УДК 355.41 https://doi.org/10.33099/2304-2745/2024-3-82/65-72

Y. Hannenko, PhD[1] (0000-0002-5684-5593)
G. Topic[2]

[1] - Department of Infrastructure and Transport Support, National Defense University of Ukraine, Kyiv
[2] - Center for Joint & Strategic Logistics, USA

The impact of logistics on the Russian-Ukrainian war

Resume. The impact of logistics on the russian-Ukrainian war is of great importance for successful military operations. This article is about the formation of Ukrainian logistics according to NATO standards. The transition to a new structure provided logistics with better opportunities to influence the russian-Ukrainian war. Food, material, infrastructural support and supply of fuel and lubricants were organized at a high level, although there were a lot of problematic issues that were resolved directly during the war. Movement and transportation were carried out by road and rail transport.

The material and technical support of the russian Federation remained at a very low level, which caused defeat during a large-scale armed aggression.

The russian federation was preparing for an attack on Ukraine in advance, striking arsenals and warehouses of weapons, missiles and ammunition, destroying the armed forces' potential for the defense of Ukraine. Despite this, the Armed Forces of Ukraine dealt a decisive blow to the russian army, especially to the enemy's logistical facilities, which helped liberate a certain territory of Ukraine from the russian invaders.

Keywords. ammunition; food; infrastructure; logistics; material and technical support; movement; supply of fuel and lubricants; transportation, weapons.

Logistics is a key element in providing the armed forces with weapons and military equipment, missiles and ammunition, food and property, fuel and lubricants, and the transportation of all the above-mentioned materials.

The importance of conducting a successful operation (combat operations) depends on the supply of material means, that is, logistics.

The purpose of the article is to analyze the functioning of the logistics of the Armed Forces of Ukraine and the logistical support of the russian federation during the Russian-Ukrainian war, and how logistics affects the conduct of operations.

Logistics originated in ancient times and has not lost its importance.

Analyzing scientific studies of logistics [1-8] and reading quotes from famous personalities to understand the importance of logistics for the military even in distant times:

Gen. Robert Barrow, Commandant of the Marine Corps, told “Amateurs talk about tactics, but professionals study logistics.”

Army General John Pershing, commander of the American Expeditionary Forces in World War I told “Infantry wins battles, logistics wins wars.”

Logistics for the Armed Forces of Ukraine. Logistics for the Armed Forces of Ukraine are very important for providing the troops with the necessary weapons, military equipment and other material means.

Thus, the creation of a modern, improved system of material and technical support of the Armed Forces of Ukraine will play a positive role in the provision of the Armed Forces during a full-scale invasion of russian troops on the territory of Ukraine.

Important functions in logistics are played by material, technical, transport and infrastructural support.

Material support includes food, clothes supply and provision of fuel and lubricants.

Food and clothes supply was carried out in accordance with concluded contracts and the current legislation of Ukraine. In connection with the increase in the number of the Armed Forces of Ukraine, the mobilization resource at the beginning of the large-scale armed aggression of the russian army was difficulties in meeting the needs. The problems that arose were partially solved by volunteer organizations [1-3].

The material support of the Armed Forces of Ukraine was carried out at the appropriate level and all issues related to the timely and complete support of the troops (forces) were resolved.

Territorial defense troops and volunteer formations of territorial communities at the beginning of the full-scale armed aggression of the russian troops had many problematic issues regarding material support due to their new creation.

In accordance with state orders, provision of fuel and lubricants from central bases was carried out.

Also, a network of civilian gas stations was used to refuel military vehicles in individual cases. Field refueling points were not deployed due to the danger of destruction [3].

Technical support includes provision of weapons and military equipment, maintenance and restoration (repair) and their use.

Technical support of the Armed Forces of Ukraine has a three-level maintenance system of weapons and military equipment, that are:

the first level is military repair that is the maintenance of an weapons and military equipment is carried out by repair units of tactical and operational levels or teams of repair enterprises and manufacturers in stationary or field conditions. As a rule, these are such types of repairs as running and mid-life carried out by services of repair units and temporary groups of logistical support;

the second level is factory repair, it's maintenance of weapons and military equipment as a repair enterprise or an industrial plant. As a rule, it's the overhaul, or repair of weapons and military equipment that has received complex combat damage and can't be repaired in the field. The overhaul is carried out to restore the serviceable condition and complete or near-complete resource recovery, in stationary (factory) conditions by state repair enterprises and enterprises of other forms of ownership, forces and items of repair groups of a strategic level;

the third level - it's repair, which is supposed to be carried out at repair enterprises of partners of Ukraine (abroad), for example, in Poland, the Czech Republic and Slovakia.

The logistics system of the Armed Forces of Ukraine showed itself at a certain level during the russian armed aggression against Ukraine, especially its movement and transportation function.

Movement and transportation was organized in cooperation with the state agency "Ukratodor" and the joint-stock company "Ukrzaliznytsia". A set of organizational and technical issues regarding the organization and organization of military transportation by road and rail transport, establishment of dispatcher control over loading, movement and unloading of military echelons and vehicles for the purpose of timely execution of military movements and transportations was carried out.

Infrastructural support is one of the important functions of logistical support of troops (forces). There are a lot of effort was put into this function to build fortifications and provide housing needs. Infrastructural support consists in carrying out organizational and practical measures to maintain the logistics support infrastructure of the Armed Forces of Ukraine and other components of the defense forces, both stationary and mobile, implementing measures to ensure their survivability, ensuring the needs of the troops (forces) in quartering, logistics support, execution of works, provision of services and creation of favorable conditions for their performance of assigned tasks.

Preparation of the russian army for the war. The preparation of the russians for a large-scale armed aggression began with the anti-terrorist operation in 2014.

Thus, warehouses with ammunition caught fire in the city of Svatove, Luhansk region. The arsenal contained more than 3 thousand tons of ammunition of various modifications (mines, artillery shells of various calibers, ammunition of self-propelled 122 mm multiple rocket launcher "Grad") in 2015.

The explosions began in Balakliia, Kharkiv region, at warehouses with ammunition. Then 70% of the ammunition in the warehouse exploded in March 2017.

The ammunition began to explode at a military warehouse near the village of Maloyanisol in September 2017.

The explosions shook Kalynivka in the Vinnytsia region. The warehouse stored 188,000 tons of ammunition, including missiles for multiple rocket launchers "Smerch", "Uragan-Hurricane" and "Grad" in September 2017.

The ammunition started exploding again in Balaklia in May 2018.

The warehouses with ammunition began to explode at the arsenal in Ichna, Chernihiv region in October 2018, around 3:40 a.m.

In all cases, the security of the arsenals observed the unmanned aerial vehicles, but from the beginning few people believed in it, but now, analyzing these situations, we understand that it was the use of an explosive device. We are understanding now, that this was a step-by-step preparation for a large-scale russian invasion on the territory of Ukraine.

Material and technical support in the Armed Forces of russia. Material and technical support in the Armed Forces of Ukraine and the russian federation until 2014 was of the same type and fundamentally didn't differ due to the inheritance of the support of the troops (forces).

Material and technical support had corruption, because of which there was no development, but only decline.

One of the reasons for the decrease in the rate of invasion of the russian army is the unsatisfactory supply of material items and the

low level of material and technical support of the russian troops. Very often, russian military equipment stopped due to a lack of fuel and ammunition, the personnel remained without food and heating, as a result of which the military were demoralized and couldn't perform the assigned combat tasks under constant fire, thanks to the professional skills of the Ukrainian troops.

The task of food supply for the russian troops wasn't fully resolved, despite the high level of equipment of the troops with the necessary material and technical items declared in the reports of the Ministry of Defense of russia.

Before invading the territory of Ukraine, each military received five dry rations, which were supposed to be enough for the period of active combat operations. Dry rations that expired in 2015-2021 and in unsuitable packaging were sent to the troops.

The soldiers were provided with dry rations for only three days, because the russian army was counting on a "blitzkrieg".

After 3 days, neither a hot meal no a delivery of food was organized. This led to massive cases of looting and a drop in the morale and psychological state of military personnel, cases of mass desertion.

Since the combat operations didn't go according to plan almost immediately, the troops switched to "self-sufficiency" in food. At first, russian military had orders not to make crimes the local population. But the russian military began looting stores after running out of food supplies. Then, with the increase in losses, the decline in unit control and discipline, Russian military began looting and robbing the population.

In 2012-2013, as for material supply, military and state tests of the combat complex of protective equipment of the military "Warrior" were conducted on the basis of ten military units and military training areas of russia. Among its components were a set of combat equipment of the "Barmits" soldier and a machine gun AK-12. In the 4th quarter of 2014, the first samples of the complex began to enter service.

In 2014-2015, the Ministry of Defense of russia received 71000 items of "Warrior" equipment, and more than 200000 by the start of the war in February 2022. The primary recipients were special intelligence units, airborne troops, marines, and units of the military bases in Armenia.

The deployment of a mass army due to the mobilization and recruitment of volunteers made it necessary to urgently remove from storage and delivered items of material support 30-50 years ago to the troops, as well as to order the production of fabric for sewing new uniforms in Asian countries. This led to the fact that the new military were dressed and equipped in an extremely diverse way: both modern items and items from the Second World War.

The russian uniform is made uncomfortable and has many shortcomings, as a result of which there are cases when russian military, even senior officers, used more comfortable and high-quality uniforms of the Armed Forces of Ukraine, especially shoes.

Assembly and disassembly pipelines in the system of technical support of the russian troops were not widely used, mainly because of the possibility of their damage.

Fuel tanks were a priority target for attack drones and ambushes of the Special Operations Forces of the Armed Forces of Ukraine, so the russian side sought to disguise the tanks as civilian trucks.

In the period of preparation for the march and in the course of the nomination by the command of military units of the russian army, technical support was organized at an unsatisfactory level and was carried out with numerous violations.

For example, there were no technical assistance vehicles, evacuation vehicles, vehicles with military-technical property; the personnel of the combat units before the invasion wasn't oriented to the implementation of the necessary maintenance measures before the march and during the advance to the territory of Ukraine.

At the beginning of the active phase of combat operations, the leadership of the military units of the russian army didn't pay due attention at all:

the organization of technical monitoring (technical observation points were not created);

evacuation and repair, as a result of which weapons and military equipment, which sometimes required even minor repairs, remained on the battlefield;

the formation of new technical support units capable of ensuring the intended use of the newest types of weapons and military equipment.

Replenishment of military units with weapons and military equipment up to standard requirements was mainly carried out at the expense of existing outdated samples at bases for storage and repair of weapons and military equipment.

The lack of maintenance facilities is explained by the fact that the troops were involved in training and during the two months before the invasion of Ukraine were constantly in the field, that is, they didn't have a time limit to

carry out the necessary complex of maintenance work on weapons and military equipment before the offensive.

According to the analysis of the composition of the forces and means of the battalion tactical groups used by the enemy during the invasion of the territory of Ukraine, there were, as a rule, only two "repair vehicles" - tow trucks, which were usually driven by mechanics. And only one of them could tow tanks based on its tactical and technical characteristics.

From February 24 to March 4, 2022, the aggressor did not take any measures to restore damaged weapons and military equipment, which once again confirmed the enemy's plans for a quick “blitzkrieg”.

As a rule, during this period, equipment that received damage and technical failures remained at the point of failure. The personnel didn’t try to carry out attempts to evacuate it and, even minor operations for repair and maintenance. At best, weapons and military equipment were blown up or burned.

The impact of logistics on the russian-ukrainian war. In the second half of March, in connection with large losses of weapons and military equipment, the aggressor was forced to start removing equipment from long-term storage in order to replenish military units up to staffing requirements. At the same time, it should be noted that according to the results of the audit, from 20 to 30% of the samples of weapons and military equipment were not combat-ready.

In addition, optical devices and electronics containing precious metals were completely stolen from tanks and combat vehicles.

For example, in the 4th tank division of the russian federation, it was found out that out of 10 were from storage tanks, only one was in working order, and a significant part of the combat vehicles even without engines.

At long-term storage bases, obsolete models such as the T-62 and

T-55 continue to be decommissioned, which indicates an attempt to use the last mobilization reserves in the amount of up to 900 units, but at the moment the plans to transfer to the front the equipment removed from storage are actually disrupted.

During the combat operations at the initial stage of the invasion, the Armed Forces of Ukraine very effectively used the logistical weakness and miscalculations of russia to their advantage: the deeper the enemy's troops were drawn into the territory of Ukraine, the more the logistical supply routes were stretched. Accordingly, the greater the distance from the russian logistics center to the battlefield, the fewer trips per day a logistics brigade can make. The longer the logistical route of delivery, the more opportunities Ukrainian special operations forces found to destroy transport trucks. They attacked the enemy from ambushes and carried out airstrikes on stranded convoys. As the experience of such actions shows, the combat work of the Bayraktar UAV proved to be particularly effective during these attacks. Effective air and artillery strikes on the concentration of troops, russian fuel trucks and trains, paralyzed the enemy even more and significantly reduced their pace of attack.

In order to protect its logistics units from attacks and sabotage on the supply route, the enemy was forced to disperse his troops along the entire route of movement. At the same time, the longer the delivery (transportation) route, the more it was necessary to detach forces and means from the battlefield and use them for cover, protection and defense of supply routes.

The longer the convoy distance from the logistics base to the point where supplies, food, fuel, ammunition, equipment, and personnel need to be moved, the more problems there will be with supply times and convoy security. In combat situations, the supply chain includes personnel, transportation, supply bases, security, intelligence sources, and much more.

An analysis of material and technical support of the russian Armed Forces shows that the support units are able to effectively perform their assigned tasks only if the nearest logistics center is located less than 150 kilometers from the battlefield. At the same time, for example, the nearest route of russian troops to Kyiv is more than 260 kilometers, in particular from Gomel (republic of belarus). At the same time, the composition of enemy military equipment columns doesn’t have a sufficient number of support units and special equipment to carry out significant movements over such long distances.

The russian military aren’t able to provide the troops (forces) with a sufficient number of ammunition and food during full-scale offensive operations, despite the huge reserves of oil, fuel and lubricants and agricultural products.

During the invasion of Ukraine, the russian troops faced a large-scale supply crisis and a complete inability to provide the army with everything necessary. The soldiers lack not only food and ammunition, but also warm clothes, as well as fuel for the ships of the Black Sea Fleet.

The system of transporting material stocks by road transport of the russian army is significantly limited by the number of freight

transport units involved and the scale of the operation.

For example, at the speed of a motor vehicle convoy of 50 km/h on the existing road network, one truck can make three trips per day for a distance of up to 50 km: one hour for loading, one hour for the trip to the unloading place, one hour for unloading and one hour to return to base. Repeating this cycle three times equals 12 hours. The rest of the day is devoted to vehicle maintenance, food, refueling, weapon cleaning and rest.

If the distance is increased to 100 km, the truck will be able to make two trips per day.

At a distance of 150 km, the same truck will be able to make one trip per day.

This assumption won't work in rough terrain or where there is limited or damaged infrastructure. If there is a sufficient amount of freight transport to provide logistics support of troops at a distance of up to 50 km, for the same amount of transport at a distance of 100 km, the capacity will already be 33% lower. At a distance of 150 km, it will decrease by 66%. Therefore, the further the enemy troops advance from the storage items of logistics support, the smaller the amount of supplies will be able to be supplied to them by the units of logistics support. With a significant increase in transport distances, the units of logistics support will not be able to replenish the spent and lost stocks of fuel and ammunition on a daily basis.

Based on the agreements of the defense ministries of russia and belarus, since 2016, the russian army has been freely using logistics facilities on the territory of belarus. The army of the russian Federation in “peacetime” created the necessary reserves in the warehouses and bases of the armed forces of belarus, and during the war it uses these reserves [3].

According to the results of the “WEST-2021” and “Allied resolve-2022” training, the russian and belarusian military formed the infrastructure in belarus necessary for the actions of the russian troops, in particular, they equipped additional warehouses for fuel and other consumables, bases for the repair of damaged equipment, laid pipelines for the supply of fuel troops.

The territory of belarus was used by Russia as one of the main bridgeheads during the offensive against Ukraine.

During the offensive operation in the strategic direction, the russian command set the task of delivering up to 500,000 tons of material resources to the troops in 15-20 days. Their consumption during the day of the operation is uneven, but the average daily volume of transportation is up to 35 thousand tons, namely: Fuel - 45%, ammunition - 40%, food - 5%, other material resources - 10%.

Continuity of such a ride could be achieved only with the use of all communications and in a complex of all types of transport. From the central logistics bases and district (front) rear bases, in accordance with current regulations, transportation is provided: by rail way - 80%, by road - 15%, by pipeline - 5%.

Then to the army logistics brigade to 20-25% of items are delivered by railway, about 75-80% by vehicles, 5-10% by pipelines. In the front line, delivery is carried out only by road transport, and in some cases, for urgent transfer, by air or water transport.

The russian troops of material and technical support used more than 45% of the available vehicles. But it turned out that such a logistical chain isn’t able to meet the needs of troops at a distance of 150 or more kilometers from the russian border. By the end of May 2022, more than 2,200 trucks and special vehicles were destroyed, which led to the collapse of the combat capability of the advanced groups of russian troops in the north of Ukraine.

First of all, it affected food supply and fuel. At the same time, battalion and regimental motor vehicles with fuel were traveling as part of military convoys, experiencing first-line attacks by Ukrainian troops. The inconsistency in the possibilities of transporting fuel by road transport, aggravated by losses at gas stations, led to an acute crisis in the troops. Advanced strike groups stopped and began draining fuel from destroyed equipment, as well as at local civilian gas stations.

One of the advantages of the russian army is a fairly developed system of railway connections and the presence of 10 railway brigades, which are part of them, which do not have. The army of belarusians and russian in “peacetime” created the necessary reserves in the warehouses and bases of the armed forces of belarus, and during the war it uses these reserves.

This allows for the rapid transfer of large amounts of weapons, military equipment and material resources in a short period of time. This was demonstrated at the initial stage of the russian invasion. However, the Russian army's attempt to provide its groups with fuel on the territory of Ukraine ended with the destruction of an echelon transporting 56 diesel fuel tanks (3000 tons) in the Chernihiv region.

After on February 26, 2022, the Ukrainian military blew up all railway junctions connecting the Ukrainian railway with the russian one.

An analysis of the logistics system of the russian army shows that the composition and capabilities of the forces and means of logistics of the Russian army aren't designed to carry out a full-scale land offensive at a long distance from its railways.

Therefore, the russian offensive operation failed and on April 2, 2022, the Kyiv region was liberated.

A distinctive feature of the russian material and technical support of hostilities in the south-eastern part of Ukraine was the widespread use of railway transport, which is considered the most powerful and efficient means of mass transportation. This is due not only to the fact that the railway network was developed in these directions, but also to the task of supplying the troops with significant amounts of artillery ammunition.

For small arms, one rounds of ammunition could be enough for 1-2 days of fighting. At the same time, the artillery spent from 3 to 20 rounds of ammunition during this time.

The maximum daily consumption was up to 80,000 shells in July 2022. In order to supply this amount of ammunition to the troops in the occupied territory of Ukraine, units of the russian railway troops were sent.

The need to protect railways from the actions of the Special Operations Forces of the Armed Forces of Ukraine in the steppe zone of the Kherson and Zaporizhzhia regions led to the fact that in June, a special armored train "Volga" was sent there from russia via the Kerch bridge and Crimea.

Since the appearance of the M270 MLRS and "HIMARS" high-precision rocket launcher systems in the Armed Forces, the successes of the russian railway forces in establishing uninterrupted support for their troop groups were neutralized by a series of strikes on unloading stations.

Airstrips (helipads), the sizes of which depend on the types of aircraft, are necessary for the use of air transport in logistical support.

In the south, the former military airfields of Chornobayivka (Kherson) and Melitopol, as well as several small aviation airfields, were captured. Their regular use was disrupted by missile troops and artillery of the Armed Forces following strikes on railway unloading stations.

Water transport was used in the Azov operational zone during the transportation of military cargo by amphibious ships to Berdyansk and Mariupol in order to reduce the burden of transportation through the Crimea.

Unsatisfactory material and technical support of the russian army became the key problem of the russian invasion of Ukraine and practically led to the loss of the enemy's offensive capabilities.

So, for example, in September-October 2022, thanks to weapons and ammunition provided by NATO, missile strikes were carried out on the Antonivsky Bridge and the main areas of the Kherson region: around Kherson, east of Kherson in the Nova Kakhovka - Beryslav area and south of the Dnipro River. To the troops of the russian occupiers on the right shore of Kherson, this caused great losses in the need for personnel, weapons, military equipment and other material items, which made it impossible to supply missiles and ammunition, fuel and lubricants and food and enabled the Ukrainian military to liberate the city of Kherson from the russian occupiers.

The maximum russian occupied area since the beginning was over 200000 km².

Ukraine has since the beginning of the 2022 invasion liberated over 77800 km² or 40% of occupied territory.

The liberation of the occupied territories of Ukraine was done thanks to NATO's assistance: Bayraktar, Javelin, NLOW for the liberation of the Kyiv region, HIMARS, MLRS (Multiple Launch Rocket System), IRIS-T for the liberation of the Kherson region.

The total combat losses of the enemy were approximately from 24.02.22 to June 2024:

personnel – more than 529 750 (30%) persons were liquidated,

tanks – 7984 (36%),

APV – 15319 (30%),

artillery systems – 14007 (16%),

MLRS – 1104 (22%),

Anti-aircraft warfare systems – 857 (20%),

aircraft – 359 (21%),

helicopters – 326 (16%),

UAV operational-tactical level – 11221 (26%),

cruise missiles – 2297 (32 %),

warships / boats – 28 (11 %),

vehicles and fuel tanks – 19078 (14%),

special equipment – 2351 (11%) [9].

If analyze the number of losses, that there are more than 30% losses in weapons and military equipment, which indicates a low capacity for the next hostilities.

Insufficient capabilities of the forces and material means of the russian army, fire impact on the forces and means of logistical support of

high-precision weapons, unmanned aerial vehicles, aviation, destruction of infrastructure (bridges, crossings, roads), destruction of accumulations of equipment with reserves of resources (individual columns reached several tens of kilometers) forced the leadership of the russian federation to take operational pauses to adjust the logistics of their troops, which subsequently significantly slowed down the speed of their offensive and directly affected the ability of the troops to perform the tasks assigned to them.

Thus, the main reasons for the loss of combat capability of units of the russian army, as well as mass cases of abandonment of weapons and military equipment (due to lack of fuel) on the 6-8th day of hostilities, are the lack of military reserves in the units and the impossibility of their rapid replenishment due to disruption of supply lines.

Ensuring the combat capability of the defense forces of Ukraine requires huge funds, especially during the war, when the economy is destroyed, the need for material resources for defense exceeds the production capabilities, the question of their effective spending arises, which does not always happen in the process of logistical support of troops (forces).

Therefore, as a conclusion, it can be noted that the logistics of the Armed Forces of Ukraine is able to replenish needs and provide its units in a timely manner. Due to the NATO modern weapons and military equipment, missiles and ammunition, and other military assets and resources the Ukrainian Army can advance to the 1991 borders of Ukraine and bring peace in Europe closer.

LIST OF SOURCES

1. Volodymyr Kyvliuk, Iurii Hannenko. Impovement of the system of material resources of the Armed Forces of Ukraine. Social development & Security,Vol. 2, No. 4, 2018. Accessed at: https:// doi.org /10.5281/zenodo.1231404 .
2. Volodymyr Kyvlyuk, Viktor Lazorenko Yurii Hannenko, Mykhaylo Lavruk. Problems of management of the system of provision of military property of the troops of the Armed Forces of Ukraine and ways of their solution. Accessed at: https://doi.org/10.33099/2311-7249/2021-40-1-111-116.
3. Volodymyr Kyvlyuk, Yurii Hannenko, Svitlana Hannenko. Analysis of the functioning of the system of providing troops (forces) of the Armed Forces of Ukraine during a large-scale armed aggression. Social development & Security, Vol.43, No. 1, 2022. Accessed at: https://doi.org/10.33099/2311-7249/2022-43-1-59-64/
4. Thomas Ekström, Tore Listou., Yurii Hannenko. Societal resilience in theory and practise. Collection of scientific works of the Center for Military and Strategic Studies NDUU. No 3(79), 2023. Accessed at: https://doi.org/10.33099/2304-2745/2023-3-79/66-73.
5. Per Skoglund, Tore Listou and Thomas Ekström (2022). “russian Logistics in the Ukrainian War: Can Operational Failures be Attributed to Logistics?” Scandinavian Journal of Military Studies 5 (1) pp.99-110. Accessed at https://doi.org/10.31374/sjms.158.
6. Alex Vershinin. The Return of Industrial Warfare. 17 June 2022. Accessed at: https://www.rusi.org/explore-our-research/publications/commentary/return-industrial-warfare.
7. Col. Marinko Aleksić, Army of Montenegro, Retired Col. Sead Cvrk, Army of Montenegro, Retired Col. Dražen Božović, Army of Montenegro, Retired, “Analysis of Land Army Maintenance Techniques in the War in Ukraine,” Military Review, May-June 2023. Accessed at: aleksic-analysis-of-battlefield-UA.pdf.
8. Bradley Martin, Sean Barrett and Devin McCarthy, “russian Logistics and Sustainment Failures in the Ukraine Conflict—Status as of January 1, 2023,” RAND Corporation, June 2023. Accessed at: russian logistics and sustainment failures in the Ukraine conflict: status as of january 1, 2023 | rand
9. The defense forces were destroyed. Ministry of Defence of Ukraine. https://www.mil.gov.ua/news/2024/06/19/vtrati-rosiyan-za-dobu-1130-okupantiv-48-artilerijskih-sistem/.

The article was sent to the editorial colleague 14.10.2024

Вплив логістики на російсько-українську війну

Анотація

Логістика є ключовим елементом забезпечення збройних сил озброєнням і військовою технікою, ракетами і боєприпасами, продовольством і майном, паливно-мастильними матеріалами, а також транспортуванням усіх вищезазначених матеріальних засобів. Важливість проведення успішної операції (бойових дій) залежить від постачання матеріальних засобів, тобто від логістики.

Метою статті є аналіз функціонування логістики Збройних сил України та матеріально-технічного забезпечення Російської Федерації під час російсько-української війни, а також вплив логістики на ведення операцій.

Розглянуто функції логістики: матеріальне, технічне, транспортне та інфраструктурне забезпечення. Матеріально-технічне забезпечення у Збройних Силах України та російської федерації до 2014 року було однотипним і принципово не відрізнялося через спадковість забезпечення військ (сил).

Однією з причин зниження темпів вторгнення російської армії є незадовільне матеріальне забезпечення та низький рівень матеріально-технічного забезпечення російських військ. Дуже часто російська військова техніка зупинялася через нестачу пального та боєприпасів, особовий склад залишався без їжі та опалення, внаслідок чого військові були деморалізовані та під постійним вогнем не могли виконувати поставлені бойові завдання, завдяки професійним майстерності українських військ.

Під час бойових дій на початковому етапі вторгнення Збройні Сили України дуже ефективно використовували матеріально-технічну слабкість і прорахунки РФ на свою користь: чим глибше війська противника втягувалися в територію України, тим більше шляхів матеріально-технічного постачання були розтягнуті.

Створення сучасної, вдосконаленої системи логістики Збройних Сил України відіграє позитивну роль у забезпеченні Збройних Сил під час повномасштабного вторгнення російських військ на територію України.

Ключові слова. боєприпаси; продовольство; інфраструктурне забезпечення; логістика; матеріально-технічне забезпечення; транспортування, озброєння.