



THE RUSSIAN WAY OF WAR

FORCE STRUCTURE, TACTICS, AND MODERNIZATION OF THE RUSSIAN GROUND FORCES

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Chapter 5

Tactical Maneuver

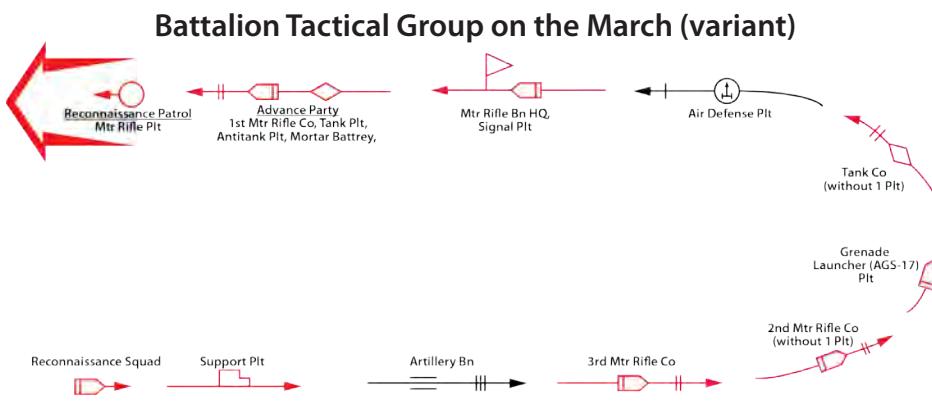
The March

Russia covers more land mass than any other country. Its population density of 8.4 people per square kilometer make it one of the most sparsely populated countries on the planet. Russia's ground forces have to be mobile and skilled in long-range deployment in order to deploy to threatened areas. Brigades deploy annually over a thousand kilometers to unfamiliar training areas. Emergency Readiness Deployment Exercises also move troop units over long distances to determine their ability to get to the fight efficiently and effectively. Brigade officers are skilled in conducting road, rail, boat/ship and aviation unit movements. The Soviet Army's entrance into Afghanistan and its later withdrawal were excellently executed. When the Russian Army hit rock bottom just before the 1994 incursion into Chechnya, it still did an impressive job of quickly pulling together pieces of its shattered army from all over the country.

Initial operations shape the course of a war and which side is first to mobilize its forces, concentrate them at the contested area and deploy them for combat has a distinct, if not decisive advantage since that side has the initiative to establish a strong defense or to forestall the other side from creating prepared defenses and thus preempt costly breakthrough operations. For Russia, combined rail and road movement is often the most effective and quickest way to move brigades. March planning includes priority for movement, march capabilities (so that the forces and heavy equipment on rail arrive together) and march support in the form of air defense, security of bridges and choke points, supply of POL and material reserves, maintenance support, secrecy, assembly areas, dispersion areas, lager sites, rest sites and information operations cover, and misdirection.¹

Marches can be administrative or under threat. Marches under threat have usually been conducted at night for concealment. Depending on the state of electronic combat and air superiority, marches may be conducted during the day under smoke. The Russians use smoke in a variety of circumstances. Instead of building expensive counters to top-attack, the Russians use smoke. Smoke may be used to screen movement effectively provided that its particulates serve as a screen against electronic probes. HETs are used to save wear and tear on tanks and artillery pieces. It is optimal that first echelon brigades have three routes from the final assembly area to commitment. The march column is organized so that the battalions may move directly into combat if needed. March columns must flow smoothly and quickly from the march into battle in combat order determined by the enemy composition and terrain where contact is expected. This provides an advantage in the event of a meeting engagement or overcoming a surprised enemy defense. March columns are normally headed by a reconnaissance detachment some 60 kilometers in front of the main body. A forward security element follows some 15 minutes behind. An advance guard battalion follows another fifteen minutes behind. Movement support detachments move behind the advance detachment, prepared to assist, repair or move stalled vehicles off the route. The main body moves behind the advanced guard with the headquarters and artillery usually in the forward portion of the main body. The march column has flank and rear security elements deployed during movement.

¹ Ministry of Defense of the Russian Federation, "March Preparation" [Маршевая Подготовка], *Military Encyclopedia* [Военная Энциклопедия], Volume 5, Moscow: Voyenizdat, 2001, 20-21.



(Right) The graphic on the facing page shows the maintenance and combat service support provided to a tank battalion on the march.² The graphic depicts logistics and maintenance support to a tank battalion on a march moving from an assembly area in

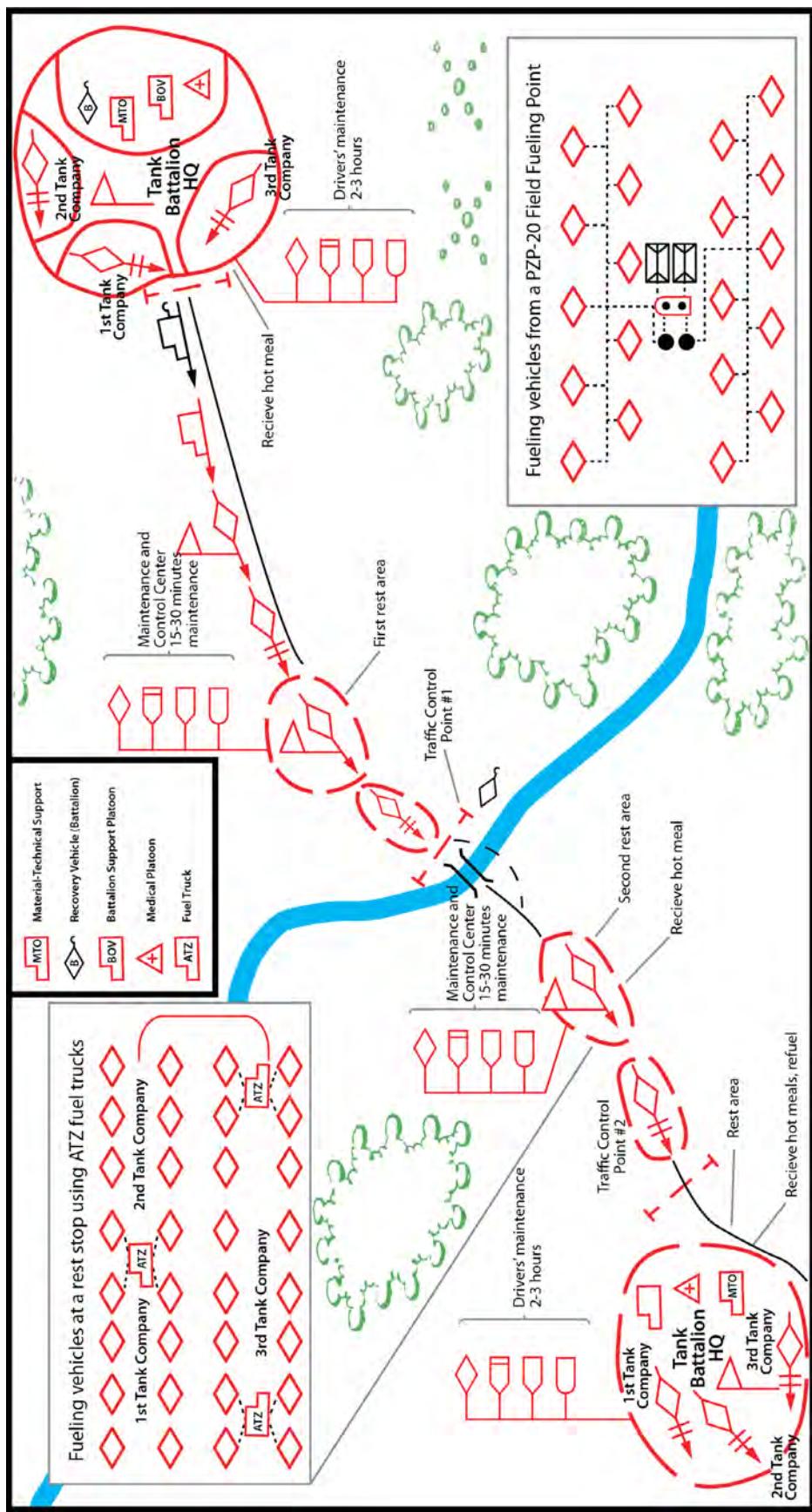
the upper right corner to a day or night lager site. The graphic is not to scale, since a normal 10-12 hour road march by a mixed march column of tanks and wheeled vehicles would stretch 200-350 kilometers on paved roads, 120-240 kilometers on dry dirt roads and 80-140 kilometers on muddy, hilly or urban roads. In the assembly area are three tank companies; the battalion headquarters; armored, tracked recovery vehicles; a maintenance support element; the battalion support platoon and the medical platoon. A motorized rifle company (MRC) mounted on BMPs or BTRs could be attached to the battalion. A field kitchen is set up to provide hot food. During the 12-14 hours in the assembly area, drivers and mechanics are required to spend 2-3 hours maintaining their tracked and wheeled vehicles. The assembly area is set up for 360° defense, and fighting positions are prepared and vehicles are camouflaged.

The battalion departs the assembly area in column formation stretching over eight kilometers, with some five kilometers between it and another battalion. The combat support and combat service support trucks, including tow trucks, bring up the rear. After the first two hours, the column enters into a rest area for a half-hour halt. The first rest area on this graphic is a maintenance and control center, where drivers and mechanics spend 15-30 minutes in maintenance. Resuming the march, the column reaches a river, which is manned by traffic control personnel (traffic control point #1) to maintain intervals and loads on the crossing bridge. Air defense assets (not shown) will cover the bridge. Maintenance assets (in this case, tank recovery vehicles) are on hand to keep traffic moving and the bridge cleared.

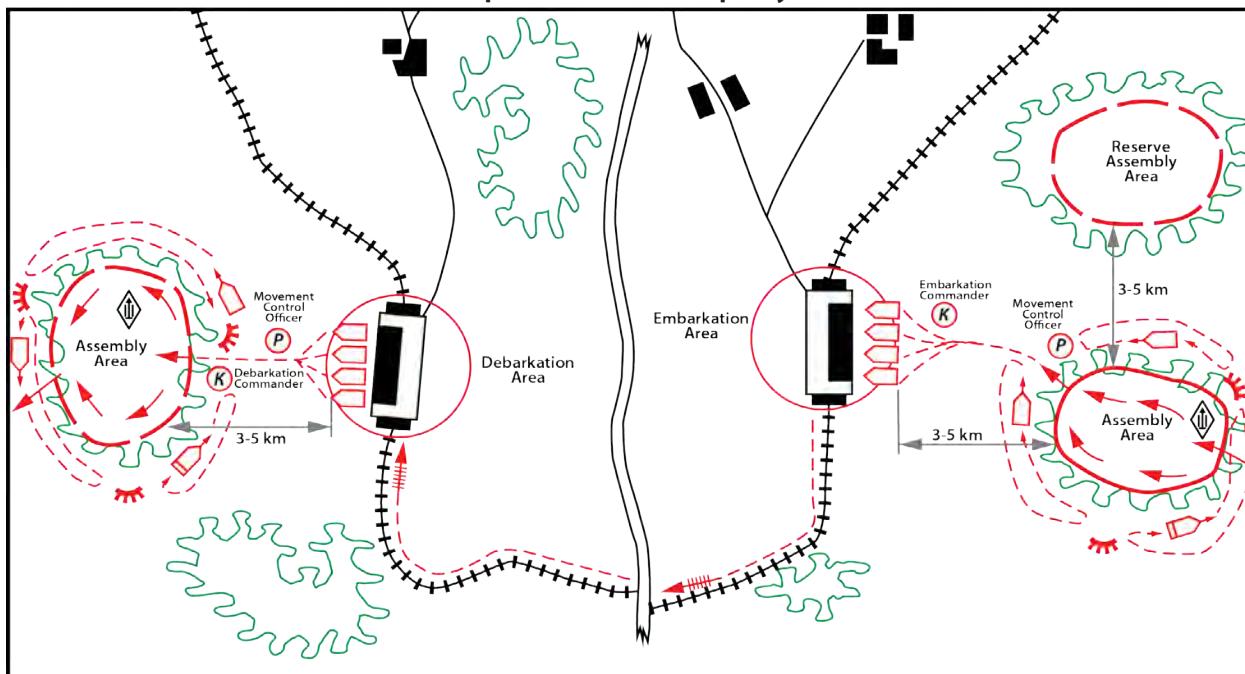
Two-three hours after leaving the first rest area, the battalion closes into a second rest area for another break, while the drivers and mechanics spend another 15-30 minutes on maintenance. The battalion is fed another hot meal at this rest area and the vehicles are refueled. The graphic shows two methods of refueling. The top left box shows 32 tanks parked in 4 rows so that fuel trucks can drive between them and refuel 4 tanks simultaneously. The bottom right box shows a field pumping station that can refuel 20 tanks simultaneously. The march continues and the battalion reaches traffic control point #2. The battalion moves into its day or night lager, takes up defensive positions, and camouflages vehicles, and the drivers and mechanics settle in to another 2-3 hours of maintenance. Vehicles are refueled and a hot meal is served. Personnel get some sleep before the next march (or attack).

² Ministry of Defense of the Soviet Union, *Tactics (company, battalion)* [Тактика (рота, батальон)], Second volume, Moscow: Voenizdat, 1991, plate 28.

Rear Service Support for a Tank Battalion on the March



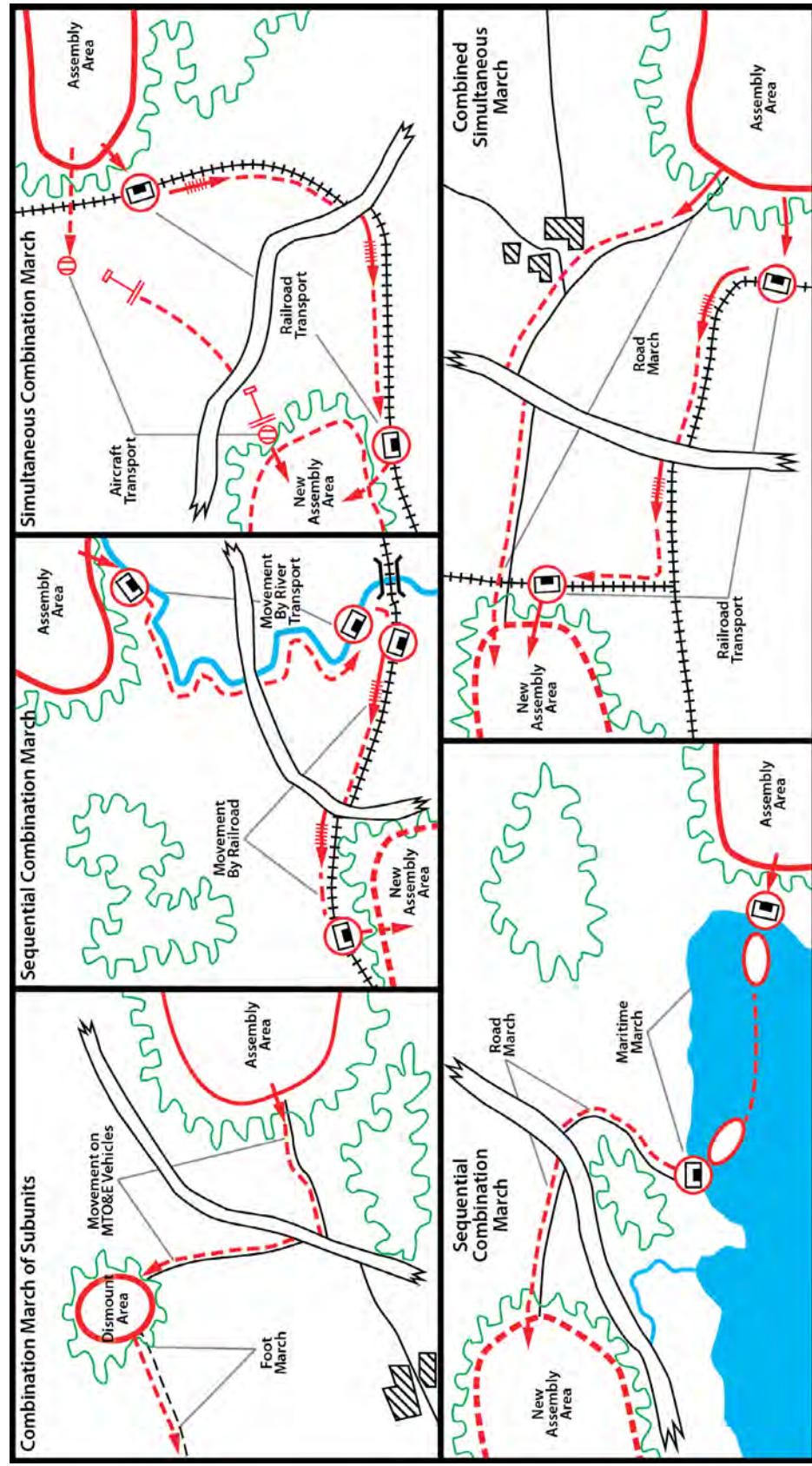
Transportation of Troops by Rail



(Above) The above graphic depicts a rail march where the unit waits in a concealed waiting area some 3-5 kilometers from the railhead. The unit occupies the waiting area in tactical readiness and patrols the perimeter. There is a reserve concealed waiting area in case it is needed. Vehicles are maintained, troops are fed and rested in the area. The unit moves from the waiting area and loads onto train flat cars and box cars and boards personnel. When the trains arrive at the receiving railhead, the unit unloads and occupies another assembly area. Security is maintained while vehicles are topped off, equipment is sorted out and personnel are fed and rested. Once the unit is ready, it conducts a motor march to its next destination.

(Right) The graphic on the facing page shows ways to conduct marches. Each of the examples includes a long, white, jagged-ended belt snaking across the travel routes. This belt simply marks a long span of distance and time during which travel is conducted but the mapping of this area is not included. The top left example shows a subunit march combining a motor march and a foot march. The unit starts in an assembly area on the right, moves on vehicles to a dismount area and continues on foot. The top middle example shows a sequential combination march where a unit moves from an assembly area by river transport to a disembarkation point, where it boards railroad transport and continues to a detraining point and moves into a new assembly area. The top right example shows a combination march where part of the unit is moved by air transport and part by railroad simultaneously. The bottom left example shows a sequential combination march where a unit embarks on maritime transport, disembarks men and equipment, then moves to a road where it continues its march on vehicles. The last example is a combined simultaneous march where a unit conducts a road march while its heavy equipment (usually tracked vehicles) is moved by rail to meet up at a new assembly area. This last example is quite common as the Russian ground forces do not want to expend track and motor life unnecessarily for tanks, self-propelled artillery, and the like.

The Combined Movement of Troops





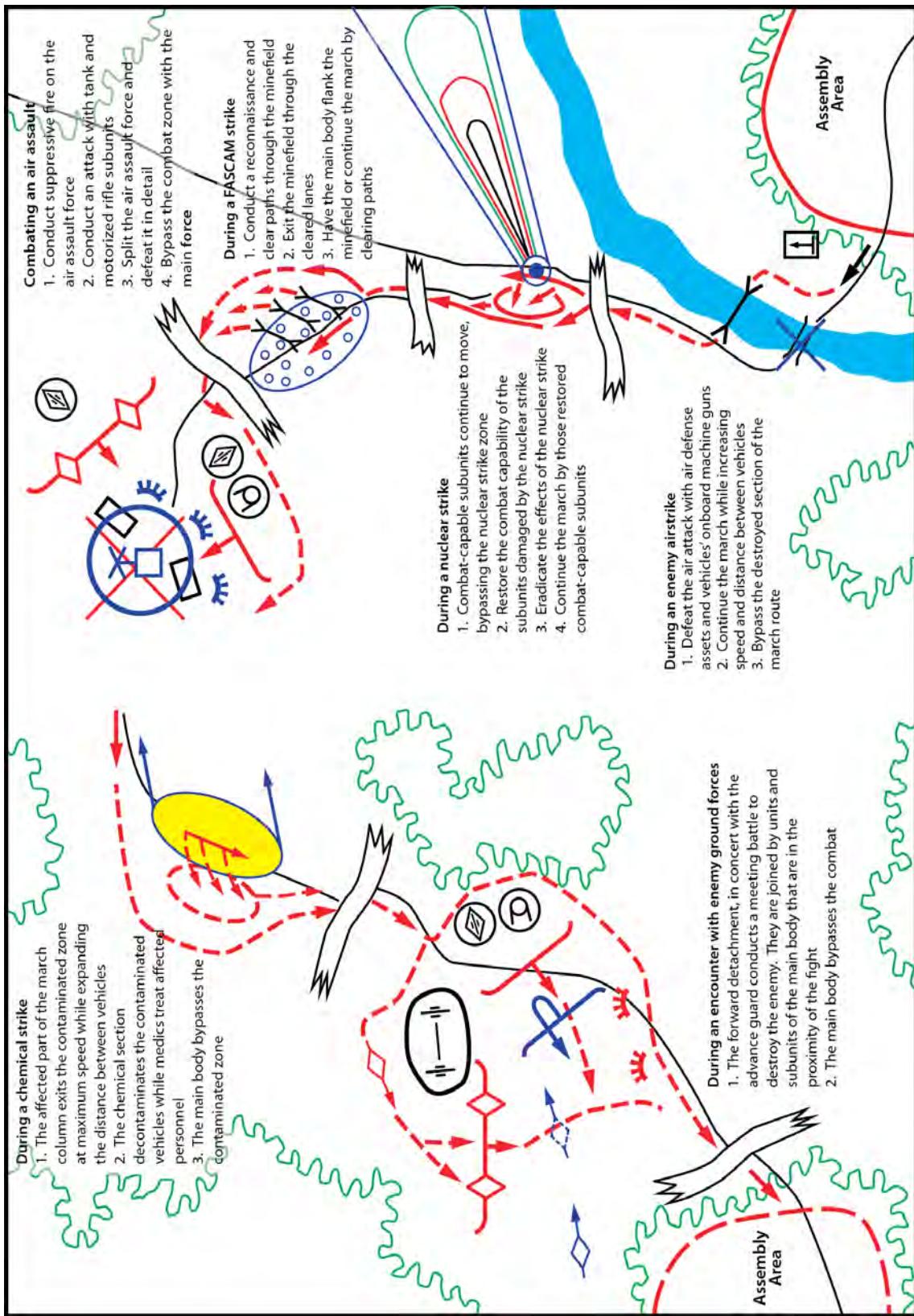
Convoy Operations

Image Courtesy: Russian Ministry of Defense

(Right) The graphic on the facing page depicts a hard-luck unit on a road march. Starting at the bottom right hand corner, the unit departs from its waiting area only to be met by enemy aircraft which attack the column and destroy a bridge crossing. The unit deploys its air defense assets while vehicles respond with on-board machine guns and defeat the air attack. The unit diverts to a river fording site and crosses the river successfully. After some time, the enemy hits the column with a nuclear weapon. The combat capable subunits withdraw from the strike zone on the upwind side. The units take measures (decontaminating men and equipment) to restore combat capability to the stricken units. The unit takes necessary measures to mitigate the effects of the strike in the area (road repair, fire control) and the subunits (including the restored units) resume their march. The determined unit drives on and, after a good while is attacked by enemy FASCAM. The intrepid unit conducts a reconnaissance to determine the extent of the mine field and employs its UR-77 or UR-83 line charge mine clearing systems to clear paths through the minefield. The trapped vehicles exit the minefield. The unit continues its march by either creating a bypass around the stricken area or clearing the route through the minefield.

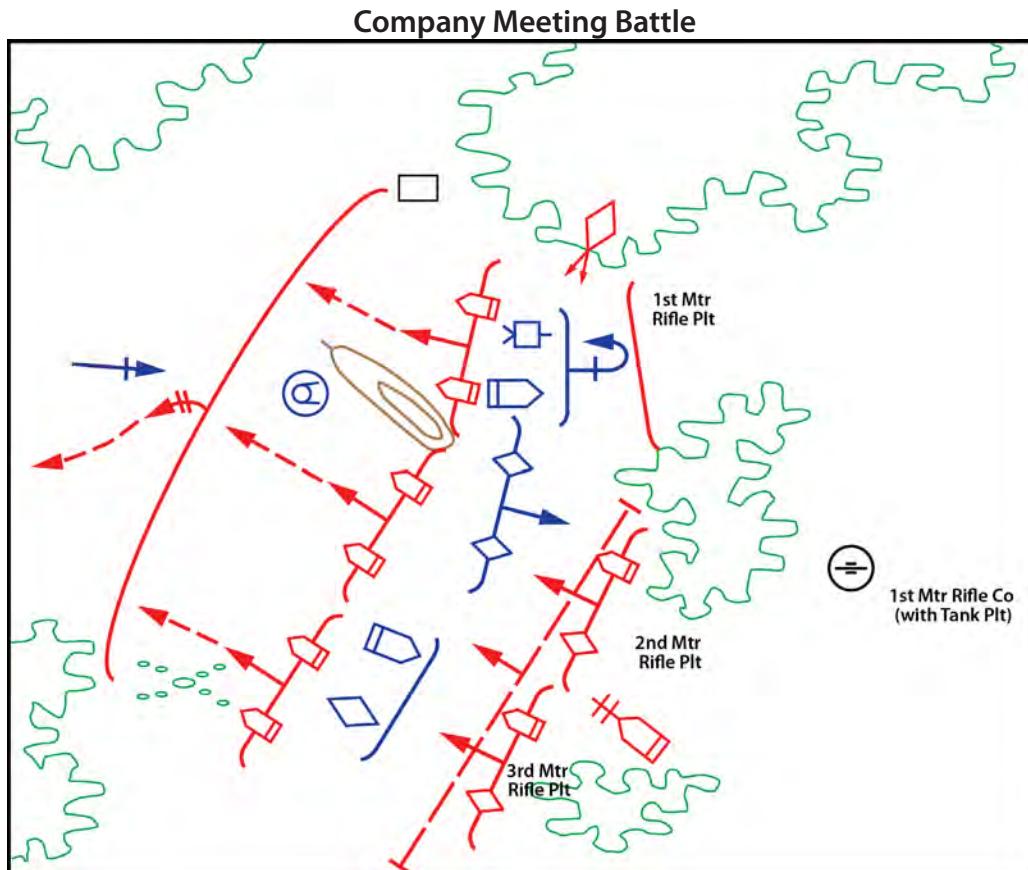
Our hard-luck unit pushes on, but the enemy is determined to stop it. After driving further, the column encounters an air assault unit. The unit immediately puts artillery fire on the enemy and deploys tanks and motorized rifle subunits to deal with it. The attackers split the air assault unit into pieces and defeat it in detail. In the meantime, the main body of the unit column bypasses the fighting and continues the march. Trouble awaits and the column is now hit with an enemy chemical strike. The part of the column in the contaminated zone quickly exits the zone at maximum speed and spreads out the distance between vehicles. The stricken vehicles are decontaminated by the chemical defense subunit and medical personnel see to the personnel. The main body of the unit column bypasses the stricken area. Further, down the road, the forward detachment encounters the enemy and, in concert with the advance guard, conduct a meeting battle. This is joined by units and subunits of the main body which are in the proximity of the fight. The main body bypasses the fight and continues the march. Finally, the unit reaches its new assembly areas and deploys tactically into it. It's time to maintain and fuel vehicles, clean weapons, feed the troops and get some rest.

A Rough March



Meeting Battle (Engagement)

The meeting battle (engagement) is a variation of offensive combat where both sides strive to carry out an attack simultaneously, with the goal of destroying the other quickly, seizing the initiative and creating the conditions for further action.³ A meeting battle may arise while in a march column, particularly in the initial period of the war, when the enemy is surprised while deploying. A meeting battle may also occur while counterattacking from within the defense.⁴



(Above) This graphic shows a motorized rifle company with attached tank and artillery platoon engaging an enemy tank and mechanized infantry platoon. The Russian force detects the enemy force and immediately forms a two-platoon and two tank firing line. The first platoon goes into a hasty defense with a tank setting up a flanking ambush. The enemy force moves onto the open ground and is taken under fire. It drops off a mortar and deploys into assault line under fire incurring losses. The Russian force then counterattacks on line through the enemy force. The artillery platoon plans fire on the northern flank in the event of an enemy counterattack.

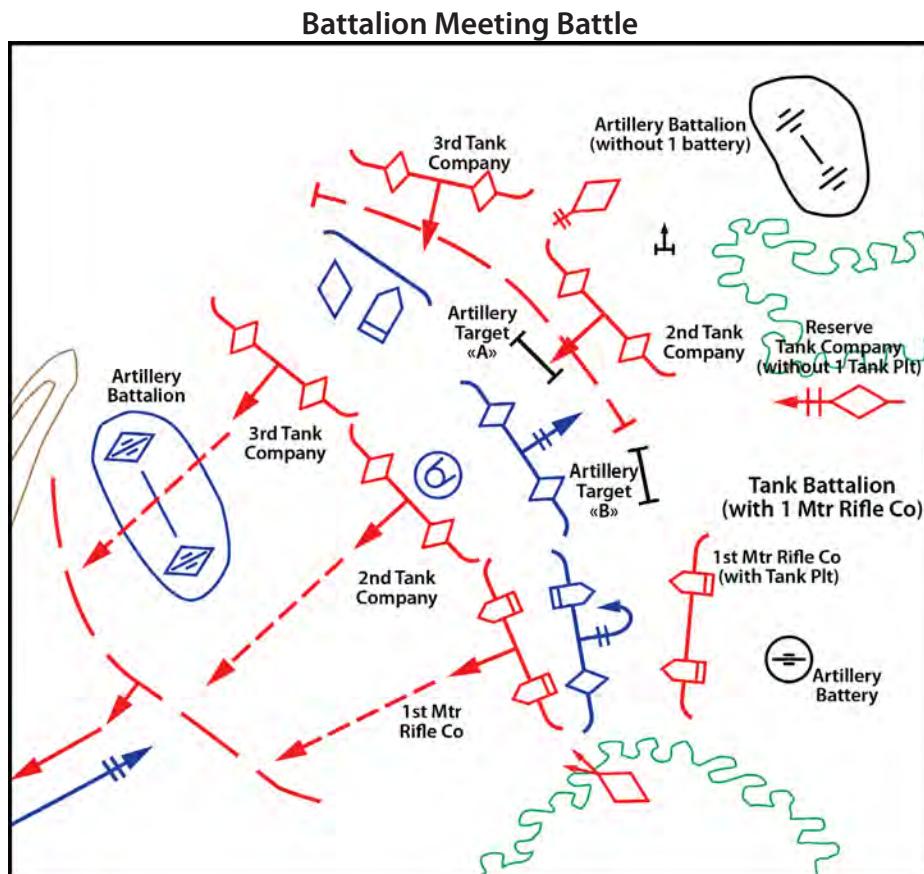
Some argue that the meeting battle is no longer possible where satellite and other high technology sensors will produce 100% battlefield clarity. This argument is made despite the recent wars in Iraq and Afghanistan, where coalition forces could not gain 20% battlefield

³ The term "meeting battle" typically refers to tactical situations, while "meeting engagement" refers to operational situations.

⁴ V. F. Mozolev, Ministry of Defense of the Russian Federation, "Meeting Battle" [Встречный бой], *Military Encyclopedia* [Военная Энциклопедия], Volume 2, Moscow: Voyenizdat, 1994, 305-306.

clarity against an enemy who had no electronic countermeasures and satellite jammers or other high-tech counters. The Russians have extensive experience with all this technology and a history of employing smoke to mask their own movements and to protect against top-attack munitions.

The meeting battle is the preferred tactic when compared to a breakthrough attack and,



(Above) This graphic shows a battalion meeting battle. A tank battalion with attached motorized rifle company, artillery battalion and air defense platoon encounter an enemy tank battalion with attached mechanized infantry company and artillery battalion. Two tank companies and the motorized rifle company go on line with a tank company (minus) in reserve. One tank platoon establishes a flanking ambush while a howitzer battery moves into direct lay positions behind the motorized rifle company. The artillery battalion (minus) lays down two barrier fire lines in support of the Russian lines. After causing enemy losses, the Russians attack on line through the remnants of the enemy tanks and infantry fighting vehicles, the enemy mortar position and artillery battalion. The reserve tank company follows to deal with pockets of enemy.

often, to being on the defense. The Russians prefer having freedom of maneuver, and the meeting battle is an optimum tactic for achieving that freedom. Naturally, achieving the operational mission without a meeting battle or other fighting is even better. The Russian Army fights to be able to move, not moves in order to fight.

The meeting battle is characterized by changing circumstances and short-term combat; the rapid closure of forces and commitment into combat from the march; the fight to win time to gain and maintain the initiative and fire superiority over the enemy; the discovery of the gap in the enemy combat formation; and the use of maneuver to penetrate his flank and rear.⁵ Since both sides are advancing, there will be little time once the presence of the other side is discovered. The situation will usually be obscure, as reconnaissance strives to uncover the rapidly changing situation when aggressive forces move where there is no continuous front. Units may be committed into combat directly from the march. The battlefield is fluid, where open flanks and gaps between units are common and decisive defeat or victory is the probable outcome. Well-rehearsed battle drills provide a marked edge in this type of combat, since they can be executed rapidly on the move without extensive orders and planning.

Success in a meeting battle depends on constant, aggressive reconnaissance to determine enemy size, composition, order of march, and speed and deployment, and the location of nuclear and precision weapons. Pre-emption through air and artillery strikes and force deployment is key to seizing the initiative. Since there will be no time to regroup prior to a meeting battle, the order of march is the order of deployment and commitment. The commander's decision and orders must be prompt, and the consequent maneuver must deny the enemy the advantage of terrain while finding gaps and opening up the enemy flanks. The march column must employ flank detachments and reserves to prevent the main body from being diverted from its primary mission.⁶

The motorized rifle or tank battalion or battalion tactical group will, most likely, be the first combined arms force committed in a meeting battle or meeting engagement, and its meeting battle will often be conducted as an independent action. The maneuver battalion that constitutes a covering force or is the brigade forward detachment, advanced guard or flanking detachment is most likely to meet an advancing enemy. A battalion from the main body may also conduct a meeting battle.⁷

In a meeting battle, the battalion will have an immediate objective and a direction of further advance. If the battalion is serving as a forward detachment, the immediate objective is to seize and hold a designated line and to take the enemy lead elements under fire while supporting the movement and deployment of the main force of the senior commander. There are several possible immediate objectives for an advance guard battalion: destroy the enemy forward security element; decisively attack to break through to the enemy main body; and hold the enemy in place from the front while assisting the deployment and advance into combat of the senior commander's main force. The immediate objective of a maneuver battalion in the main body may include destroying that part of a first-echelon enemy battalion that is within its sector of advance; destroying or capturing the enemy artillery and securing a line; or taking advantage of favorable conditions to destroy the enemy reserve and continue the advance. A maneuver battalion in a meeting battle usually attacks in a single

⁵ Ibid, 305.

⁶ Conversations with Charles Dick, former director of the Combat Studies Research Centre in the United Kingdom.

⁷ David A. Dragunskiy, *Motorized Rifle (Tank) Battalion in Combat* [Мотострелковый (Танковый) батальон в бою], Moscow: Voenizdat, 1986, 156.

echelon with a designated reserve. This allows it to concentrate the maximum quantity of fire and systems forward in a maximum strength preemptive strike, envelop open enemy flanks or conduct a withdrawal, with the goal of inflicting maximum damage on the enemy while covering friendly flanks.⁸

In the graphic on the following page, an enemy force broke through Russian defenses west of Zaprudnoe and committed its reserve, which began advancing east at dawn on 15 June. It is expected to follow the route which will take it through Zaprudnoe and Vlasovo. The 3rd Motorized Rifle Battalion (MRB) is serving as advance guard for a march column moving west. The march route goes through Vlasovo, Bessonovka, Zaprudnoe and Mukhino. The battalion's mission is to reach the line Mukhino-Peschanka by 1000 hours, 15 June and support the approach and deployment of the brigade main body. The battalion is reinforced with the 3rd tank company, the 1/9 Artillery Battalion (minus one battery), an antitank platoon, an air defense missile platoon, an air defense gun platoon, an engineer platoon, an NBC defense platoon and an armored launch bridge.

The commander formed his march column into a combat reconnaissance patrol (1st platoon, 9th MRC); forward security element (7th MRC with a tank platoon, an artillery battery, the antitank platoon, the air defense missile platoon and an engineer squad); the main body (headquarters, engineer platoon, NBC defense platoon, the tank company minus, the air defense gun platoon, the 8th MRC with the mortar battery and AGS-17 platoon, the 9th MRC minus a platoon, the artillery battalion minus a battery, and the supply, maintenance, medical and other support elements). The unit is at 90% strength and is topped off and fully equipped. The march column's next rest area is 50 kilometers east of Vlasovo.

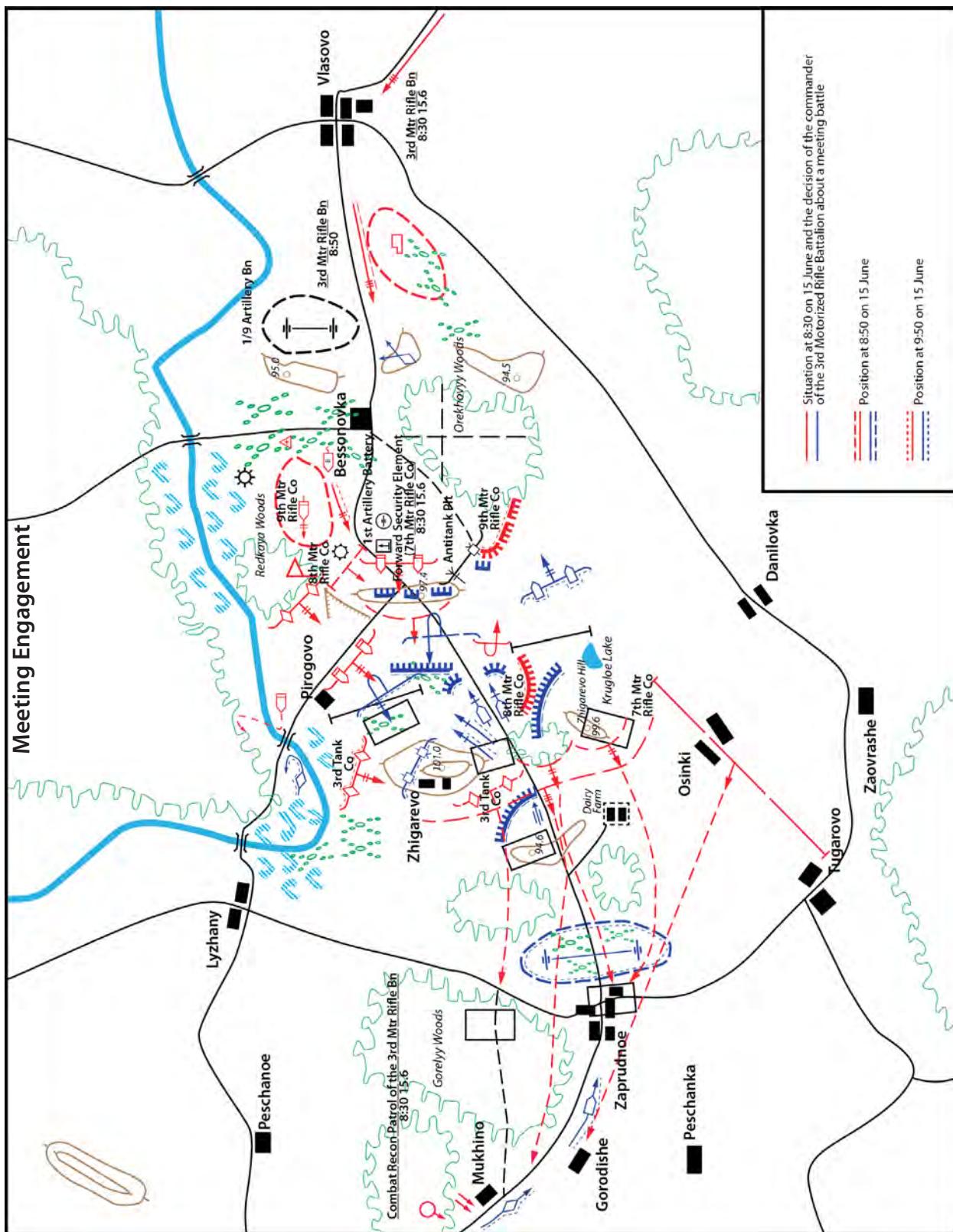
At 0830, when the battalion main body is southeast of Vlasovo, the forward security element (FSE) reports, "Have reached eastern slope of elevation 97.4 and am engaging enemy mechanized infantry force up to platoon-sized. Can observe up to a company of mechanized infantry and an artillery battery deploying south of Zhigarevo."

The combat reconnaissance patrol (CRP) reports, "Located in the brush 500 meters north of Mukhino. Have observed the passage of a column of armored personnel carriers (APC), tanks, artillery to the west of the outskirts of Kruzhilino (two kilometers west of Mukhino and not on this graphic)."

The brigade commander radios, "Up to two mechanized infantry battalions with tanks in march column are moving on the axis Kruzhilino-Mukhino-Zaprudnoe. Your battalion will seize the line Zhigarevo-Hill 99.6 and support the deployment of the main body on the line Krugloe Lake-Tugarovo for a strike in the direction of Osinki, Zaprudnoe, Mukhino." As the brigade transitions to the attack, the battalion will continue its advance in the direction of height 94.6, Mukhino. At 0850, airstrikes will attack the moving enemy.

The 3rd Battalion commander orders his FSE, "Seize height 97.4 and support the deployment of the battalion main body."

⁸ Ibid, 158-159.



The graphic displays how the FSE seized height 97.4, defeating a defending enemy element, and how the battalion deployed on both sides of it. The solid red and blue lines show the situation at 0830 and the initial positions the battalion seized. The battalion's northern flank is covered by the river and a patrol squad from the 9th MRC while the antitank reserve moves to the south of the FSE to cover the southern flank. The broken red lines show the initial assembly areas for the trail units - the 9th MRC (-) and the rear services, while the broken black lines show the artillery battalion position. The broken red lines also show the planned line that the battalion will seize and the disposition of the battalion in the attack. The battalion will attack in a single echelon with the 9th MRC (minus the platoon serving as the CRP) as the reserve. The tanks will be concentrated in the north as the 3rd Tank Company (now complete, as the FSE has relinquished its tank platoon), the 8th MRC and the 7th MRC make the battalion attack, supported by the antitank platoon. The artillery has established two standing barrage lines on the approach to the Zhigarevo-Hill 99.6 line and plotted concentration areas on high ground, attack axes, a traffic congestion point and a possible assembly area.

The situation at 0850 hours is shown by red and blue lines that are backed with thinner broken lines of the same color. The antitank platoon reports destroying two enemy APCs attempting to enter the "Orekhovyy" woods. A mechanized infantry company is deploying into combat formation opposite the FSE and an enemy artillery battery located south of Zhigarevo is firing on the FSE. An enemy fighter bomber has attacked the artillery battalion and the air defense gun platoon has returned fire. The CRP reports that a column of enemy APCs and artillery is moving from Mukhino to the outskirts of Zaprudnoe. The 3rd MRB commander orders the artillery battalion to take the column under fire. The 9th Tank Company and 8th MRC advance to the top of Hill 101 and its southern slope, but are pushed back by an enemy counterattack.

The battalion attacks at 0950. The situation is shown by red and blue lines backed by a dotted line of the same color. The 3rd Tank Company advances through Pirogovo and meets no resistance. While attacking the northern slope of hill 101, it comes under antitank fire and loses two tanks. An enemy mechanized infantry company holds the heights of hill 101. The tank company commander calls in artillery fire on hilltop 101. Meanwhile the 8th MRC, mounted on BMPs, advances to the southeast of Pirogovo, advancing toward Zhigarevo. It encounters an enemy mechanized infantry platoon that is withdrawing in small groups. The 7th MRC attacks dismounted, its right flank constricted by the enemy along the road. Its left-flank platoon moves around the battalion antitank platoon position to make its advance. In front of the 7th MRC are two mechanized infantry platoons. Up to a company of mechanized infantry on APCs bypasses the left flank of the 7th MRC. The antitank platoon engages the APCs and enemy artillery answers their fire. Two of the ATGM launchers are knocked out.

The battalion commander observes the enemy deploying on the southeast slope of hill 101 and from the east. In Zaprudnoe, up to a battalion of enemy artillery is firing on the 3rd MRB. Further, the CRP reports the passage of a column of tanks, which is approaching the outskirts of Gorodishche. The squad leader of the 9th MRC patrol on the battalion's northern flank reports that as he approached the bridge, two enemy light tanks fired at him from the woods. The tanks are located about 700 meters from Pirogovo and 1.5 kilometers southeast of Lyzhany. The artillery

battalion commander reports that his three batteries (which are not masked by smoke) are being fired on from the high ground 800 meters southeast of Bessonovka. The brigade commander informs the battalion that at 0955, an airstrike will target the moving enemy force. The brigade is approaching its deployment line to move into combat formation.

The battalion commander orders the 1/9 Artillery Battalion to conduct a ten-minute fire strike on Hill 101 to suppress the enemy antitank and mechanized infantry defenders. He commits his reserve, ordering the 9th MRC (-) to form a firing line between the barn and Orehoviy Woods, where, in conjunction with the antitank platoon, they will repulse the enemy advance from Hill 99.6 to Bessonovka. The 3rd Tank Company and 8th MRC will resume their attack to regain Hill 101 and constitute the line Zhigarevo-Hill 99.6 as ordered by the brigade commander. The 7th MRC will join the attack to constitute the line Zhigarevo-Hill 99.6, but will leave part of its force in place to assist the reserve and antitank platoon in containing the enemy advance from Hill 99.6 to Bessonovka. The engineer platoon will move forward to place antitank mines in front of the antitank platoon and reserve.

By 1030, the 3rd MRB secured the line Zhigarevo-Hill 99.6 and continued to fight the enemy from this firing line, supporting the deployment of the brigade main body on the line Krugloe Lake-Tugarovo and attacking in the direction of Osinki, Zaprudnoe, Mukhino.

The above vignette portrays the fast-moving situation that accompanies a meeting battle. The value of quick, accurate spot reports, radio discipline, responsive fires and well rehearsed battle drills are evident throughout the example.

To smoke or not to smoke is an irrevocable decision in a meeting battle. The artillery can fire and maintain smoke screens, but this may detract from its ability to conduct other fire missions. Russian vehicles are capable of creating their own smoke screens, and smoke pots are standard issue for mobile forces. In this vignette, the artillery was very busy and had not laid its own smoke screen before it came under direct fire. It probably responded by using on-board smoke generation and pots while it continued its mission.

Flanking Detachment

Where possible, it is usually better hitting an enemy on the flank or rear than running into his prepared defense with a frontal attack. In wars with contiguous lines, the frontal attack is often the only option, but once the enemy defense is penetrated, the opportunities for flanking attacks open up.

Modern maneuver warfare may not have contiguous lines like World Wars I and II. The recent fighting in the Donbass region involved companies and battalions fighting with open flanks, and flanking detachments were frequently employed on the plains of Eastern Ukraine. Plains are not the only terrain feature where flanking detachments can be deployed. Russian military history shows the wide use of flanking detachments in desert, deep forest, marshland and urban combat. During the Soviet-Afghan War, the Soviets used flanking detachments to trap Mujahideen guerrillas in their mountain sanctuaries. Lester Grau published the following as "A Flanking Detachment in the Mountains" in the May-August 2010 issue of *Infantry* magazine:

Defending mountain terrain has its own challenges. While mountains offer good observation, they also block it, particularly close up. Mountains offer good long-range fields of fire, but they are also full of dead space and concealment. Mountain defenses are not continuous, but are normally separate outposts and fighting positions which may be mutually supporting, but usually are not. They are often not even in the same plane. Mountain fighting positions are difficult to construct and maintain. Mountain fighting positions can be stockpiled with ammunition, but food and water quickly run out at these positions. The latter two are normally supplied in the villages and hamlets down in the mountain valleys and canyons. Consequently, in Afghanistan, the Mujahideen usually congregated in the valley, except when they felt threatened. Some security was maintained at the fighting positions, but this was usually slack, without indications or intelligence of enemy actions.

Attacking in the mountains has its own set of problems. First, the enemy holds the high ground and, if he has occupied the area for any time, he has had time to establish fighting positions and emplace long-range crew-served weapons, such as mortars, heavy machine guns, recoilless rifles and even direct-lay artillery. He has had time to reinforce the defenses with mines and other obstacles. Entries into the mountain valley or canyon are limited and liable to interdiction by a skilled defender.

Still, the irregular mountain terrain offers distinct advantages to the attacker. The enemy is seldom able to mass fires, and the terrain offers numerous concealed attack approaches to defending positions. Enemy withdrawal will be by small groups, often forced to abandon heavy weapons, ammunition stockpiles and wounded.

Too often during the Soviet-Afghan War, Soviet attacks in the mountains were frontal attacks. The Mujahideen response was to kick out a rear guard and exfiltrate. After much effort and the expenditure of much artillery fire and aerial ordnance, the Soviets found themselves somewhat in control of a mountain that they had no intention of garrisoning. The Mujahideen had lived to fight another day. The following article describes the Soviet use of a

flanking detachment to seize high ground within the depths of a Mujahideen defense located in the mountains. The attacking troops were paratroopers, trained and equipped to fight as both mechanized infantry and light airborne or air-assault infantry. Each regiment had its compliment of armored personnel carriers, assault guns or tanks, artillery and sappers.

Flanking Detachment- Vignette

A FRONTAL ATTACK...IS NOT RECOMMENDED

by Major V. A. Selivanov⁹

In April 1985, according to intelligence reports, there was a significant grouping of the armed opposition concentrated in the Mazlirud and Kakh Canyons. Their number was estimated at 1,200. Besides assault rifles, this group had 35-40 DShK heavy machine guns and up to 15 ZU anti-aircraft machine guns, as well as mortars, recoilless rifles and rockets.¹⁰ The main body of the enemy (400-600 men) was located in the village of Malakhairu. The general situation was complicated by the fact that earlier large-scale operations in the area showed that surprise was not possible and that, other than the casualties inflicted, the results were insignificant. The main body of the enemy, as a rule, managed to withdraw from the canyon before our troops arrived. The enemy had managed to establish a significant, well constructed system of observation and early warning. Further, this region was particularly unsuited for air assaults, and military vehicles could enter the canyon only on one road, which ran through Mazilishakhr, Zagan and Malakhairu. (See the map).

Considering the peculiarities of the region, during planning, our battalion commander determined to carry out the mission in the following fashion. We were briefed at an officers call that at 1330 hours on 9 April, the bronegruppa of the main body would move from its base camp along the road from the south, with the mission of closing in to the village of Mazlishakhr by 1800 hours.¹¹ My parachute company was ordered to support the departure and movement of the march column. Then, after the column had passed, my company was to return to garrison to carry out guard duty. The combat action to destroy the enemy grouping was planned for 10 and 11 April by moving the bronegruppa to link up with its paratroopers who would move from the west into the valley.

However, at noon on 7 April, my regimental commander, without any witnesses, gave me an order for a totally different plan.¹² The new mission was as follows: At 1600 hours on 8 April, my parachute company would serve as a flanking detachment, and, without attracting any attention, would secretly move to the region of Khakfakhai village in order to conduct a route reconnaissance for movement through the Afedshakh Pass. With the advent of darkness, I would leave my combat vehicles on the road, go on foot through the pass, enter into the Mazirrud Valley

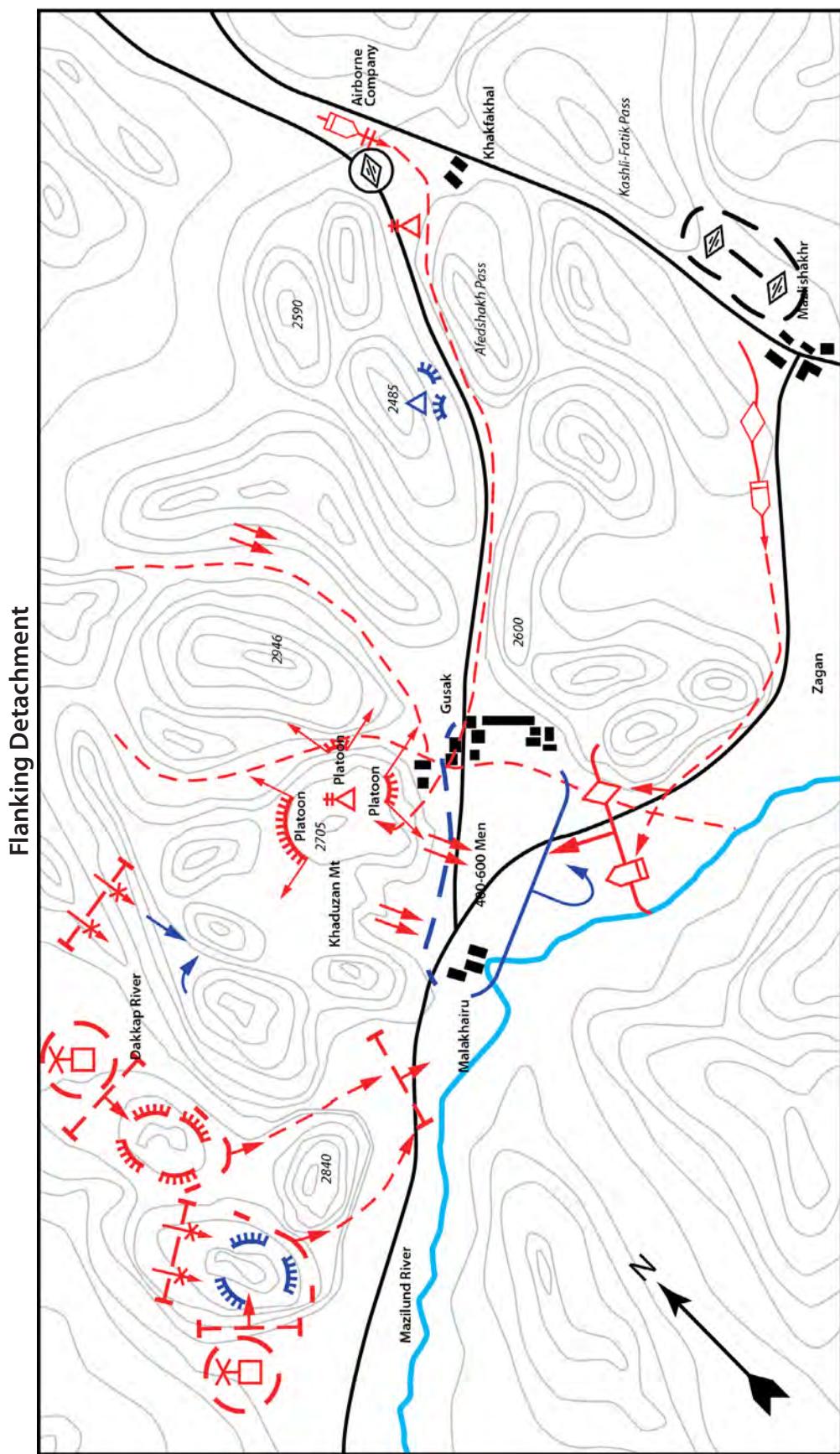
⁹ Major V. A. Selivanov, "A Frontal Attack...Is not Recommend," *Armeiykiy Sbornik*, October 2009, 21-22.

¹⁰ The ZU is an anti-aircraft 23mm machine gun which comes in a single- and dual-barrel model (the ZU-23-1 and ZU-23-2).

¹¹ The bronegruppa (armored group) consists of a unit's tanks and personnel carriers which, after the infantry has dismounted the carriers, are used as a separate reserve. It is usually commanded by the unit's first deputy. In this case, it has the BMPs of two companies (22 vehicles), probably at least 2 tank platoons (6 tanks) and 12 self-propelled howitzers plus other vehicles supporting the mortar platoon, signal platoon and so on.

¹² The Soviets always insured that orders and plans were witnessed and approved so that if things went wrong, the blame might be assigned or shifted. The regimental commander is undertaking a risky ploy, so he issues the order without any witnesses. Apparently, even the battalion commander does not know that one of his subordinate units has this mission. The company commander is on his own if things go wrong.

TACTICAL MANEUVER



and, by dawn, occupy positions on Khaduzan Mountain. At dawn on 9 April, I would be in position to adjust artillery fire and direct close air support, with the goal of creating panic among the assembled Mujahideen and not allowing them to exit the canyon before the main body struck them. While carrying out this mission, very strict attention had to be paid to the secret movement and independent actions, since it would be impossible to support my detachment in case we were discovered.

At 1800 hours on 8 April, my company was assembled in the designated area near Khakfakhai village. Soon, our observation disclosed that groups of armed men periodically moved on the path through the Afedshakh Pass. There was also a group of eight Mujahideen located in a guard post on that very same pass. Everything appeared calm in the target area. Everyone discussed it and agreed that the “ghosts” [Mujahideen] were not expecting our force. With the onset of darkness, we conducted a radio check with our armored vehicles and our higher headquarters, and then I gave the order to begin movement.

We crossed through the pass by 2200 hours, bypassing the guard post to the south without drawing the attention of the Mujahideen. During nighttime, this post was a main [security] link. They were tied in with other posts using a complex system of varying signals. Even though these “stinkers” were one of the [security] links, we bypassed them literally in 15 minutes.

Just as we began to descend into the canyon, we lost radio contact with our company bronegruppa and with our higher headquarters. By all rules of military science, I must immediately either restore communications or return.¹³ But then our company’s combat mission would not be accomplished. Therefore, I made a decision to continue to move and to restore communications once we reached high ground. I had to make this decision because I knew that if the Mujahideen discovered our company at night, we could only count on ourselves for help.

From the depths of the canyon, we heard the noise of night firing. We were convinced that the Mujahideen were not expecting the appearance of our force and had occupied their fighting positions to sort things out [conducted an alert]. At midnight, we entered the hamlet of Gusak. This is where I, the company commander, made a mistake that might have compromised all our measures for secrecy. Despite the ample number of night-vision devices that we had, we discovered too late that there were two Mujahideen patrols that we barely avoided running into. Taking necessary precautions, we lost about two hours before we exited the village. At 0300 hours, the company assembled at the foot of Khaduzan Mountain.

The heavens were clear and things were now visible thanks to the appearance of the moon. This additional lighting “worked” to the enemy’s advantage and forced us to hurry up. The first platoon, commanded by Senior Lieutenant A. Mikenin, climbed the mountain. After an hour, he reported that his platoon had occupied positions on the heights. I placed two platoons, under the command of Senior Lieutenant V. Plotnikov, in an ambush directed against the hamlet of Gusak, and I followed the path of the first platoon to the top. We established our primary observation post on height 2705.0. I placed Lieutenant Mikenin’s platoon on the northern slope and I placed the other two platoons on the southern slope. From these positions, they could also interdict paths on the eastern

¹³ The commander is already out there on his own without support and loses communication. By Soviet regulations, he is required to reestablish communications or abort the mission. This is a very risky decision.

side and partially on the western side, while blocking enemy bands located in the hamlet of Gusak.

At 0500 hours, we were prepared to carry out our mission. At that time we were able to reestablish radio contact. An under-strength paratrooper company had secretly crossed 12 kilometers of enemy-controlled territory, assembled in the rear of a strong enemy force and taken the commanding heights. It should be noted that the secret movement of the company was key to the success of the action and the complete lack of company casualties.

On the morning of 9 April, the bronnegrupa of the main body of the battalion inconspicuously passed through the village of Mazilishakhr and began to enter the canyon. Instantly, the signal (three individual shots) repeatedly rang from the mountain slopes from the north to the south and even the west. It announced the arrival of our force. Some 15-20 minutes after the signal, a band of 120-200 men emerged from the hamlet of Gusak and began to advance on my company. When the Mujahideen were close to our second and third platoon positions, my paratroopers opened up on them with deadly fire. It caught the Mujahideen completely by surprise and inflicted such heavy casualties on them, that they were unable to offer resistance. The "ghosts" panicked and ran back into the hamlet.

At this point, I should note that the sun was in our eyes and it was hard to find the enemy. After five minutes, the Mujahideen suddenly launched an attempt to break out of the canyon to the northeast. I called artillery fire on them. Again, after a half hour, they attempted to bypass the company to the north and up the southern slope of height 2946.6, but they came under the fire of Senior Lieutenant A. Mikenin's platoon.

From 1400-1500, we conducted two tactical air assaults [with the remaining two companies of paratroopers] on the western side of the canyon. The [bronegruppa of the] main force, by this time, had already pushed through the hamlet of Gusak. The company's mission was over.

Thinking over our combat action as a flanking detachment in the mountains of Afghanistan, I have arrived at several conclusions. First, in order to conduct combat in similar circumstances, it is necessary to plan to assign an element of the combat formation to be a flanking detachment. It will be able to secretly enter the flank or rear of the enemy without engaging in combat with small subunits and guard posts. It will be able to prevent the enemy withdrawal and hit him with a surprise attack to destroy him and his capabilities in order to facilitate the successful mission accomplishment of the main force.

The experience of conducting such operations shows that most successful flanking detachments are company-sized. Well trained subunits and personnel should be used in forming the detachment.

Second, the nature of mountainous terrain prevents small subunits from carrying heavy weapons and ammunition. At the same time, it is necessary to have sufficient fire power to conduct effective fires at various ranges. Besides our assault rifles and sniper rifles, my company carried one AGS-17 and a heavy machine gun.¹⁴ In every squad, we had one AKM assault rifle with the under-barrel

¹⁴ The AGS-17 is a tripod-mounted 30mm automatic grenade launcher which fires rounds out to 1,700 meters. The machine gun was probably the 7.62mm PKM machine gun.

grenade launcher.¹⁵ Our ammunition load was 600-700 rounds per assault rifle and 1200 rounds for the machine gun. Our special gear included some night-vision devices.

The successful actions of a flanking detachment in the mountains is dependent on close, well planned coordination with the forces and resources of the senior commander. Of primary importance is the support of artillery and aviation as well as agreement on the action with the main force before it departs to carry out its mission. Thus, in the course of combat it is impossible to fulfill the mission without reliable uninterrupted communications. Experience shows that in order to guarantee communications, it is better to establish retransmission stations or simply to use aircraft that are equipped for retransmission [emphasis is in the original].

In conclusion, selection of company-grade officers for assignment to a flanking detachment requires care. You know that they will be required to make independent mission decisions while separated from the main body on unfamiliar territory that is controlled by the enemy. This requires detailed planning and thorough preparation, as well as a high degree of individual training. In part, it is absolutely necessary that the commander has concrete experience working with maps and can quickly detect objectives in the mountains, determine the necessary data for their destruction, precisely direct the fires of his subordinate units, and skillfully use all possibilities for secret and sudden actions.

Analysis of the Vignette

In this article, the Soviets conducted the apparent main attack with their armored vehicles moving into the canyon on the only road. This attack included the personnel carriers of two paratroop companies, attached tanks, and an attached battalion of self-propelled artillery. There was little infantry in this attack. The two airborne companies that the armored vehicles belonged to conducted an air assault approximately six hours after the beginning of the supposed main attack to eliminate Mujahideen positions in the west and then moved into the canyon to link up with their vehicles. Helicopter gunships provided close air support to the air assault. The flanking detachment, which had inserted itself into the depths of the enemy position, was particularly useful in calling in artillery strikes and defeating the enemy advance and his withdrawal attempt. Although the article provides no casualty figures, the flanking detachment suffered none, while the Mujahideen did.

There are some interesting aspects to this attack. The flanking detachment left its armored personnel carriers (bronegruppa) at the dismount point. It was responsible for its own security and served as a mobile reserve in the event that the flanking detachment got into trouble. Once the flanking detachment was deep into enemy territory, however, the reserve role was problematic. A self-propelled artillery battery joined the bronegrupa for the attack the following morning. The Soviets had entered this war with a limited ability to conduct split-fire direction center operations. By 1986, this capability was well developed. Soviet artillery usually accompanied the ground attack, since it was more accurate than jet aircraft in support in the mountains. Further, the artillery was often used in direct-lay against a

¹⁵ The GP-25 sub-barrel grenade launcher fires a 40mm grenade out to 100 meters. These paratroopers preferred the older AKM Kalashnikov, with its 7.62mm round, over the newly issued AK-74 with its 5.45mm round. Combat in the mountains is long-range and requires a subsonic medium-weight bullet. The AK-74 was designed for close combat and has less range and punch over distance.

stubborn enemy.

The flanking detachment was not part of the original battalion planning and was controlled by regiment. In the interests of operational security, the company's role and presence were not disclosed to the rest of the battalion. The company, except for on-call artillery and close air support, was basically on its own for at least 15 hours. Both require communications and were iffy at night.

Communications were a problem and remain such in the mountains, despite modern technology. Mountains absorb radio waves and distort GPS signals.¹⁶ Satellite communications are spotty and a savvy opponent could jam the GPS and satellite telephone receivers in the mountains. Ground retransmission units are hard to move, emplace and defend, and retransmission aircraft are few and seem to go down for maintenance at critical points.

The infantryman's load remains a problem, and in Afghanistan, where the bulk of engagements are beyond 500 meters, small-caliber supersonic bullets fired from short-barreled carbines are ineffective. The fight devolves to the machine gunners while the rest of the platoon tries to get involved. The Soviets issued the AK-74 with the thought that the infantryman could now carry more ammunition. Where possible, units such as this airborne unit went back to the longer-range, medium weight 7.62 cartridge. Still, the weapons that the airborne carried did not give it an advantage over its opponent. The paratrooper's position on commanding terrain did.

Going into the mountains is critical to gaining the initiative and bringing the fight to the enemy's sanctuary. Still, bulling into the mountain valleys and canyons without securing high ground or establishing a blocking force is futile. The lightly equipped enemy will withdraw over familiar territory, leaving his burdened attacker behind. Flanking detachments are an excellent way to shape the battlefield and hold the enemy in place for punishment.

¹⁶ In the mountains, GPS accuracy can slip from a 5-meter diameter circle to a 500-meter diameter circle or more.

Relief in Place

A relief in place is the organized reception and dispatch of subunits, units and large units occupying positions, lines, sectors and belts during combat. It is conducted in the defense, in the course of regrouping for deployment into another area, when placing forces in their positions for an offensive or counteroffensive, while in direct contact with the enemy and under other circumstances.¹⁷ It is often used to replace subunits that have lost their combat potential through casualties.¹⁸ It is normally conducted at night or during periods of limited visibility. It demands thorough preparation, quick and secret conduct, and strict observance of the schedule and orders of the conducting force.

A relief in place is one of the more difficult measurements of the readiness of subunits to conduct defensive and offensive combat. It is executed under conditions where the enemy has effective reconnaissance systems and fire delivery systems. Since the relief in place is usually conducted at night or under conditions of limited visibility, it is necessary to consider that people hear better at night than during the day since sound travels farther at night.¹⁹

Range that Sound Travels at Night When the Wind is not Blowing

Person's quiet footsteps	40 meters
Single person's speech	50 meters
Sound of a breaking branch	80 meters
Conversation of several people	100 meters
Sound of a weapon bolt closing	300 meters
Sound of a falling tree	300 meters
Strike of a hammer, cross-cut saw	300-400 meters
Troops moving on a country road	300 meters
Troops moving on a hard-surface road	600 meters
Loading a machine gun	500 meters
Hammering in a stake	700 meters
Truck movement on a hard-surface road	800 meters
Truck movement on a country road	1000 meters
Tank moving on a country road	1200 meters
Tank moving on a hard-surface road	3000-4000 meters

Observation at night is affected by the degree of darkness present at different times of night. Modern sensors are able to detect movement through heat, movement, signals traffic, night vision devices and radar imaging. Relief in place may take place in daylight, but requires the cover of airstrikes, artillery strikes, flat trajectory weapons fire, air defenses, particulate smoke screens and radio-electronic suppression or destruction of the enemy command and control system. It is best to conduct the relief in place at night.²⁰

¹⁷ Ministry of Defense of the Russian Federation, "Relief in place" [Смена войск], *Military Encyclopedia* [Военная Энциклопедия], Volume 7, Moscow: Voyenizdat, 2003, 522.

¹⁸ A. V. Vlasov, "When subunits are no longer combat-ready, conduct a relief in place" [Когда подразделения уже не боеспособны, то происходит смена войск], *Army Digest* [Армейский Сборник], December 2010, 23.

¹⁹ Vlasov, 23.

²⁰ Ibid.

Night Observation Conditions

Very dark night: The eyes are unable to see much except nearby movement against the backdrop of an open horizon. Noise carries far, particularly when there is no wind. Use of night vision devices provides excellent results.

Moderately dark night: The eyes can detect the movement of personnel and equipment on open country (100-150 meters). Various sounds carry as well as on a very dark night.

Moonlit night: Vision is notably improved. Excellent results can be achieved with high-resolution binoculars. The eyes can readily determine what objects are and all contours are sharply delineated. Night vision devices are usable.

Stormy night: Hearing is difficult, making it easier to move closer to the enemy. Night vision devices may be used, but the field of vision is strained.

Rainy night: Observation is difficult and hearing is poor. Instead it produces a sound which resonates off of raincoats, tents and feet splashing through puddles and mud. Night vision devices are not effective.

Frozen winter night without snow: Demands the adoption of special measures to prevent the sound of footsteps and the possibility of slipping. Night vision devices produce excellent results.

Snowy winter night: Improved visibility. If snow is not falling, then sound transmission is greatly improved over greater distances. Dark items appear distinctly against a white field of vision. Night vision devices do not work.

Foggy night: Everything is indiscernible and vague. Night vision devices do not work.

Preparations for a relief in place begin during the day. Rendezvous areas are designated for the departing force and assembly areas for the relief force. Any indications of the location of these areas must be concealed from ground and air observation, protected from air strikes and the approach and withdrawal routes must be hidden. The rendezvous and assembly areas may coincide. The areas for the first echelon battalions may be located between the first and second defensive positions (3-5 kilometers from the forward edge of the defense). The areas for the second echelon battalions or combined arms reserve and the remaining units would be behind the defensive area involved in the relief in place.²¹

The commander begins his work in the rendezvous area or assembly area, where he will organize a defense or an attack from positions in direct contact with the enemy in conjunction with the relief in place of a defending combined arms unit. The senior commander will determine the combat formation and the time to conduct the relief in place. The plan will be issued on a map sheet which the relief subunit commanders must verify and refine onsite. They do so during a commanders' reconnaissance along with the full assistance of the commanders that they will relieve to occupy defensive positions, strong points fighting positions or the assembly area for an attack. In the course of the reconnaissance, the relieving commander must determine the enemy situation; the dispositions of the subunit; the handover of the defense and the schedule for its conduct; the organization of the system of fire; the air defense layout; the engineering improvements to the defense; the strong points, fighting positions and obstacles; and the NBC situation. Further, it is necessary to coordinate with the commanders being relieved as to the defensive area (strong points and

²¹ Ibid, 24.

fighting positions); or the attack assembly area; the rendezvous area for the relieved force; the assembly area for the relieving force; the approach routes used to accomplish the relief; the place to meet the guides from the force being relieved; and the exit routes for the relieved force from the various positions. The commanders must also determine where the enemy positions are; the areas susceptible to fire and radio-electronic attack; and the lines where smoke screens may be laid to cover the relief in place.²²

The commanders of the subunits being relieved must handover their detailed maps and sketches showing their defenses, strong points, fighting positions and firing data as well as details as to enemy firing positions, weapons and obstacles. Considering the complex circumstances involved with a relief in place, the commanders' reconnaissance must include not only the subordinate commanders, but also the drivers and vehicle commanders. Experience has shown that having the vehicle crews study the approach route, the vehicle destination position, the order of march and the route markers is necessary as is repeated training in night movement behind a ground guide.²³

During the coordination among the subunit commanders, the following must be agreed on: the actions of subunits during the period of movement from the assembly area through the period of the relief in place, which will include whether to conduct a fire strike on the enemy with all weapons; whether to conduct remote mining on enemy routes using engineer assets; whether to employ smoke to cover the movement and relief; whether to conduct artillery and radio-electronic strikes during the relief; actions of air defense assets; the recognition signals between the guides and the relief force commanders; the timing and requirements for signal communications between the forces during relief; and who will command during the entire relief and from where. During the organization of fire support, determine how to attack the enemy to destroy him during a possible counterattack and to forestall enemy actions during the relief in place.²⁴

During the relief in place, the defense must remain stable while replacing departing elements with arriving elements and retaining a combat formation for upcoming missions. The reconnaissance subunits are the first to arrive and move into position. The artillery subunits are next. They must be in position and ready to fire before the combined arms subunits begin their relief. It may happen that the relieving subunits may not be immediately ready for combat, so, in order to maintain the stability of the defense at this time, the artillery subunits assume their firing positions on the order of the senior artillery commander or his deputy. An attached artillery subunit assumes its firing positions upon the command of the commander of the combined arms subunit. A motorized rifle battalion mortar battery assumes its firing position upon the command of the motorized rifle battalion commander. Only after this, do the waiting motorized rifle and tank subunits begin the relief in place, occupying the defensive region, strong points and fighting positions while organizing their system of fire and command and control. Artillery battalions or batteries supporting the subunits defending the forward position (the position in front of the main defense) are the last

²² Ibid.

²³ Ibid.

²⁴ Ibid, 25.

relieved. Should the senior artillery commander decide to conduct a fire strike on the enemy, the relief artillery units will occupy their primary firing positions after the mission is fired.²⁵

Simultaneously with the relieving artillery subunits taking up positions to repel an enemy attack, the brigade conducts expedient planning for the movement of antitank subunits to defeat enemy armor. At this point, the relieving motorized rifle subunits and their equipment move forward. In the interests of security, the approach movement to the forward defenses is on foot. The BMPs, BTRs and other tracked vehicles will move when the tank subunits move. The subunits move quickly into position and, by dawn, are completely camouflaged. The distance between the assembly and/or rendezvous areas and the front line is no closer than 5-7 kilometers. If the relief in place is being conducted during a transition to a defense under the cover of supporting fires, the distance may be shortened to 2-4 kilometers.²⁶

After the relieving motorized rifle subunits complete their hike and meet with their guides, they move into the forward defensive area to a forward withdrawal area. There they meet other guides from the company, platoons and squads being relieved who bring the relief force to their new area, strong points or fighting positions which they occupy. During the movement to the forward edge of the defense, haste and fuss are inadmissible. It is necessary to consider that all movement at night takes longer than during the day and guiding in every individual is of vital consequence. It follows that if the entire subunit does well, but one scatter-brain makes a serious mistake (for example, an accidental discharge of a weapon or the non-observance of night discipline) everyone could get killed. In this manner, night movement demands not only excellent training of the subunit, but also strict training of every soldier.²⁷

During the relief in place of the motorized rifle subunits, the danger of weakening the first echelon or sometimes a sector of the defense arises, which the enemy could take advantage of. To eliminate this problem, use different variants of the relief in place. If there is sufficient time, move a relieving company from the second echelon in the battalion defense forward, a platoon at a time, to occupy the front line and ward off an enemy attack. If there is insufficient time, move all the platoons of a relieving company simultaneously forward. However, this requires taking measures to cover a potential weak area with fire from all means deployed at this time. The relieving units assume the defensive mission, organize a system of fire and observation and fine tune plans to defeat a possible enemy attack. Subunits deployed in the forward position or in combat security are relieved after the main defense has been relieved.²⁸

A more difficult problem is the relief of combat vehicles, particularly those located in firing positions on the forward edge of the battlefield or close behind. The first approach is to exchange a large part of the vehicles already deployed forward with relief force vehicles in the rear by the order of the senior commander. Second is to camouflage the shape and muffle the sound and use firepower during a simultaneous movement of vehicles, hopefully lessening

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid, 26.

the possibility of their destruction. The third approach is move the armored vehicles during an artillery fire destruction of the enemy mission while simultaneously moving the vehicles. This could result in the loss of a large part of the relieving and relieved vehicles. A consideration is that when combat vehicles are damaged and evacuation machines tow them off, it is difficult to differentiate between a vehicle moving under its own power or being towed away or merely starting up its engine or giving another vehicle a push. Besides which, combat vehicles in a defending subunit are used differently than during normal combat. The crews carefully study the location of the enemy weapons when digging in with the result that the enemy efforts to pinpoint their position is very difficult and practically useless.²⁹

The motorized rifle combat vehicles that are already positioned in the defense are sited for one purpose-to defeat an enemy attack. It is ineffective to use those vehicles in an attack during the artillery fire preparation of the attack and the fire support of the attack, since these vehicles are in the wrong positions. Consequently, the senior commander may decide to exchange a number of the combat vehicles of the relief force with the relieving force.³⁰

If the relief in place is done during the day time, the relieving and relieved combat machines may occupy the same firing position simultaneously. However, this requires reliable covering fire from aviation, artillery fire, flat-trajectory fire, air defense systems and an aerosol curtain of particulate smoke and radio-electronic warfare conducted against the enemy communications and command and control systems of missile forces, artillery, helicopter and fixed-wing aviation, combined arms subunits, reconnaissance subunits and electronic warfare units.³¹

Relieving tank subunits move into their designated positions or assembly areas: as the relieved force transitions to the attack-particularly during the artillery fire preparation phase; and during the transition to the defense, particularly at the beginning of the artillery destruction of an attacking enemy phase. If subunits are exchanged during these firing phases, an assembly area should be set up beforehand as the place to meet subunit representatives who will serve as guides. The remaining subunits and elements of the combat formation meet their guides and move to their positions and areas. Air defense subunits conduct their movement under the cover of the other subunits.³²

During the relief in place, the commanders of the subunit being relieved remain at their COPs for the area, position or strong point. During this time, command and control of the subunits is conducted over landline, which is normally stays in place. The relieving subunit supplies an identical set of wire communications gear to the departing subunit.³³

Covering the relief in place is the responsibility of the subunits being relieved. Should the enemy attack during the relief in place, all the subunits will defeat the attack. The departing commander is in charge of the fight and will command his and the relieving subunits. After

²⁹ Ibid.

³⁰ Ibid.

³¹ Ibid.

³² Ibid.

³³ Ibid.

the attack is defeated, the relief in place will resume. An officer and several sergeants from the relieved subunit, who know the area and the enemy dispositions well may remain with the relief force to assist in studying the area and enemy until the subunit transitions to the attack or initiates defensive combat. The commander of the relief subunit submits a report on the completion of the relief in place in two copies promptly.³⁴

The relief in place is difficult and begins with the reconnaissance and artillery. Motorized rifle subunits follow. It is difficult to move BMPs or BTRs from forward firing positions. Brigades and subunits that constitute bronegruppa should not have difficulty, but it is often better to swap forward vehicles rather than try to move them back and forward at night. Wire communication is almost always swapped. Tanks move once the motorized rifle units are in place and defending. The final relief is of the subunits positioned in the forward position or security zone. Remote mining by engineer vehicles or MLRS is possible, but hard to conceal.

³⁴ Ibid.

Breaking Contact and Withdrawal

Withdrawal is either premeditated or from necessity. A force leaves an occupied line or region and withdraws for the purpose of avoiding the strike of a superior enemy force and occupying a more advantageous position for subsequent action. A premeditated withdrawal is usually connected with a deteriorating situation on a neighboring sector of the front or in the rear. A forced withdrawal normally arises when a neighboring unit's strength is such that they are unable to continue occupying the line or region and it follows that enemy military action must result in the destruction of the defending force.

In either circumstance, the withdrawal is conducted only by the order of or permission from the senior leader, it is organized in secret with the goal of conducting a timely, withdrawal of forces in combat-capable condition. The withdrawal begins with forces breaking contact with the enemy. Brigades and units will designate a line or a withdrawal march route with a start and finish line and the order for their occupation, the location of areas for rocket units and artillery firing positions, the site for deployment and the control points. Further, the brigade or unit commander focuses on the characteristics of the follow-on military action after the withdrawal. During the withdrawal, the combat formation usually includes units or subunits designated to cover the break in contact, the main body and the rear services. The rear service units and subunits withdraw in the first march order. Breaking contact begins after the rearguard brigade or unit occupies the start line and continues until after the entire main body has crossed the start line. In order to conceal the activities of the force as it breaks contact and moves away from the enemy, it is conducted at night and during other periods of limited visibility and is supplemented with a variety of camouflage and concealment measures. If the enemy is not particularly active (aggressive), the second echelon and reserve withdraw in the first march order. The entire first echelon of the brigade or regiment (in a division) moves simultaneously to a rear defensive line that is not in direct contact with the enemy. This movement is covered by subunits left on the front line trace.

After breaking contact, the main body assembles into march column and, not delaying at intermittent lines, withdraws under the cover of the rear guard to its designated area. Units or subunits designated as a covering force, maintain the previous pattern of military activities and do not allow the enemy to transition to an organized pursuit. The covering forces withdrawal begins, as a rule, after the main force has all passed the start line and the rear guard has occupied the start line. The covering force withdraws quickly and usually simultaneously. With the goal of preventing the enemy from seizing gorges, bridges, crossings, road intersections and other important points on the withdrawal routes, subunits (or units) are designated to cover these obstacles to movement and hold them until the main body has withdrawn and the rear guard has taken over.³⁵

The rear guard occupies a rear line and actively and decisively contains the enemy advance and secures the uninterrupted withdrawal of the main body. It maneuvers from one line to the next, in accordance with the orders of its commander and is conducted in sequence. The rear guard uses ambushes, obstacles and controlled destruction extensively during

³⁵ Ministry of Defense of the Russian Federation, "Withdrawal" [Отход], *Military Encyclopedia* [Военная Энциклопедия], Volume 6, Moscow: Voenizdat, 2002, 201-202.

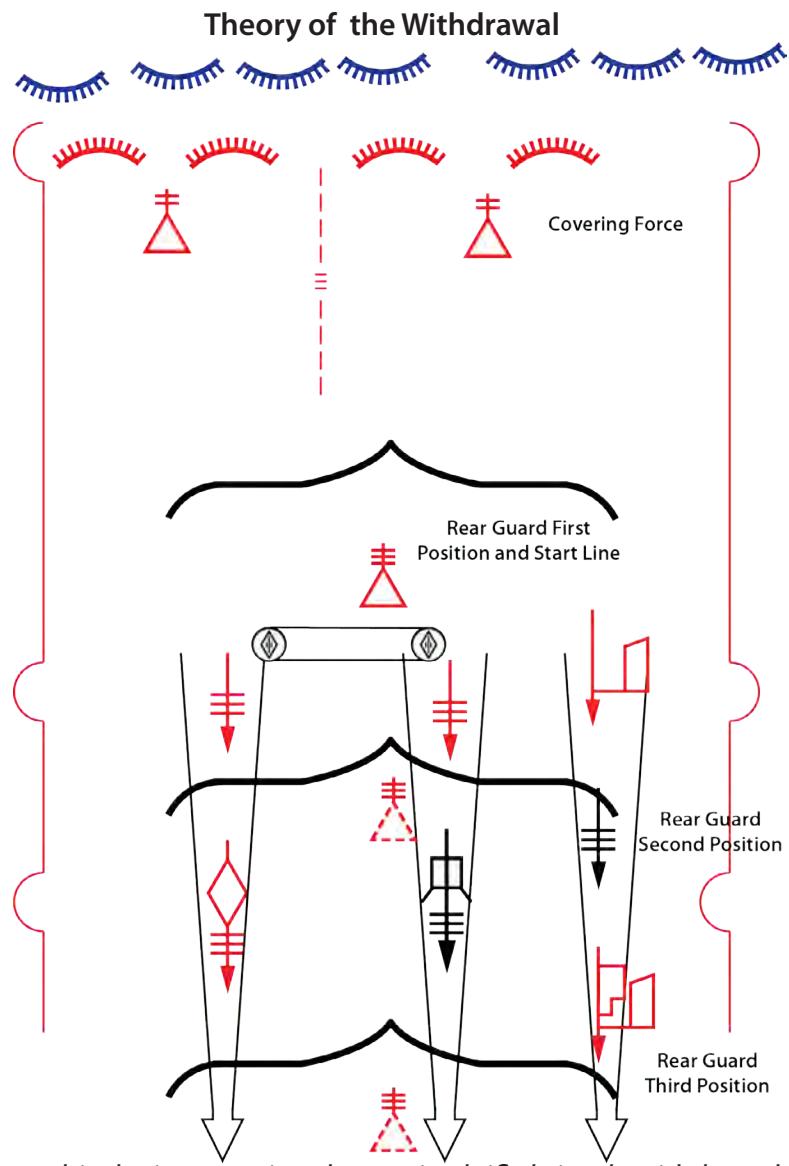
its maneuver, particularly at the lines of withdrawal and on the flanks. Depending on the situation, the main body, or units from it, may deploy back into battle along an intermittent line, should the rear guard and march security elements be unable to contain the enemy pursuit or an attack on the march route. Depending on the situation, at the last designated position or region, the rear guard withdraws as a group.³⁶

The rear guard is usually a tank or motorized rifle brigade or battalion that is capable of independent action and is supported by long-range artillery and army aviation. It may be reinforced with self-propelled artillery, subunits of other branches and specialized troops. Its mission is to occupy a designated position or line and to hold it for the required time and then withdraw when ordered to the next position or line. The withdrawal can be simultaneous or by leapfrogging. When the withdrawal is simultaneous, a company per battalion will first withdraw to the next line and occupy a broad front. The company will then cover the withdrawal of the remaining rear guard force. When the withdrawal is by leapfrogging, the rear guard occupies two successive lines in the depth simultaneously. When the first line withdraws, it withdraws past the second line and occupies a third. When the second line withdraws, it passes through the third line and occupies a fourth. This may continue until the end of the rear guard mission. A rear guard may be designated during the entire march from the front to the rear. The rear guard will constantly conduct reconnaissance for the purpose of determining the enemy composition, groupings and direction of advance.³⁷

The more roads that are available for a withdrawal, the better. A brigade prefers that each maneuver battalion, the artillery and the trains each have their own routes. Often, subunits will have to share routes and the challenge is not to have traffic bunched up on them. Cross traffic must be avoided or tightly controlled. Vehicle spacing, evacuation vehicles and engineer road repair and constructions assets are key. Reserve roads, unused up until the withdrawal, are ideal for withdrawals. The engineer battalion will employ corner reflectors, laser deflectors, false radar signals and physical masking to cover movement. Mining the withdrawal routes can aid the withdrawal provided that it does not interfere with the rear guard. Night, rain and particulate smoke help the effort and supplement ECM efforts. Historically, if wind and weather conditions permit, grass and forest fires can aid a withdrawal. Air defense of bridging and fording sites are critical, and engineer crossing assets need to be available to assist water crossings.

³⁶ Ibid.

³⁷ Institute of Military History of the Ministry of Defense of the USSR, "Rear Guard" [Арьергард], *Soviet Military Encyclopedia* [Советская Военная Энциклопедия], Volume 1, Moscow: Voenizdat, 1990, 247.

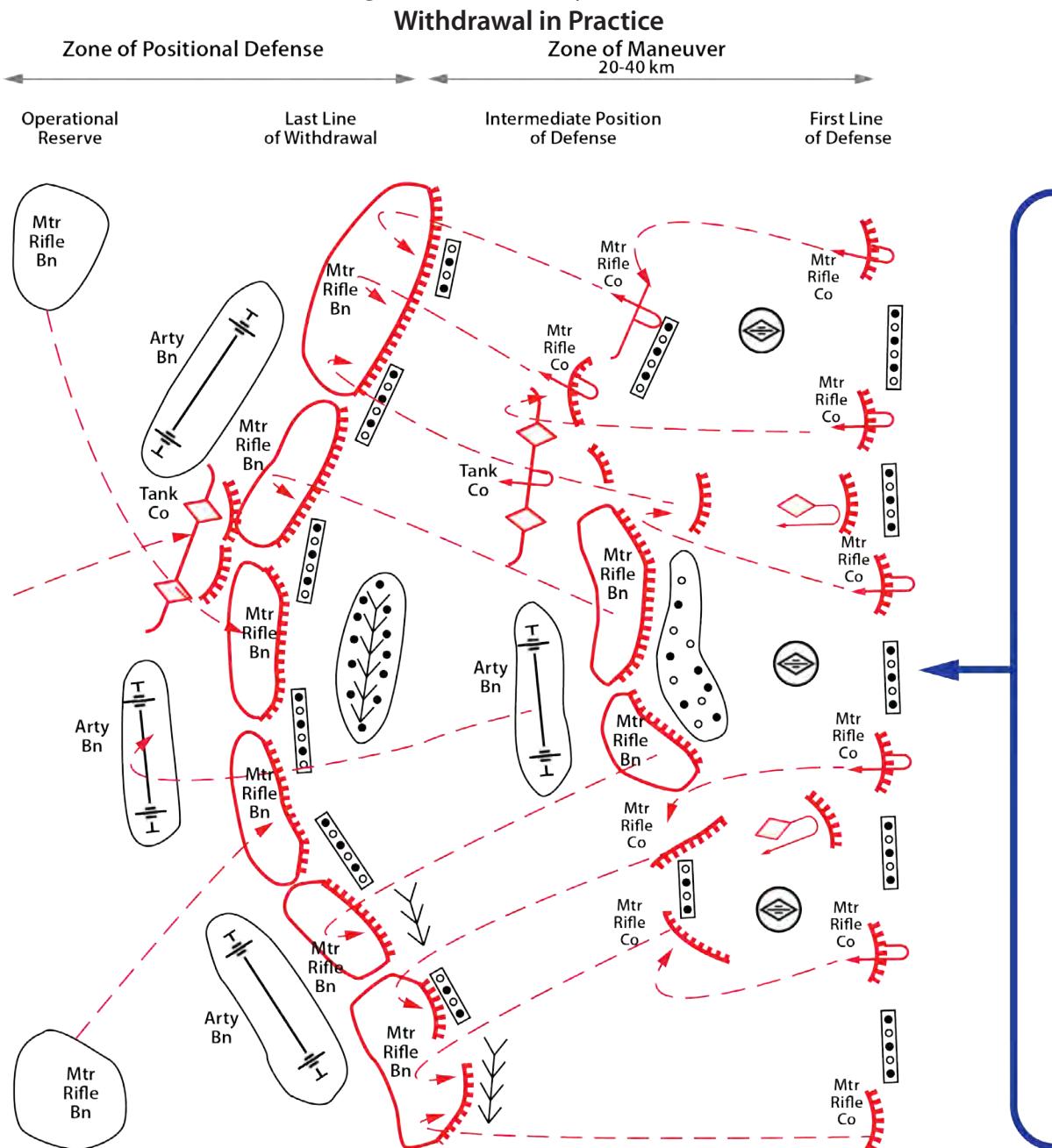


(Above) The above graphic depicts a notional motorized rifle brigade withdrawal. The forward two motorized rifle battalions each leave a company covering force as they secretly withdraw. The enemy is not too active at this time, so the brigade commander has decided to withdraw the trains and second echelon first. A second echelon motorized rifle battalion assumes the rear guard mission. It is reinforced with an artillery battalion as well as tanks, engineer mining assets and air defense assets. This brigade withdraws on three primary routes. The trains, an artillery battalion and brigade forces withdraw on one route. The MLRS battalion and a motorized rifle battalion withdraw on a second route, while the tank battalion and a first echelon motorized rifle battalion withdraw on the third route. Determination of the start line and the sequential positions for the rear guard are a function of terrain, weather, enemy activity, subsequent mission and hours of darkness available. The start line and first position of the rear guard do not have to be the same. Which units travel on what routes is a function of which are the safest and more exposed routes, expected enemy actions, using more trafficable routes for heavy equipment, water crossings enroute and potential traffic problems (built up areas, road intersections, mud, blown bridges and the like).

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The covering force is usually withdrawn after the main body has passed the start line. It withdraws through the rear guard and follows the route taken by its parent battalion. In this example, the rear guard will withdraw simultaneously from position line to position line instead of leapfrogging back.

Withdrawal under heavy enemy pressure may devolve into a series of hard-fought engagements while attempting to preserve as much combat power as possible on a more advantageous line. Historically, the Russian soldier is a stubborn defender. During the Second World War, Stalin's famous order 227 issued on 28 July 1942 "Not one step backward" [Ни шагу назад], caused a lot of units to die in place, rather than withdrawing. When ordered, the Russian soldier will stand his ground tenaciously.



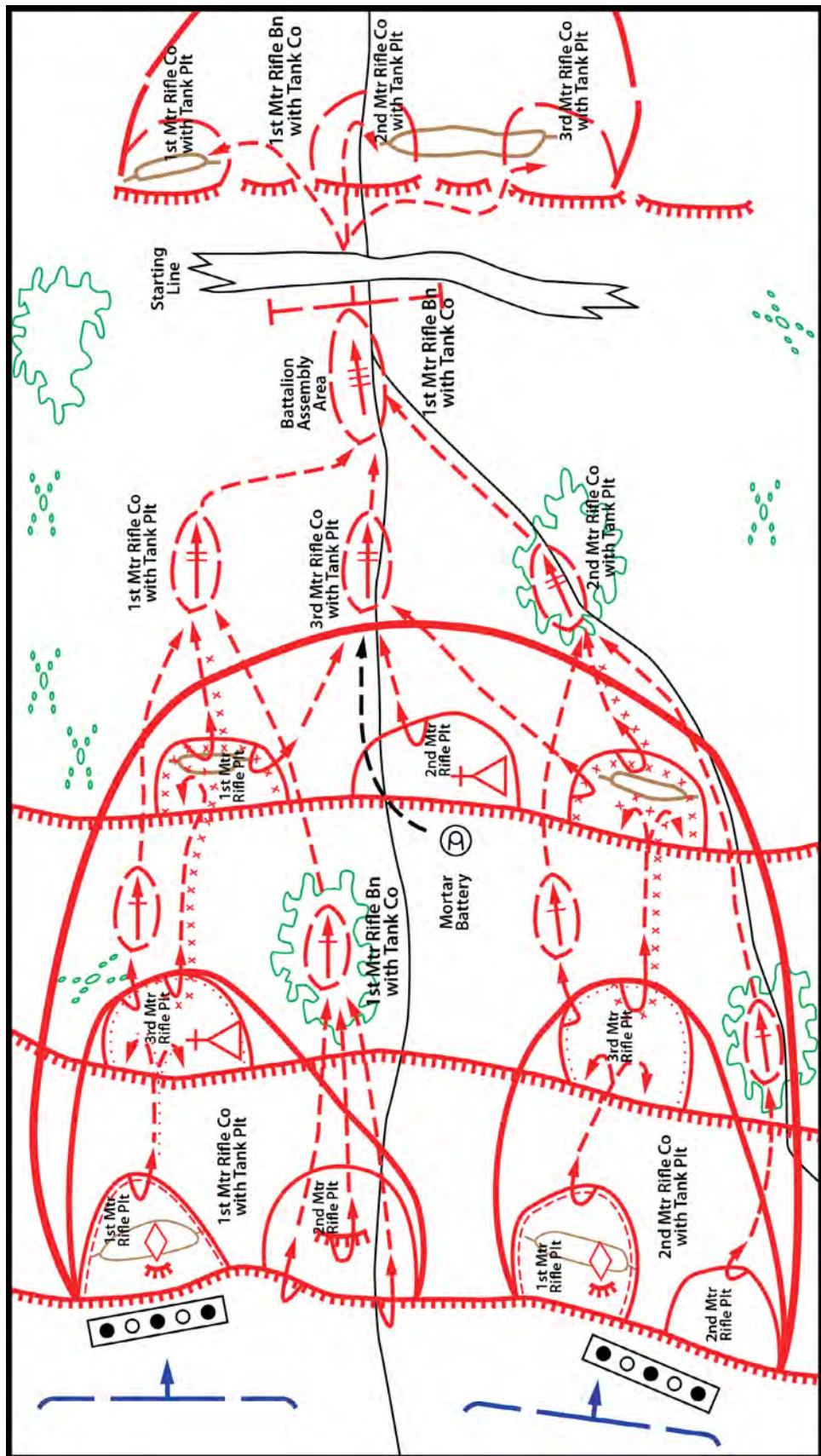
(Right) The graphic on facing page depicts a withdrawal under pressure by a defending motorized rifle battalion with an attached tank company. It is defending with two companies forward and one back. There are two east-west roads through the battalion defense that meet behind the battalion defense. Since the enemy is attacking, the battalion must conduct a fighting withdrawal. The northern company is defending in two echelons with a tank platoon and the 1st MRP in the north on higher ground. The 2nd platoon defends the main road. In the south, the 2nd MRC defends in two echelons with the 1st MRP and a tank platoon on higher ground. The 3rd MRC defends in a single echelon in the battalion rear.

The withdrawal begins with a feint attack by the 2nd platoon of the 1st MRC which then withdraws into a temporary assembly area in a covered patch of woods behind their position. After assembly, the platoon withdraws to a company assembly area behind the battalion defensive position. The 3rd platoon withdraws directly to the company assembly area. Simultaneously with the feint attack, the 2nd and 3rd platoons of the 2nd MRC, the entire 3rd MRC (with attached tank platoon) and the mortar battery withdraw to company assembly areas behind the battalion defenses. The mortar battery moves to the 3rd MRC assembly area.

Upon a signal from battalion, 1st platoon of the 1st MRC and 1st platoon of the 2nd MRC withdraw, along with their attached tank platoons, to the vacated positions of their 3rd platoons and defend. The 3rd MRC and mortar battery move to the battalion assembly area in the vicinity of the road junction, followed by the two platoons of the 1st and 2nd MRCs. As the enemy pressure mounts, the embattled 1st platoons with their attached tank platoons withdraw again and take up a defense in the vacated positions of the 3rd MRC. Finally, upon signal from battalion, the battered 1st platoons and tank platoons move quickly into their company areas for a quick nose count and then move to the battalion assembly area. The battalion has probably begun its march and the battered platoons join the march column, with luck, not as the rear guard.

The battalion marches a distance to its new positions and assumes a single echelon defense. The battalion commander's intent was to preserve as much combat power as possible, while banking on two motorized rifle and two tank platoons to conduct a determined fighting withdrawal from three prepared fighting positions. His feint created a diversion under which the withdrawal began. He took advantage of high ground defenses while leaving the road approaches subject to flanking fire in a variant of the fire sac. He will have available artillery fire planned on the roads.

Withdrawal of a Motorized Rifle Battalion



Fighting in an Encirclement and Breakout

The rolling plains, forests and marshlands of Western Russia and Eastern Europe invite the use of combined arms battalion and brigade maneuver. The nature of the terrain and the tempo of the maneuver can readily allow open flanks, gaps and bypassed forces. The probability of conducting or falling into an encirclement multiplies in this terrain. For the Soviet Union, the opening weeks of the Second World War (the Great Patriotic War in Russian parlance) resulted in massive operational-level encirclements of Soviet forces with chilling losses. As the war progressed, the Soviets were gradually able to turn the tables and conducted twelve of their own operational-level encirclements of German forces and their allies.³⁸ The operational encirclement differs from the tactical encirclement in terms of scope, duration and response. During the Great Patriotic War, the Soviets employed an inner encirclement line and an outer encirclement line against the Germans. The purpose of the inner encirclement line was to prevent the trapped enemy from breaking out. The purpose of the outer encirclement line was to prevent a rescue force from breaking in and expanding the encircled area into a bulge in the defensive line or extracting the entrapped force. Operational encirclements were designed to destroy the combat effectiveness of the entrapped major force and to capture equipment and units. The encirclements could be porous, allowing individuals to escape individually or in small groups with their rifles, but little else. The idea was to destroy the combat potential or capture the encircled units and equipment, but not become overly concerned with individuals. In the Soviet-Afghan War, the porous nature of the Soviet encirclements worked to the Mujahideen advantage, but the Mujahideen usually lost their trucks and heavy weapons when encircled.³⁹

Often, when combating an enemy, it is more advantageous to isolate a dangerous force and let artillery weaken that force before committing to a decisive attack. When conducting an encirclement, the encircling force will take advantage of the terrain to isolate the enemy force rapidly and seize road intersections, escape routes and approach routes for an enemy relief force. The outer encirclement line may be fragmented and the outer encirclement force will first seize the key routes to prevent the enemy from escaping while preventing the external enemy force from approaching the inner encirclement force. An encirclement is normally reduced by sectors, rather than simultaneously. The reserve of the outer encirclement force is frequently used in sector reduction.⁴⁰

Based on their Great Patriotic War experience, the Soviets and Russians studied and have developed operational and tactical techniques for conducting encirclements and fighting when encircled. Larger-scale encirclements are likely to occur during the initial period of a war or when forces are pinned against a natural obstacle such as a seacoast or major river or are within a city.⁴¹ Since an advance guard mission, meeting battle, forward position

³⁸ Ministry of Defense of the Russian Federation, "Encirclement" [Окружение], *Military Encyclopedia* [Военная Энциклопедия], Volume 6, Moscow; Voyenizdat, 2002, 43-45.

³⁹ Ali A. Jalali and Lester W. Grau, *The Other Side of the Mountain: Mujahideen Tactics in the Soviet-Afghan War*, Quantico: US Marine Corps Study DM-980701, 1998, 241-266.

⁴⁰ Ministry of Defense of the Russian Federation, "Encirclement" [Окружение], *Military Encyclopedia* [Военная Энциклопедия], Volume 6, Moscow; Voyenizdat, 2002, 43-45.

⁴¹ I. N. Manzherin, "Actions of forces in an encirclement," [Действия войск в окружении], *Military Thought* [Военная мысль], February 1990, 14-21.

in a security zone, failed counter-attack or inability to retreat pose the greatest danger of encirclement for a battalion, battalion-level fighting in encirclement and breakout training exercises have been conducted.⁴² These exercises involved a combined arms battalion or task-organized motorized rifle battalion with tanks, BMPs and artillery. The best way to break out of a tactical encirclement is not to be encircled in the first place. The battalion commander does so by additional reconnaissance, placing ambush sites on the flanks and boundaries with adjacent subunits, concentrating fires (especially antitank fires) on threatened avenues of approach, and grouping forces and means to conduct a counterattack. Should the battalion find itself in the rear of an advancing enemy, it must actively and decisively commit its maximum strength to retain the most tactically significant feature of the area or the area which will support its breakout of encirclement.⁴³

Tactical Considerations

Experience shows that being encircled is not necessarily a catastrophe that leads to death or captivity, but it is a serious situation. It is a situation where one is fully or partially cut off from his own force; fighting a superior force simultaneously to the front, flanks and rear; fighting under conditions where maneuver is limited, resupply is difficult, and casualties to men and material mount to a significant level. An encirclement may involve a single or double pincer movement designed to cut off a unit from its neighboring and second echelon units, disrupt its ability to receive supplies and assistance and establish an unbroken containment area. The encircled force must break out to restore its freedom of maneuver.⁴⁴

Primary tactical missions required for forces fighting in an encirclement:

- prepare a defense and construct strong points or a defensive area;
- ward off aerial attacks;
- repulse enemy ground attacks and retain established firing lines, positions and areas;
- prevent the enemy from breaking through into the depths of the defense;
- destroy enemy forces wedged into the defense;
- restore the situation on the primary axes;
- eliminate enemy assault forces, sabotage and diversionary groups acting in the rear area and irregular armed formations.⁴⁵

The requirements for fighting in an encirclement require that the commander and staff:

- seize and retain the most important tactical position in the path of the enemy;
- constitute a strong, mobile antitank reserve and deploy it on the most-threatened axes;

⁴² N. Vinokur, "Combat in an encirclement" [Бой в окружении], *Military Herald* [Военный Вестник], December 1979, 38-40.

E. Denizhkin, "In extreme situations (Motorized rifle battalion combat in an encirclement and breakthrough from it)" [В экстремальных условиях (Бой мотострелкового батальона в окружении и выход из него)], *Military Herald* [Военный Вестник], September 1990. Although these are Soviet examples, the theory is still quite relevant, particularly on a fluid, maneuver battlefield.

⁴³ Denizhkin, 40.

⁴⁴ A. P. Kozachenko, "From combat-out of encirclement: Algorithms for commander and staff work" [С боем-из окружения: Алгоритм работы командир и штаба], *Army Digest* [Армейский Сборник], April 2011, 8.

⁴⁵ Ibid.

- position part of the artillery so that it can conduct direct fire to defeat an enemy tank attack;
- prepare to mass fire and maneuver artillery on the most-threatened axes;
- order the combat engineers to mine the most-probable enemy approach;
- maintain uninterrupted communications with the senior commander and, most importantly, with neighboring units in order to combine efforts to thwart enemy intentions.⁴⁶

Combat in an encirclement requires active and decisive actions to pin down a larger force and to be prepared to fight for an extended period of time. Offset insufficient forces and means with active combat, skilled maneuver and military cunning. Subunits must staunchly defend their strong points and areas, not allow the fragmentation of the encirclement, not lose close contact with the enemy, and not allow their own forces to bunch up in a small space where they can be destroyed by all types of fire. The commander must establish a coherent perimeter defense; secure the junctures between subunits; assume command of all forces in the encirclement and assign them missions; maintain a high fighting spirit, while organizing and maintaining combat readiness; establish and maintain coordination with forces fighting outside of the encirclement; and at all times know the situation in each of his subunits.⁴⁷

Further, the commander must employ aviation, all means of fire, surprise and courageous counterattacks to evict enemy wedged into his defenses; quickly and secretly maneuver subunits, fires and particularly tanks and BMPs against a threatened axis; reconstitute the reserve; support helicopter landings and position them; receive and collect cargo dropped from aircraft; institute strict rationing of rockets, ammunition, food and fuel.⁴⁸

The basic tactical missions for fighting in an encirclement include:

- seizing a region that provides freedom of internal maneuver;
- block enemy attacks, direct and deploy our forces and destroy any enemy wedged into our defenses;
- preserve command and control and maintain combat readiness during the breakout from encirclement;
- prevent forces from crowding into a small area that can be attacked by enemy artillery;
- establish a group of forces and weapons to break through the encirclement.⁴⁹

Tactical missions for a breakout of an encirclement include:

- regrouping forces and resources and creating an attack combat formation;
- retaining the perimeter with a covering force while breaking out and withdrawing;
- breaking out through the encircling enemy defense with the main force and withdrawing from the encirclement;
- breaking contact and withdrawing the covering force from the encirclement.⁵⁰

⁴⁶ Ibid, 8-9.

⁴⁷ Ibid, 9.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Ibid, 10-11.

The breakout sector of the encircled force should line up with the breakthrough sector of the external force. The combat formation for the breakout is usually the breakout force, the support force and the reserve. There will be a requirement to assemble and direct these elements in the direction of the breakthrough. The initial withdrawing force will normally include no less than half the force and the bulk of tanks and artillery. The flanks of the breakthrough must be held against enemy counter attack. Normally one-third to one-fourth of the force will perform this mission. The commander will specify each subunits mission, the time and method of the breakthrough and the order of withdrawal from the encirclement.⁵¹

The commander's concept must include:

- the sector, direction and time for the breakout, if these are not included in the senior commander's orders, and the sectors for diversionary actions;
- the method and sequencing of the breakout and withdrawal from the encirclement;
- the order of withdrawal of subunits holding the encirclement perimeter and the flanks of the breakthrough sector;
- the sequencing of destruction of the enemy by fire;
- the follow-up mission of the withdrawing breakthrough subunits and the order of their readiness;
- the formation of the combat formation (forces and means assigned to the breakthrough, diversionary actions, flank security and perimeter security);
- provision for secrecy during preparations and for fulfilling the assigned missions.⁵²

The designation of the breakout, diversionary, flank security and perimeter defense forces and systems and their actions during each phase of the breakthrough and withdrawal, plus their missions upon reaching friendly positions, is critical. The flank security subunits are the last to withdraw and will withdraw on the order of the commander by lines, each of which they will defend. They may have to conduct a limited counterattack to check an enemy pursuit and gain time for the withdrawing subunits. The withdrawal should conduct a determined and crippling blow to the enemy on the chosen axis. The breakout of small groups from the encirclement is forbidden. A night breakout of force and tanks requires tight discipline and order, surprise, and an attack on enemy forces astride the selected axis. A daytime breakout requires a short, but intense, artillery preparation and, if possible, air strikes.⁵³

After the breakthrough, the organized withdrawal is quickly conducted. The maintenance and supply subunits move with the breakout force. The sick and wounded are moved on available transport. If necessary, vehicle cargo may have to be unloaded in a heap to make room. Destroy the heap.⁵⁴

When the commander receives the order to break out of an encirclement, he must concentrate his forces and means into a mighty fist for the breakthrough. A determined and energetic effort is necessary to conduct this mission. Active reconnaissance, a sober assessment of the situation, a clear decision, precise coordination between forces, strict

⁵¹ Ibid, 11.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid.

command and control and courage will not only result in the breakthrough and withdrawal from an encirclement, but destroy a significant group of the enemy in the process.⁵⁵

Encirclement Training Example

The following deals with the tactical fighting within an encirclement and breakout by a motorized rifle battalion. It is taken from a battalion exercise conducted shortly before the collapse of the Soviet Union, so the battalion is part of a regiment, but is fighting combined arms and the principles covered are still valid and instructive.

In this exercise scenario, the enemy has broken into a defense and encircled a motorized rifle battalion. The 1st Motorized Rifle Battalion is mounted on BMPs and has a tank company, an air defense missile platoon and a self-propelled howitzer battalion. It is joined by another tank company and the 9th Motorized Rifle Company that have been isolated as well. At 1500 hours, the battalion commander received his orders: "Assume command of the encircled subunits and constitute an unbroken defensive perimeter. Your mission: Firmly retain the area within the limits delineated by Clear Pond-height 178.6-the irregular grove, prevent the enemy from weakening the combat power of the battalion, pin down those enemy subunits not in direct contact through combat, and hinder their maneuver in the direction of the dairy farm to the village of Sentsovo." The battalion commander also learned that the enemy reserve might commit a tank battalion against his encirclement. The enemy battalion could cross the departure line, dairy-farm to long woods, in one to 1.5 hours.⁵⁶

The battalion commander considered his situation. He had an extensive perimeter of up to 10 kilometers to hold, there were several threatening avenues of approach on different sides of his perimeter and there were insufficient forces and means. In order to allow his subunits to inflict significant casualties required the ability to concentrate his force quickly against any avenue of approach. Therefore, he decided to conduct a single-echelon defense with a strong reserve located near the command post. The commander considered the northern enemy avenue of approach as the most likely and dangerous. He positioned his 2nd Motorized Rifle Company on it with a recessed fire sac. Two tank ambushes secured its flanks and another tank platoon had a firing line directly behind its position. The battalion reserve was the 9th Motorized Rifle Company and a tank company (minus one platoon). The artillery battalion was located in the center of the defense, where it could fire in any direction. The battalion's mortar battery was attached to the 3rd Motorized Rifle Company.⁵⁷

The commander paid close attention to maintaining the steadfastness and activeness of his defense, and to the tactical and fire coordination among subunits, their tenacity and their protection from high precision fires, aerial attack and artillery fire. The company and platoon positions were prepared in order to provide a zone of unbroken defensive fire to the front and flanks, guaranteed to break up an armored and/or infantry attack on the various approaches. The company defensive areas occupied 1500 meters of frontage and 500 meters of depth with gaps of up to 1,500 meters between them. Platoon strong points occupied 300-400 meters of frontage and 200 meters of depth with gaps of 300 meters between them.⁵⁸

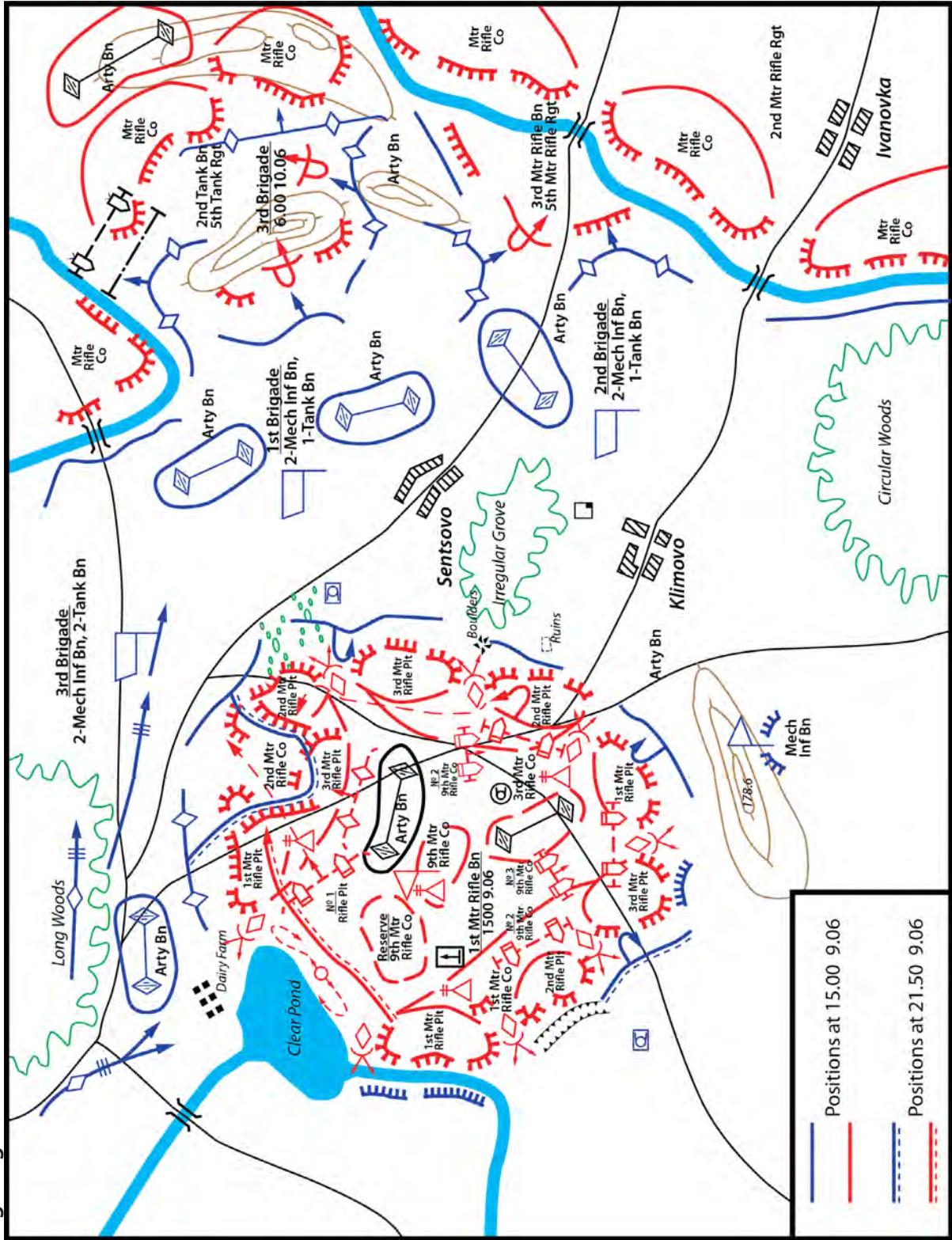
⁵⁵ Ibid.

⁵⁶ Denizhkin, 40.

⁵⁷ Ibid, 40-41.

⁵⁸ Ibid, 41.

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The battalion commander was concerned with organizing his system of fire. The basis of this is concentrated barriers of artillery and mortar fire before the forward edge and in the depth of his defense, combined with the antitank fires of the tanks, BMPs, ATGMs, ordnance, grenade launchers and other means. The positioning of machine guns and small arms completed turning the encirclement front into a solid multi-trajectory fire zone with frontal, flanking, interlocking and close combat fires. The battalion commander also planned for the maneuver of artillery, tanks, BMPs and the reserve from unthreatened sectors. This included planning for alternate firing positions, firing lines and assembly areas.⁵⁹

The battalion commander assigned missions to his air defense missile platoon to protect his subunits, the command post and his helicopter landing zone. He had to consider the strict rationing of ammunition, fuel and other supplies and take the necessary steps to receive cargo delivered by helicopter or parachute. His staff established radio contact and coordinated with those subunits that were outside the encirclement. The battalion used landline communications primarily within the defense. Wire was laid and buried in the trenches and in the communications trenches as a protection from artillery fire.⁶⁰

The enemy attacked the 2nd Motorized Rifle Company positions at 2130 hours. Two tank companies and some mechanized infantry managed to wedge some 400 meters into the fire sac and overrun part of the 1st and 2nd platoon positions. The battalion commander focused the fire of his artillery battalion on the enemy self-propelled artillery positioned south of long woods. He committed his antitank reserve to firing line #1 to combat the enemy incursion. While the 2nd MRC fought to retain the second and third trenches, they were supported by fires from the mortar battery. The battalion commander attached a motorized rifle platoon from the quiet sectors of the 1st and 3rd Motorized Rifle Companies to the 2nd MRC as reinforcements in the fight. These measures enabled the company to stop the enemy and reoccupy some lost positions. A similar attempt by the enemy to penetrate the 1st MRC position near the ravine was also unsuccessful.⁶¹

Taking advantage of the situation, the battalion commander ordered his reserve, in coordination with the tank platoons and the 2nd MRC, to destroy the enemy within the 2MRC area and restore the 2MRC original defensive front line. They secretly approached the jump-off line and launched a counterattack. The determined night attack regained more of the company positions and inflicted heavy losses on the enemy.⁶²

Breakout Training Example

The next mission was the breakout from encirclement at 0300 hours the next morning. The battalion commander's decision had to determine the breakout sector and the diversionary action; the direction and time of the breakout; what forces and means to commit to the breakout, covering force and flank security (blocking force); the missions of each; as well as the withdrawal mission and the time required to carry it out. The commander planned the order of withdrawal from the encirclement, the withdrawal of the covering force and flank security, and coordination with the

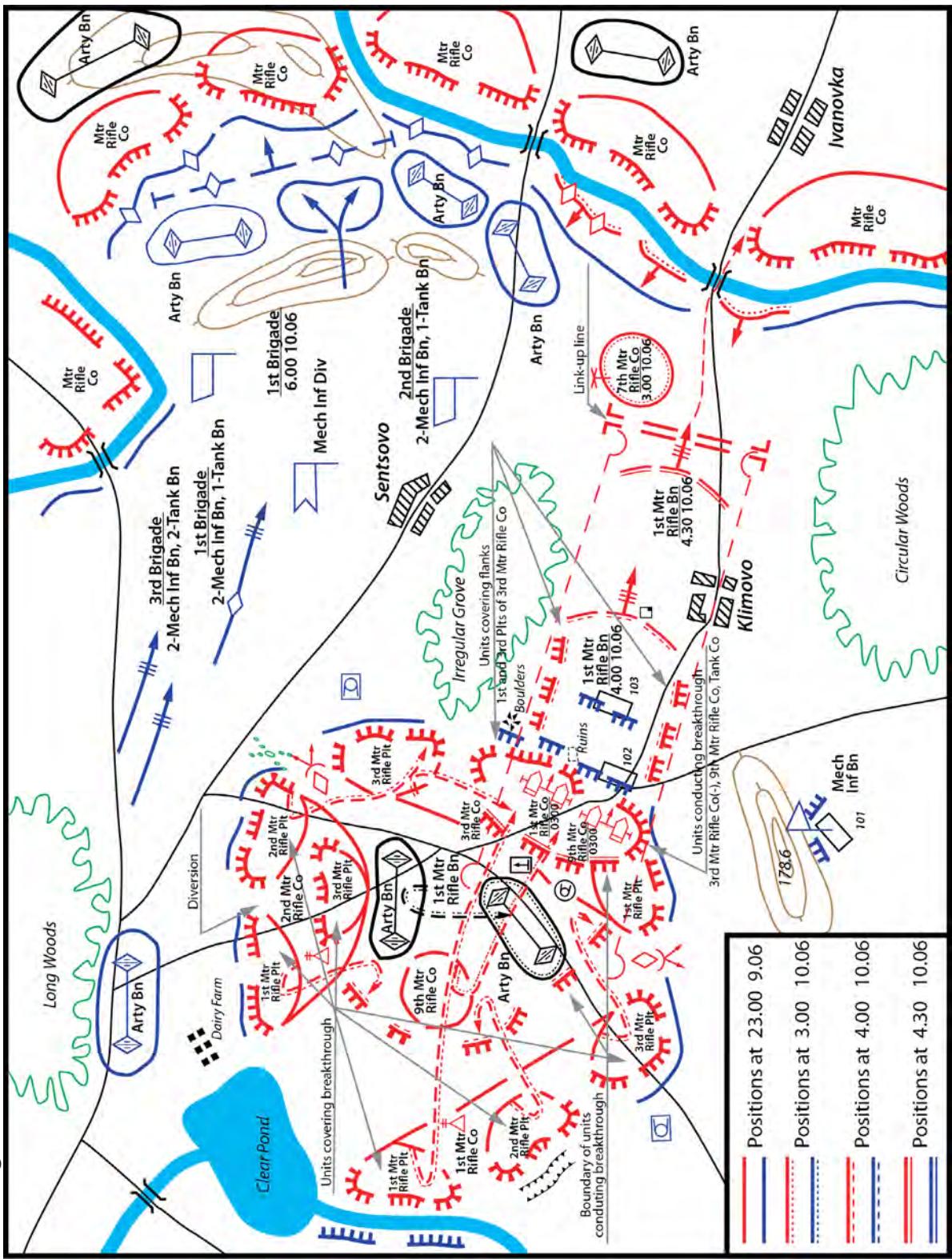
⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Ibid, 42.

⁶² Ibid.

Breaking Out of an Encirclement



linkup forces outside the encirclement.⁶³

The commander decided to have the 2MRC conduct the diversionary action in the area where the enemy was still wedged into part of the 2MRC forward defenses. He calculated that the enemy might think that action in this area indicated an attempt to restore the positions and undo his successful breakthrough attack [in the north]. In reality, the breakout axis would follow the ruins, the individual house and the village of Ivanovka.⁶⁴

The battalion commander began the covert repositioning of the 3rd MRC, the 9th MRC along with the tanks and self-propelled artillery battalion to break through the encirclement. The breakout would be assisted by the 2nd Motorized Rifle Regiment, whose commander planned to conduct an air assault at 0300 hours in a counterattack in the direction Ivanovka-Klimovo. The rest of the perimeter would be held by the 1MRC and 2MRC covering force.⁶⁵

At 0045 hours, the battalion commander gathered his company commanders and other subunit commanders and briefed them on his decision: The main force will concentrate on the direction ruins-single house-Ivanovka. The 3MRC, 9MRC and the tanks will conduct a night attack to break through the enemy defenses in the region of the barn, Kilmovo, the boulder, the southern edge of the “irregular” bushes. Destroy the enemy in the region of the barn, single house and boulder. By 0400 hours 10 June, seize the line between the western limits of Klimovo and the southern edge of the “irregular” bushes.

Continue the attack in the direction of the single house-Ivanovka, and in cooperation with the air assault forces, destroy the enemy and by 0430, link up with the subunits of the 2nd Motorized Rifle Regiment who will meet you.

The fires of the artillery battalion, mortar battery and tanks will destroy the enemy in the two platoon strong points and the command post of the mechanized battalion and provide support to the covering force and flank security force.

At 0200, the 2MRC will conduct a phony attack as a diversionary action in the sector between the brush and “Clear” Lake. The perimeter will be held by the covering force-1MRC and 2MRC. The flanks in the vicinity of the breakthrough will be held by two platoons of the 3MRC who will hold positions and assist in the orderly evacuation of subunits from the encirclement.

Combat formation is a single echelon: breakthrough subunits-3MRC, 9MRC, tank company; covering force: 1 MRC and 2MRC; flank force-1st and 3rd Platoons, 3MRC after the breakthrough. Reserve-2nd Platoon, 3MRC.⁶⁶

An hour before the breakthrough, the 2MRC launched a diversionary attack to cover the concentration of the breakthrough force. At 0300, following a short but powerful fire strike, the battalion commander signaled the start of the attack. The attack met its immediate objective and

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Ibid, 42-43.

⁶⁶ Ibid. 43.

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continued the advance. Two platoons from the 3MRC moved to the flanks and took up firing positions. Their action prevented the enemy from sealing the breach and supported the withdrawal from the encirclement-first the artillery and reserve and then the covering force.⁶⁷

In one-and-a-half hours of night combat, the battalion defeated the enemy opposite the breakthrough sector, moved over five kilometers and at 0430 hours, east of Kilmovo, linked up with subunits of the 2nd Motorized Rifle Regiment.⁶⁸

⁶⁷ Ibid.

⁶⁸ Ibid.

Maneuver Defense

Russia's long borders, smaller army and evolving mobilization system, coupled with the presence of enemy electronic reconnaissance systems and precision weaponry dictate that tied-in Russian defensive lines stretching for hundreds of kilometers will not exist, at least during the initial period of war. Aleksandr A. Svechin (1878-1938), who is now considered the preeminent Russian strategist, argued before the Second World War that the best strategy for the USSR would be the conduct of a protracted defense during the initial period of war. The enemy would be drawn into Russia's vastness where his strength would be weakened and his supply lines over-extended. Once the enemy drive had culminated, the Red Army would counterstrike and destroy the aggressor. The Soviet leadership did not heed his attrition strategy and the debacle of 1941 was the result.⁶⁹ Svechin's ideas are now well regarded in the Russian General Staff.

Much of Russia is ideal for Svechin's strategy (the exemption being the 84 miles between the Estonian border and large, urban Saint Petersburg). Most major cities are well-removed from the border areas, industry is well-distributed over the country and rail is the primary method of transport. The river network, snow, the spring thaw and fall flooding limit outside aggressors' mobility. Russian military equipment is designed for this terrain. The best option for Russia is to establish a maneuver defense that eventually leads to a positional defense where the enemy will finally be defeated.

Maneuver defense is a form of defense whose purpose is to inflict enemy casualties, gain time, and preserve one's own force while risking the loss of territory. As a rule, it is conducted when the defending force has insufficient personnel and weapons to conduct a positional defense.⁷⁰ However, the impact of new technology has changed warfare and the basic relationship between the offense and defense. Many of the advantages of the offensive are negated by the new technology. The initiative can be seized while on the offense or defense. Just before the collapse of the Soviet Union, leading military theoreticians were looking to the strength of the defense against the new technology.

Today, battle may be initiated by a bitterly contested, long-range engagement, well before the combatants come into contact. Under these circumstances, defending forces in prepared positions, which are deployed with fewer forces and combat power than the attack, may obtain a definitive superiority. This is done by the more effective protection of personnel and weapons systems during the massive fire strikes and the preservation of the combat potential of one's own armies and divisions.⁷¹

Defense may be conducted in direct contact with the enemy and out of direct contact with enemy forces. Establishing coordinated defenses when not in direct contact with the enemy

⁶⁹ A. A. Kokoshin and V. V. Larionov, Introductory Essay to English translation of Alexander A. Svechin's 1927 *Strategy* [Стратегия], Minneapolis: East View Publications, 1992, 7.

⁷⁰ Ministry of Defense of the Russian Federation, "Maneuver Defense" [Манёвренная Оборона], *Military Encyclopedia* [Военная Энциклопедия], Volume 4, Moscow: Voyenizdat, 1999, 554.

⁷¹ I. N. Manzhurin, "Some questions on the preparation and conduct of the counterstrike during defensive operations" [Некоторый вопросы подготовки и нанесения контраударов в оборонительных операциях], *Military Thought* [Военная Мысль], January, 1989, 14.

is common just prior to the initiation of hostilities. It is also encountered when preparing to meet counterattacks, when regrouping and refitting during an offensive, when preparing to absorb an enemy offensive strike prior to a counteroffensive or when conducting an economy-of-force mission in support of an offensive.⁷²

Security Zone

Positions in front of the main defense are outposts, forward positions and security zone/maneuver defense consecutive positions. A company or platoon establishes outposts, a battalion establishes a forward position, a brigade establishes a maneuver defense and an army or military district establishes a security zone. The purpose of combat outposts is early warning and concealment of the main defense. The purpose of the forward position is early warning, concealment of the trace of the main defense, forcing the enemy to deploy early and attrition of the attacking force. The purpose of the security zone is to provide early warning, mislead the attacker as to the location, configuration and actual composition of the defense and gain time for the construction of the main defense. The security zone determines the composition of the enemy forces, intentions and axes of advance. It provides adequate reaction time to the defender and forces the attacker to deploy early. It may force the enemy to attack in a disadvantageous direction and weakens the enemy force well before it closes with the main defense. It does such through the conduct of maneuver defense. The security zone is normally established when preparing defenses that are not in direct contact with the enemy. The depth of a security zone may extend 40 kilometers in front of the main defense.⁷³ There are indications that in some cases, it may extend out as far as 90 kilometers.

The depth of a security zone depends on the mission and conduct of the operation, the terrain and the time required to establish the defense. It includes several battle positions, strong points and obstacle networks. If it is located close to an international border, it might be defended by forward detachments and border guard units. These forces will fight from a series of positions prepared in depth and tied in with mine fields, ambushes and prepared demolitions.⁷⁴

Security zone defensive positions are established on important axes of advance into the main defensive area to increase the tactical depth of the defense. The depth of the security zone prevents the enemy from rapidly reaching the main defensive zone, provides for the support of the forward combined arms combat force with its main force and establishes adequate maneuver room for the forward combat force. Defensive positions and obstacles are situated where they cannot be bypassed and are strong enough to make it difficult for the enemy to overcome without significant expenditure of forces, resources and time. Tank-heavy forces and the preponderance of obstacles are positioned on the armor axes of advance. Reinforced motorized rifle battalions usually defend secondary axes. Forces and resources in a security zone include reconnaissance, combined arms forces, long-range attack systems, command and control elements, ambush forces, engineers, forward position forces and helicopter

⁷² Lester W. Grau, "Absorbing the Initial Attack: The Security Zone in the Contemporary Russian view of Defense", *Red Thrust Star*, October 1992, 4.

⁷³ Ministry of Defense of the Russian Federation, "Security Zone" [Полоса Обеспечения], *Military Encyclopedia* [Военная Энциклопедия], Volume 6, Moscow: Voenizdat, 2002, 493-494.

⁷⁴ Ibid.

gunships.⁷⁵

A battalion defending in the security zone normally deploys in a single echelon (seven to ten kilometers width) with a reinforced platoon as a reserve. The battalion does not wish to become decisively engaged and holds a wider frontage than usual (normally three to five kilometers width). Companies and platoons defend their normal strongpoint frontages. Gaps are allowed depending on the terrain and obstacles. The reserve normally occupies a blocking position on the most dangerous approach and two-three kilometers back of the battalion's front line. The reserve adds depth to the battalion defense and prevents the enemy from reaching the battalion's flanks and rear. The reserve holds its position while the battalion disengages. The reserve seldom counterattacks.⁷⁶

Positions in the Security Zone

The number of consecutive prepared positions in a security zone depends on the terrain, the existence of naturally defensible lines and the depth of the zone. The first position (closest to the enemy) should be along a favorable, naturally defensible line at a depth from which main force artillery can support from temporary firing positions. The next (second) position should also be along a naturally defensible line and at a distance from the first position that would require the enemy to displace his artillery and mortars forward in order to shift fires. The positions are dug in and provided with obstacles to the extent possible in the time available. Up to two companies of engineers are assigned to a maneuver battalion to provide obstacles and positions. Companies and platoons are sited in order to provide coordinated, interlocking fields of fire. Additional positions (third, fourth and so on) are constructed depending on time, resources and the depth of the security zone. The final position is closest to the main defensive line and could be a forward position (*Передовая позиция*) located three to five kilometers from the main defensive line. Companies and battalions from the depths of the main defense will hold the critical forward positions, while the forward detachment battalions, which have fought the mobile defense and expended resources and taken casualties, will occupy the forward positions on secondary approaches.⁷⁷

The forward detachment's artillery, mortars and air defense weapons will have primary, alternate and reserve firing positions throughout the depth of the security zone. Maneuver and withdrawal routes will be reconnoitered, prepared, marked and maintained. Deployment firing lines for tanks, BMPs and the antitank reserve will cover armor avenues of approach. Deployment counterattack lines will be selected as well as direct fire positions for select artillery. Camouflage discipline will be enforced. Obstacles will usually be placed in front of security zone fighting positions and in gaps between strongpoints. Bridges and key sites will be prepared for demolition. Should the enemy attempt to bypass obstacles, the bypass will lead to other obstacles or exposure to flanking fire.⁷⁸

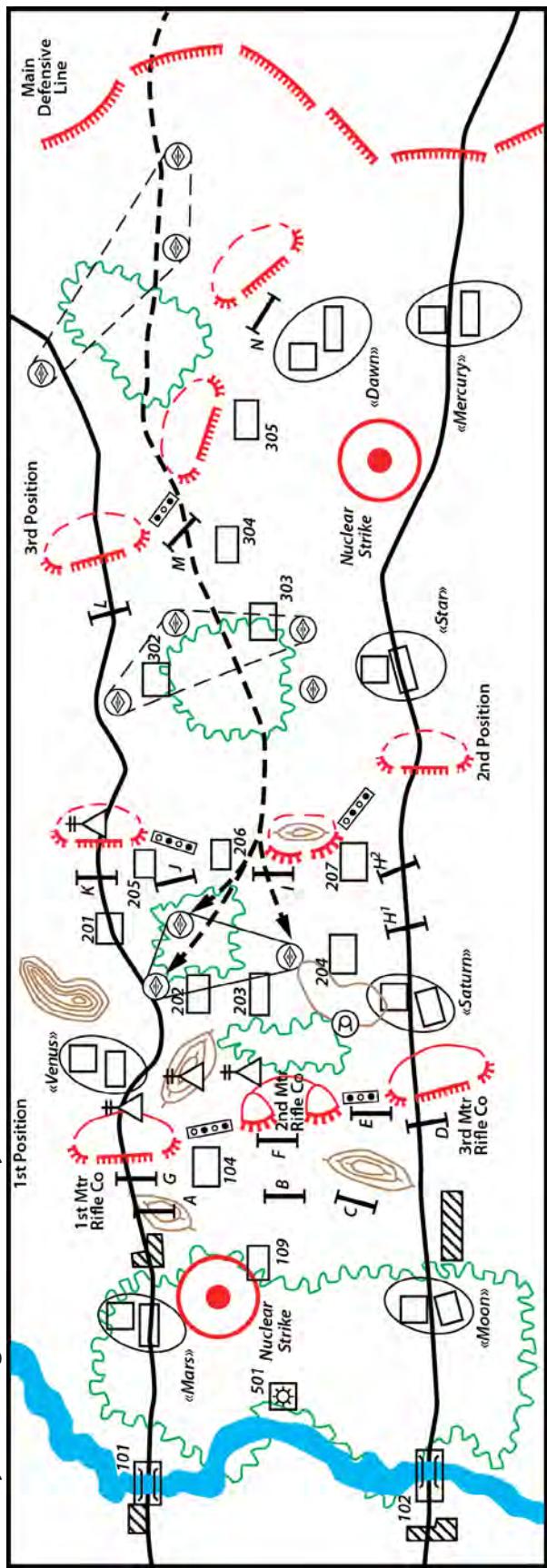
⁷⁵ Ibid.

⁷⁶ Grau, 5.

⁷⁷ Ibid, 6.

⁷⁸ Ibid, 7.

Artillery Planning for the Security Zone



(Above) The accompanying graphic is an example of a fire plan for a security zone employing three positions in a 42-kilometer depth. Standing barrage lines, MLRS concentrations and massed fire concentrations and planned nuclear strikes are depicted. Whereas the motorized rifle or tank subunits in the security zone fight consecutively from one position to the next, artillery subunits normally leapfrog back so that artillery support is constant and uninterrupted. Fixed-wing aviation and helicopter gunships may also provide fire support to the maneuver battle.

THE RUSSIAN WAY OF WAR: FORCE STRUCTURE, TACTICS, AND MODERNIZATION OF THE RUSSIAN GROUND FORCES

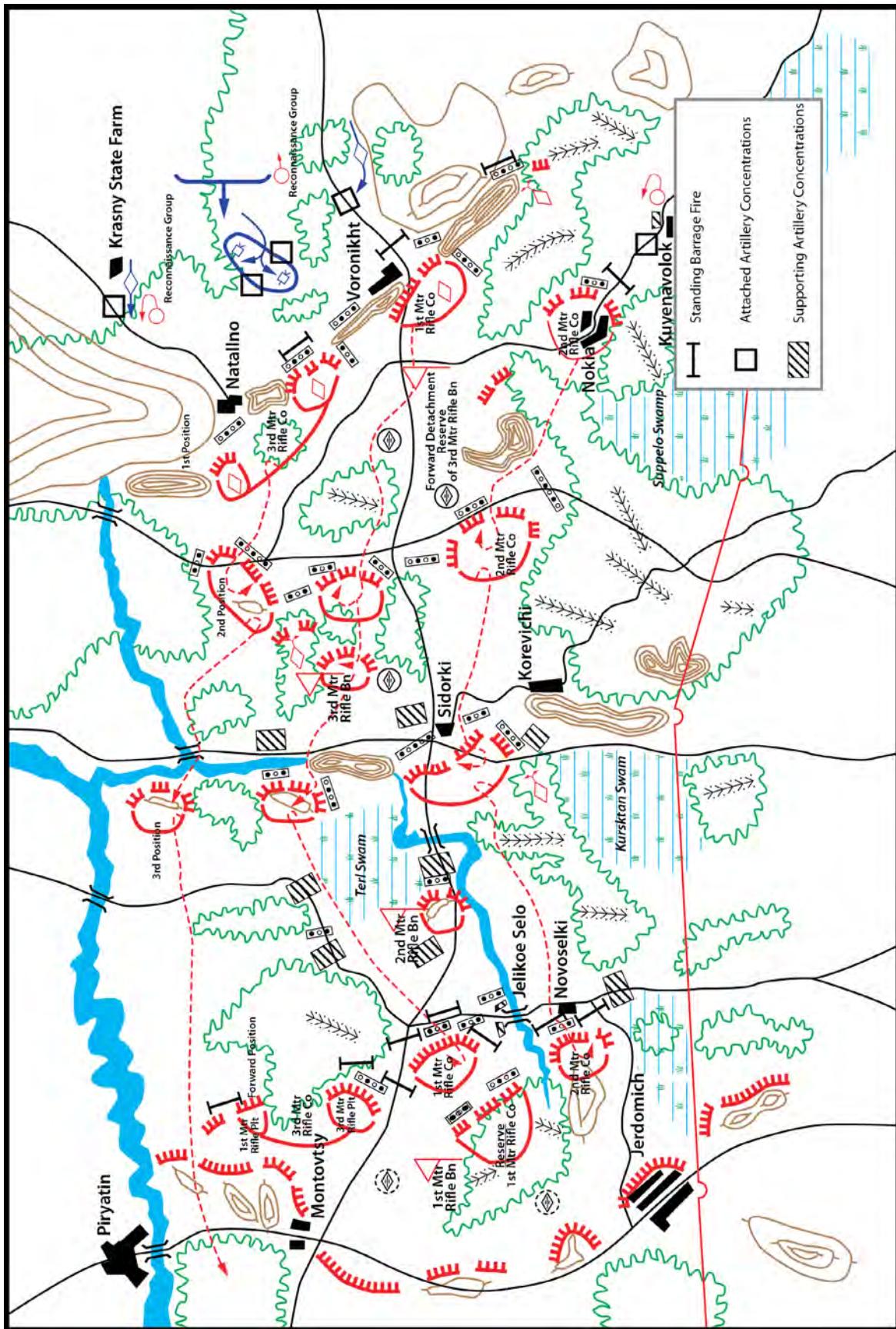
(Right) The graphic on the facing page illustrates a security zone with a series of four prepared positions and a main defensive line. The northern-most company (3rd Motorized Rifle Company) fights its way back from the first and second positions to the third position, as does its southern neighbors. Unlike the 1st and 2nd Motorized Rifle Companies, the 3rd Motorized Rifle Company does not fall back and defend the forward position in front of the main line of defense. Instead, it moves from the third position directly back into the main defense. A fresh company (coincidentally also the 3rd) from a first-echelon battalion in the main defense defends the northern forward position on the main axis of enemy advance. The 1st and 2nd Motorized Rifle Companies of the forward detachment occupy forward positions astride secondary avenues of advance. The Russians forecast that the forward detachment will be too weakened, too rushed and in need of refitting at this point in the battle to handle the enemy main attack adequately.⁷⁹

One or two artillery battalions are normally attached to the forward detachment in the security zone. Additional supporting artillery (normally MLRS) is also positioned in the security zone and controlled by the army or district commander who constituted the security zone. Artillery positions are selected to interdict major axes of advance and sited so that the guns may deliver effective indirect and direct fire. Direct fire antitank killing zones are tied in with tank ambushes and engineer obstacles, often as part of a fire sac. Fire planning covers probable enemy avenues of advance, probable firing locations of enemy artillery and movement routes. Planned mortar and artillery fires cover gaps between platoon and company strongpoints, the area forward of engineer obstacles and critical points in the defense.

⁷⁹ Ibid.

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Disposition of Forces in the Security Zone



The Brigade and Maneuver Defense

Maneuver defense [маневренная оборона]⁸⁰ is a fundamental form of defense for a motorized rifle battalion within a maneuver brigade. The maneuver defense is used on those axes where the enemy has a significant strength advantage and is facing an area that the Russian forces are allowed to withdraw from temporarily. In this situation, a maneuver defense may gain time and allow an advantageous regrouping of forces for the decisive destruction of the enemy. The battalion commander singles out those forward and consecutive defensive positions that his motorized rifle battalion will hold until the last minute against impending enemy breakthrough, while inflicting maximum casualties. Therefore the main mission of the battalion commander is to coordinate the fires of all systems against the advancing enemy while abandoning positions consecutively. Then the battalion commander supports his subunits' withdrawal to their next positions while preserving their combat strength.⁸¹

The motorized rifle battalion conducting the maneuver defense may be drawn from the brigade first or second echelon. The battalion will resume its defensive positions in the main defense at the conclusion of the maneuver defense. Fires of the various systems are planned for engaging the enemy at a distance, while moving, deploying and just forward of the front line. Forces, systems and fires maneuver and counterattacks are launched when circumstances are favorable. Counterattacks are usually conducted by the reserve or second echelon against the enemy flank and rear. Fire sacs, which are shaped by mine fields and obstacles, are effective tools in maneuver defense. Covert, surprise and quick maneuver allows subunits to move to advantageous positions with respect to the enemy. There, the subunits can inflict casualties or even destroy the enemy. Maneuver defense concludes with the uninterrupted destruction of the enemy using all means to frustrate his will and force him into a disadvantageous position for continuing the attack. Maneuver by fire is widely employed during all stages of the battle.⁸²

The accompanying graphic shows one of the consecutive positions occupied by a motorized rifle battalion in the maneuver defense of a brigade.⁸³ This maneuver defense employs a motorized rifle battalion with an attached howitzer battalion, a tank company, an antitank battery, and an air defense SA-18 or SA-25 battery. Other artillery and engineer units provide support as required. The battalion frontage may be a bit wider than a usual defense and extend 5-10 kilometers. The graphic shows the battalion astride an east-west road that forks behind the battalion defensive line. The terrain is fairly flat and partially wooded with a lake

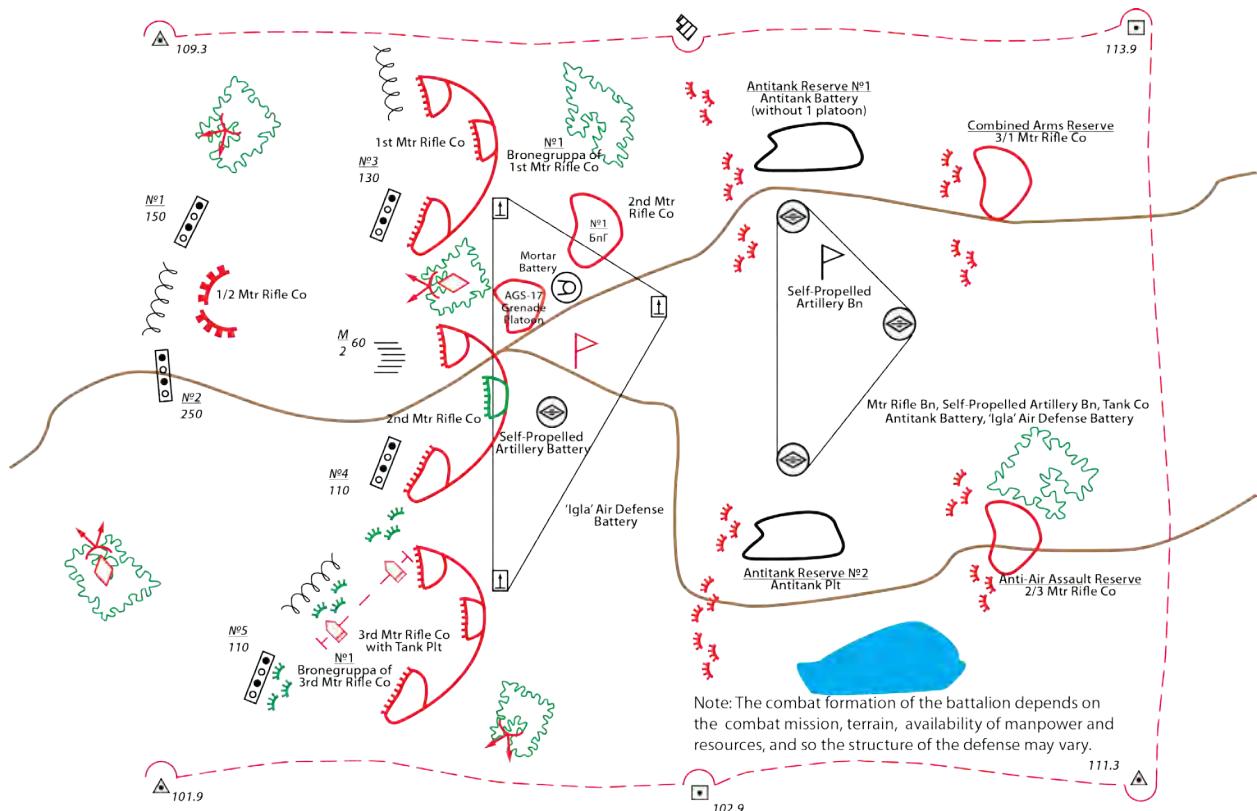
⁸⁰ Maneuver defense should not be confused with the Western term-active defense or the shared historic term-covering force. An active defense is the “employment of limited offensive action and counterattacks to deny a contested area or position to the enemy.” A covering force is a “force operating apart from the main force for the purpose of intercepting, engaging, delaying, disorganizing, and deceiving the enemy before the enemy can attack the force covered.” It can also be any “body or detachment of troops which provides security for a larger force by observation, reconnaissance, attack, or defense, or by any combination of these methods.” The Russians use a different terminology for active defense [активная оборона] and covering force [заслон].

⁸¹ D. Kalachev, “Defense is also maneuver-The motorized rifle battalion and maneuver defense” [Оборона-тоже маневр: Мотострелковый батальон и маневренная оборона], *Army Digest* [Армейский сборник], October 2016, 27.

⁸² Ibid, 28-29.

⁸³ Ibid, 30.

Combat Formation of a Motorized Rifle Battalion in the Maneuver Defense



in the southeastern portion of the position. The first platoon of the 2nd MRC holds an outpost position protected by two mixed mine fields of 150 and 250 meters length and a barbed wire entanglement. A squad ambush and a tank ambush flank the outpost. The main defensive line has the battalion's three companies deployed in a defensive line. The 1st MRC holds its forward positions with its 1st and 2nd platoons. The 3rd platoon is the battalion combined arms reserve, and is positioned in the battalion northeast rear covering the anticipated main enemy axis of advance. The 1st MRC *bronnegruppa* holds the 3rd platoon's usual rearward platoon position. The company is protected by a barbed wire entanglement and a 130-meter-long mixed minefield. Its southern flank is protected by a tank in ambush. The 2nd MRC straddles the road and deploys its 2nd and 3rd platoons forward. The 1st platoon is deployed in the battalion outpost position. The 1st platoon's normal place is held by a dummy platoon position. The enemy is expected to make its main attack along the road and into the 2nd MRC position. The 2nd MRC is protected by a 60-meter long two-row antitank obstacle of sunk heavy metal stakes and a 110-meter-long mixed minefield. The 3rd MRC is angled forward to give flanking shots on the main road. Its 1st and 3rd platoon defend forward. Its 2nd platoon is to the southeast of the battalion position serving as the anti-air assault reserve. A tank platoon occupies the rearward platoon position in the 3rd MRC company defense. The 3rd MRC company *bronnegruppa* initially defends forward of the 3rd MRC position. The 3rd MRC is protected by a barbed wire entanglement and an 80-meter-long mixed minefield while an ambush position protects its southern flank.

Supporting subunits back the three defending motorized rifle companies. The SA-18 or SA-25 MANPADS battery establishes mutually supporting air defense positions. The battalion *bronnegruppa*, automatic grenade launcher platoon, mortar battery and battalion headquarters are located where they can stop an attack through the 2nd MRC position. A 152mm howitzer battery has located forward and deployed in direct lay positions backing the 2nd MRC. Further back, the antitank reserve is split into two locations covering the anticipated primary and secondary enemy avenues of approach. The artillery battalion covers the area between the two antitank reserve positions where it can cover both enemy avenues of advance by direct fire if necessary.

The battalion normally defends in a wide single echelon, prepared to flow back intact to its subsequent positions. Its' reserve(s) is/are positioned to react in a variety of directions to transition to a defense, occupy a firing line or conduct a counterattack. In order to support the necessary independence of the subunits, most of the artillery and other firing systems are attached to companies. The firing systems are positioned where they can conduct the bulk of their fires to the front, beginning at their maximum range limits. Their positions fill the gaps between the neighboring company strong points, where, if necessary they can cover the withdrawal of first echelon companies, covering force subunits and others earlier located within the forward subunits. Artillery, tank, BMP, grenade launcher and other fires are planned on likely enemy avenues of approach, on gaps and on the flanks of the strongpoints and are organized into fire ambushes anchored on engineer obstacles and demolished points. The battalion commander may establish security in front of his forward position. This may include a reconnaissance patrol, engineer obstacles on likely avenues of advance and ambushes.⁸⁴

The brigade may be part of a security zone. Then, the maneuver of the battalion to a new position may be on the command of the brigade commander or the battalion commander, his battalion now designated as a forward detachment in the security zone. If the brigade is part of a security zone, engineering obstacles will usually be sited on tank avenues of approach forward of platoon and company strong points. Mine fields are sited on regions of probable enemy deployment and on roads which are not covered by friendly fire. Road and railroad bridges are prepared for demolition. Artillery subunits may occupy temporary firing positions in the security zone or behind the forward position and as part of the main defensive belt. The security zone battle will unfold as discussed earlier in this article.⁸⁵

Military exercises in the Central Military District in 2014 and the Far East Military District in 2015 highlighted the following key issues for motorized rifle battalion commanders conducting a maneuver defense: sequencing the destruction of the enemy starting from maximum range and preventing the enemy from rapidly transitioning to the attack; the possible direction of maneuver by fire and forces to prevent the enemy from flanking the battalion defensive area; sequencing breaking contact and withdrawal (including composition of the covering force and its subsequent withdrawal); the order in which to conduct the withdrawal of the maneuver subunits during the withdrawal to its subsequent

⁸⁴ Ibid, 30-31.

⁸⁵ Ibid, 31.

position; and the places to constitute fire sacs, lay obstacles and conduct demolitions.⁸⁶

Maneuver Defense Conclusion

Ever since the Gulf War, ground forces have realized that unprotected maneuver in the open may lead to decimation. Less-modern ground forces have attempted to negate this by moving the fight to terrain that defeats or degrades high-precision systems-mountains, jungle, extensive forest, swamps and cities while conducting a long-term war of attrition to sap the political will of the enemy. This difficult terrain will be a valuable ally in future conventional maneuver war as will camouflage, electronic and aerial masking, effective air defense systems and secure messaging. Maneuver defense will clearly be a feature of future conventional maneuver war. One thing that may change dramatically is the fundamental concept of the main, linear, positional defense that the maneuver defense leads to. Perhaps the main linear defense will be anchored in difficult terrain. Perhaps the main defense will more closely resemble the security zone maneuver defense. The main defense may become an expanded security zone containing counterstrike/counterattack forces and a concentration of high-precision weapons systems. Open flanks may be covered by maneuvering artillery fires and positional forces not under duress. The Russian concept of maneuver by fire may dominate the battlefield as it alone may enable maneuver.

The linear battle field may be replaced by the fragmented [очаговый] battlefield where brigades maneuver like naval fleets, deploying maneuver and fire subunits over large areas, protected by air defense systems, electronic warfare and particulate smoke. Strong points will be established and abandoned, artillery fires will maneuver and difficult terrain will become the future fortresses and redoubts. The First World War in the West was a positional fight where artillery, field fortifications and interlocking machinegun fire prevented maneuver. The First World War in the East, however, was not positional, but fluid. The antithesis to the stalemate in the West was the tank. Yet the tank did not spell the end of the linear defense. During the Second World War, the tank enabled maneuver in some places, but in other places, difficult terrain and integrated defenses prevented maneuver and fires prevailed. The Korean War was about fires and not much maneuver. Vietnam was about the maneuver of the helicopter, but difficult terrain dominated the battlefield. The antitank guided missile and precision guided munitions currently threaten maneuver. Still, advances in fires, ECM, robotics and air defense may enable maneuver. The Serbian Army proved quite adept at hiding and surviving in difficult terrain during the 78-day Kosovo air war. What they lacked was a ground force to combat at the termination of the bombing.

The fragmented battlefield has become common following the Gulf War. The Soviet-Afghan War, the Angolan Civil War, the Chadian-Libyan Conflicts, the Battle of Mogadishu, Operation Enduring Freedom, most of Operation Iraqi Freedom, the Libyan Civil War, the Sudan conflicts, the Saudi Arabian-Yemen conflict—all have involved fragmented battlefields. How do peer forces fight conventional maneuver war on a fragmented battlefield? Permanent combined arms battalions appear to be an important component. For decades, the Soviets and Russians have struggled with fielding, training supporting and fighting a combined arms battalion with its own tanks, motorized rifle, artillery, antitank, and support subunits capable of fighting

⁸⁶ Ibid.

and sustaining independently over a large area. The Russian maneuver brigades now have one or two battalion tactical groups and are working to achieve four.⁸⁷ The Russians have a long history of conducting a fragmented defense on a fragmented battlefield. The Russian Civil War is replete with such examples.⁸⁸ During the Second World War, the Soviets fielded the largest Partisan Army in history. It conducted a fragmented offense and defense against a linear German force.⁸⁹ As Mark Twain noted, "history may not repeat itself, but it does rhyme."

⁸⁷ See Lester W. Grau, "Restructuring the Tactical Russian Army for Unconventional War", *Red Diamond*, February 2014.

⁸⁸ Ministry of Defense of the Russian Federation, "Очаговая Оборона" [Fragmented Defense], *Military Encyclopedia* [Военная Энциклопедия], Volume 6, Moscow: Voyenizdat, 2002, 214.

⁸⁹ Recommend *The Red Army Do-It-Yourself Nazi-Bashing Guerrilla Warfare Manual (The Partisan's Companion)*, Lester W. Grau and Michael Gress (editors), translation and commentary of the 1943 Soviet edition of the manual used to train Partisans to fight the Nazis. Philadelphia: Casemate, 2010.

Soviet/Russian Tactical Nuclear Planning and Future War

The Soviet Union tested its first atomic bomb on 29 August 1949. It was a 22 kiloton blast (the first US atomic bomb test on 16 July 1945, near Alamogordo, was a 20 kiloton blast). The next two Soviet atomic bomb tests were in September and October of 1951 and had blasts of 38.3 and 41.2 kilotons. In December 1953, the Soviets tested a 400 kiloton atomic bomb and a 1.7 megaton atomic bomb in November 1955. The nuclear race escalated into thermonuclear weapons and hydrogen bombs.⁹⁰ The initial weapons were strategic weapons developed for delivery by long-range bombers. However, over time, nuclear weapons designers were able to build smaller nuclear weapons that could be delivered by fighter-bombers, rockets and tube artillery. The Soviets built nuclear weapons of varying yields and classified them by yield.⁹¹

Russian Nuclear Yield Classifications

Very small	Up to one kiloton
Small	One to ten kilotons
Medium	Ten to one hundred kilotons
Powerful	One hundred kilotons to one megaton
Very Powerful	Over one megaton

According to training material, a nuclear shock wave travels 1000 meters in two seconds, 2000 meters in five seconds and 3000 meters in eight seconds. Its thermal radiation travels at 300,000 kilometers an hour and the time of exposure is dependent on the nuclear round's yield.⁹²

The Effective Time of Exposure to Thermal Radiation by Weapon's Yield

Very small	Approximately 0.2 seconds
Small	One to two seconds
Medium	Two to five seconds
Powerful	Five to ten seconds
Very Powerful	Twenty to forty seconds

Tactical and operational-level nuclear munitions were introduced into the Soviet ground forces and Army Air Forces. They were delivered by aviation bombs, rockets (and later missiles) and tube artillery. The primary question was where these weapons can be used most effectively. At the tactical level, the primary concern was breaking through a prepared enemy defense.

The initial planning for tactical use of nuclear weapons involved their mass use to create a gap in the defense. Tank battalions and motorized rifle forces would then conduct a mounted attack through the gap and drive deep to exploit the strike. In effect, the nuclear strike was

⁹⁰ V. M. Temnov, Ministry of Defense of the Russian Federation, "Nuclear Weapons" [Ядерное Оружие], *Military Encyclopedia* [Военная Энциклопедия], Moscow: Voyenizdat, 2004, 548.

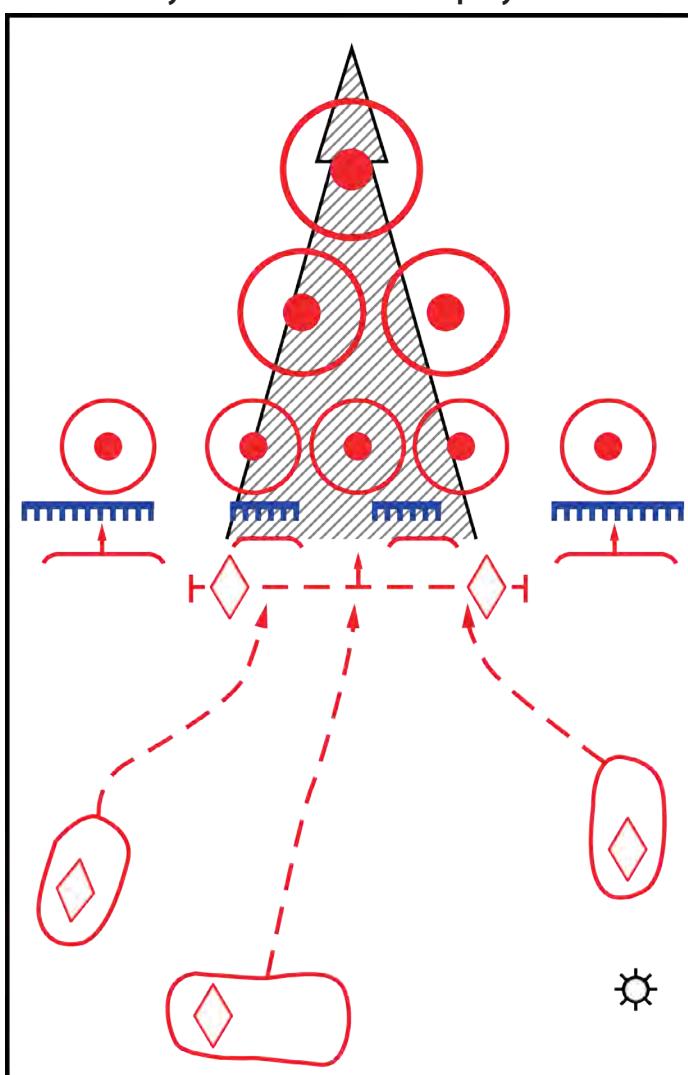
⁹¹ B. A. Konyakhin and A. A. Nezhaiko, Ministry of Defense of the Russian Federation, "Nuclear Munitions" [Ядерные Боеприпасы], *Military Encyclopedia* [Военная Энциклопедия], Moscow: Voyenizdat, 2004, 550.

⁹² Yu. A. Haumenko, "Preparation for Reserve Officers of the Ground Forces" [Подготовка Офицеров Запаса Сухопутных Войск], Moscow: Voyenizdat, 1989, 356-357.

the main attack. The graphic to the right is from the 1966 tactics manual. It shows a tank attack through a gap created by a belt of small nuclear weapons, followed by a belt of medium nuclear weapons and capped by a powerful nuclear weapon.⁹³ The T-54 and T-55 tanks of that day were fitted with a lead interior lining to mitigate somewhat the intense radiation this nuclear pounding would create. The infantry personnel carriers and trucks that would follow the tanks were not similarly shielded.

There was a problem. This many nuclear rounds would clearly create a hole in the defense, but getting through that hole could be a problem even for tracked vehicles. Fire, torn-up terrain, cratering, blowdown, rubble and airborne dust would complicate crossing the area with any kind of speed or formation and would greatly reduce visibility. Residual radiation would drastically shorten the combat life of the soldiers-particularly those following in personnel carriers and trucks. By 1984, the expected expenditure of nuclear rounds for blowing a hole in the enemy tactical main defense was reduced to one per breakthrough sector.⁹⁴

Early Tactical Nuclear Employment



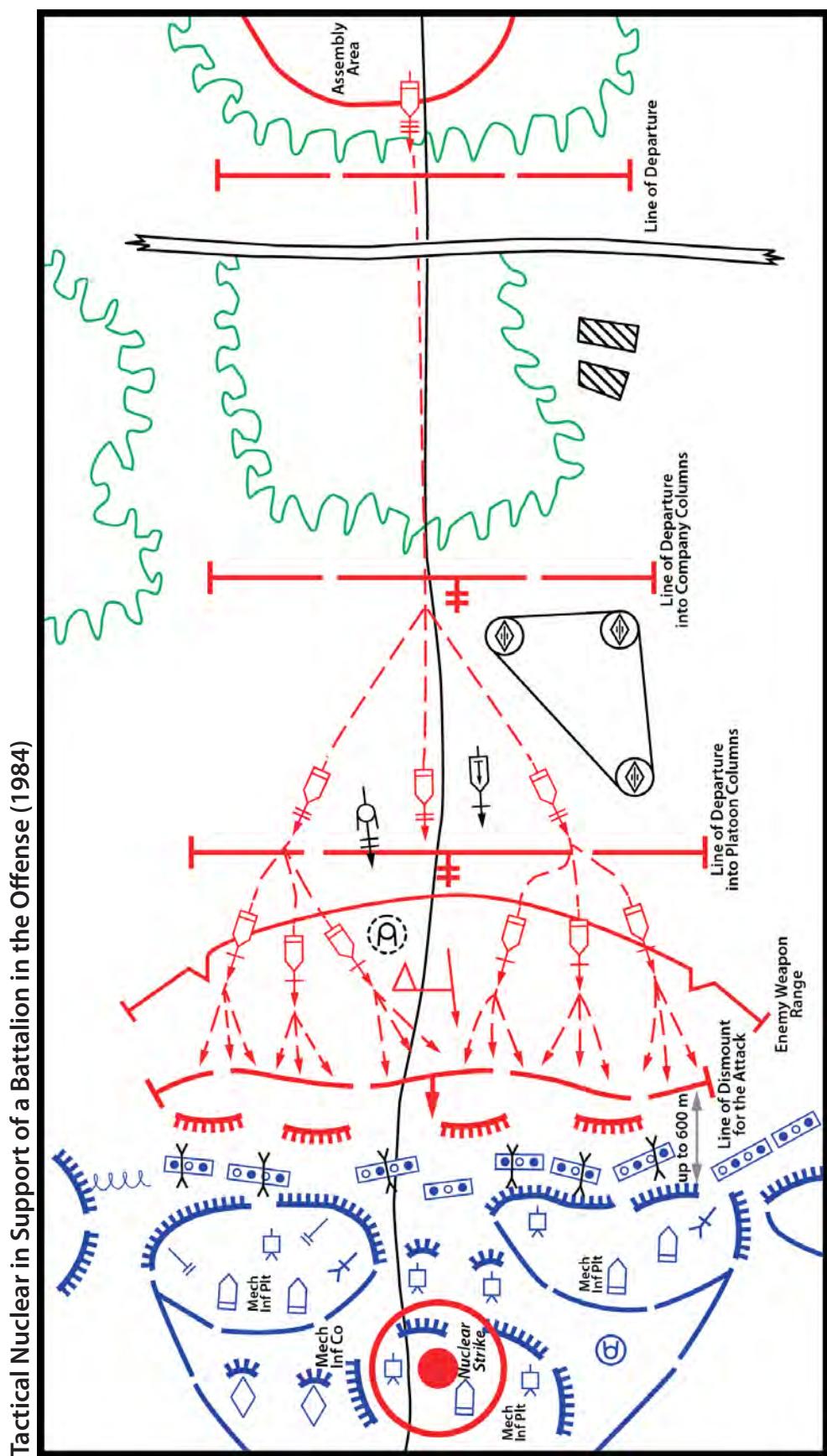
There is still a problem here. (facing page) The battalion is attacking on line through the blast area with dismounted troops. By 1988, the expected tactical use of nuclear rounds was against the second echelon or reserve. Conventional artillery would blow the hole through the main defense.⁹⁵ Of interest is that the Chernobyl disaster preceded this text by two years. The lesson is not to dismount and advance through a radiated blast area.

⁹³ V. G. Reznichenko, *Tactics* [Тактика], Officer's Library Series, Moscow: Voyenizdat, 1966, 79.

⁹⁴ V. G. Reznichenko, *Tactics* [Тактика], Officer's Library Series, Moscow: Voyenizdat, 1984, 273.

⁹⁵ N. P. Moiseenko, "The Motorized Rifle (Tank) Company in Combat: Training Textbook" [Мотострелковая (Танковая) Рота в Бою: Учебное Пособие], Moscow: Voyenizdat, 1988, 277.

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(Right) The graphic on the facing page depicts a nuclear round being used against the reserve of a defending mechanized infantry company. The tank battalion with an attached motorized rifle company on the attack is part of a larger offensive. The neighboring attacking battalion to the south is not shown completely, since the text focuses on the actions of the tank battalion. The battalion's subordinate companies are attacking mounted and skirting the blast area of the nuclear blast.

The Nuclear Dilemma

Early in the nuclear period, the assumption was that nuclear weapons would greatly increase operational tempo and that the conflict would soon be over as mechanized columns would rapidly advance through enemy defenses and seize capitals, economic areas, ports and harbors. However, the reality was somewhat different. In the European theater, the Soviets planned to use thousands of nuclear weapons to blast NATO forces as Warsaw Pact columns snaked their way to the English Channel.⁹⁶ The problem with this massive use of powerful nuclear weapons was that it would retard movement more than it would assist it. Forest fires, flooding, radiated zones, rubble and destroyed infrastructure could actually make a nuclear war advance much slower than a conventional fight. There had to be a better approach than laying waste to Europe, particularly since the prevailing winds blow back toward the Soviet bloc. The major problems encountered in mitigating the Chernobyl disaster in April 1986 added to the planners' dilemma. Nuclear weapons have a deterrent value as well as a fall back value when the fortunes of war are decidedly hostile.

Future War

How do nuclear weapons fit in with future war with peer competitors? Before the collapse of the Soviet Union, the General Staff's view of future war envisioned dynamic, high-tempo, high-intensity land-air operation that would extend over vast expanses and include new realms such as space. Tactical combat would be even more destructive than in the past and would be characterized by fragmented or non-linear combat. The front line would disappear and terms such as "zones of combat" would replace terms like FEBA and FLOT. No safe havens or "deep rear" would exist. Nuclear war must be avoided as it could lead to strategic exchange. The Soviets announced a "defensive orientation" during the initial period of war-a way to inflict severe losses on the enemy with fewer forces and create the conditions necessary for a counteroffensive. Qualitative improvements in firepower and mobility, coupled with operational surprise would allow a combatant to insert forces rapidly inside his opponents' territory while covering his own flanks with long-range fires. Aviation and long-range fires would attack reserves and support bases. High-precision weapons systems would take the place of nuclear systems.⁹⁷

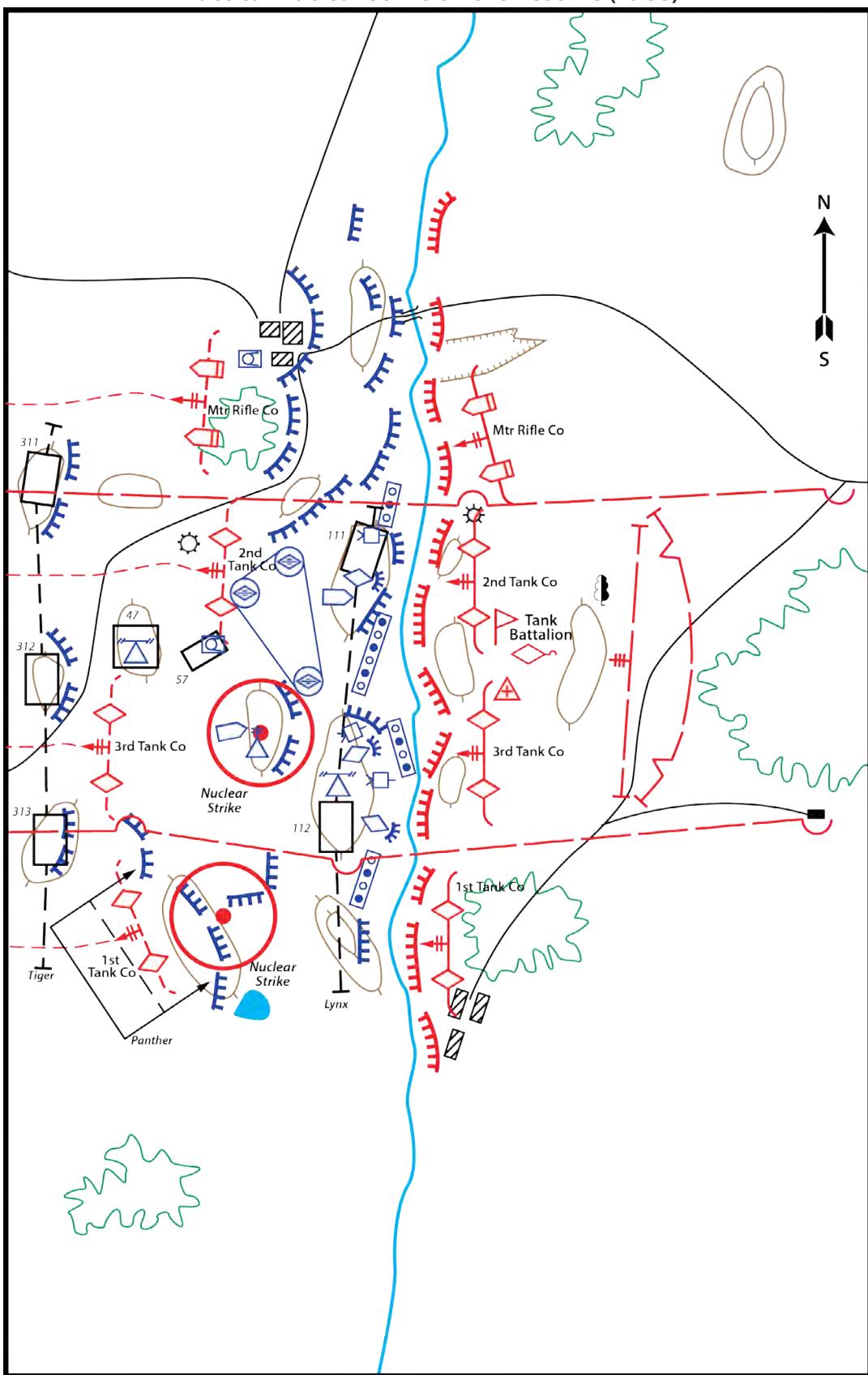
This view of future war was put on hold following the collapse of the Soviet Union and a weakened Russia renounced the "no first use of nuclear weapons" proviso in Russian defense. Nuclear weapons figured prominently in Russia exercises. However, Russian conventional military power is clearly now in ascendency in Eurasia and Russia is considering how to fight

⁹⁶ When the Soviets pulled out of East Germany, they left a lot of equipment and ammunition behind. They also left nuclear planning documents for possible war against NATO which depicted thousands of nuclear rounds expended in a two-phase operational nuclear strike.

⁹⁷ Lester W. Grau, "Soviet Nonlinear Combat in Future Conflict", *Military Review*, December 1990, 16-17.

TACTICAL MANEUVER

Tactical Nuclear Strike on the Reserve (1988)



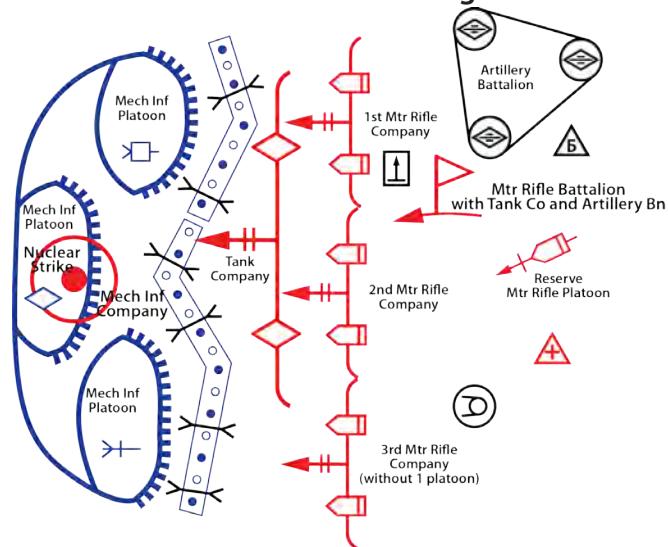
under nuclear-threatened conditions and win. Advances in technology, modernization of the force and a more mobile ground force support this effort. Russian nonlinear battle apparently sees separate tactically-independent battalions and brigades fighting meeting battles while covering their flanks with obstacles, long-range fires and tempo. There are no safe areas and combatants will suffer heavy attrition. Armies may influence the battle through employment of their reserves and long-range attack systems, but the outcome will be decided by the actions of battalion tactical groups and brigades fighting separately on multiple axes in support of a common plan and objective. Attacks against prepared defenses are undesirable and neither side will be able to tie in their flanks or prepare defenses in depth.⁹⁸ The new brigade and battalion tactical group structure fits this role.

The initial period of war is crucial in future war as initial actions can disrupt enemy attempts to establish a cohesive, coordinated defense and drive forces deep into enemy territory to conduct fragmented, nonlinear

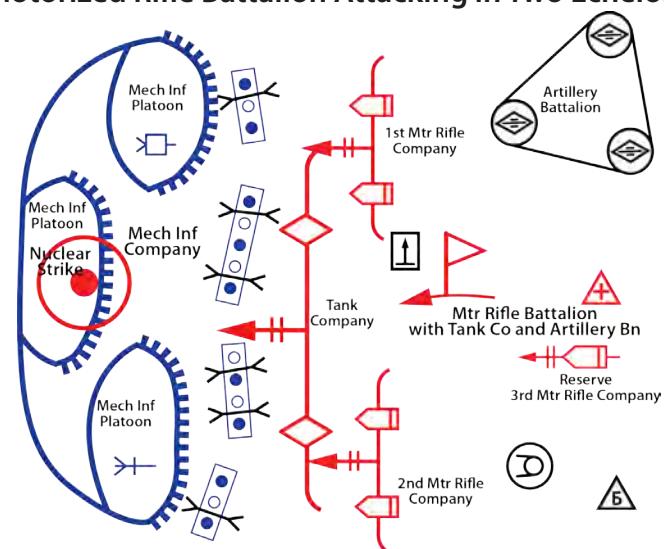
maneuver war. Defensive war may be part of future war and the Russians plan to conduct this with a combination of maneuver defense and positional defense. Maneuver defense is designed to trade space for time and weaken the enemy force while pulling it deep into the expanse of Mother Russia. As the enemy supply lines are overextended and the enemy momentum is slowed, the Russians plan to conduct a counterstroke to destroy the enemy within the depths of the country and then rapidly advance through the shattered enemy force into the enemy rear area. Multiple attacks on multiple axes will frustrate enemy attempts to stem the advance. Before an attack on one axis has culminated, the Russians plan to launch an attack on a different axis to wrong-foot the operational reserve.

Still, Russian force modernization includes a rigorous program to modernize and improve tactical, operational and strategic nuclear weapons. Clearly, the Russians see a need to retain

Motorized Rifle Battalion Attacking in One Echelon



Motorized Rifle Battalion Attacking in Two Echelons



⁹⁸ Ibid, 17.

an up-to-date nuclear force for an uncertain world. The Russians also see a need to train for nuclear war. NBC defense units are well-equipped and an integral part of maneuver brigades. Russian wargames and major field exercises frequently include nuclear strikes and their aftermath. Most US and NATO wargames and major field exercises terminate when nuclear strikes are introduced.

The Russians would prefer to fight under nuclear-threatened conditions, but not go nuclear due to the threat of escalation to strategic exchange. The Russians see two serious challenges to the current status quo and nuclear balance. The first is ballistic missile defense. In late 2001, the United States withdrew from the 1972 Anti-Ballistic Missile Treaty, stating that it needed to protect the US from nations that were developing long-range missiles and weapons of mass destruction (i.e. Iran). In 2007, as plans to install portions of the system in Europe were being discussed, Russia offered to cooperate by letting the US use its Gabala Radar Tracking Station in Azerbaijan. The US insisted that, due to technical and operational concerns, the best locale for combating Iranian launches was in Poland and the Czech Republic (later Romania). Russia saw this as an attempt to weaken the system of nuclear deterrence, since the MK-41 launch system used in the Aegis-Ashore system is also capable of launching Tomahawk cruise missiles against Russian ICBM sites.⁹⁹

The second serious challenge is the US Prompt Global Strike Program (PGS). The US Air Force's Global Strike Command, headquartered in Barksdale AFB, was established in August 2009 with the mission of providing strategic nuclear deterrence and operational capability to carry out rapid precision conventional strikes. The Russians believe that PGS is designed to neutralize Russian military capabilities by eliminating their offensive and defensive strategic deterrent forces without using nuclear weapons. The result has been an expanded Russian program to hide and improve nuclear and nonnuclear strategic and operational systems.¹⁰⁰

⁹⁹ Ibid.

¹⁰⁰ Ibid.