city, especially from human intelligence sources. Military intelligence did not delineate targets for air and artillery forces, and electronic warfare resources were not used to cut off President Dudayev's communications. Reconnaissance was poorly conducted, and Chechen strong points were not uncovered. There was little effective preliminary reconnaissance of march routes, reconnaissance amounted to passive observation, and reconnaissance elements appeared poorly trained.[17] Simply put, the Russians did not do a proper intelligence preparation of the battlefield--indeed, there does not seem to be an established procedure for processing data for the intelligence preparation of the battlefield in the Russian armed forces. Commanders and troops tried to overcome this shortcoming in the course of combat actions, leading to delays in operations and reduced effectiveness.

These first two lessons (know your opponent and battleground, and the importance of preparation) may seem elementary, but they may also reveal aspects that US planners are most likely to miss. Analysts writing urban doctrine should raise their focus from tactics to consider also overarching concepts such as political considerations, limitations of city fighting, worldwide integration of economic assets, characteristics and types of opposing forces (guerrillas, regular force, willingness to violate international law), city size and infrastructure, and probable enemy methods for negating US operating superiority. It is a combination of these latter facts that will drive the tactics and operations when going into a city. Neither strategy nor tactics can be developed in isolation from them. US forces thus need an urban combat courses of action methodology to help select the optimum approach to each situation.

Lesson Three: Choose the Right Weapons

The Chechen weapon of choice was the rocket propelled grenade launcher (RPG). The RPG was most feared by the Russians because of its multiplicity of uses. It could be used to shoot over buildings like a high-trajectory mortar, and it could be used either as an area weapon when fired over troop formations or as a precision weapon when fired directly at armored vehicles. Some destroyed Russian tanks were hit more than 20 times by RPGs.

A second weapon of choice for the Chechens was not really a weapon at all. It was the multitude of information-technology gadgets, especially cellular phones and commercial scanner systems, that allowed the Chechens to communicate easily with one another, ensured the coordination of

combat operations, and allowed Chechens to listen in on Russian conversations (thereby proving to be a force-coordination multiplier). On many occasions, the Russians felt the Chechens knew what they were going to do ahead of time, and for this reason believed these communication devices were like weapons. The Chechens also used mobile TV stations to override Russian TV transmissions and to deliver messages from President Dudayev directly to the people. The Internet was also used, especially to raise funds and assistance from abroad.

Flame-throwers appear to have been a weapon of choice for the Russian force. One article written after the fighting noted that the Kalashnikov assault rifle, the Mukha grenade launcher, and the Shmel flame-thrower were a "soldier's best weapons." [18] The flame-thrower was chosen as much for its psychological effect as its ability to flush people or snipers out of buildings at a considerable range. Evidence supporting the view that this is an important Russian weapon was provided when an improved, jet-powered model was advertised for sale abroad in October 1998. It reportedly was capable of the same effectiveness as 152mm artillery rounds, and had a maximum range of fire of 1,000 meters (over a half mile!). [19] With its portability and range, it may prove to be an adequate substitute where the use of supporting artillery would be difficult.

A "weapon" of choice for both Russians and Chechens was the sniper, who caused panic and havoc with just a few well-placed shots. There are reports that the Chechens employed female snipers from the Baltic region. Snipers were extremely effective in slowing a convoy's movement and forcing a column to take another route. One observer wrote:

One experienced sniper is capable of doing what will prove to be beyond the capability of a tank, gun, or entire infantry subunit: disable a commander, destroy a gun or mortar crew, control one or two streets . . . and, most important, instill in the enemy a feeling of constant danger, nervousness, and expectation of a sudden shot. Everyone fears the Chechen snipers in Grozny. . . . There are many cases where a sniper wounds a serviceman, and then kills the wounded person and those who come to his aid. [20]

The sniper could also use an RPG in conjunction with a sniper rifle. A real problem for Russian troops was identifying snipers who shot at them and then donned a Red Cross armband and mingled with the local populace and the Russian soldiers he was killing. To counteract this, Russian checkpoints began forcing the Chechen men to take off their shirts. Soldiers would look for bruises on the shoulder from weapon recoil, for powder burns on forearms, or for a silver lining around cuffs (from mortar or artillery propellant bags). They also smelled clothing for gunpowder and looked for traces of it under fingernails or on arms or legs. Russian forces also employed snipers, but not with the same degree of success as the Chechens. A March 1995 article decrying the neglect of sniper training attests to this fact. [21]

The correct mix and employment of weapons in the city were also important. Grozny was a three-tiered fight (upper floors of buildings, street level, and subterranean or basement), and the weapons had to fit. Russian tanks could not lower their main gun tubes and coaxial machine guns low enough to shoot into basements harboring Chechen fighters. To correct this problem, the Russians put ZSU-23-4 self-propelled, multi-barreled, anti-aircraft machine guns forward with columns to fire at heights and into basements.

The use of artillery and air power in the city was counterproductive in many instances. Indiscriminate bombing and shelling turned the local population against the Russians. The locals included some Russian citizens who were inhabitants of Grozny (and who found it incomprehensible that their own leaders had such disregard for the lives of civilians). Most of the Russian population of Grozny lived in the center of the city. Since this is where the most severe fighting took place, Russian civilian casualties were high.

Lesson Four: Adapt Tactics to the Situation

The principal Chechen city defense was the "defenseless defense." They decided that it was better not to have strong points, but to remain totally mobile and hard to find.[22] (Some strong points did exist but were limited to dug-in tanks, artillery, or BMPs to engage targets head-on.) Hit-and-run tactics made it difficult for the Russian force to locate pockets of resistance and impossible to bring their overwhelming firepower to bear against an enemy force. Russian firepower was diluted as a result and could be used only piecemeal. Chechen mobile detachments composed of one to several vehicles (usually civilian cars or jeeps) transported supplies, weapons, and personnel easily throughout the city. Chechens deployed in the vicinity of a school or hospital, fired a few rounds, and quickly left. The Russians would respond by shelling the school or hospital, but usually after the Chechens had gone. Civilians consequently viewed this action as Russians needlessly destroying vital facilities and endangering their lives, not realizing who had initiated the incident. The Chechen mobility and intimate knowledge of the city exponentially increased the effect of their "defenseless defense."

The slaughter of the Russian 131st Brigade was a result of this tactic. Russian forces initially met no resistance when they entered the city at noon on 31 December. They drove their vehicles straight to the city center, dismounted, and took up positions inside the train station. Other elements remained parked along a side street as a reserve force. Then the Chechens went to work. The Russian lead and rear vehicles on the side streets were destroyed. The unit was effectively trapped. The tanks couldn't lower their gun tubes far enough to shoot into basements or high enough to reach the tops of buildings, and the Chechens systematically destroyed the column from above and below with RPGs and grenades. At the train station, Chechens from other parts of the city converged on the station and surrounded it. The commander of the Russian unit waited until 2 January for reinforcements, but they never arrived. His unit was decimated.

The most lethal Chechen force in those early days of January was led by one of President Dudayev's most trusted warriors, Shamil Basayev. Basayev's "national guard" force consisted of some 500 men who had fought in Abkhazia against Georgians in 1992-93. Battle-hardened, they moved in groups as large as 200 at times, showing up in cars with guns blazing.[23] The more typical Chechen combat group was a three- or four-man cell. Five of these cells were usually linked into a 15- to 20-man unit that fought together.

Some Chechen soldiers pretended to be simple inhabitants of Grozny, volunteering to act as guides since it was so difficult to navigate in the city.[24] They subsequently led Russian convoys into ambushes. Russian forces tried to counter Chechen ambush tactics by using a technique called "baiting," in which they would send out contact teams to find Chechen ambushes. In turn, the Chechens used a technique called "hugging," getting very close to Russian

forces. This technique eliminated the Russian use of artillery in many cases, and it exposed baiting tactics.

The Chechens were proficient at booby-trapping doorways, breakthrough areas, entrances to metros and sewers, discarded equipment, and the bodies of dead soldiers. Some command-detonated mines were also used, but this weapon found greater use in other cities the Chechens defended. (A detailed 1998 Russian article about the importance of initially using plenty of expert engineer-reconnaissance forces in MOUT was published to teach how to counteract such threats.[25])

Russian forces became wary of moving into a building and learned to proceed methodically. They began taking one building at a time, and moving block by block instead of rapidly moving into the city center as they had at the beginning of the intervention.

Another significant Russian problem was the delineation of boundaries between units owing to the nonlinear nature of urban combat. For the Russian force, this problem was complicated by four factors: poor communications that prevented units from knowing where other units were; the absence of an integrated communications system tying together different units from the Ministry of Internal Security, the army, and the other services; different operational tempos in different parts of the city that caused one unit to get ahead of another; and dealing simultaneously with both vertical and horizontal boundaries within a building. This difficulty in ascertaining boundaries resulted in several incidents of fratricide and instances in which units were pinned down by friendly fire for up to an hour. Aware of these problems, the Chechens exploited boundary conditions whenever possible. To help overcome such difficulties, a Russian expert recommended that units wear pagers and use a map display system known as Cospas-Sarsat during future operations. (Cospas-Sarsat is a system of geostationary satellites that act as a global positioning system, especially for search and rescue.)

A final tactical issue was the Russian use of assault detachments and tanks to seize buildings and drive the Chechens from the city.[26] Initially the Russians relied heavily on tanks in Grozny, but this approach was soon abandoned, with infantry and marines then becoming paramount. The initial instruction pamphlet issued to Russian soldiers in Grozny noted that a tank platoon should move at the head of the column, covered by motorized riflemen and flame-throwers. Reserve teams advancing in armored personnel carriers behind the tanks would fire against second and third floors. Three months later conflicting advice appeared in Russian army magazines. Tanks were advised to seal off city blocks, repel counterattacks, and provide cover. In providing supporting fires along streets, tanks were expected to occupy covered positions or operate only in areas controlled by motorized rifle units. During movement, tanks would move behind infantry at a distance beyond the effective range of enemy antitank weapons, but close enough to support the infantry with grazing fire from machine guns. The same principle was to be used for calculating the follow-on distance for other armored vehicles. Additionally, metal nets and screens were mounted 25 to 30 centimeters away from the armor to create protection from Chechen antitank rounds.

Lesson Five: Anticipate and Resolve Communications Problems

As we have seen, a lack of training was the biggest problem for Russian troops and staffs in planning and executing the urban combat mission. The most significant technical problem was establishing and maintaining communications. In 1997-98, no issue received more attention on the pages of the Russian army's most prestigious journal, *Armeyskiy Sbornik*. Obviously, this problem greatly complicated the execution of missions. If you can't coordinate and control units, how can they bring firepower to bear effectively?

The breakdown in communications occurred at the platoon, company, and battalion levels. Some of the problems were clearly the fault of Russian planners, such as the decision during the battle for Grozny to transmit all messages in the clear. This misstep obviously allowed the Chechen force not only to monitor all transmissions and thus prepare for what was coming next, but also to insert false messages in Russian communications traffic. Later, the Russians used message scramblers.[27]

The chief factor in the communications breakdown, however, was simply the vertical obstacles posed by urban structures. High-rise buildings and towers impeded transmissions, especially those in the high to ultra high frequencies. Communication officers had to consider the nature of radio wave propagation and carefully select operating and alternate frequencies, and they had to consider the interference caused by power transmission lines, communications lines, and electric transportation contact systems.[28]

Many radio transmitter operators were killed in the initial battles, as Chechens focused on soldiers carrying radios or antennas. To solve this problem, Russian radio operators began concealing their antennas. However, this led them to hide their whip antennas in a pocket or under a shirt, and in their haste to reassemble the radio while under fire, forgetting to reconnect the antenna.[29]

After-action recommendations by Russian communication specialists included developing more convenient and lighter-weight gear for radio operators, including wire-type antennas; outfitting units with cellular and trunk-adaptable radios; putting an indicator lamp on the radio sets to highlight problems; developing a common radio storage battery; and providing alternate antennas in follow-on models, capable of automatic connections in case primary antennas become disabled.[30]

The Russians noted that the Chechen forces used Motorola and Nokia cellular radios, and leased satellite channels on foreign relays. This enabled them to establish communications between base stations and to maintain quality mobile radio communications.[31]

Looking to the Future

When considering the initial failure of the Russian forces in Grozny in January 1995, it seems apparent that the issues outlined above, drawn from one-on-one discussions with participants as reported in Russian military literature from January to March 1995, would be at the center of the lessons-learned discussion. But Russian conclusions about the types of weapons and methods for attacking in future urban combat were much more imaginative than originally expected, focusing

largely on the low end of the technological hierarchy. Such Chechen strategies as "defenseless defense" and "successive cities" seemed to force an innovative response.

For example, one of the lessons learned by Russian forces and underscored in their critique of combat in Grozny is the increasing utility of nonlethal weapons in future urban combat. This conclusion primarily refers to chemical weapons not banned by the Geneva Convention, such as tear gas and other agents.[32] The principal lesson Russian commanders seem to have learned is, "Don't fight this type of battle unless there is no other option." Gas is an option because it debilitates opponents and allows friendly forces to disarm them without lethal combat.

But the Russians are also considering high-tech, debilitating nonlethal means (rays of light causing blindness or seizures, subsonic sounds that penetrate concrete or metal and induce vomiting or spasms, electromagnetic waves, etc.).[33] New types of psychological operations, an old nonlethal technique, were under discussion as well. Psychological warfare techniques have been seriously upgraded through information technology developments. For US forces concentrating on the high-technology solutions and approaches (firing around corners, devices to measure heartbeats through walls, etc.), it is important not to overlook counters to Russian innovations. At the very least, improvements should be made to US soldier protective devices. Despite the standard US aversion to the use of most of these Russian nonlethals, they may be more than attractive to other armies, especially if they are underbudgeted, undermanned, and undertrained.

The Russians learned other lessons from their Chechnya experience as well. They will likely now do everything in their power to persuade political figures to solve conflicts by peaceful means,[34] and their preparation phase for urban combat probably will be comprehensive and exhausting in the future, since it is clear that Chechnya was not like Czechoslovakia. There will be more instruction on urban combat in their academies. The correlation of "other forces" (customs, religion, belief in the cause, receptivity to friendly forces, etc.) will be considered during the preparation phase, as will such factors as types of forces (guerrillas, regular, mercenaries), building materials, communications potential, local customs and resistance, friendly forces available, and the use of chemicals. Those chemicals may include "traction interrupters" to interfere with the working parts of equipment or to change a road surface, pyrophoric materials to burn non-flammables, or even biological materials to destroy electric and insulating materials.[35] It is clear that the Russian armed forces learned that if they can disable a person or piece of equipment, then it will be much easier to achieve their objective.

If force is used, there will be no preparatory fires (because it turns the population against you), but only supporting fires during the operation.[36] This concept may result in an extended use of direct fire artillery and a greater reliance on flame-throwers. It will be imperative to get civilians out of a city before fighting starts. Army aviation will be used to adjust artillery fires, provide battlefield command and control of troops, mark and coordinate boundaries, evacuate the wounded, and insert air assault forces at critical points in the city.[37] Finally, as the United States learned in Somalia, it is not always the best-equipped force that wins. Patience, discipline, and will play a greater role in the long run than the Russians acknowledged going into Grozny. This lesson must be learned by those who rely too heavily on precision weapons and think that victory is possible in the short term. Long-term engagement works against the intruding force; as

civilian casualties mount, every move is scrutinized in the media, and the international community bands together to scold the "perpetrator."

Finally, a lesson learned by medical personnel and participants was the psychological stress of urban combat. Like the war in Afghanistan, the Chechen conflict produced severe cases of combat stress and psychological trauma. A psychologically well-prepared and trained Russian force was not available during the initial fight for Grozny. As a result, Russian commanders began establishing a reserve force only a few hundred meters away from the main force during the fighting. This reserve acted as a relief force that replaced the main force when it became psychologically spent. This usually occurred after about three hours of house and booby-trap clearing, which were the most stress-inducing activities other than clearing obstacles during the most intense days of the fight. A recent article about Chechnya noted that younger members of the native population there are also having serious troubles with stress-induced injuries from the war. One physician in Grozny, speaking about the children, noted: "They have become more aggressive, nervous, cruel. They have no respect for elders. They're dangerous to be around. They have psychological illnesses, terrible illnesses. Some can solve problems only with a gun." [38]

The first visible indicator of the traumatic nature of the attack on the Russian psyche was an article in *The Journal of Military Medicine*, just four months after the start of serious fighting. Major General V. S. Novikov, a professor in the medical service, gave a scathing account of the neurological disorders he was observing in Chechnya. [39] Novikov screened 1,312 troops in his survey. He found that 28 percent were healthy, while the other 72 percent had some type of psychological disorder (46 percent exhibited asthenic depression symptoms--insomnia, lack of motivation, anxiety, neuro-emotional stress, or tiredness--and the other 26 percent exhibited psychotic reactions such as high anxiety or aggressiveness, a deterioration of moral values or interpersonal relations, and excitement or depression). The longer a soldier was stationed in the war zone, as expected, the more radical the change in his neuro-psychological condition. Novikov termed this condition Post-Traumatic Stress Syndrome, using the English acronym for this affliction in the Russian original. He had obviously studied the US experience in Vietnam. The percentage of troops with combat-induced deficiencies was higher than in Afghanistan. [40]

Novikov's research also revealed that some 32 percent had experienced extreme stress while preparing for combat actions. These soldiers were taught active and passive muscular relaxation; others received psychological therapy or even pharmacological treatment (to treat insomnia or stress). After their removal from combat, troops' asthenic symptoms decreased while their psychotic disorders increased. [41]

Conclusions

The lessons of the fight for Grozny are several and sobering for anyone who contemplates using troops in an urban environment. While some of the lessons learned by Russian and Chechen combatants are peculiar to that region, others have wider applicability. No army wants to engage in urban combat, but increasing urbanization and the danger of strikes from high-precision weapons may well force the fight into the city, where the defender has all the advantages.

Preparation for urban combat should begin in peacetime. There is a vast array of possible courses of action, options, constraints, limitations, force mixes, enemy compositions, legal factors, and city characteristics that must be studied and understood. The most important point may be that there is no "standard urban combat operation." Each is unique to the opponent, the city, specific operational and tactical issues, and geopolitical considerations, among other factors. Understanding the elements and ramifications of urban combat is a difficult but crucial task for any army, but especially for one moving from a forward-deployed to an expeditionary state. In the latter case, the tasks required to sufficiently sustain or support urban combat are enormous.[42]

NOTES

1. For an extended, blow-by-blow version of the fighting during the month of January, see either Carlotta Gall and Thomas de Waal's firsthand accounts in *Chechnya: Calamity in the Caucasus* (New York: New York Univ. Press, 1998), chapters 1 and 10; or Timothy Thomas, "The Battle for Grozny," *Slavic Military Studies*, 10 (March 1997), 50-108.
2. David Remnick, "In Stalin's Wake," *The New Yorker*, 24 July 1995, p. 48.
3. Sergey Surozhtsev, "Legendary Army in Grozny," *Novoye Vremya*, No 2-3 (January 1995), pp. 14-15.
4. N. N. Novichkov, et al., *Rossiyskiye vooruzhennyye sily v Chechenskom Konflikte: Analiz, itogi, vyvody (analiticheskiy obzor)* (Paris, Moscow: Holveg-Infoglob-Trivola, 1995), pp. 18, 19.
5. *Ibid.*, p. 21.
6. Vitaliy Kudashov and Yuriy Malashenko, "Communications in a City," *Armeyskiy Sbornik*, No. 1 (January 1996), p. 30.
7. Peter Ford, "Chechens' Eye for Eye Vendettas Shape War," *The Christian Science Monitor*, 8 March 1995, pp. 1, 13.
8. Novichkov, et al., p. 5.
9. Gall and de Waal, p. 26.
10. *Ibid.*, pp. 39, 41, 62.
11. Graham Turbiville, "Soviet Bloc Maneuvers," *Military Review*, 58 (August 1978), 19-35.
12. Novichkov, et al., pp. 28-30.
13. *Ibid.*, pp. 30-31.

14. Ibid., pp. 23, 25.
15. "Soldiers Sent to Battle after 8 Days' Training," *Moscow News*, 17-23 April 1997, p. 5.
16. Ibid.
17. Novichkov, et al., pp. 34, 35.
18. Vladimir Berezko, "Flame Throwers: A Second Birth," *Krasnaya Zvezda*, 29 December 1995, p. 2. The Mukha antitank weapon was second in popularity to the RPG. There were also reports that the flame-thrower was under-utilized, but these were deemed a mistake.
19. ITAR-TASS, 0943 GMT, 2 October 1998, as translated by FBIS and downloaded to their web page. The high accuracy is due to an engineering development in which the motor and fire satchel inside the bore (container) separate.
20. Oleg Mikhaylov, "A Rare and . . . Unpopular Specialty: About One Lesson of the New War," *Armeyskiy Sbornik*, No. 3 (March 1995), pp. 38-41.
21. Ibid.
22. Chechen Brigadier General Zelimkhan Yandarbiyev recently emphasized this point, noting that in the early fight for the city "the situation did the organizing." "Chechen Commander on Modern Separatism," *Nezavisimoye Voyennoye Obozreniye*, No. 2, 22-28 January 1999, p. 2.
23. Gall and de Waal, p. 205.
24. In addition, Chechen artillery observers operated in the rear of Russian forces disguised as peaceful residents or refugees. Some Chechens, especially Russian-speaking women, reported on Russian forces. Chechens also took hostages to coerce family members to serve as artillery spotters in the rear of Russian forces. See *Armeyskiy Sbornik*, No. 1 (January 1996), pp. 37-42.
25. Vadim Mayatskii, "When Storming a City . . .," *Armeyskiy Sbornik*, No. 2 (1998), pp. 62-68.
26. A proper explanation of the concept of employing assault detachments requires a separate article.
27. Valeriy Osyanin, Yevgeniy Komarov, and Nikolay Chistyakov, "Portable Radios in Grozny," *Armeyskiy Sbornik*, No. 10 (1996), pp. 41-43.
28. Kudashov and Malashenko, p. 30. Other recommendations to improve communications included: using radios with automatic frequency tuning together with devices for guaranteeing scrambling and masking speech; using HF radios of armored vehicles with a supplementary receiver; using an "architectural waveguide" and "signal amplification by obstacle" plan (bouncing signals off of buildings or retransmitting them at intersections or via airborne platforms); locating VHF/UHF radios at a distance of three to five times the height of reinforced

concrete upper stories or iron roof structures; putting antennas near windows or doors of upper stories when a radio is in a building; remoting radios from basements by using 10-15 meters of coaxial cable mounted to local objects with brackets or feeding into an existing television antenna; and using beam antennas to maintain communications with a distant subscriber and a whip antenna for a radio net. Ibid.

29. Osyanin, et al., p. 41.

30. Ibid., p. 43.

31. Vladimir Komashinskiy, Valeriy Kurnosov, and Nikolay Burenin, "In the Interest of Continuous Command and Control," *Armeyskiy Sbornik*, No. 10 (October 1996), pp. 48-49. Two other interesting articles on future communications techniques or adaptations are Aleksandr Anatolyevich Ivanov, "A View of the Future," *Armeyskiy Sbornik*, No. 11 (November 1996), pp. 6-8; and Nikolay Kochetov, Vladimir Artamonov, and Yevgeniy Komarov, "Flexible Command and Control," *Armeyskiy Sbornik*, No. 9 (September 1995), pp. 36-38. One report stated that some commercial cellular communications were used to support Russian formations and units in Grozny, but no further information was provided.

32. V. V. Kilunin, "New Views on Combat Actions in a City," *Military Thought*, 7 (No. 3, 1998), 41-43.

33. Novichov, et al., p. 164.

34. Kilunin, p. 41.

35. Novichov, et al., p. 164.

36. Kilunin, p. 41.

37. Ibid., pp. 42-43.

38. Edward Kline, "Chechnya after the War," *Central Asia Monitor--On-Line Supplement*, 7 January 1999.

39. V. S. Novikov, "Psycho-physiological Support of Combat Activities of Military Personnel," *Military Medical Journal*, No. 4 (1996), pp. 37-40. The discussion and information in this section were taken from this article.

40. Ibid., pp. 37-38.

41. Ibid., pp. 38-39. Novikov recommended collective suggestive influences and pharmacological treatments as the most effective, and that there should be five specialists at army level (two psycho-physiologists, and one psycho-pharmacologist, one psychiatrist, and one medical psychologist). This group can assess 200-250 people per day and provide help. Ibid., p. 39. There were also urban combat "lessons learned" offered by some of the more savvy reporters

who were present during the fight for Grozny that should be studied. Their experiences and opinions were colored differently than those of the combatants and remain valuable. Anatol Lieven, for example, offered three telling observations: that the effectiveness of even the best technologies for urban warfare will depend on how confused and afraid the man using them is; that Russians missed the capacity of Chechen social tradition to mobilize fighters and impose a discipline on them that goes beyond the "surface discipline" (imposed by basic training) of a modern army that does not provide nearly as strong a cause for the individual soldier to fight for (although it did not immunize young Chechens from PTSD); and that the Russian failure again demonstrates the limitations of firepower when fighting a dispersed infantry opponent behind good cover. Anatol Lieven, "The World Turned Upside Down," *Armed Forces Journal*, August 1998, pp. 40-43. Lieven's article is worth the time to look up and read.

42. The author would like to offer a special thanks to Mr. Les Grau of the Foreign Military Studies Office, Ft. Leavenworth, Kans., for his help with this manuscript.

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