ASSURANCE OF SUBSISTENCE SERVICES FOR MECHANIZED BRIGADA IN OPERATION

Sorin PÎNZARIU, Toma PLEȘANU

"Nicolae Bălcescu" Land Forces Academy, Sibiu, Romania
sorinpinz@yahoo.com, tomaplesanu@yahoo.co.uk

Abstract: *The field of campaign services is currently the most complex area of logistical support, as it covers a wide range of services, requires cooperation between military bodies and various institutions, entities involved in providing them and requests promptness from planning and logistical management bodies in immediately solving the various problems that may arise. As part of the campaign services, feeding the personnel and providing water, as subsistence services. in the quantity and quality standards provided by the instructions, directly influences the health of the military and contributes to maintaining a high morale of the military. In order to give a more accurate overview of the influence of this functional field on the actions of the mechanized brigade in the operation, we will detail for each subsistence services some theoretical and practical aspects that we consider important.*

Keywords: logistical support, feeding, water provisioning, campaign services

1. Introduction

In order to provide the logistical support required for a mechanized brigade in the operation, the logistic support structures of the large unit shall be adequately placed on the ground and shall carry out specific activities within a logistics support line. This line is part of the operations device of the mechanized brigade and is carried out by the grouped field layout of the logistic support structures, according to the commander's decision, in order to carry out the tasks entrusted in a timely manner.

Logistical support of the troops is essential for maintaining and multiplying the fighting power and will necessary to achieve victory. Flexible logistic support, organized in full accordance with the master's intention and the design of the operation, is a vital condition for the success of any operation.

The provision of the necessary logistical support to the forces shall be carried out in

accordance with the following functional areas of logistics: supply/resupply, movement and transport, maintenance, infrastructure, campaign services, Host Nation Support, RSOM and related fields.

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2. Feeding troops

At the level of the mechanized brigade, but also at the level of each battalion in its organic, the organization of the feeding of the herds is the attribute of the head of the logistics module and of the specialist officer responsible for feeding the herds.

During the operations, the following shall be taken into account in organizing the organization of the feeding of the staff of the mechanized brigade: the degree of assurance of the stocks of existing agri-food products on the structures and the possibility of completing them; the role, place and missions of the units forming part of the mechanized brigade; the possibility of adapting the feeding regime to the specific tactical situation; the means of preparing existing food and the supply possibilities; possibilities for the use of mechanized means; rationalization of consumption, in the case of limitation or disposal of resources at long distances; the possibilities of providing the drinking water necessary for the preparation of food; limited feeding opportunities for personnel carrying out isolated combat actions; the possibilities of transporting prepared food, so that it can reach the military on time and in hygienic-sanitary conditions.

Regarding the process of organizing the feeding of herds, it consists of: establishing the feeding regime, according to mission and effort; drawing up menus and the distribution table for agri-food products; organization of the storage, distribution and processing of agri-food products; organization of food preparation; transport and distribution of food to fighters; organization of food service.

Depending on the tactical situation in which the units and subunits of the mechanized brigade are located, the commander of the mechanized brigade, on the proposal of the head of the logistics mode establishes one of the following feeding regimes, with three meals in 24 hours: normal feeding regime with hot food (when there is the possibility of thermal preparation of agri-food products,

for the three daily meals), feeding regime with individual rations , (when combat actions are carried out) and cold food feeding regime, when hot food cannot be provided (during transport, for a period not exceeding 10 consecutive days.

Feeding of herds shall be carried out in accordance with the calorific and value ceilings, according to the feeding rules laid down for each category of military. Food provided by the food rules to which the military is entitled shall be granted free of charge.

In situations where certain units or subunits carry out isolated missions, the commander of that structure, depending on the specific situation, may change the feeding regime of the soldiers he commands.

For units and subunits of the mechanized brigade that are part of the Immediate Employment Force (ISP) and Support Force (FS), the feeding of the military is carried out differently during the preparation and conduct of military actions. During the preparation period of the operation, this activity is carried out in hot feeding mode, and during the period of carrying out the operation in combat ration mode.

For units in the subsequent employment force (FAU) and the logistic support unit(s), feeding may be carried out both during the preparation and during the hot feeding operation for all three meals.

Feeding of the injured and hospitalized patients in the disposition districts of the medical treatment facilities shall be carried out in accordance with the diets prescribed by the doctor, without exceeding the quantities of food provided for by the rules.

When feeding the military personnel, the aim is to ensure the calorific ceilings, the rations of agri-food products provided for in each rule, the assortments of agri-food products laid down in the rules, compliance with the rules on the composition of menus, the judicious allocation of food rights on the tables, the ensuring the weight of the

food portions and the proper processing of agri-food products.

In order to ensure quality nutrition, it is also intended that the distribution of agri-food products on the three meals is made in quantities constant at the same dishes and respecting the following proportions: 35 % in the morning, 40 % at noon and 25 % in the evening.

For both brigade command and each battalion under the large unit, feeding is provided by the care of the service groups and the mess of the logistic platoons located in the organic companies/batteries support or logistical support. The preparation of the food and its serving will be carried out, as a rule, by specialized personnel, with their own means of the organic of each unit (car rolling kitchens BRA-2), at their points of management. If there are food preparation facilities in the area of logistical responsibility, they will be used as a matter of priority, with the agreement of local public administration bodies. In this respect, during the logistics recognitions, these facilities and their production capacity will be identified.

When certain structures carry out missions at great distances from the layout of their logistics structures, their feeding will be organized in cold food feeding mode. In certain cases, these sub-units will be allocated to food rights to other establishments in the mission area.

As regards the supply of bread to the fighting personnel during the operations, it can be ensured both by its own forces, through the properly framed and equipped mobile country bakeries, existing in the organic logistics support battalions under the brigade, as well as by local contractors or production capacities existing in the area of operations (bread factories, bakeries). Bread, like other foods, is provided by means of the supply chain established in the process of securing Class I materials (prepared food, combat rations, bottled water).

The storage of the agri-food products necessary for the preparation of food shall be carried out in accordance with specific rules, taking into account also the degree of perishability of the products. Perishable products shall be stored in separate refrigeration areas (containers, cabinets, refrigerated crates, refrigerated vans/isotherms) at the temperature prescribed by the supplier. Finished and non-heat-processed preparations shall be kept separate from meat, fish, raw viscera and raw meat preparations.

Bread and bakery products shall be kept in specially designed spaces, wicker baskets or plastic shuttles, provided that they are not placed directly on the floors, are covered, sheltered from dust and insects. Packaged food will be stored separately from inventory items, empty packaging, cleaning and disinfection substances.

The transport of agri-food products or the distribution of prepared food to the military shall be carried out by means of approved veterinary, hygienic means of transport which ensure, throughout transport, the unaltered preservation of the nutritional, organoleptic, physico-chemical and microbiological characteristics and protection against dust, insects, rodents and other agents of pollution, degradation and contamination of the food transported. Transport will be organized and executed according to the means of transport available, taking into account the tactical situation in which the troops are found, the conditions of the terrain, the season and the weather condition of the area of operations. When installing feeding facilities, consideration will also be given to the storage and recycling capacities of household and food waste resulting from the service of daily meals by the military. It is extremely important to dispose of household waste, food scraps in compliance with existing national and international sanitation and environmental standards.

3. Water supply for troops

The organization of water insurance of troops is, in our opinion, a complex process that requires specialized expertise from at least three distinct fields (genius, medical, logistics). At the level of the mechanized brigade, the organization of this complex process involves the involvement of three decision-makers from the brigade command: the specialist on the line of genius for drilling water wells, bringing to the surface and purifying it; the Chief Medical Officer for the Water Potability Notice and the Head of Logistics for the Storage, Transport and Distribution of Water to the Units and Subunits of the Organic Large Unit [1].

In order to organize the provision of water to forces during operations, the following measures shall be taken at the level of the specialized structures in the organic mechanized brigade: the existence of water supply facilities from public or private sources shall be assessed; other, so far undiscovered, water sources are recognized and evaluated for the extraction of water from both surface and deep sources; the quality of the water shall be examined and the water determined whether the water is drinkable or requires purification; purify and drink water using the water purification plant AQUATOR 501-S; determine whether water is drinkable as a result of the purification process; the purified water is stored; transport and distribute water to units in the organic mechanized brigade.

The sources used to provide water to the forces in the operation are the following: existing landscaped sources (water networks, wells, underground captures); surface sources (rivers, rivers, ponds, puddles, lakes, seas); groundwater sources; precipitation (rain, snow and ice on the surface of the ground or underground).

Water supply is preferably made from the public water supply system or from local sources. When in the area of military action these sources are missing or when, during the course of operations, water supply is

interrupted through the public supply system, the forces of genius for logistics must be able to meet the needs of drinking water and household water, for maintaining operational capacity, by providing emergency water, from their own resources [2]. Logistics genius specialists play a major role in obtaining and purifying water, directly contributing to the completion of the water shortage at the level of the mechanized brigade.

In this situation, available underground sources are considered in the first phase, as they require a minimum purification process or directly provide drinking water. Water from these underground sources is obtained by drilling up to the groundwater of some water wells. The wells will, as a rule, be drilled by the drilling group of the engineering logistics company located in the structure of the division's genius battalion, in the area of arrangement of the mechanized brigade units, at their request.

If underground sources are missing, the emergency water supply is made by specialized structures from the organic battalions of the brigade or from the organic upper echelon, using other sources such as: surface water, precipitation water or even waste water, the latter only for the production of technological water.

To provide drinking water, surface sources will be exploited limited and will operate until groundwater from underground sources is put into service; these sources are will, however, be used as a priority for the procurement of water for technical needs, decontamination and firefighting [3].

Drinking water must meet the quality standards set for water in the public water supply system. In emergency situations, a minimum quantity of 5 to 7 liters per person must be provided for a period of up to 7 days.

For water supply, specialized genius structures (teams of soldiers operating the S-501 Acvator installations equipped with the mechanized brigade battalions, water purification group / combat genius

company located in the organic mechanized brigade, the genius company for logistics/genius battalion of the division's organic) arranges water insurance points consisting of water sources, personnel serving the point, the necessary technical means (drilling facilities, water purification plants, tanks, means for transport and storage), working platform for the abstraction, processing, storage and loading of water in means of transport for dispatch to distribution points, other facilities necessary for the operation of the point of insurance. Water insurance points can be: with drinking water; with industrial water for washing dishes, linen and technology, for engine cooling installations, decontamination, etc.; carbonated/mineral/payment water that is used only for drinking [4].

At the level of the mechanized brigade, the water supply points ensure the obtaining of drinking water from surface sources, its collection, treatment, storage and distribution to the fighting forces, the quality and quantity required [5].

Necessary information on the existence, availability, location and type of water sources (developed - public and private or undeveloped water supply networks - springs, groundwater, sources of fresh, salt water, surface), are obtained by the engineering research subunits of the genius company's organic fighting brigade or from the organic support companies of the fighting forces of the brigade, and the details of the amount of water that can be supplied, the flow, facilities of capture, extraction, storage and distribution, transport and water insurance, are determined by the specialized structures (genius for logistics, logistics, medical) within the large unit [6].

The water quality check shall be carried out both with the means of verification existing at the level of specialized structures and in specialized laboratories, through analyses carried out on water samples collected daily by the medical service. Water is given for

consumption only after verification from the point of view of chemical, bacteriological and radiological contamination (CBR) and after obtaining medical advice from the chief medical officer of the unit/large beneficiary unit. [7] The determination of water quality from the point of view of its contamination shall be carried out following the CBR verification, carried out by the specialized structures of the organic units of the mechanized brigade.

For the transport and storage of water to the beneficiary structures, the engineering subunits for logistics and the logistics sub-units in the organic units of the mechanized brigade shall be equipped with the following means: rubber cloth tanks with a capacity of 100 liters; rubberized cloth tanks with a capacity of 1000 liters; tank tanks of rubberized cloth with a capacity of 1200 liters; rubberized cloth tanks with a capacity of 2000 liters; isothermal tankers for transporting drinking water on the DAC-665 T chassis with a capacity of transport of 5000 liters; TRUCKS DAC-665 T or FA 16215. In trucks, water is transported in tanks placed at the bottom of the bodywork, on a thermal insulating layer of sand 10-15 cm thick.

During the operations, other storage capacities available in the brigade's logistical responsibility area may be used for water storage or, with the support of the logistics engineering structures, basins in the ground that are properly lined and covered, the capacities of these basins being determined according to storage needs.

Viewed from the perspective of the logistics bodies of the units in the mechanized brigade, the water insurance needs take into account the water needed for the preparation of military food, for drinking, personal hygiene, the needs of the medical service, but also for the household needs such as washing dishes, washing linen or for technical needs (filling of liquid in the cooling plants of the technique). All these needs involve a major water

consumption and show us that water supply is essential in particular to meet the individual needs of the military.

The large transport needs to meet all the above mentioned requirements and the small number of vehicles intended for the transport of water, existing at the level of the logistic structures of the units under the mechanized brigade, bring to the attention of the water insurance activity, in particular during the carrying out of military actions. Therefore, the planning of activities involving water consumption, whether drinkable or for domestic or technical needs, constitutes a particularly complex task of logistics structures within the units subordinated to the mechanized brigade.

Water for consumption and food preparation will be provided from sources authorized by military and territorial health bodies, in compliance with potability standards.

In winter, water for the personal needs of the military can also be obtained from melting snow, thus reducing transport needs. Moreover, in winter the consumption of drinking water decreases on average by 25-30%.

To provide drinking water, both the means of transport provided with the structures and those requisitioned locally will be used. An increased degree of water potability is not required for washing linen or for filling liquid in the cooling plants of motor vehicles and therefore surface, flowing water sources may also be used for these activities. However, it is necessary for veterinary bodies to check the quality of the water from these sources in order to eliminate the risks of their contamination with chemical or bacteriological agents, agents which may cause various contagious diseases or even the death of manipulative personnel.

At the level of the mechanized brigade, the person directly responsible for the organization of the water quality approval

tests for consumption, obtained from surface or depth sources, with the task of permanent monitoring its quality and interpreting the results of the tests carried out, is the chief medical officer of the large unit. In order to approve the distribution of water necessary to ensure the feeding of herds, funeral services, herd bathing and linen washing, the logistics structure will cooperate and coordinate with preventive medicine specialists.

The preparation, timely and hygienic-sanitary distribution of food to the military depends on how the mechanized brigade is provided with drinking water. In addition, the activity of bathing and washing linen is directly influenced by the existence of water supply sources and the amount of water that can be provided to the mechanized brigade.

4. Conclusions

The provision of water to the troops, the service is, in some respects, the responsibility of the logisticians, but it is, at least to a point, the responsibility of the genius specialists (especially those of genius for support). In the specialized manuals of the genius structures are detailed technical, organizational aspects related to the procurement of water, its storage, etc., unknown by logistics specialists, but which concern them to some extent. On the other hand, certain aspects relating to the way in which collaboration should be carried out, the cooperation that must exist between genius and logistics specialists are not detailed, and certain responsibilities are not clearly delineated, which requires certain doctrinal clarifications.

In conclusion, we can say that the experience gained in recent years, the quality of the staff and a proactive attitude, aimed at finding the best solutions, can lead to improved logistics support in general and especially campaign services.

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