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*pasi.tuunainen@nef.fi***ELIMINATION OF POCKETS IN WESTERN LEMETTI DURING JANUARY-FEBRUARY 1940:
USE OF GERMAN EXPERIENCE WITH STORM TROOPS BY THE FINNISH IV ARMY CORPS**

The article covers the military tactic used by the Finnish IV Corps during the Soviet-Finnish (Winter) War of 1939–1940 for elimination of Soviet units encircled in pockets. It concentrates on the adaptation of the German WWI experience with storm troops to specific conditions of the winter weather and wooded terrain, as well as on the role of special training and personality factor.

Ключевые слова: Finnish military tactics, pockets, motti, Soviet-Finnish (Winter) war, Matti Aarnio

In December 1939, in Ladoga Karelia along the road to Käsänaselkä, units of the 18th Rifle Division and 34th Light Tank Brigade of the Red Army quickly dug in and took up a stubborn defence. With only woods and snow around and quite severe weather conditions, they were tied down to the road and its nearby vicinity. After a Finnish counter-offensive to Kitilä in early January 1940, the Soviet 168th Rifle Division was isolated and caught in a large pocket, while a number of smaller pockets also formed westward to the Soviet border. Only the large pocket was formed intentionally, others emerged seemingly by accident. One of these smaller pockets was situated in the area of Western Lemetti (also called Northern Lemetti in the Russian sources) [15].

Jaeger Major-General Woldemar Hägglund, the commander of the Finnish IV Army Corps, wrote that his aim was to find a quick solution for the larger pocket. Multiple pockets were unwanted because they tied up too many forces for their maintenance. Hägglund mentioned that deep snow, the fire-power of the encircled Soviet troops and the necessity to avoid losses prevented quick elimina-

tion of the pockets. Insufficient forces also dictated that pockets could not be destroyed right away. Hägglund summarised the main essence of the tactics to eliminate pockets: “Taking into account our weak offensive abilities and our desire to avoid any military defeats, this [elimination of pockets] was achieved by the application of methods of positional warfare and a skilful use of local conditions.” During the nights storm troops destroyed peripheral resistance zones, and thus, gradually tightened the ring around the Soviet troops. It was a slow process. The main idea was to keep biting off small pieces of the pocket until its complete destruction and to hope that hunger and lack of ammunition would help facilitate it [14; 146], [15; 206], [13; 186].

This paper addresses the Finnish military art of the Winter War (1939–1940). It focuses on the offensive operations which led to the elimination of the pocket in Western Lemetti.¹ The object of the research is analysed, first of all, through the tactics and the methods of military operations used in that case. The operations in Western Lemetti were chosen because they provide the most characteristic example of the actions of so-called storm troops

(also known as shock or assault troops).² Their use was a typical tactic for the elimination of pockets – a tactic by which the Finnish command hoped to negate the unequal balance of forces. The same tactics to eliminate pockets were used all over Ladoga Karelia (most actively in Impilahti), as well as in Kuhmo. The paper will primarily concentrate on the details of these offensive operations.

During the Winter War, the Finnish troops which fought to the North East of Lake Ladoga adapted for the elimination of pockets certain offensive methods which involved storm troops – a military innovation which was used by the Germans on the Western Front during the First World War. Finnish Jaegers, who were trained in Germany during the Great War, were familiar with the German methods of offensive operations as early as 1917. The tactics of storm troops involved small, lightly-equipped infantry forces which were to cross the enemy front line at weak points, penetrating deep into enemy's rear areas. By that they bypassed and sealed off enemy strong points which were left behind – those were to be attacked and destroyed by heavily equipped second-echelon units that followed the storm troops. Fast advance was a key element of success, therefore leading units disregarded their own flank defence which was to be taken care of by the follow-up forces. Another advantage of the tactic was a prudent use of human resources. German offensive methods were described in regulations and manuals of the Finnish Army and Civil Guard (*Suojeluskunta*) during the inter-war period. Besides, Finnish officers often visited Germany, while German officers taught in the Finnish military schools. By the Winter War, storm troops became an integral part of the Finnish military doctrine. The Finns, however, adapted this tactic, initially developed for open spaces, to the forest terrain and winter conditions [12], [29], [30], [9].

The Finnish IV Army Corps staked its success on the mobility of its forces. Its operations employed the methods of active manoeuvre warfare, since its units had enough space to encircle the enemy from the flanks and the rear. A special emphasis was placed on freedom of action. Counter-offensives were not organized regularly, but were rather aimed to achieve specific purposes, especially if they were carried out by specially trained units. Aggressive offensive actions allowed Finns to seize the initiative, while the encircled forces could do nothing but react passively to the attackers' moves. Activeness was strongly emphasized in Finnish tactical thinking during the 1930s. Defence was only considered an initial stage for an offence. Finns preferred envelopments and flanking attacks [31].

Heavy equipment was arbitrarily caught inside the pockets. In Western Lemetti, the defence was supported by twenty-five BT-5 tanks (a Walter Christie's design) with their guns, three more artillery pieces, as well as a four-barrelled anti-aircraft machine gun. Additionally, automatic weapons of the defenders provided a high volume of fire. The defenders dug their tanks into the ground to use

them as artillery and also constructed deep dugouts. The Finns were unwilling to take the pocket by a frontal assault, as this would have led to high losses. During the preparatory stage of the battle, it was discovered that if thrown upwind, smoke grenades could blind the defenders. A lack of cover and concealment and a desire to save forces rendered attack activities during the daytime – as earlier in January 1940 – impossible. Attempted frontal assaults were confronted by heavy return fire. As a result, some new methods had to be invented. Reconnaissance missions reported that the fire-power of the defenders was mainly directed outside of the pocket. Finnish units, thus, had to infiltrate into the inner area of the defended perimeter, behind and aside of the tanks. If successful, this would have greatly expanded their operational possibilities [10; 282–283].

The Finns made serious efforts against the pockets beginning in late January. On 22 January, the IV Army Corps gave an order to stop all offensive operations against a stronger pocket in Eastern Lemetti (or Southern Lemetti in Russian sources), also known as the General's Pocket (*Kenraalimotti*) and to transfer all released units for the elimination of the pocket in Western Lemetti. It was, thus, an attempt to create and exploit the concentration of forces to get an edge over the enemy. Earlier attempts to eliminate the pocket had been ineffective, but they nevertheless proved valuable as an armed reconnaissance. Besides, in their course the forest hill of Tenhamo was captured from the enemy, and from this hill and the hill of Nuutinen it was possible to provide fire support for storm squads with light arms or to dominate the pocket with machine-gun fire. On 27 January, a joint council of senior and junior Finnish military commanders was held in the headquarters of the 13th Division, in which the action against pockets was discussed, and after it Major-General Hägglund decided that the pockets in Pien-Kelivaara and Western Lemetti had to be eliminated first [15; 179–181], [25; 201], [8].

The first day of the offensive in Western Lemetti did not bring results, but after offensive operations in the last days of January, the enemy-controlled area was narrowed, and on 31 January it was split into two parts. The first stronghold – dubbed the *Panzer taxi stand*,³ as the Soviet tanks lined up there as if at a taxicab stand – was located on the western side of the village of Lemetti. It was two kilometres wide and had from four to five hundred Soviet soldiers trapped inside. A more easterly located stronghold in Mylly was approximately of the same size, but it was defended by just seven tanks. The shrinking of the enemy controlled area meant in practice that the living space of the defenders decreased and the supplies delivered by air were mostly captured by the Finns. Thus, the situation of the encircled Soviet troops became more and more complicated. In order to break their spirit and promote a feeling of uncertainty, means of psychological warfare were also exploited: leaflets were dropped above the pockets and loudspeakers were

used from the Finnish positions. This, however, did not have the desired effect. Finns noticed that the most disastrous effect on the enemy's defences were made by time, hunger and frost. Flares and assault cries, which could also influence the morale of the Soviet troops, were often used to the defenders' surprise [28; 95], [21; 55].

The military regulations adopted by the Finnish Army during that time stated that an offensive against entrenched enemy positions had to exploit methods of positional warfare. At the initial stage, a careful reconnaissance was to be carried out. After that, storm squads were to approach enemy positions unnoticed under concealment of smoke or darkness and to launch a surprise attack, aiming to penetrate deep into the enemy position through weak points, and thus achieving a deep breakthrough. This breakthrough was to be followed by resolute efforts to split the enemy position. Successful elimination of a pocket required that the initial success was to be secured and exploited without delay [4], [6].

The failure of the initial attempts at attack also led to more careful planning of future operations. The plans were suggested by Major Matti Aarnio, commander of the 4th Jaeger Battalion. Before the decisive attack, a detailed reconnaissance of the terrain was carried out, which allowed them to quite easily identify the location of the surrounded positions. Knowledge of the situation and current conditions allowed a correct evaluation of both Finnish and Soviet positions. Accurate information formed the basis for a plan of how most effectively to penetrate into the enemy's lines [10; 277–279].

The defenders were not granted a respite during the preparation of the offensive, as they were kept under pressure all day and night. Direct artillery and mortar fire destroyed all tanks, fortified points and dugouts, and was also used to support night infantry raids on the pocket edges which aimed to destroy the enemy's fortified positions and to narrow the pocket area. There was no shortage of shells for the mortars, but the amount of artillery shells was limited. Moreover, shells did not always explode because fuses did not detonate in the cold weather. In addition, the effect of small-calibre ammunition which was used in the indirect artillery fire was relatively weak, since the shells hit in thick snow. At that time, Finnish artillery was concentrated in the direction of Pitkäranta. As a result, the operation against the pocket in Western Lemetti was supported by three artillery batteries, only one of which was heavy. This was necessary because some of the field works in the pocket were quite strong. Most of the operation against the pocket was to be carried out without artillery support [10; 276–307], [19; 203].

The launch of the attack was scheduled for 30 January at 2:00 A.M., to maximize the benefit of lighting conditions. Before that, Major Aarnio discussed with his subordinates what methods should be used to eliminate the pocket. The plan relied on a diversionary manoeuvre of the 2nd Company of the

4th Jaeger Battalion. This company had to attract the enemy's attention and draw fire to cover the operations of two other companies which would split into storm squads of ten people each. Some squads were also made up from soldiers from the 18th Special Battalion. To assist them, two field engineer companies were also allocated. Storm squads were specially trained for the forthcoming mission. Use of sledges allowed a flexible delivery of replenishments. The aim of the operation was to attack the *Panzer taxi stand* area with minimal losses under concealment of darkness from different directions. During the first night, the Finns advanced through special paths dug out in the deep snow. During the advance, the storm squads had to refrain from opening fire until the very last moment. It was the essence of the so-called *creeping tactic* (4th Battalion's nick name was *Creeper*). The storm squads reached initial success in the pitch darkness: by 7:00 A.M., twenty dugouts had been destroyed, however, it did not bring the desired result. With the dawn, the storm squads were withdrawn. The offensive continued in the evening starting at 7:45 P.M., and another dugout was destroyed. Yet, the fire of the defenders was still intense, and on 1 February at 3:00 A.M., attempts to eliminate the pocket were temporarily suspended. The same day, in continuation of the planned, the Finns delivered a howitzer to a position located on open ground and suitable for laying of direct fire. To protect it, fortified emplacements were constructed from logs and snow at a mere 100 meter distance from the pocket's edge. This howitzer and an anti-tank gun destroyed several tanks and neutralised several enemy defensive posts. Soviet tanks on the western flank of the pocket were thus rendered useless for the battle. Molotov cocktails also proved effective in the action against tanks [21; 57–58], [20; 521, 533–534], [10; 283–284, 290–293], [3].

During the offensive, the 3rd Battalion of the 37th Infantry Regiment engaged in the fighting against the enemy stronghold in Mylly and supported the advancing Finnish squads with fire from light arms. Fire support and a smokescreen were organised from the hill of Nuutinen. Two companies of the 4th Jaeger Battalion launched a surprise attack against the *Panzer taxi stand* from the south eastern slope of Repomäki. The 2nd Company once again launched a diversionary manoeuvre and was able to attract, at least partly, the enemy's attention. It was a part of the plan to provoke Soviet soldiers for preliminary countermeasures and to force them to waste scarce ammunition. For the same purpose, models of soldiers were also installed to visible places. At approximately 9:00 A.M., the 1st and 3rd Companies reached the front line of the fortified enemy position and engaged in close-in fighting. A breakthrough was secured within half an hour. At the same time, storm squads of the 2nd Company, which operated along the road, neutralised more distant defensive posts. At approximately midnight, after many dugouts had already been destroyed, the

encircled Soviet forces tried to assemble in the centre of the *Panzer taxi stand* to launch a counter-strike. However, vigilance of the attackers prevented this. When it became clear that the battle was turning in favour of the Finnish forces, the surviving Soviet soldiers tried to break through to their second stronghold in Mylly, but the attempt was frustrated by machine gun fire. The Finns captured the *Panzer taxi stand* by 3:15 A.M., and two hours later the entire area was mopped up [1], [10; 293–299], [20; 530, 534–535].

The next evening, on 3 February, it was the turn of the Soviet stronghold in Mylly. A low place where a cowshed belonging to the Kuikkas family stood was estimated as the weak point in the enemy's defence, so it was chosen for the point of attack. The latter was preceded by artillery fire which started at 8:15 P.M. and lasted for half an hour. Then the pocket was traversed by machine gun fire. After the defenders hid in their dugouts, the frontal storm squads of the 4th Jaeger Battalion slipped unnoticed through the low place near the Kuikka's house into the inner area of the pocket. To support the 18th Special Battalion, three storm squads of the 37th Rifle Division advanced from the south in the direction of the riverbed of the river Koirinoja, two storm squads attacked the pocket from the north, while two more storm squads of the 4th Jaeger Battalion advanced upon the southern part of the road from the south-east along the brook. The 2nd Company was in reserve, ready to be thrown into the battle to exploit the initial success and secure the advance. When the explosion of satchel charges was suddenly heard inside the pocket, a surprise was sprung upon the defenders. In the north and south, the 37th Infantry Regiment reached the front line of the pocket and also diverted Soviet efforts. Dugouts were destroyed from the flanks and the rear. Satchel charges were thrown into open dugout entrances, while sub-machine gunners were waiting outside for those who tried to escape. The advance was slow because the defenders fired back fiercely and organised counter-strikes. By the early morning of 4 February, the situation became more complicated for the Finns, as the Soviet troops attempted to break through to the west and south-east. This attempt to escape from the pocket failed however, since the Finnish forces did not weaken their vigilance and could quickly adapt their activities to unpredictable changes. The outcome of the battle was long inconclusive, but eventually the Finnish troops were successful in preventing all attempts of a breakthrough from the pocket. The pocket had been mostly captured by 4:30 A.M., and the Soviet stronghold in Mylly finally fell by the noon [5], [10; 300–306], [21; 58–63], [19; 133].

The Red Army defenders of the pockets sustained heavy casualties. Unrecoverable losses of the Soviet forces were approximately 1,000 people, of whom 400 perished in the *Panzer taxi stand* and 600 in Mylly. Additionally, in the former, another hundred Soviet prisoners were captured. Although

the Finns were on the offensive side, their losses were much lower: in particular, during the elimination of the *Panzer taxi stand* they lost a total of eleven men killed in action and several wounded. In addition, the Finns also captured rich spoils of war. They included, for example, thirty two tanks, six guns, forty two trucks, as well as a field bakery. The materiel arrived in a very timely fashion, as the Finnish field army had a shortage of practically everything [10; 299, 306].⁴

In Western Lemetti one officer, the so-called *pocket-commander*,⁵ commanded all Finnish troops. Military rank or long service did not determine who would be appointed for this position. It was prowess that was the decisive factor. The man was Major Matti "Motti-Matti" Aarnio who was in charge of the cooperation between different combat arms. His plans were also coordinated with the general plans of the Commander of the IV Army Corps. Aarnio led by giving directions and building up morale. He took calculated risks and made bold decisions, but despite this, he tried to minimise losses in units under his command. In addition to that, he gave his orders and instructions long in advance, so that the troops would have enough time to prepare for combat. Aarnio also delegated power and responsibility to his subordinates and granted them freedom of action. They could also exhibit initiative and act according to situational changes. This was facilitated by the tradition of so-called mission-type tactics borrowed by Finland from Germany. Although the main problem of the Finnish commanding officers during the Winter War was their lack of experience in commanding large formations, Aarnio's decisions in the role of the military commander were largely successful. He tried to avoid stereotyped decisions and to maximize the use of the terrain, weather, snow and lighting conditions. Soldiers who fought under his command were known for their high spirit. Their fighting fortitude was also of a superior nature, and their motivation did not require coercion or any other means. Detachments that participated in the battles in Western Lemetti were mostly experienced: they had already participated in the fighting on the Karelian Isthmus and in Ladoga Karelia during the early stages of the war, in particular in the December counter-offensives. Troops involved in the elimination of pockets knew how to operate in the conditions of the winter forest [27].

Tauno Räisänen, who participated in the pocket battles as a young reserve officer, writes that Matti Aarnio was "extraordinarily inventive and daring tactician," who was valued and trusted by his subordinates. According to Räisänen, Aarnio always invented improvised means and protective equipment. Räisänen describes the activities of Aarnio's Jaeger detachments as:

Where a direct attack would fail, the tactic of 'slow advance' would be employed which included such methods as satchel charges, Molotov cocktails, armoured sledges, and 'Trojan horses', i.e. log shields which were transported on sledges and had a

thick layer of snow between two log walls. Under the protection of these log walls, field and anti-tank guns were dragged from the southern part of the forest to the open space, from which they could destroy nearby dugouts and annoying tanks [26; 155].

We can easily assume that Aarnio, who was a general staff officer and an experienced teacher of tactics in the National Defence College of Finland, had to scrutinise the subtleties of the storm troops' tactics. There is reason to suggest that his tactical thinking was more advanced than that of other battalion commanders. Aarnio had also passed individual qualification courses organised by the General Staffs of Germany, Poland and Hungary. In his own graduate treatise he had analysed operational possibilities of the Red Army in Ladoga Karelia and, thus, knew the military geographical features of this area fairly well [22; 52–53].

Communication was instrumental for effective command. At one point, telephone lines of the 13th Division completely encircled both trapped (18th and 168th) Soviet divisions. In the case of the military base in Mylly, signal officers of the 4th Jaeger Battalion installed telephone wires so that every platoon commander would have a direct connection with Major Aarnio and vice versa. It meant that all units participating in the operations could be informed in real time of the advance of storm squads. However, on the morning of 2 February, the telephone connection with Major Aarnio was cut for half an hour. Messenger dogs were also used – the best of them was shot the same night [24; 128], [11; 15–16].

The command of the Finnish forces clearly demonstrated coherence, cooperation and mutual support. Relations between commanding officers were functional and the command staff which supervised the operation to eliminate the pockets was situated close to the battlefield. No serious delays were experienced. The reserves which followed the attack echelon could immediately secure control over the captured terrain. Aarnio personally explained the tactics and technical details of the upcoming battle to storm squads under his command. Storm squads were formed from units which operated in the same area on a voluntary basis. Initial attacks relied not on large forces, but rather on smaller storm squads of ten men, which were to serve as spearheads and pathfinders. Each company had two front line storm squads. The offensive was directed at the most vulnerable points and was concentrated on a narrow area. Storm squads approached the pocket from different directions, but once inside the pocket they united their striking power. Although people who were selected for storm squads had been well trained in the army or the Civil Guard, their training was significantly improved before the operation. Generally, people who would be selected as members of storm squads had to be effective individual fighters, because the leaders of small tactical units were only able to inspire and instruct their immediate companions. An emphasis was placed on the restoration of fighting ca-

capacity of members of storm squads: in particular, they could rest during the daytime. They were better supplied and equipped, and supplies could be delivered even during the fighting. Fighting capacity was maintained on a high level with the help of morale building measures [23; 110], [10; 283–284], [20; 520–521, 528–535].

The standard issue arms of the Finnish forces – rifles – were far from optimal for storm squads. Having stripped their heavily armed detachments, the Finns managed to arm storm squads with 9 mm Suomi sub-machine guns and Mauser pistols. Their power and range were enough for close-range engagements. Although initially each group had only two sub-machine guns, two additional ones were later added. Second-echelon storm squads were also equipped with light machine guns. The equipment of storm squads also included knives, hand grenades, 1–3 kilogram satchel charges and Molotov cocktails. In addition, they carried smoke boxes and flares. Because of the short distances, storm squads could not be supported by fire from behind – they were to advance following the principle of mutual fire support. Although speed was regarded as a key factor to achieve victory, storm squads were granted freedom in choosing the rate and direction of advance [10; 283–284].

The German military philosophy is particularly evident in the manner of how the pockets were eliminated under the command of Aarnio. Since the trapped forces mostly concentrated on the perimeter of the encircled zone, the Finns were able to destroy the organised defences at once if they managed to break through the perimeter of the pocket. In these cases the defence was blown up from inside the pocket. Storm squads crept unnoticed and broke through to the inside area of the pocket. Attackers tried to keep their pace and moved from one defensive position to another, without giving the defenders an opportunity to concentrate their forces. The advance was well organised. Storm squads were followed by support units which provided security so that the advancing forces would not be attacked from behind. At the same time, supporting fire from automatic weapons did not let defenders raise their heads from their dugouts. Storm squads acted independently and agreed beforehand with each other about communication and fire support during the battle. Satchel charges proved effective for destruction of dugouts. Less fortified dugouts were destroyed with these charges almost completely [15; 174, 181], [7].

The terrain on which the fighting took place was only partly covered with vegetation, which did not facilitate a covert approach, but in darkness the sentries of the defenders usually did not notice the quiet advance of storm squads. The Finnish command decided to use the features of the terrain for their own benefit and take possession of the no-man's land in order to facilitate the upcoming offensive. Storm squads were to crawl quietly in deep snow, unless they were prematurely noticed by the

defenders. Members of the storm squads were instructed to open fire only in case defenders were about to walk over their heads or blocked the way for throwing a satchel charge into a dugout. The Finnish command relied on surprise which was achieved not only in terms of time and place, but also in direction of attack, as well as involved units and fire-power, and involved the active use of hand grenades and satchel charges. The basic rule for the forward storm squads was to surprise the enemy by breaking through his weak points into the inner area of his defensive positions. Second-wave storm squads followed them closely allowing effective visual and audio contact. Their aim was to support the initial breakthrough. They also acted as reserves, so that at any time they could be used to widen the breakthrough point, to establish control over captured positions, to secure the achieved progress, to help annihilate enemy units, to secure freedom of action and to provide necessary support in case of any sudden and unexpected changes [10; 284].

The offensive methods which were used in the elimination of pockets in Western Lemetti were, in

general, borrowed from Germany. The operations to eliminate pockets described above were characterised by the use of common sense – or resourcefulness – as well as by simple yet accurate plans which were far from being routine. Another characteristic feature of the operations which were carefully elaborated by the Finnish command was freedom of action which was achieved by taking initiative, as well as by adopting the course of operation to current conditions and changing situations. Concentration of forces and use of reserves were also important. Members of storm squads knew their functions and were ready to implement their tasks. During the inter-war period, the Finnish military placed a special emphasis on offensive operations which facilitated the use of storm squads. Finnish military operations also relied on diversionary manoeuvres and surprise which were achieved by flexibility in their mode of action. All of these took freedom of action from the Soviet commanders, who lacked the ability to react quickly and take effective countermeasures. Yet another noteworthy feature of fighting in Western Lemetti was the boldness of the attackers.

(Translation from the Finnish language by Alexey Golubev. Proofreading by William L. Hancock, Jr.)

NOTES

- ¹ The pocket in Western Lemetti was divided into two sub-pockets, one of which was the so-called 'Panzer taxi stand' and another was a stronghold in Mylly.
- ² The Finnish terms are iskuosastot or syöksyjoukot. – Translator's note.
- ³ The Finnish term is Panssaripirssi (variant Taxipirssi). – Translator's note.
- ⁴ Spoils of war were often used almost immediately, and equipment from one captured pocket helped to eliminate the next one. Weapons were captured in very large numbers. For example, after the Soviet 18th Division and 34th Tank Brigade were destroyed, Finns captured 55 field guns, 47 anti-tank guns, 132 tanks, 12 armoured cars, 17 mortars and 184 light and ordinary machine-guns. In additions, Finnish spoils of war included hundreds of horse-driven and motor vehicles, as well as huge numbers of submachine-guns and rifles [2], [19; 161].
- ⁵ Mottikomentaja in Finnish. – Translator's note.

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