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THE KHARKIV OFFENSIVE: THE VIEW FROM THE COMMANDER'S SIGHT – A CASE STUDY

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ABSTRACT: The offensive of the Armed Forces of Ukraine in early September 2022 in the Kharkiv Region is an outstanding achievement and marks a significant cornerstone in the story of the ongoing Russo-Ukrainian War. The goal of this study is not to retell the story of this operation and not to invent something that already exists, but to present this historically significant military operation from the view of the tactical-level infantry commander. At which level, after all, wars are decided.

KEYWORDS: infantry, tactical-level of war, Ukraine, Russia, offensive, penetration, delaying action

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INTRODUCTION

This offensive operation from 1st to 14th September, which is recently called the "Kharkiv counteroffensive", is no doubt a huge Ukrainian success. Not just because of the obvious military achievements, but also because of the fact, that an operation like this could be planned, prepared, and executed. This means that if nothing unexpected happens, the strategic initiative has been retained by the Ukrainians for the first time in this conflict since the spring of 2014.

Until finalizing this paper (15/11/2022), the ongoing conflict can be divided into four big phases with numerous sub-phases:

- The Russian offensive to capture Kyiv and all major Ukrainian cities.
 - "Thunder Run" to Kyiv with air assaults;
 - unsuccessful push of mechanised forces to capture the initial objectives.
- The Russian offensive for the capture of the Donbas.
 - Breakthrough to Izyum;
 - unsuccessful river crossings on the Siverskiy Donetsk near Bilohorivka;
 - breakthrough at Popasna;
 - the battle for Severodonetsk and Lysichansk;
 - "grinder" for Bakhmut.
- The Ukrainian offensive for the liberation of Kharkiv Oblast.
 - Diversionary (?) attack at Kherson;
 - diversionary attack near Balakleya;
 - breakthrough at Volokhiv Yar;

- exploitation and pursuit to the Oskil River;
- attack through the Oskil River and the battle for Lyman.
- Russian mobilization and slower Ukrainian advance
 - counterattack and defensive operations in the northern part of the Luhansk Region;
 - ongoing "grinder" for Bakhmut;
 - liberation of Kherson.

In this study, I will examine the third phase and the first four of its sub-phases (a-d). I will not write about the battle for Lyman, because it is not a decisive part but the consequence of this operation.

The available information regarding the actual military operations is about brigade-level and above. My goal is to use my knowledge to identify the role of the battalions and companies in order to have a view of tactical-level infantry commanders, mainly company commanders. I chose this perspective for two reasons. First, I am an infantry officer with thorough tactical-level knowledge and in the focus of my Ph.D. research is the deployment of infantry units at tactical level in the recent conventional wars. The second reason is my firm conviction that, in spite of the rapid technical advance, in the end, wars are still decided at tactical level, where infantry units fight each other in brutal, extremely fast-paced close combat.

I must emphasise that I relied only on open sources. I made my deductions based on these open sources and on my expertise, therefore in the future, further examination and evaluation of this topic will be absolutely necessary.

MISSION ANALYSIS PRIOR TO THE OFFENSIVE

The analysis of a mission is carried out with the guidance of the METT-TCC acronym. M: Mission, E: Enemy, T: Terrain and weather, T: Troops and support available, T: Time available, C: Civil considerations, C: Cyberspace considerations. The brief mission analysis I present here is purely a deduction based on open-source information, experts' analysis, and my knowledge. I will not cover the "last C" (Cyberspace considerations) because it is far away from my expertise.

Mission

To fulfil a mission always means carrying out a task. There are two types of tasks: specified task (which is given by the superior) and implied task (which is deduced by the commander who received the mission).¹

I assumed that the mission of the Ukrainian forces was the defeat of the 20th GCAA (Guards Combined Arms Army) and the destruction and/or defeat of the 1st GTA (Guards Tank Army) in order to retain the strategic initiative, liberate a large part of Ukraine, and eliminate the threat posed by the Izyum bridgehead to the Ukrainian forces in the Donbas. This can be called the specified task at strategic level.

This specified task – as always – led to numerous implied tasks that in turn led to numerous specified tasks at operational and tactical levels, which again, led to numerous implied

¹ Larsen C., Wade, N. M.: US ARMY Small Unit Tactics. (Totowa: The Lightning Press, 2016) 1-26.

tasks. In order to fulfil this task, the Ukrainians had to carry out a large-scale offensive. In the first phase of the offensive, they had to break through the Russian defences. In the second phase, they had to seize vital terrain in order to encircle the 1st GTA. In the third phase, they had to destroy/defeat the 1st GTA.

To successfully execute the first phase, the Ukrainians had to achieve a breakthrough. For a successfully breakthrough the most vital task is to find a weak spot in the enemy's defences. In order to find a weak spot, the attacker must execute intelligence and reconnaissance tasks. There are multiple ways to do this, and it is without doubt that the Ukrainian side enjoys an unprecedented amount of ISR assistance (Intelligence, Reconnaissance, Surveillance) from the US.² Of course, it is an essential support, but not sufficient *per se*. The Ukrainian side had to carry out such reconnaissance tasks as aerial reconnaissance with drones, recon patrols, reconnaissance in force by infantry units, engineering recon for river crossings, road recon, etc.

After the weak spot is found, it is time to organise the breakthrough. For this, the attacking side has to form two groups:

- breakthrough element,
- support element which consists of two sub-elements:
 - support by diversionary attacks (this consists of infantry that attacks an enemy force in the vicinity of the breakthrough, in order to fix the enemy),
 - support by indirect fire (artillery).³

Therefore, the focus of my study, the tactical-level infantry commander, can receive the following types of missions:

- reconnaissance in force;
- take part in the first or second echelon of the breakthrough;
- take part in the support element, and, of course;
- can be in reserve.

In the Kharkiv offensive, the breakthrough was just the first decisive tactical task. After the successful breakthrough, the AFU's (Armed Forces of Ukraine) units executed envelopment, exploitation, and pursuit. For an envelopment, just like for a breakthrough, the attacker needs a manoeuvre force, which envelops the enemy (attacks his flanks) while there is also a need for a fixing force, which fixes the enemy in order to enable the manoeuvre force to envelope him.

The envelopment, if executed right after the breakthrough is a perfect means to widen the breakthrough in order to provide secure passage for the second echelon and the logistics to support the main attack. The other typical case of envelopment is when the enemy counterattacks and the first echelon fixes it, while the second echelon carries out the envelopment in order to defeat the enemy's counterattack.

The successful breakthrough and envelopment are followed by the exploitation and the pursuit. To briefly describe the exploitation:

Julian, E. et al. "U.S. Intelligence Is Helping Ukraine Kill Russian Generals, Officials Say." The New York Times, 04.05.2022. Downloaded: 23.09.2022. https://www.nytimes.com/2022/05/04/us/politics/russia-generals-killed-ukraine.html

³ FM 3-90 – Tactics. (Washington DC.: Department of the Army, 2023) 2 5-10.

Exploitation is not normally conducted below the brigade level. Exploitation often follows a successful attack to take advantage of a weakened or collapsed enemy. The purpose of exploitation can vary, but it generally focuses on capitalizing on a temporary advantage or preventing the enemy from establishing an organized defence or conducting an orderly withdrawal. To accomplish this, the brigade (or higher-level unit) attacks rapidly over a broad front to prevent the enemy from establishing a defence, organizing an effective rear guard, withdrawing, or regaining balance. The brigade secures objectives, severs escape routes, and destroys all enemy forces.⁴

In case of an exploitation an infantry company commander, again, can receive various missions. The main element of an exploitation is a series of hasty attacks and fast tactical movements. There is no available, valid, open-source information for all the hasty attacks carried out by the Ukrainian forces in the exploitation phase of the Kharkiv offensive. However, I can deduce from the size of the units and the size of the area of operations that after the successful breakthrough, multiple hasty attacks were carried out successfully at company level.

All in all, the reader can see, that an infantry company (and of course platoon) commander of the AFU could find himself in multiple situations with multiple types of missions. These are:

- reconnaissance in force, recon patrol,
- frontal attack or fixing force in the diversionary attack,
- frontal attack in the first echelon of the breakthrough element,
- frontal attack in the supporting (fixing) element of the breakthrough,
- envelopment in the second echelon,
- fixing force in an envelopment,
- hasty attack (which can usually mean frontal assault or envelopment at a sub-unit level).

According to open sources and my deduction, these are the missions and tasks that were carried out by Ukrainian infantry companies in the Kharkiv offensive.

Enemy

For the analysis of the enemy, the attacker must gather information regarding the enemy's:

- task & purpose (goals, tasks, course of actions),
- positions (exact place and level of fortification),
- composition (units, equipment, level of training, morale).

In the first days of September the long-awaited "Kherson offensive" finally was launched by the Ukrainians. Before the actual commencement of this offensive, the Ukrainians had employed all types of information warfare to draw the Russian's attention to the southern sector of the frontline. Furthermore, the officially stated Russian intention at this time was the "liberation" of Luhansk, Donetsk, Zaporizhia, and Kherson Oblasts. As a result of this, the Russian military leadership (which is according to rumours, rigidly controlled

⁴ FM 3-90. 2 5-51.

Stepanenko, K. et al. "Russian Offensive Campaign Assessment, September 1," Institute for the Study of War, 01.09.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-1 Visited: 12.09.2022.

by Vladimir Putin) had sent all the available reinforcements arriving from Russia, and the bulk of its elite forces, the naval infantry and airborne (VDV) units, to the west side of the Dnipro river in the Kherson Oblast.

After this redeployment, the two formations in the path of the future Ukrainian offensive were the 20th Guards Combined Arms Army (20th GCAA) and the 1st Guards Tank Army (1st GTA). These were formidable forces, but after more than a half year of war, their combat power had significantly decreased, and some of their most effective units had been redeployed to the Kherson Region.

The northern part of the frontline was the area of responsibility (AoR) of the 20th GCAA from the Oskil River/Russian border down approximately to the P78 highway. From this highway down to the border between Kharkiv and Donetsk Oblasts was the AoR of the 1st GTA.

The 20th GCAA, which would receive the Ukrainian main attack, had the 144th Guards Motorised Rifle Division (144th GMRD), the 3rd Motorised Rifle Division (3rd MRD), and the 11th Army Corps (11th AC) under its command.⁶

These seemingly fearsome units were far below their authorised strength. Basically, a standard motorised infantry division has 2-3 motorised infantry regiments or brigades (depending the original peacetime composition) and a tank regiment or brigade, as well as numerous combat support (artillery, air defence, engineer, etc.) and combat service support (logistics, signal, CBRN, etc.) battalions and companies. The widely accepted standard unit of the Russian land, airborne and naval infantry forces is the Battalion Tactical Group (BTG). Originally, a peacetime regiment or brigade can form one full-strength BTG.⁷ This means that a division had 2-3 "infantry-heavy" and 1 "tank-heavy" BTG under its command. If we do the math, (144th GMRD plus 3rd MRD plus 11th AC), we can see that the full-strength 20th GCAA should have had at least seven, but possibly nine BTGs under its command, and should have been supported by overwhelmingly strong artillery. The width of their AoR was approximately 150 km. Thus, a single BTG (not more than 1,000 soldiers) was responsible for a frontline of almost 17 km. This was too much for a single BTG, if we consider that according to NATO standards a "basic" battalion is responsible for a 4×4 km area, and a NATO-standard Battalion Battlegroup can be responsible for a front of up to 8 km in width.

However, in this war the number of deployed troops is usually smaller than that prescribed in the related manuals. The first reason for this is, of course, the smaller number of deployed forces. The other (and in my opinion the more important) reason is the presence of sophisticated sensors that can gather information from greater distances, therefore provide the ability for a given unit to control a far greater area than was possible some decades earlier.

Furthermore, the 20th GCAA had an unknown number of Russian internal security forces ("Rosgvardiya") and "separatist" forces under its command, mainly from the so-called Luhansk People's Republic (LPR). These reinforcements were necessary because of the above-mentioned redeployments, and the high losses suffered after more than half year of war. According to relevant sources, the divisions had only one depleted BTG under their

Takács, M. "Short Study: Describing the Major Features of the Russian Battalion Tactical Group." *AARMS*, 2021/2. 49–65.

⁶ Axe, D.: "12,000 Russian Troops Were Supposed To Defend Kaliningrad. Then They Went To Ukraine To Die." Forbes, 27.10.2022. https://www.forbes.com/sites/davidaxe/2022/10/27/12000-russian-troops-once-posed-a-threat-from-inside-nato-then-they-went-to-ukraine-to-die/?sh=11de83223375 Visited: 29.10.2022.

command.⁸ Of course, separatist and Russian Interior Ministry's forces were deployed in the gaps, but the combat effectiveness of these forces and their cooperation with the divisions were very far below the necessary level.

All in all, the Russian 20th GCAA had approximately 3-4 depleted BTGs and an unknown but clearly inadequate number of separatist and interior forces. This was clearly not enough to carry out effective defensive operations against the Ukrainians.

The 1st GTA's situation was only slightly more favourable. In late August, the main task of the 1st GTA was to maintain pressure on the Ukrainian defences from the area of Izyum to the direction of Slovyansk and Kramatorsk.⁹ The 1st GTA had approximately seven BTGs consisting of the forces of the 2nd Guards Motorised Rifle Division (GMRD) and the 4th Guards Tank Division (GTD). However, the bulk of their forces was concentrated to the south, in the area of Bohorodychne and Krasnopillya in order to exert pressure on the Ukrainian defences northwest of Slovyansk.¹⁰ Therefore, the majority of the 1st GTA's forces could not take part in the fight against the Ukrainian offensive.

Briefly, the task of the Russian forces in the way of the imminent Ukrainian offensive was as follows:

- 20th GCAA: to hold the line around Kharkiv in order to screen the artillery bombarding the city, and cover 1st GTA's right flank in the area of Izyum.
- 1st GTA: to maintain pressure on the Ukrainian defences NW, N, and NE of Slovyansk and Kramatorsk, in order to slowly but surely gain ground and destroy the Ukrainian forces defending this area.

The first phase of the Ukrainian Kharkiv offensive affected mainly the Russian 20th GCAA. The defences of the 20th GCAA's left flank were extremely weak. Due to the low number of available units, the defensive line was not coherent, there was no depth of the defence, and no sufficient reserves were available to execute effective counterattacks there.

All in all, the Ukrainians (with immense US intelligence support) had correct information about the Russian defences. They knew where it would be useful to launch a fixing attack, where it was possible to break through, and in which direction it was useful to exploit the success of the breakthrough.

Terrain and weather

The importance of the terrain is undoubted. If carefully analysed, the terrain helps us, if not, the terrain quickly turns against us providing our enemy good opportunities to defeat us. For a quick, but thorough terrain analysis, we can use the OAKOC acronym. The letters stand for Objectives, Avenues of approach, Key terrain, Obstacles, Cover and concealment. Of course, the terrain analysis must be carried out from our mission's point of view. The analysis can be carried out with the help of maps, aerial images, software tools, etc. Of

Huweiler, S.: "Russian Advances in Ukraine." *UaWarData: Tracking the Russian Invasion*. https://uawardata.com/ Map as of 11th September 2022. Visited: 12.09.2022.

⁹ Stepanenko et al. "Russian Offensive Campaign Assessment, September 1." *Institute for the Study of War*, 09.01.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-1 Visited: 20.09.2022.

¹⁰ Stepanenko et al. "Russian Offensive Campaign Assessment, September 1."

course, the AFU supposedly had exact information about the area of their offensive, since it was their country, and because of the above-mentioned intelligence support.

Objectives

Deduced from the actual manoeuvres during the offensive and the *Mission* part of the METT-TC analysis, the Ukrainian offensive had four phases, with the following objectives:

Phase 1, the diversionary attack: attack by fire Balakliya and Lyman from the south.

- Phase 2, the breakthrough: cut the highway between Balakliya and Volokhiv Yar, and occupy the town of Volokhiv Yar.
- Phase 3, the exploitation: occupy the towns of Semenivka and Shevchenkove, and secure the gains of the exploitation by seizing Kupyansk and Sen'kove.
- Phase 4, the pursuit: pursue and destroy the 1st GTA, or at least force it to withdraw from Izyum.

Avenues of approach

The avenues of approach must provide a safe and secure path to reach the objective. To reach an objective against a resisting enemy, of course, the attacker must deploy a large force of battalions and brigades. An avenue of approach consists of movement corridors. Basically, one movement corridor provides space for a company. It is widely accepted that for a safe and secure movement of a company, approximately 1,5-2 km wide space is needed.

If we take a look at the terrain of the Ukrainian manoeuvres, we can see that the terrain is wide and flat. In late summer (which was extremely dry in 2022), the soil was dry, the small canals were almost empty, therefore the avenues of approach could be planned with great operational freedom. This freedom and the favourable terrain provided safe and secure avenues of approach and a comfortable freedom of movement for the attacking Ukrainian units.

Key terrain

Key terrains are those areas in the Area of Operations (AO) that are vital to control to achieve the mission. It means that there can be a situation where the key terrain is different from the point of view of the attacker and the defender. In order to achieve success, the attacker must seize his key terrain, and control it and the avenues of approaches leading to it – while the defender's success depends on his retaining his key terrain. It is also important to identify the key terrain regarding the enemy's task and objective, in order to prevent the enemy from reaching its goal.

An examination of the task and purpose of the Ukrainians, and a careful examination of the terrain identify the following key terrains that would serve the goals of the various phases of the Kherson offensive.

Phase 1, the diversionary attack:

- the bank of the Donets River in the line of Pervomai'ske Bairak Nova Husarivka;
- the most important key terrain is the bridge (K1) over the Donets River north of Bairak: if the Ukrainians wanted the Russians to take the bait, they had to attack the bridge in order to show their commitment to cross the river and break through to Balakliya from the south.

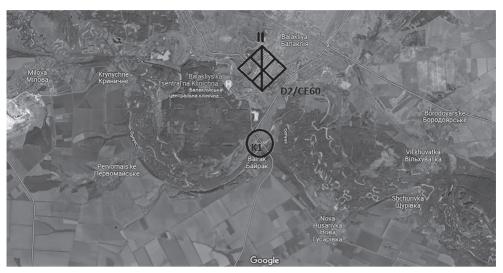


Image 1 Deduced key terrain of the diversionary attack¹¹

Phase 2, the breakthrough:

- in order to successfully break through, it was necessary to fix the Russian forces in Balakliya. Therefore, it was vital to attack and capture Vrebivka (K1),
- to effectively break through the Russian defences, there were two key terrains which subsequently led to two key tasks:
 - to capture the highway between Balakliya and Volokhiv Yar east of the village of Yakovenkove (K2),
 - to capture the area where it was the easiest to cross the Serednaya Balakliika River and at the same time cut Volokhiv Yar from the south (K3),
- to widen and secure the breakthrough, it was indispensable to capture the town of Volokhiv Yar (K4).

¹¹ The author's work.

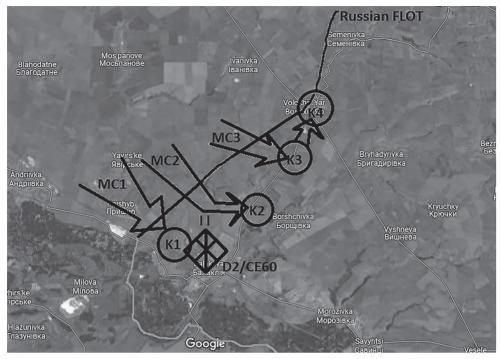


Image 2 Deduced key terrains and movement corridors (MC) of the breakthrough phase¹²

Phase 3, the exploitation:

- after the breakthrough, the Ukrainians exploited the breakthrough with two parallel attacks in the direction of the Oskil River:
 - one was conducted from Volokhiv Yar to Shevchenkove and Kupyansk;
 - the other was conducted from Balakliya to Vesele and Horokhovatka;
- in this phase the key terrain at operational level consisted of the above-mentioned urban areas. The tactical level key terrain and tasks will be discussed later.

Obstacles

Briefly, there are two main types of obstacles: natural and man-made obstacles. Their common feature is that both types of obstacles can hamper us in reaching our goal and/or hamper our enemy in reaching their goal.

Natural obstacles are – usually – well known to both sides, and both sides can and should take them into consideration. If there is a river, a swamp, a hill or a dense forest, it is easily identified on an accurate map and a commander can easily adjust his plan in order to exploit these obstacles, secure his troops' freedom of movement (FOM), and at the same time hamper that of the enemy.

The man-made obstacles also have two types: urban areas and complex fields of obstacles made by the defender. The urban areas – most of the time – behave just like natural

¹² The author's work.

obstacles: they are "default" features of the terrain, and both warring parties are well aware of them.

The complex fields of obstacles are different. Most of the time, the defender deploys complex fields of obstacles (consisting of mines, barbed wire, ditch, IED, etc.) in order to prevent the attacker from achieving their goal by slowing and canalizing the offense and, of course, inflicting casualties.

For the superficial observer it can be seen that the actual AoR is a flat land without any major obstacles. From a strategic point of view, it can be true, but if we observe the Kharkiv offensive with a tactical scope, we can identify many obstacles.

First and foremost, the main obstacles in the AoR were the:

- Siverskiy Donetsk River, the Oskil River, numerous canals and creeks;
- the town of Balakliya and numerous small villages and industrial compounds (the most important, of course, are those in the way of the Ukrainian main attack – see *Image 2* above);
- treelines, small swampy forests on the banks of the canals.

Until the time of finalizing this paper, I did not find any reliable sources regarding the Russian obstacles along their defensive lines. Therefore, I can only deduce from the speed of the Ukrainian advance, that there were no significant fortifications in the way of the Ukrainian offensive.

Now we can see, that at tactical level, the AoR was very far from being an easily passable flat terrain. In order to achieve success, the Ukrainian tactical-level commanders had to thoroughly identify the obstacles in their way and had to prepare their troops to bypass or break through the dangerous areas and to use the terrain in their favour.

Cover and concealment

Obviously, this part of the OAKOC terrain analysis is about the camouflage features of the AoR. Of course, vegetation is an important part of the concealment. High treelines, dense forests, and even high grass can cover troop movements or defensive fortifications. The troops can also contribute to concealment: commanders have to employ measures to improve their forces' concealment, such as perfecting individual camouflage or hiding their equipment and movement. These can be done by actually concealing and hiding and by mimicking troop movements.

It is also important to emphasise that concealment is not just a visual issue. In war, commanders must employ measures to conceal their troops in the infrared range, electronic warfare's (EW) battlespace, and the information domain. Therefore, on the modern battlefield, it is extremely difficult to conceal even a single APC, let alone whole units. As experts say, the battlefield had become "naked" because sophisticated sensors can detect troops and operations from space, air, and cyberspace.¹³ I assume that in the near future this will lead us to a decreasing density of forces in the first echelons of the AoRs in order to protect forces from the effective range of the enemy's sensors and long-range artillery.

Before February 2022, most experts (including myself) thought that Russians possessed an overwhelming superiority in ISR (Intelligence, Surveillance, Reconnaissance) means at

Watling, J. "The Key to Armenia's Tank Losses: The Sensors, Not the Shooters." RUSI, 06.10.2020. https://rusi.org/explore-our-research/publications/rusi-defence-systems/key-armenias-tank-losses-sensors-not-shooters Visited: 04.10.2022.

both levels of war. I assume that even the Russian offensive itself was proof of the complete misuse of this superiority at the strategic level of intelligence. Furthermore, at tactical level the Russian BTGs suffered heavy losses mainly because of poor situational awareness caused by poor intelligence and inadequate decision-making. ¹⁴ In this actual offensive, the ISR capabilities of the Russian forces were even more diminished, because the more capable Russian units were on their way or had even just arrived in the area of Kherson to stop the long-awaited Ukrainian offensive. This led to a situation that in the way of the Ukrainian main attack the lines were held by Rosgvardiya forces (as I mentioned above) whose commanders, and staffs were not prepared to conduct tactical-level intelligence.

However, it is still a matter of debate why the Russian strategic-level ISR did not discover the concentration of division-size Ukrainian forces a dozen kilometres from their FLOT (first line of own troops). What is even worse, it seems that the preparation of the Ukrainian attack was discovered¹⁵ but the Russian commanders did not prepare their defences adequately.

The cover has a lot of correlation with concealment because what is covered is usually concealed. The commanders must carefully observe and prepare (if possible) their AoR to find covered routes to key terrains (see Avenues of Approach part), to find cover for their valuable and/or vulnerable assets, and to cover the movement and positions of their forces.

In this particular operation, the terrain did not provide a lot of cover because of the lack of hills and valleys. However, the aforementioned treelines, urban areas, forests, and canals could provide some cover at a tactical level. This is important for my paper because it means that the tactical-level commanders could easily find covered routes for their tactical-level manoeuvres, (e.g. envelope a battle position of a depleted Russian company with a mechanised infantry platoon in order to subsequently assault and defeat this battle position with appropriate supporting fire provided by the other platoons of the company).

I must underline here, that in this actual offensive, in this actual AoR the well-trained company commanders could easily find appropriate cover to carry out their task. This fact paired with the "blindness" of Russian ISR assets had created a favourable environment for the Ukrainian offensive.

Troops and support available

It is clear that the Armed Forces of Ukraine (AFU) (and the state itself) can maintain its resistance thanks to continuous Western support. In the first two phases of this conflict, (see the phases in the Introduction) the main focus was on the defensive capabilities both in technical and tactical aspects. After the Russian capture of Lysychansk, it seemed, that the AFU finally could contain the Russian offensive, but the continuous flow of western support remained critical to maintaining the AFU's operational capabilities.

After the capture of Lysychansk on 3 July, the Russian advance effectively came to a halt. According to experts and my assessment, a timeframe of opportunity (and a need) for the Ukrainian counteroffensive has appeared. Albeit the Russians did not have sufficient power to launch decisive offensive operations, they still had an overwhelming superiority in firepower, and in time, they could have bled the Ukrainians white with a constant artil-

¹⁴ Takács. "Short Study." 55. and 58.

¹⁵ Social media post by @epodubbny. *Telegram.org*. https://t.me/epoddubny/12137 Visited: 13.11.2022.

Kofman, M. and Evans, R. "Ukraine's Window of Opportunity?" War on the Rocks, 28.07.2022. https://warontherocks.com/2022/07/ukraines-window-of-opportunity/ Visited: 14.09.2022.

lery bombardment.¹⁷ This led to the recognition, that the Ukrainians can and must retain the initiative in order to avoid the slow destruction of their forces (and their country) in a yearslong artillery grinder.

For the Kharkiv offensive, the Ukrainians had gathered a 5 brigade-strong force, which is the approximate equivalent of a NATO standard division. These elements of the offensive force were (from north to south):

- the 103rd and 113th Territorial Defence Brigades (TBD);
- the 92nd and the 93rd Mechanised Infantry Brigades (MIB);
- the 3rd Tank Brigade (TB);
- the 25th and the 80th Air Assault Brigades (AAB):
- and unknown elements of Ukrainian Special Forces.

Of course, these forces were supported by additional artillery. Furthermore, I have to underline that it is still not 100% clear, which elements of which Ukrainian units were involved in this offensive. However, for the scope of my study, it is almost indifferent what the official identification number of the unit was, what really matters is the actual size of the unit and the size and time of their operation, and this information is valid and available.

At the time of finalizing this paper, we can see that the Ukrainians used deception on a grand scale. However, it is still not clear whether the Kherson offensive was originally meant to be a decisive operation or a strategic shaping operation for the support of the Kharkiv offensive. From our point of view, it is indifferent, what the original goal was, because the huge "operational noise" made in the information space by the Ukrainians, and the launch of the attack on 31 August had perfectly diverted the Russians' attention to the southernmost sector of the frontline.¹⁸ I consider this operation as a strategic-level decisive operation with a different speed which "turned-out-to-be a diversionary attack".

Ultimately, it is totally indifferent whether the Kherson offensive was originally planned to be or became a diversionary attack only later. This operation had created favourable conditions for the Ukrainian offensive. According to experts' and my assessment, the Ukrainians' goal was to drive a wedge between the 20th GCAA and the 1st GTA by breaking through the thinly held defensive line of the 20th GCAA. After the breakthrough, the further goal was to encircle the 1st GTA in order to defeat and/or destroy the main threat to the northern flank of the Ukrainian forces in the Donbas down to the Zaporizhia Oblast.

As I wrote above, the Ukrainian offensive can be divided into four phases: diversionary attack, breakthrough, exploitation, and pursuit. To successfully execute these phases, it is necessary to deploy a slightly different composition of forces in extremely different ways.

For a diversionary attack, it is important to have a sufficient number of troops to make the enemy believe that it is an actual attack. For this it is enough to have a number of attackers equivalent to the enemy, the more important factor is to have motivated troops to employ a wide range of fires and manoeuvres against a matching enemy to successfully deceive the defender.

Staiano-Daniels, L. "Why Russia Keeps Turning to Mass Firepower." Foreign Policy, 19.06.2022. https://foreignpolicy.com/2022/06/19/why-russia-keeps-turning-to-mass-firepower/ Visited: 14.09.2022.

Stepanenko et al. "Russian Offensive Campaign Assessment, August 29." Institute for the Study of War. 08.29.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-august-29 Visited: 15.09.2022.

For the breakthrough, it is widely accepted to have at least sevenfold superiority in combat power in the area of the breakthrough. Of course, this does not mean deploying seven times more troops, but having better trained, better motivated, troops with commanders who have better situational awareness, and employ a more effective military decision-making process. Next to these "human resources"-related factors, of course, it is important to have superiority in artillery, to have aerial dominance, to have at least equal quality in terms of equipment, and to have flawless logistics.

For the exploitation and the pursuit, it is indispensable to have again, flawless communications, good coordination, excellent situational awareness, and (I think it is the most important) to have well-trained, motivated commanders with a sufficient amount of tactical freedom to adapt to the quickly changing situation and to retain the tactical-level initiative. Furthermore, these units and commanders must use highly mobile and reliable IFVs and APCs with a substantial amount of swiftly available fire support.

If we have a look at the Ukrainian offensive in the Kharkiv oblast between 6th and 14th September, we can see that the Ukrainians had sufficient quality and quantity of troops to achieve their goals.

Time available

As I wrote above, the Russian offensive was practically stopped after the capture of Lysychansk in early July. The stationary warfare could have easily led to the slow destruction of Ukrainian forces by the superior Russian artillery.

Parallel with this, western support seemed to have reached its peak mainly because of the shadows over the European and US economies and most importantly, the limited number of available military equipment.¹⁹

I assume that these two factors had created a "now or never" opportunity for the Ukrainians to deliver a serious blow to the Russians, retain the initiative, boost the morale of their own troops and people, and last but not least, prove to their supporters that it is still worth supporting them.

The other time factor was in connection with the weather. The muddy season, the "Rasputitsa" usually begins in late October, therefore if the Ukrainians launch a successful attack in early September, they can have a comfortable seven weeks to execute even strategic-level manoeuvres.

Briefly, I assume that the time (both in operational and weather means) was appropriate for this offensive.

Civilian considerations

The attitude of the civilian population is often overlooked in a conventional conflict. Traditional military thinking presumes that the population will take cover in the way of the destructive power of the military and they will only creep out from cellars when the fighting is far away from their neighbourhood. Albeit, a significant amount of Ukraine's population escaped the country, especially from the areas that became a battlefield, there were multiple

Turak, N. "The U.S. and Europe are running out of weapons to send to Ukraine." CNBC, 28.09.2022. https://www.cnbc.com/2022/09/28/the-us-and-europe-are-running-out-of-weapons-to-send-to-ukraine.html Visited: 04.10.2022.

examples of the Ukrainian population actively supporting the AFU and actively hampering the operations of the Russians.²⁰

These actions by the Ukrainian population were totally surprising for the Russians, mainly because of the poor strategic-level intelligence regarding the expected attitude of the Ukrainian population in case of a Russian offensive. After the first shock, the Russians employed countermeasures which led to serious atrocities against the civilian population. The war crimes highly likely committed by Russian troops are widely known today.

All these factors led to the fact that in the area of the Ukrainian offensive, the attitude of the population was negligible regarding the offensive, but the support of the population of the recaptured settlements surely boosted the morale of the Ukrainian troops. However, mainly after the success, it has to be considered that supplying the population in the recaptured areas puts serious pressure on the AFU's logistics system.

DESCRIBING THE OPERATIONS

As I wrote above, the Ukrainian Kharkiv offensive can be divided into four big phases: diversion, breakthrough, exploitation, and pursuit. In this part of my study, I will examine both phases and I will attempt to discover and describe the decisive tactical-level operations in order to present the truly important and decisive factors of this offensive.

The diversionary attack

Before the main attack, the Ukrainians had executed a carefully planned diversion. As I wrote above, I do not consider the Ukrainian offensive in the Kherson Oblast to be a diversion. I assume that it was another decisive offensive of the Ukrainians but with another operational tempo. The diversion of the Kharkiv offensive consisted of the following two attacks.

Crossing the Siverskiy Donets

The first element of the diversionary attack was a Ukrainian river crossing attack on 1 September on the Siverskiy Donetsk River 4 km west of Siverskiy in order to capture Ozerne and Yampil.²¹ This attack did not succeed but it was clearly enough to divert the attention of the 1st GTA to its left (Eastern) flank.

Because of the distance of this attack and the breakthrough, I assume that this attack was an operational-level diversion, in order to divert the attention of the area's most formidable Russian formation far away from the future main attack.

At a tactical level, the river crossing²² is one of the most difficult operations consisting of multiple tactical tasks:

²⁰ Harding, A. "The small town which managed to block Russia's big plans." *BBC*, 22.03.2022. https://www.bbc.com/news/world-europe-60840081 Visited: 04.10.2022.

²¹ Cooper, T. "Ukraine War, 16 September 2022: East Kharkiv." *Medium*, 16.09.2022. https://medium.com/@x_TomCooper_x/ukraine-war-16-september-2022-east-kharkiv-fae7688306e2 Visited: 17.09.2022.

Most field manuals call this operation "water-gap crossing" or "wet-gap crossing," but in this case the water gap was clearly a river, and I will use the term "river crossing" in my study.

- to reconnoitre the spot(s) of the crossing;
- to employ effective fires to pin down the enemy at the opposite bank (exit bank) of the river:
- to assault the exit bank in order to gain a bridgehead to secure the main forces;
- to have main forces cross the river and exploit the attack.²³

Reconnoitre the spot(s) of the crossing

First of all, the attacker has to find the spot of the river crossing. In this area, the river has to have a runoff, width, bank, and river bed adequate for the operation. After these natural circumstances, the enemy forces present could be overpowered by the attacker. These operations are usually conducted by ISR elements; therefore, they are not in the scope of my study.

Fire support of the crossing

After adequate reconnaissance, the attacker must overpower (at least pin down) the defender at the exit bank. This – usually – is the task of the artillery and air force. In this case, there are no sources for deploying a large number of Ukrainian aerial assets in this operation; therefore, I assume that this was done by Ukrainian artillery. At tactical level, infantry units do not have crucial tasks in this phase, they are mainly preparing and planning the river crossing, or more probably, they are conducting a tactical march from an assembly area to the spot of the crossing.

Assault through the river

Ideally, just after the artillery finished its fire missions against the enemy forces at the exit bank, the assault on the exit bank commences. This can be done either by air assault or by fording and swimming through the river. In this concrete operation, there are no sources regarding air assault, therefore, I assume that the assault was executed by amphibious APCs (BTR-80 is still present in high numbers in the AFU) and by rubber boats.

From the later reached dimensions of the bridgehead (1 km deep, 3 km wide), and available open sources²⁴ I can deduce that this attack was executed by not more than one battalion. In this case, the crossing could happen at one or two crossing spots.

From the point of view of the infantry company commander (CO), he (of course with his unit) can cross the river by both means and he can be in both the first and second wave of the attack. If the company is in the first wave it must conduct a tactical movement from the assembly area to the spot of the crossing. During this movement, the CO must maintain firm control over his company, through solid communication and clear orders (regarding route, objective, contact drills, and emergency situations).

Arriving at the river, the vanguard platoon must identify the spot of the crossing. For this, the platoon leader (PL) must use the tools of land navigation correctly and must have good situational awareness. Both of these can be assured by proper training and accurate information from the CO, and this information is a result of a carefully executed planning and preparation phase. This phase, – because of the Western training – I assume was done by the Troop Lead-

²³ FM 90-13 - River Crossing Operations. Washington DC.: Department of the Army, 1998. 3-1.

^{24 &}quot;Invasion Day 194 – Summary." MilitaryLand, 05. 09. 2022. https://militaryland.net/news/invasion-day-194-summary/ Visited: 18.09.2022.

ing Procedures (TLP).²⁵ All in all, I must underline here, at the commencement of the assault the vanguard platoon must close up to the river and occupy favourable positions to provide effective supporting fire to the incoming platoons of the company. After the company arrived at the bank of the river, it is possible to cross the river at once (if the terrain is favourable and the enemy is pinned down adequately), or platoon after platoon.

In both cases, the PL must organise the direct fires of the platoon. The PL and the subordinates must identify the targets in advance, the PL must:

- employ effective fire control measures;
- give correct fire orders;
- employ effective graphic control measures;
- designate engagement areas useful to destroy or at least pin down the enemy on the exit bank.

In this concrete operation, the river was approximately 50-80 m wide, therefore all weapons in an infantry platoon could be used (of course, except pistols and hand grenades). The main weapons of the platoon are the turret weapons of its APCs or IFVs (in this case the 14.5 mm KPVT heavy machine gun, the 7.62 mm PKT medium machine gun), and the infantry machine guns (7.62 mm PKM medium machine gun). The PL must carefully divide his AoR between his unit's weapons in order to form mutually overlapping sectors of fire, which ensure effective fire at the enemy. I must note here that firing over water can have an effect on the trajectory of the bullets and it also has to be considered during the assault.

All in all, supported by direct fires the company crosses the river in its amphibious vehicles, in boats, or hasty equipment. Until finalizing this paper, I did not find any resources regarding the equipment used for the crossing in this operation, but from the unit that executed this (15th Special Operations Regiment)²⁶ I would exclude none.

Advance from the exit bank and securing the bridgehead

After crossing the river with serious direct and indirect fire support, the crossing units must advance from the crossing point in order to give space to the following units and echelons. To do this, it is necessary to carry out offensive tactical tasks. I will thoroughly describe the fundamentals of basic offensive tactical tasks in the subsequent parts of my study.

Until that, I would like to mention that in this case, the attacker's tasks depend on the opposing enemy on the exit bank. If the enemy is still present but successfully pinned down by fire, the attacker can assault the enemy instantly. If we consider a company, it can assault successfully a force not bigger than two platoons (if they are seriously affected by fire). It means, that the attacking company can secure an area up to 800 m wide and 400 m deep. If everything goes as planned, the first company is followed by multiple other companies and they can secure more ground. According to recent manuals, the objective of an attacking battalion (consisting of three infantry companies) can be up to 2 km wide and deep.²⁷ Of course, on difficult terrain, and/or facing heavy resistance, these numbers become smaller.

²⁵ For further information on the TLP conducted by mechanised infantry units, see FM 3-21.11 – The SBCT Infantry Rifle Company. Washington DC.: Headquarters, Department of the Army, 2003. 2-5.

²⁶ "Invasion Day 194."

²⁷ Ált/54 – Tactical Manual for the Land Forces of the Hungarian Defence Forces, part II – Battalion. (in Hungarian) (Budapest: Hungarian Defence Forces, 2014) III-8.

In this concrete situation, the bridgehead was no larger than 2 km wide and 1,5 km deep. According to my deduction, it means that this diversionary river crossing was carried out by a Ukrainian BTG with sufficient artillery support.

Frontal attack on Balakliya from the south

The other part of the diversion was another Ukrainian attack from the south to the north. This attack I should call a tactical-level diversion, because it was carried out in the vicinity of the actual main attack and its goal was to divert the attention of the tactical and operational-level units of the Russians near the subsequent decisive operation.

This operation was launched just before the main attack (5 September)²⁸ and continued overlapping in time with that. This operation was meant to look like another river crossing; however, the actual river crossing was neither executed nor planned. The only goal of this operation was to "make some noise", to divert the attention of those very units to the south, which could have put up some resistance against the Ukrainian main attack.

The tactical tasks of a frontal attack are largely similar to the ones we will see later at the decisive operations. However, in this case, this attack was not meant to be a decisive offensive operation, therefore the tactical tasks were the following:

- a tactical movement to the own FEBA²⁹, then passage of lines;
- tactical movement through the enemy's FLOT³⁰ and defeating its screening forces;
- attacking by fire the enemy's main forces' battle positions in its FEBA.

As I wrote above, during this actual operation, there was no intention of breaking through, but to make the Russians believe that this attack is the one they should defeat. In order to achieve this, the Ukrainians had to have a significant effect on the Russian defences. To have this effect, the Ukrainian company and platoon commanders had to execute the following tasks:

- to find favourable firing positions for their armoured vehicles (mainly APCs), machine guns, light mortars, and anti-tank missiles from which they can fire effectively and at the same time, are well protected against enemy fire and premature discovery;
- to organise a system of fires to effectively suppress the enemy and destroy dangerous assets (e.g.: artillery observers, anti-tank missiles, IFVs, machine guns);
- to designate routes for withdrawal if the enemy deploys its reserves to counter the assumed attack;
- to organise the coordination of indirect fires to inflict high casualties on the enemy's reserves;
- to designate alternate and reserve firing positions to effectively destroy the enemy's reserves and counterattacks.

This tactical-level diversion proved to be effective because the main attack had the element of surprise. Furthermore, after the breakthrough, units conducting this operation have successfully pushed into Balakliya from the south.

²⁸ Hird, K., et al. "Russian Offensive Campaign Assessment, September 6." *Institute for the Study of War*, 06.09.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-6 Visited: 01.10.2022.

²⁹ FEBA = Forward Edge of the Battle Area

³⁰ FLOT = Forward Line of Own Troops

The breakthrough

It is without a doubt that the first step for Ukrainian success was the success of the breakthrough. The breakthrough at tactical level is called penetration. "In a penetration, the attacker concentrates forces to strike at an enemy weak point and break through the position to rupture the defence and break up its continuity. The attacker then uses the gap created to pass forces through to defeat the enemy through attacks into his flanks and rear. A successful penetration depends on the attacker's ability to suppress enemy weapons systems, to concentrate forces to overwhelm the defender at the point of attack, and to pass sufficient forces through the gap to defeat the enemy quickly."³¹

This definition leads to the consequence that for a successful penetration, the following tactical tasks need to be executed (in the sub-points, there are the actual tactical tasks which are the responsibility of the infantry):

- Suppression of the enemy defences;
 - this is the task of the artillery and army aviation, the infantry at this time conducts a tactical march in the direction of the enemy.
- Penetrating the main line of resistance (practically the FEBA of the enemy);
 - attack and support by direct fires;
 - dismounting the infantry;
 - breaching the enemy's obstacles;
 - assaulting the enemy's battle positions.
- Widening the gap for securing the flanks;
 - seizing the enemy's secondary battle positions (envelopment or frontal assault);
 - defeating minor (maximum company-level) enemy counterattacks;
 - securing the advance of the second echelon.
- Seizing the objective and subsequent exploitation;
 - repel enemy (battalion-level) main counterattacks;
 - successfully deploy the second echelon;
 - attack into the enemy's rear and flank and achieve operational-level (brigade) objectives.

Now we can see that an infantry company can have multiple types of tasks. In this part of my study, I will examine each step of the Ukrainian penetration and describe the tactical tasks possibly executed by infantry companies.

Penetration between Andriivka and Vovchyi Yar

As I wrote above, to achieve the breakthrough, the first step is to successfully defeat the enemy's screening forces between its FLOT and FEBA. These forces usually do not even try to stop the attack, as their task is the early warning of the defenders regarding the commencement of the attack, and slow the attackers' progress with fire and obstacles. After defeating the screening forces, the attacker meets the FEBA of the defender.

The attacker has to break through the obstacles made by the defender. Ideally, it is a 50-100 m wide area of mines, barbed wire obstacles, ditches, etc. parallel with the FEBA, approximately 2-300 m from it. To do this, the attacker must suppress the defending units

³¹ FM 3-90-2 - Reconnaissance, Security, and Tactical Enabling Tasks, Volume 2. Washington DC.: Department of the Army, 2013. 5-5.

in their battle positions by indirect and mainly direct fire (because of the dangerous vicinity for enemy artillery), and reduce the obstacles with bulldozers, by sappers, etc, or at least open clear lanes for the infantry and tanks.

After it has been done, the attacker assaults the defenders' battle positions. At tactical level, in accordance with recent manuals, a company attacks no more than 1.5 km wide and its primary objective is a battle position (BP) of an infantry platoon.³² Of course, these platoon BPs normally cover each other's flank with overlapping fields of fire in order to make it difficult to envelop them.

The above-written paragraphs contain the ideal situation according to manuals. However, in this operation, the defender had huge disadvantages. As I described at the METT-TC, the terrain was flat, the ground was dry, there were no serious obstacles that could have limited the Ukrainians' freedom of movement (FoM), and most importantly, there were not enough well-trained and motivated Russian troops to build ideal defences. Mainly this is the reason, why the Ukrainians decided to attack here.

In this actual operation, the Russian defences in the way of the first echelon of the Ukrainian main attack were insufficient. I assume that they tried to concentrate their forces to hold the small villages of Andriivka, Zhotneve, Yavirs'ke, and Vovchyi Yar. Between these settlements, they did not build any fortified positions; the most they could do is to man observation posts (OP) and patrol the open areas. However, because of the low quality of these forces, I assume that even these inadequate measures were not executed properly.

From the quick success of the first days, I deduce that the Ukrainians had a clear picture of the Russians' defences, therefore I assume that the first echelon companies had received the above-mentioned four settlements as their primary objectives (see *Image 3*, circles with numbers 1). The width of the breakthrough was 10 km, which means to me that the breakthrough was conducted by at least two, or rather three Ukrainian infantry battalions.

Right flank – the capture of Andriivka, attacking towards the Shyfernyy Kombinat

At the Ukrainian right flank, the first objective was Andriivka. Andriivka is a small town with a population of a bit under 10,000, but because of its rural, agricultural character, the settlement stretches more than 4 km in SE-NW and 2 km in N-S. At the northern perimeter of the settlement, there is an industrial area with huge gas tanks, railroads, and plants.

If heavily defended it could have delayed the whole Ukrainian offensive, but as I mentioned, the Russians did not have the means to fortify and man the town. Relying on available open sources I assume that the Ukrainians captured Andriivka without a fight and easily pushed toward Balakliya on the T2105 road.³³ Deducing from the speed of the Ukrainian advance, I think that maybe one company secured the western and northern entry points, while the other infantry companies pushed through the village. The other option (if we consider the subsequent Ukrainian tactics of bypassing pockets of resistance) is that the first echelon bypassed Andriivka from the north and attacked forward the Balakleys'kyy Shyfernyy Kombinat.

³² Tactical Manual for the Land Forces of the Hungarian Defence Forces, III-8.

³³ Hird, K. et al. "Russian Offensive Campaign Assessment, September 7." Institute for the Study of War, 07.09.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-7 Visited: 12.09.2022.

Until finalizing this text, I did not obtain any valid information regarding which way the Ukrainians captured Andriivka, but it is clear, that they did that in the early hours of their offensive.

Centre – the main push to the north of Balakliya

The main attack of the break-in (the first phase of the breakthrough) was executed in the centre. The goal of this attack was to cut the T2110 road between Balakliya and Volokhiv Yar in order to effectively penetrate the Russian defences and to make unfavourable conditions for the Russians both north and south from this bulge.

In order to successfully achieve this goal, the primary tactical objective was the capture of Yavirs'ke, which is not even a village, but a small industrial compound with no more than a dozen of surrounding houses of workers. The actual difficulty of capturing this village is the fact that two small canals/creeks channel all kinds of movement from the west to the vicinity of this area, and to further hamper the attacker, the Krainya Balakliika river forms a swampy, and difficult-to-cross perimeter with only few passable fords and culverts. Again, this settlement could have been easily defended with adequate means, but as I described earlier, this was not the case.

The Ukrainian units easily bypassed this settlement. If we accept my deduction that in the first echelon of the main attack at least one battalion was deployed in the centre, we will come to the conclusion that the main forces of the battalion bypassed the settlement from the north and no more than a company captured the settlement without any serious combat (see *Image 3*).

Left-flank – Securing the main effort from the north, the capture of Vovchyi Yar

To secure the main effort in the centre, the Ukrainians had to capture Vovchyi Yar. This is a small village on the banks of the Kainya Balakliika River. Again, it could have been a heavy fight if it had been well defended, but it was not, therefore the Ukrainian attackers crossed the river SW from the village and then captured it without any resistance.

After the capture of the village and securing its bridge over the river (in order to hamper any possible counterattack from the north), the Ukrainians must have pushed forward to the east. According to open sources, they did not meet heavy resistance until this time, and they managed to penetrate the Russian defences, by effectively breaking through the first echelon of battle positions. The Ukrainian offensive has managed to achieve the first step of the breakthrough by reaching my hypothetical Phase Line A (PL A) after a few hours of launching the offensive.

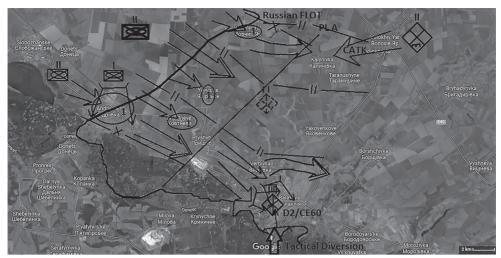


Image 3 The deduced tactical tasks and manoeuvres during the Ukrainian penetration between Balakliva and Volokhiv Yar³⁴

Breakthrough north of Balakliya

After successfully penetrating the Russian defences by capturing the primary objectives, the Ukrainian forces pushed towards the T2110 road to achieve the breakthrough. To achieve this breakthrough, the Ukrainians had to capture Balakliya (or at least contain its defenders), cut the T2110 road near Yakovenkove, and take Volokhiv Yar to secure the northern flank of the penetration.

Right flank – capture Vrebivka and contain the defenders of Balakliya

The easiest way for the attacking Ukrainian forces was the T2105 road, but on this road, there were the Balakleys'kyy Shyfernyy Kombinat and the town of Verbivka. The Kombinat is a huge industrial compound and Verbivka is a small town mainly consisting of one or two-storey buildings built from bricks and concrete. Both of these settlements could have provided a favourable defensive battle position for the Russian defenders, but mainly because of the successful Ukrainian diversionary attacks, and the lack of troops, there were not enough Russian forces to fortify and man these crucial areas. Therefore, by afternoon Verbivka was liberated by the Ukrainians who then reached the outskirts of Balakliya. This was the first place where they met with notable resistance.

Because the operational objective was to break through the Russian defences and to threaten the back of the 1st GTA, the Ukrainians did not try to capture Balakliya at all costs or as fast as they could. This would have been a difficult task anyway. Balakliya is an industrial town and can be approached from the west through two thin corridors: the T2105 road and the railroad. This meant that if we accept that Balakliya was held by a depleted bat-

³⁴ The author's work.

Balmforth, T. "In liberated Ukraine town, locals sob with relief, relate harrowing accounts." Reuters, 14.09.2022. https://www.reuters.com/world/europe/liberated-ukraine-town-locals-sob-with-relief-relate-harrowing-accounts-2022-09-13/ Visited: 15.09.2022.

talion-sized Russian unit, the Ukrainians still would have deployed at least a full-strength brigade to swiftly overcome the defenders.

Of course, this would have drawn away serious resources from the main attack, therefore, the Ukrainians have contained the defenders from the north, while fixing them from the south by the aforementioned tactical-level diversionary attack (see part 3.1.2.).

It means that at least one company of the first echelon had to close the western exits of Balakliya, while the other two companies did the same at the longer, northern perimeter. I assume that this battalion was the same that had been the first echelon since the commencement of the attack in the early morning of 6 September.

To close the exits the company commanders (CO) had to disperse their platoons between the boundaries, received from the battalion (presumably from the battalion tactical operations centre = TOC). The CO has to identify the key terrain which has to be occupied or kept under fire and/or conduct effective surveillance to fulfil this task. The platoon leaders (PL) position their platoons in accordance with the CO's intention.

In this actual situation, the town's western exits could be easily checked; as there are only two narrow corridors between the Balakliya River, the Siverskiy Donets River, and the industrial areas. The northern exits were more problematic because north of the town there is an enormous military depot (by the time largely empty) with high fences and huge warehouses. But at the same time, it makes it easy to monitor the outer wall, and the two narrow passages next to the depot, one is a crop field (not wider than 400 m) and the other is the T2110 road leading to the north from Balakliya.

All of these means, that the Ukrainian forces could easily contain the defenders of Balakliya with a force, not larger than a battalion.

The main attack in the centre – cut the T2110 road near Yakovenkove

After the successful first couple of hours of 6 September, the Ukrainian main attack was still at the centre. The primary tactical goal was to cut the T2110 road between Balakliya and Volokhiv Yar. The terrain here was flat, but some creeks and canals could have easily channelled the Ukrainian movement into Russian kill zones. However, due to the dry summer, these canals were mostly dry and the Russian defences were virtually non-existent. As a result, the Ukrainian first echelon battalion could reach and cut this road with ease.

Deducing from the speed of the advance and the terrain, I assume that the Ukrainian COs had ordered their companies to use marching formations (e.g. column, wedge, echelon) instead of the line formation (which is the basic battle formation).

The main attack in the centre was successful, the road was cut by the morning of 6 September. Now it was the time to secure the penetration and finish the breakthrough successfully.

Securing the breakthrough from the north

- defeating the Russian counterattack and liberating Volokhiv Yar

According to recent manuals, if the first echelon of defensive battle positions (BP) has been penetrated, the defender must deploy counterattacks into the enemy's flank to inflict casualties and stop its advance.³⁶

³⁶ FM 3-90-2. 6-5.

Of course, the attacking force should be well aware of this, therefore during the planning, the attacking battalion commander must take measures to cover his flanks from the possible direction of the counterattack. It means, that during this phase the battalion commander must identify in advance (or give orders to his COs to identify) the dangerous directions favourable for enemy counterattacks (see OAKOC above). After identifying the possible direction of the enemy counterattack, the attacking commander must employ countermeasures, such as:

- have a reserve force to outmanoeuvre the counterattack;
- prepare the attacking forces to continuously monitor and screen their flanks in the dangerous direction;
- have pre-planned indirect and direct fire missions that can be executed after transmitting a password to inflict heavy casualties on the counterattacking force, and fix it while the reserve conducts the manoeuvre.

In this war, the Russians often suffer heavy casualties mainly because they are unable to execute what their own field manuals specify to them. In this actual situation, there is a great amount of irony, because the Russians have perfectly executed a desperate counterattack from the direction and in the time as their field manuals specify, however, since the Ukrainians had anticipated the counterattack they managed to repel it.

Until finalizing this study, I did not find any validated sources regarding the Russian unit conducting this counterattack, but most of the relevant experts write and speak about a BTG of the VDV.³⁷

These sources claim that the counterattack came from the area of Volokhiv Yar and was defeated SW of this settlement in the open area. If it is true, relying on my knowledge and the relevant field manuals, first, the counterattack must be checked. It can be done by effective direct and indirect fire. In this case, because of the presumably close range and the speed of the events, I assume the direct fire of the infantry companies was the main element of halting the counterattack.

If this was executed effectively, there is still a chance that the counterattack continues successfully if the COs and PLs of the counterattacking force can quickly and precisely report the situation and their commander (battalion commander, or the battle captain at the TOC) quickly switches the main effort of his counterattack (and of course, adequate forces are available). In spite of the fact that the counterattacking force was presumably VDV, they were plagued by the strict and stubborn military decision-making process employed in the Armed Forces of the Russian Federation.

Meanwhile the Ukrainians effectively used what they learned from the US and UK advisors, and the western style MDMP³⁸ and TLP adapted to their own national characteristics proved to be effective. It is still unclear from which direction (after assessing the terrain and the forces, I drew a sketch regarding that operation, see *Image 4*), but the counterattack was outflanked and defeated so effectively that the Ukrainians had taken Volokhiv Yar itself by the afternoon of 6 September.³⁹

³⁷ Cooper, T. "Ukraine War, 16 September 2022."

³⁸ MDMP = Military Decision-Making Process

³⁹ Bielieskov, M. "Ukrainian Balakliya-Kupyansk Offensive: Sequence of Events, Mechanics and Consequences." Eurasia Daily Monitor. Volume: 19 Issue: 133. https://jamestown.org/program/ukrainian-balakliya-kupyansk-of-fensive-sequence-of-events-mechanics-and-consequences/ Visited: 20.09.2022.

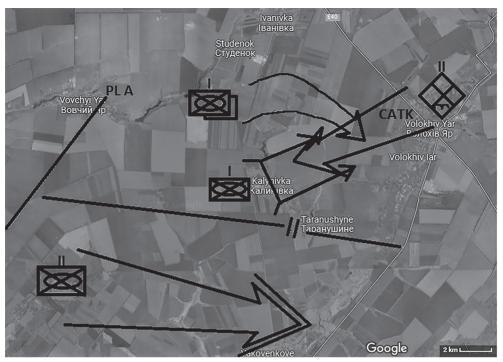


Image 4 The possible tactical tasks conducted during the Russian counterattack SW of Volokhiv Yar⁴⁰

The following paragraphs are completely based on my deduction. The Ukrainian battalion commander on the left flank of this brigade had to have some information regarding the commencement of the Russian counterattack. He could receive intel from his superior (brigade) or could gather it via his reconnaissance capabilities. It is probable that in this situation it was easy to spot the incoming Russians because the weather was good, the visibility was great, and the terrain was flat.

After realising the Russian counterattack, the Ukrainian battalion commander had to manoeuvre his forces in order to meet the needs of defeating a counterattack, explained above. Deducing from the terrain, mission, and speed, the Ukrainian left flank battalion could have its companies in a column or a long echelon-left formation. The companies themselves could employ a line, or a wedge formation with their platoons with the infantry still mounted.

In this case, the first company could meet the first company of the Russian counterattack. If this company had received appropriate information regarding the Russians' manoeuvre, the CO could deploy his forces in a favourable position (e.g. a tree line or a streambed, see *Image 4*). In this concrete situation, according to my deduction and based on the terrain and my experience, the CO could consider the following:

⁴⁰ The author's work.

- quickly giving orders to his PLs to prepare for a hasty defence to stop and fix the enemy's counterattack by inflicting casualties;
- dividing the engagement area between these platoons, specify from which distance the platoons should be allowed to open fire on what kinds of targets;
- the PLs must dismount their infantry, preferably outside the distance of the Russian anti-tank assets;
- moving the infantry into favourable positions: put the machine guns in a place, from where they can utilise their maximum range, and put the anti-tank missile troops in a position, from where they have a clear observation and field of fire to the possible movement of the enemy's armoured vehicles (in this case, probably BTR-82 or BMD-2);
- moving the vehicles into firing positions where they are somewhat covered and from which have a clear observation and field of fire to the enemy;
- having executed all these measures, this company can effectively halt the Russians' counterattack temporarily and can be a base of fire element for the Ukrainian manoeuvre to the Russians' flank.

While this base of fire element is being formed, the following two companies of the battalion are constantly moving forward. While doing so, they receive information from the TOC to perform a flanking manoeuvre. In this actual situation, I found it more probable that this manoeuvre (which was the main effort in this tactical situation) was carried out in the grain field south of Ivanivka because on the right there was a great chance of running into the neighbouring battalion. To avoid fratricide, the unhealthy density of troops in a large field in front of the enemy's counterattack, and because of the favourable terrain, I assume that the manoeuvre was executed as I drew it.

The manoeuvre element consisted of one or two companies. If two, then one of the COs should be appointed as a senior, but it is more common that the TOC leads their operation with a few simple instructions:

- the task & purpose (destroy the counterattacking Russian force in order to secure the flank of the main attack);
- size and direction of the Russian units (not bigger than 3 infantry companies, maybe some tanks, moving from Volokhiv Yar to SW);
- from which direction should the manoeuvre be executed (south of Studenok, left from the base of fire element company);
- strictly designate the right perimeter of the engagement and the limit of advance (LOA) area to avoid fratricide;
- actions after the destruction of the enemy.⁴¹

After beating the counterattack and successfully cutting the T2110 road, the Ukrainians successfully penetrated the tactical depth of the Russian defences; hence they had reached more than a 10 km deep and 20 km wide penetration by the afternoon of the first day.

⁴¹ It is still unclear whether the goal of the Ukrainians was to defeat or destroy the Russian VDV BTG, but it is clear that the counterattack was not successful, they could not even temporarily halt the Ukrainian advance, or threaten the main attack.

According to relevant field manuals, it means that in this period they successfully achieved more than what is specified for a mechanised infantry brigade conducting a conventional armoured penetration.⁴²

Operations after the operational breakthrough

After cutting the T2110 road, containing the Russians in Balakliya, and defeating the Russian counterattack, we can clearly state that the successful tactical-level penetration was followed by an operational-level breakthrough. Moreover, we should consider the fact that parallel with this operation the Ukrainian 103rd, and 113th Territorial Defence Brigades commenced their attack from the area SE of Chuhuiv, to the direction of Chkalovkse.

However, there is no available open-source information regarding the Russian military decision-making in this operation. It is almost sure that by the afternoon of 6 September the HQ of the 20th GCAA had realised that the Ukrainians had penetrated into the operational depth of their defence between Chuhuiv all the way down to Balakliya. In this situation, the 20th GCAA should have tried to halt the Ukrainian advance or request permission to withdraw its forces to defendable positions.

With the liberation of Shevchenkove on 7 September, the Ukrainians had forced the Russians to withdraw to Hrushivka and later to Kupyansk. On the southern flank, after a one-day battle, the Russians withdrew from Balakliya towards Vesele on 8 September.⁴³ Here, the Russians could maintain some kind of resistance, or the Ukrainians could not dictate a high tempo after the liberation of Balakliya. The reason is still unclear, but considering the fact that there was a daylong battle for Balakliya, and the Russians could withdraw from the town, I assume that the Russians could maintain some kind of cohesion and could conduct a fighting withdrawal.

On the northern flank, on 9 September the vanguard of the Ukrainian offensive (probably the 92nd Mechanised Infantry Brigade)⁴⁴ reached the eastern outskirts of Kupyansk, thus effectively cutting the 20th GCAA into two. It forced the depleted, low-morale Russian 20th GCAA to withdraw instead of trying to resist the Ukrainians.

In the following part of my study, I will examine and describe the tactical aspects of these two days (8 and 9 September).

Exploitation – push to the Oskil River

After a successful operational breakthrough, to continuously retain the initiative, it is indispensable to continue the offensive operation. Once breakthrough have been achieved, two kinds of military operations need to be considered: exploitation and pursuit. Their common features are:

- planned and executed at brigade level or above;
- conducted after a breakthrough against a beaten enemy.

⁴² Tactical Manual for the Land Forces of the Hungarian Defence Forces, III-8.

⁴³ Stepanenko, K. et al. "Russian Offensive Campaign Assessment, September 9." Institute for the Study of War. 09.09.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-9 Visited: 18.09.2022.

Stepanenko, K. et al. "Russian Offensive Campaign Assessment, September 10." Institute for the Study of War. 09.10.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-10 Visited: 12.09.2022.

The main difference between these two types of operations is that exploitation focuses on occupying vital territories (terrain-oriented attack), while pursuit focuses on pursuing, catching, and destroying the retreating enemy forces (force-oriented attack).

If we take a look at the Ukrainian operations on 8 and 9 September, we can clearly see, that this was a very successful exploitation. However, its successful execution requires meeting a lot of criteria. "The brigade commander must receive accurate assessments and reports of the enemy situation to capitalize on the opportunity for exploitation. Typical indications of the conditions for exploitation include:

- a significant increase in EPWs (enemy prisoners of war);
- an increase in abandoned enemy equipment and materiel;
- the overrunning of enemy artillery, C2 facilities, and logistics sites;
- a significant decrease in enemy resistance or in organized fires and manoeuvre;
- an intermixing of support and combat vehicles in formations and columns;
- an increase in enemy rearward movement, especially of reserves and FS (fire-support) units."⁴⁵

With my focus on the mechanised infantry company, it is important to find the possible roles and tasks for them. What we know is that the Ukrainians advanced on paved roads, and if they met with resistance, the fast-moving first echelon bypassed it, and the second echelon tried to defeat the resisting enemy. This pattern perfectly fits the exploitation's criteria. In this actual situation from Volokhiv Yar and Shevchenkove to Kupyansk, the Russians did not resist stubbornly, after the first Ukrainian units bypassed them, they retreated usually disorderly.⁴⁶

However, it is easier said than done. To successfully execute an exploitation, the attacker must fulfil numerous tactical tasks at a very high level. Not to mention the previous successful operational breakthrough.

After the breakthrough – depending on the sustained casualties – the first, but usually the second echelon executes the exploitation. In this case, the first echelon's task is to execute a hasty defence. By doing so the infantry company commanders can receive the following tasks:

- to cover and continuously observe key areas in the direction of the enemy (e.g.: roads, forests, bridges, culverts, urban areas);
- to be prepared to support by fire (if needed) the second echelon's advance;
- to join the second echelon as its rear guard or reserve;
- to clear obstacles to secure the freedom of movement of the second echelon.

The second echelon's infantry commanders can receive the following tasks:

- to swiftly advance to the new FLOT (hasty defensive positions of the first echelon);
- to swiftly execute passage of lines;
- to maintain speed and initiative by using appropriate tactical movement techniques (formation, speed, gaps, land-nav, advance guards);
- to effectively execute contact drills against the enemy if needed;

⁴⁵ FM 3-90-2. 5-52.

⁴⁶ Stepanenko, K. et al. "Russian offensive campaign assessment, September 8." Institute for the Study of War. 09.08.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-8 Visited: 12.09.2022.

- to obtain a high level of situational awareness to recognize the enemy units which need to be bypassed;
- to quickly and correctly report dangerous enemy groupings, and enemy counterattacks and call for fire or bypass or prepare to defeat them (depending on the order of the brigade commander);
- to mark left-behind enemy materiel, UXOs, and possible IEDs and quickly hand over EPWs to avoid being slowed down by them.

In this actual operation, it is still not known whether the first or second echelon conducted the exploitation. It is not even clear which brigade conducted the exploitation, but according to Ukrainian governmental and near-governmental sources the 92nd Mechanised Infantry Brigade did so.⁴⁷

To successfully see ourselves in the role of the infantry company commanders (COs) of this brigade, primarily we should observe the actual operation and subsequently the terrain, and finally the enemy. The 92nd Brigade reached the western outskirts of Kupyansk on 9 September, and on 10 September they turned south to cut the route of retreat of the remnants of the 20th GCAA.

According to all sources and based on the speed of the advance, it is clear that the brigade advanced largely on paved roads, employing tactical march techniques. However, it is also clear that in the vicinity of Shevchenkove and at the Western approaches of Kupyansk (near Hrushivka) heavy clashes took place (defensive operations described in the subsequent part). Based on these facts, I can deduce that the 92nd Brigade had executed the exploitation at a very high level.

To do so, near Shevchenkove, the vanguard's CO must obtain firm radio communication with his foremost platoon to receive accurate reports regarding the enemy in the town. This very CO had to swiftly deploy his troops to defeat or at least suppress the enemy in the southern outskirts of Shevchenkove. On 9 September, elements of the 103rd and 113th Territorial Brigades had already attacked the town from the west, therefore I assume that the Russians did not try to firmly hold it. It means that after the first company of the 92nd had opened fire on them, the Russians started withdrawing to the east.

This leads us to the fact that the subsequent companies of the first battalion of the 92nd had received the task to try to cut the escape route of the Russians. It meant that the second and third companies had to turn east and advance through the small villages of Samars'ke and Hroza and then occupy firing positions approx. 500 m south of the P07 road. To do so, the battalion HQ (presumably the battle captain at the TOC) must have had an extremely up-to-date and clear picture of the companies' actual situation, the ability to quickly assess the situation, and discover the option (and also a need) to turn the bulk of the battalion east to achieve a quick tactical victory.

To do so, these COs and their platoon leaders (PLs) must have had flawless communication and high-level situational awareness (based on quick and accurate reports of their subordinates) to find the route leading to the best positions to fire at the withdrawing Russians.

^{47 &}quot;Invasion Day 198 – Summary." MilitaryLand, 09.09.2022. https://militaryland.net/news/invasion-day-198-summary/ Visited: 12.09.2022.

⁴⁸ Stepanenko, K. et al. "Russian Offensive Campaign Assessment, September 9."

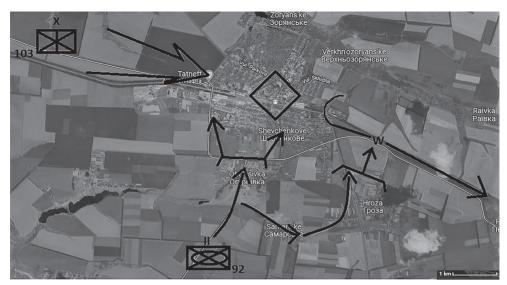


Image 5 Possible operations around Shevchenkove on 9 September 49

After the liberation of Shevchenkove, the Ukrainians pushed towards Kupyansk, to capture this vital crossing on the Oskil River before the Russians could have withdrawn their forces through it. This is a classical exploitation manoeuvre: occupy key terrain to effectively hamper the enemy in reaching its goal.

By the end of 9 September, even Russian official sources had admitted that there was a "problem" in this region, showing reinforcements moving in the direction of Kupyansk.⁵⁰ Possibly those were the Russian units with which the Ukrainian 92nd Brigade reported short but heavy fighting before reporting the liberation of the western side of Kupyansk. This fighting took place at the village of Hrushivka, 10 km west of Kupyansk.

From the fact that the fighting was short but fierce, I can deduce that the Russians executed here a successful delaying action, or a Russian sub-unit had heroically tried to halt the overwhelming Ukrainian advance. However, a delaying action is more possible because by the end of 9 September it had to be clear to the Russians that the 20th GCAA was defeated and the only chance to stabilize the front was to withdraw beyond the Oskil River.

I assume that the clash at Hrushivka was largely similar to the one described above:

- the advance guard platoon of the first company had met with Russian resistance;
- the PL reported the enemy's 3Ds (direction, distance, description) to his CO;
- the CO ordered his other platoons to form a line according to the terrain to support the first platoon by fire and at least suppress the Russians;
- at the same time, the CO reported the enemy's 3Ds to the battalion's TOC;
- the battalion's TOC ordered the other companies to execute a flanking manoeuvre on the Russians to defeat them or at least force them to fall back.

⁴⁹ The author's work

⁵⁰ Stepanenko, K. et al. "Russian Offensive Campaign Assessment, September 10."

This operation was also executed quickly and successfully, the exploitation was conducted with total success by the 92nd Mechanised Infantry Brigade. The main reason for this at tactical level was the excellent communication between the PLs, COs, and TOCs. The other reason of the success was that in case of a communication breakdown the Ukrainian sub-unit leaders had the freedom to decide what to do in order to execute their tactical tasks. According to my experiences, communication and freedom are the most important elements of success besides the appropriate training.

Of course, I do not have any information regarding the quality of the Ukrainians' tactical communication, but deducing from the success of the exploitation, this must have been the case.

Russian defensive operations at the time of the exploitation

However, the Ukrainians executed the exploitation with huge success; we should examine the Russians' actions on these two days (8 and 9 September). I should emphasise, that in spite of being penetrated and defeated, an operational-level commander must take measures to slow down the tempo of the exploitation. In this case, the defender can conduct retrograde operations. The related field manuals designate three types of retrograde operations:

- Delay. This operation trades space for time and preserves friendly combat power while inflicting maximum damage on the enemy.
- Withdrawal. A withdrawal is a planned, voluntary disengagement from the enemy, which
 may be conducted with or without enemy pressure.
- Retirement. Retirement is an operation in which a force that is not in contact with the enemy moves to the rear in an organized manner.⁵¹

Between the original Russian FLOT and the Oskil River on these two days, the Russians conducted a couple of delaying actions. These delaying actions took place at Shevchenkove, on the road to Hrushivka, in Hrushivka itself, and on the western outskirts of Kupyansk.

The fact that these clashes have not lasted longer than an hour also supports my deduction that these were delaying actions trying to slow the Ukrainian advance. The delay is one of the most complex and dangerous operations because it is executed with significantly smaller forces, against an overwhelmingly superior enemy after its operational breakthrough. The order for a delay always originates at brigade level (or above).

To successfully execute a delay, primarily it is essential to have a ground that the delayer will exchange for time and troops. In this operation, the ground was adequate. After this, the delayer has to have an easily defendable line as the final protective line (FPL) which he will and can defend against the advancing enemy.

At the infantry company's level, it is highly likely that the company will "fight alone", meaning without fire and/or visual connection with the adjacent friendly forces. Because the delay is conducted when there is not enough force to form a coherent defensive line, it is unavoidable to have open flanks and huge gaps between the delaying sub-units.

All in all, to successfully execute a delay the CO must:

have a clear understanding of the concept of operation (CONOP), which is not that easy
if we consider the fact that the delay was ordered probably after a defeat and with great
haste;

⁵¹ FM 3-90-2. 6-20.

- thoroughly analyse the terrain to identify the enemy's possible movement corridors, and the favourable terrain to inflict heavy casualties on the advancing enemy;

- to inflict heavy casualties, these favourable positions must provide clear observation and field of fire in a distance that allows using the maximum effective range of the turret guns and anti-tank missiles;
- these positions also have to have covered escape routes;
- the CO must designate engagement areas, specify the amount of ammunition that can be used up in each position;
- specify multiple criteria which have to be met to start the movement to the subsequent delaying position;
- specify the tasks at the FPL.

After the commencement of the delaying action, the CO can maintain strict leadership based on radio and other measures (smoke, signal flare, time, consumed ammunition, etc.) to ensure that the delay is executed appropriately. Or he can "ride with a loose rein" by allowing his subordinate PLs to execute the delay between the previously specified limitations and to report only when the FPL has been reached.

Both options have their pros and cons, but based on the information that I have so far gathered regarding the Russian military decision-making process⁵², I have to state that strict leadership was maintained during these operations west of Kupyansk on 8 and 9 September.

Furthermore, I can also state that these delaying actions had ambivalent results. They were unsuccessful because the Ukrainians could defeat the 20th GCAA and advance more than 40 km in four days. The Russian milboggers were talking about a disorderly rout.⁵³

But we can consider the delay mildly successful, therefore the more important elements of the 1st GTA could withdraw to the east, which I will describe in the next part of my study.

Pursuit of the 1st Guards Tank Army

It seems that on 8 and 9 September the main effort of the Ukrainians was the exploitation operation of the 92nd Mechanised Brigade. However, at least the same size force was attacking SE in the general direction of Izyum. Again, I have to underline that I could not gather valid information regarding the actual intent of the Ukrainian commanders, but deducing from the events, I can firmly state that the Ukrainians' operational goal was to pursue and destroy the main forces of the withdrawing 1st GTA by attacking their rear. This operation is called pursuit.

According to open sources the Ukrainian 80th Air Assault Brigade, main elements of the 3rd Tank Brigade, and unidentified elements of the "Kraken" Special Operations Regiment had received the task to pursue and defeat the 1st GTA.⁵⁴ The pursuit is a very dangerous operation because it means that the swiftly advancing force does not bypass the enemy's pockets of resistance, but attacks and defeats them. To successfully execute this, the attacker must have overwhelming superiority, the enemy must be severely disrupted.

⁵² Takács. "Short Study." 55.

⁵³ Stepanenko, K. et al. "Russian Offensive Campaign Assessment, September 10."

^{54 &}quot;Invasion Day 198 – Summary." and Hunder, M., and Hnidyi, V. "Russia gives up key northeast towns as Ukrainian forces advance." *Reuters*, 11.09.2022. https://www.reuters.com/world/europe/ukraine-troops-raise-flag-over-railway-hub-advance-threatens-turn-into-rout-2022-09-10/ Visited: 14.09.2022.

"A pursuit is ordered when the enemy can no longer maintain a coherent position and tries to escape. Once ordered, the close coordination between the pressure and encircling forces is critical for the necessary synchronization. The brigade's mission is the destruction of the enemy rather than avoiding enemy contact.

The direct-pressure force organizes a movement to contact and prepares to conduct a series of hasty attacks. Encirclement results when a force is able to sever the enemy's lines of communication and prevent his reinforcement or escape. The encircling force must have greater mobility than the enemy. The encircling force is usually created from uncommitted forces and must be strong enough to protect itself from the enemy's reserves and what is left of the main body. The direct-pressure force must track the movement of and coordinate with the encircling force. Timing is key to the success of the mission, and information systems are key to this synchronization. The encircling force should be prepared to conduct a hasty defence until the direct-pressure force succeeds in destroying or forcing the enemy to surrender. The ultimate goal of pursuit is to fix the enemy between the direct-pressure force and the encircling force and then to destroy the enemy."55

These are all serious demands, and it is extremely rare to meet all of them. We can see why, if I describe the meaning of these demands at tactical level. If one finds these requirements similar to the exploitation, it is not a coincidence. At tactical level, the hasty attack is almost the same when these are conducted in an exploitation or a pursuit. The advance guard platoon must report the enemy's 3Ds and secure the company's other platoons' movement to his flanks to effectively attack the enemy by fire. The difference comes after this.

The following companies are closing up to the first one, to increase the pressure on the enemy. It is not uncommon to deploy a whole battalion to put adequate pressure on the enemy. Parallel with that, the enveloping force begins conducting the envelopment. At the infantry company's level, the following tasks have to be considered:

- tactical movement into the enemy's flank or rear (it means that all measures of tactical movement have to be executed at a high level);
- conducting a hasty attack on the enemy (it requires close coordination between the pressure and flanking force, which largely relies on the accurate reports of the COs and PLs);
- actions on the objective (clearing the objective, collecting EPWs, executing medical tasks, rearming weapons if needed, preparation for continuing the pursuit);
- continuing the pursuit.

These are all extremely difficult tasks, particularly if we consider, that these are conducted after a successful operational breakthrough. Therefore, it is not a surprise if I state that the pursuit of the 1st GTA achieved ambivalent success.

It was successful, because the Ukrainians captured at least a battalion-worth intact T-80 MBTs (main battle tanks) of the 4th GTD and large amounts of other materiel.⁵⁶

However, it was not so successful if we consider the fact that the bulk of the 1st GTA was able to withdraw to the east on low-quality paths between the town of Oskil and Studenok.

⁵⁵ FM 3-90-2. 5-52.

Lendon, Brad. "The rot runs deep in the Russian war machine. Ukraine is exposing it for all to see." CNN, 12.09.2022. https://edition.cnn.com/2022/09/13/europe/ukraine-advance-russia-war-analysis-intl-hnk-ml/index.html Visited: 12.10.2022.; and Oryx. n.d. https://www.oryxspioenkop.com/2022/02/attack-on-europe-documenting-equipment.html Visited: 16.09.2022.

This is true if we consider the fact that until finalizing this text, there was proof only for a limited number of Russian POWs and abandoned equipment near Izyum. Indeed, a battalion-worth of intact T-80s was left behind by the 4th GTD but besides this, casualties in personnel and the losses of important artillery were very low. Therefore I assume the bulk of the 1st GTA was successfully withdrawn. This statement receives more proof if we consider that elements of the 1st GTA were fighting in the subsequent battle of Lyman and were active participants in limited offensive actions in the vicinity of Svatove throughout late autumn 2022.⁵⁷

To further assess this episode of the Ukrainian offensive, we have to take a look at the hard facts. On 10 September, forward reconnaissance elements of the 92nd Brigade crossed the Oskil River at Kupyansk, heavy fighting was reported NW of Izyum. By the end of 11 September, Izyum was captured by the Ukrainians.

If we compare these with the previous paragraphs, we can see that the Russians had managed to withdraw their forces from the forming cauldron by the end of 11 September. Furthermore, it was made possible even for the units that fought risky delaying actions near Vesele, Chystovodivka Izyum, Borova, and Oskil. From open sources, it is not known which elements of the 1st GTA conducted these actions, but from the point of view of this study, it is almost indifferent. According to open sources, these actions were fierce, but short in time, which further proves my statement regarding the successful delaying action. For the tactical considerations, see the section "Russian defensive operations..." of this study.

All in all, I can state that the 1st GTA was withdrawn with high losses in equipment (largely due to the low morale of certain troops) but it was able to save the bulk of its personnel and artillery, thanks to the brave and well-executed delaying actions on 10 September.

SUMMARY

After the liberation of Izyum, the fighting was far from over. In the subsequent battle of Lyman, the Ukrainians won another significant victory. However, in my opinion, that was not another decisive battle, but the result of the decisive victory achieved west of the Oskil River.

The so-called Kharkiv offensive of the AFU was a huge success. The superiority in intelligence, planning, military decision-making, morale, and training resulted in the liberation of more than 500 settlements and 12,000 km² by the AFU.⁵⁸ This superiority resulted in local superiority in combat power. If we consider these facts, we can accept the Russian claim to be true, that the Ukrainians had eightfold superiority.⁵⁹

These facts are all widely known, it would have been unnecessary to write them down after a lot of high-quality think tanks and analysts had done so. My goal was to describe all

Stepanenko, K. et al. "Russian Offensive Campaign Assessment, November 14." Institute for the Study of War, 11.14.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessmentnovember-14 Visited: 15.11.2022.

^{58 &}quot;Ukraine must demine 12,000 km² of liberated areas in Kharkiv region: official." Reuters, 09.21.2022. https://www.reuters.com/world/europe/ukraine-must-demine-12000-km²-liberated-areas-kharkiv-region-official-2022-09-21/ Visited: 14.11.2022.

^{59 &}quot;Ukraine troops 'outnumbered Russia's 8 times' in counterattack." Al-Jazeera, 09.12.2022. https://www.aljazeera.com/amp/news/2022/9/12/ukraine-troops-outnumbered-russias-8-times-in-counterattack Visited: 15.09.2022.

the possible tactical situations and considerations amid which the infantry company commanders had to fulfil their missions.

I hope that I managed to present the complex and demanding nature of these tactical tasks. These are situations that in the end, decide the success of a military operation. In summary, the commanders:

- must maintain flawless communication with their troops and superiors;
- must extremely quickly assess the situation and give appropriate orders under extreme stress;
- must have the tactical freedom to solve their task as their assessment suggests;
- the subordinates must report the situation correctly and in time, to support the commanders' decision-making.

Of course, not only the tactical level decides the war. I have to underline that the kill chain has to be super-fast, the battalion and brigade commanders must ensure tactical freedom for their subordinate commanders, and the battalion and brigade staff must perform staff work at a very high level.

However, the planning, preparation, invested money, time, and all efforts are useless if the small tactical engagements are not won, and to win these engagements, the aforementioned factors are a must to master. Furthermore, to understand the reason behind this Ukrainian strategic victory, it is indispensable to be familiar with tactical-level operations.

In this study, I attempted to use my knowledge and open sources to do so, but I am sure that only decades after the end of this terrible war, the time comes when we can have a clear picture. Therefore, this study will need to be revised, but I think we have enough information to understand the most important lessons to learn by current militaries, and using them with our knowledge we can achieve valuable lessons to learn.

BIBLIOGRAPHY

- Axe, D.: "12,000 Russian Troops Were Supposed To Defend Kaliningrad. Then They Went To Ukraine
 To Die." Forbes, 27.10.2022. https://www.forbes.com/sites/davidaxe/2022/10/27/12000-russiantroops-once-posed-a-threat-from-inside-nato-then-they-went-to-ukraine-to-die/?sh=11de83223375
- Balmforth, T. "In liberated Ukraine town, locals sob with relief, relate harrowing accounts." *Reuters*, 14.09.2022. https://www.reuters.com/world/europe/liberated-ukraine-town-locals-sob-with-relief-relate-harrowing-accounts-2022-09-13/
- Bielieskov, M. "Ukrainian Balakliya-Kupyansk Offensive: Sequence of Events, Mechanics and Consequences." *Eurasia Daily Monitor*. Volume: 19 Issue: 133. https://jamestown.org/program/ukrainian-balakliya-kupyansk-offensive-sequence-of-events-mechanics-and-consequences/
- Cooper, T. "Ukraine War, 16 September 2022: East Kharkiv." *Medium*, 16.09.2022. https://medium.com/@x TomCooper x/ukraine-war-16-september-2022-east-kharkiv-fae7688306e2
- FM 3-21.11 The SBCT Infantry Rifle Company. Washington DC.: Headquarters, Department of the Army, 2003.
- FM 3-90 Tactics. Washington DC.: Department of the Army, 2023, 2 5-10.
- FM 3-90-2 Reconnaissance, Security, and Tactical Enabling Tasks, Volume 2. Washington DC.: Department of the Army, 2013. 5-5.
- FM 90-13 River Crossing Operations. Washington DC.: Department of the Army, 1998.

- Harding, A. "The small town which managed to block Russia's big plans." BBC, 22.03.2022. https://www.bbc.com/news/world-europe-60840081
- Hird, K., Barros, G., Philipson, L., and Kagan, F. W. "Russian Offensive Campaign Assessment, September 6." *Institute for the Study of War*, 06.09.2022. https://www.understandingwar.org/back-grounder/russian-offensive-campaign-assessment-september-6 Visited: 01.10.2022.
- Hird, K., Mappes, G., Barros, G., Philipson, L., and Clark, M. "Russian Offensive Campaign Assessment, September 7." *Institute for the Study of War*, 07.09.2022. https://www.understandingwar.org/back grounder/russian-offensive-campaign-assessment-september-7
- Hunder, M., and Hnidyi, V. "Russia gives up key northeast towns as Ukrainian forces advance."
 Reuters, 11.09.2022. https://www.reuters.com/world/europe/ukraine-troops-raise-flag-over-rail
 way-hub-advance-threatens-turn-into-rout-2022-09-10/
- Huweiler, S.: "Russian Advances in Ukraine." *UaWarData: Tracking the Russian Invasion*. https://uawardata.com/ Map as of 11th September 2022.
- "Invasion Day 194 Summary." MilitaryLand, 05.09.2022. https://militaryland.net/news/invasion-day-194-summary/
- "Invasion Day 198 Summary." MilitaryLand, 09.09.2022. https://militaryland.net/news/invasion-day-198-summary/
- Julian, E., Barnes, J. E., Cooper, H., and Schmitt, E.: "U.S. Intelligence Is Helping Ukraine Kill Russian Generals, Officials Say." *The New York Times*, 04.05.2022. https://www.nytimes.com/ 2022/05/04/us/politics/russia-generals-killed-ukraine.html
- Kofman, M. and Evans, R. "Ukraine's Window of Opportunity?" *War on the Rocks*, 28.07.2022. https://warontherocks.com/2022/07/ukraines-window-of-opportunity/
- Larsen C., Wade, N. M.: US ARMY Small Unit Tactics. (Totowa: The Lightning Press, 2016) 1-26.
- Lendon, Brad. "The rot runs deep in the Russian war machine. Ukraine is exposing it for all to see."
 CNN, 12.09.2022. https://edition.cnn.com/2022/09/13/europe/ukraine-advance-russia-war-analysis-intl-hnk-ml/index.html
- Oryx, n.d. https://www.oryxspioenkop.com/2022/02/attack-on-europe-documenting-equipment. html
- Social media post by @epodubbny. *Telegram.org*. https://t.me/epoddubny/12137
- Staiano-Daniels, L. "Why Russia Keeps Turning to Mass Firepower." *Foreign Policy*, 19.06.2022. https://foreignpolicy.com/2022/06/19/why-russia-keeps-turning-to-mass-firepower/
- Stepanenko, K., Hird, K., Philipson, L., Barros, G. and Clark, M. "Russian Offensive Campaign Assessment, September 1." *Institute for the Study of War*, 09.01.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-1
- Stepanenko, K., Hird, K., Philipson, L., Howard, A., Klepanchuk, Y., Williams, M. and Kagan F. W. Russian Offensive Campaign Assessment, November 14. *Institute for the Study of War*, 11.14.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-november-14
- Stepanenko, K., Mappes, G., Barros, G., Howard, A. and Clark, M. "Russian Offensive Campaign Assessment, September 10." *Institute for the Study of War*. 09.10.2022. https://www.understandingwar. org/backgrounder/russian-offensive-campaign-assessment-september-10
- Stepanenko, K., Mappes, G., Barros, G., Philipson, L. and Clark, M. "Russian offensive campaign assessment, September 8." *Institute for the Study of War*. 09.08.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-8
- Stepanenko, K., Mappes, G., Barros, G., Philipson, L. and Clark, M. "Russian Offensive Campaign Assessment, September 9." *Institute for the Study of War.* 09.09.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-september-9

- Stepanenko, K., Mappes, G., Howard, A. Philipson, L. and Kagan, F. W. "Russian Offensive Campaign Assessment, August 29." *Institute for the Study of War*. 08.29.2022. https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-august-29
- Ált/54 Tactical Manual for the Land Forces of the Hungarian Defence Forces, part II Battalion. (in Hungarian) (Budapest: Hungarian Defence Forces, 2014) III-8.
- Takács, M. "Short Study: Describing the Major Features of the Russian Battalion Tactical Group." AARMS, 2021/2. 49–65.
- Turak, N. "The U.S. and Europe are running out of weapons to send to Ukraine." CNBC, 28.09.2022. https://www.cnbc.com/2022/09/28/the-us-and-europe-are-running-out-of-weapons-to-send-to-ukraine.html
- "Ukraine must demine 12,000 km² of liberated areas in Kharkiv region: official." *Reuters*, 09.21.2022. https://www.reuters.com/world/europe/ukraine-must-demine-12000-km2-liberated-areas-kharkiv-region-official-2022-09-21/
- "Ukraine troops 'outnumbered Russia's 8 times' in counterattack." *Al-Jazeera*, 09.12.2022. https://www.aljazeera.com/amp/news/2022/9/12/ukraine-troops-outnumbered-russias-8-times-in-counterattack
- Watling, J. "The Key to Armenia's Tank Losses: The Sensors, Not the Shooters," RUSI, 06.10.2020. https://rusi.org/explore-our-research/publications/rusi-defence-systems/key-armenias-tank-losses-sensors-not-shooters