WRITTEN PREPARATION

Subject: Artillery Tactics

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Topic: T4: Artillery Positioning (4p + 2c + 2k)

Objective: Explain the basic requirements and components of a combat assembly.

Describe the nature of the outline of individual species and clarify the differences between the combat set of autonomous and non-autonomous

weapon systems.

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1) Combat Assembly

As part of the combat deployment, artillery, depending on the tasks and situation, operates in combat assemblies, assemblies for movement, areas of concentration or other areas of deployment outside the fight.

"Combat set is an organized system of elements of artillery units (units), which are necessary for the preparation, control and execution of fire and maneuver."

The combat formation must ensure the fulfillment of the assigned tasks, the use of combat capabilities of the artillery, cooperation with all-army formations, reliable command, the possibility of a quick maneuver and protection against enemy fire.

To deploy to a combat formation, the superior commander of the artillery unit (unit) usually determines:

- firing range spaces,
- premises for the development of command posts,
- possibly also spaces for the deployment of forces and means of artillery reconnaissance.

Note Elements of medical security are an integral part of artillery assemblies in combat, but they are not an element of combat assemblies.

2) Content of Combat Assembly and Calculation Units

The combat formation of the artillery division consists of:

- the main command post (HMV), which also includes the Fire Control Center (SRP)
- combat battery assemblies,
- the status of directly controlled forces and means of artillery reconnaissance,
- and the rear of the section (forces and means of logistical support and embankments).

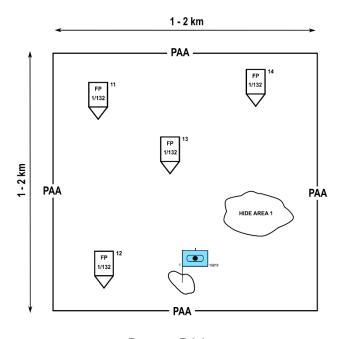
Combat set of artillery (mortar) battery (platoon) consists of:

- the command place of the battery, which consists of the Fire Control Point (MŘP),
- several firing positions (2 to 4),
- waiting position.

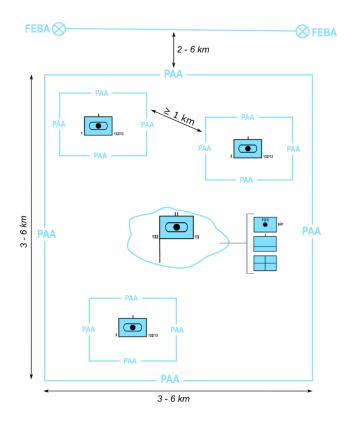
A part of the combat set may be a place of deployment of ammunition vehicles.

The firing positions of artillery divisions and batteries are determined depending on the tasks and the possibilities of the terrain. The leading edge of the main firing range may be, depending on the tactical situation, 2-6 km from the leading edge of own troops. The dimensions of the space of firing positions of the section can be 3-6 km in width and depth.

The dimensions of the firing range of artillery batteries depend on the number of planned firing positions and can be 1-2 km in width and depth. The firing position of the battery consists of a waiting position (1-2) and several firing positions (3-4). The distance between adjacent battery compartments is at least 1 km.



Battery PAA



Battalion PAA

Similar principles and standards apply to the self-propelled mortar battery of medium caliber (120 mm). Batteries of medium-caliber mortars carried occupy the range of firing positions 1 km in width x 1-1.5 km in depth and are located 1.5 - 4 km from the front edge of their own troops.

A platoon of medium-caliber mortars (81/82 mm) occupy the firing range 0.5 - 1 km in width x 0.5 km in depth and are deployed 0.5 - 1.5 km from the front edge of their own troops.

3) Combat Assembly Main Parts

Firing position

Firing position is a section of terrain taken or ready to be taken by a firing unit to conduct fire. It can be covered and uncovered, prepared and unprepared. In the covered firing position, the cannons (mortars) are hidden from ground enemy observation for the duration of the fire. In the exposed firing position, the cannons (mortars) are camouflaged, but after the start of firing they are observable.

Firing positions are divided into width and depth. The battery in the firing position is usually distributed in squads (firing sections) on an area of 500-800 m in width and up to 300 m in depth with a distance between squads (firing sections) of 300-500 m. Spacing between cannons can be 30 - 50 m and distances between cannons up to 40m. If it is possible to use natural concealment, individual cannons (mortars) are dispersed in the firing position. When deploying the battery as a whole, the firing position occupies a space of 200-400 m in width and up to 300 m in depth.

When the firing position is taken by the mortar towed by the unit, the tractors (vehicles) remain hidden in the vicinity of the firing stations or at the firing stations. Ammunition, which is above the carried stock at the cannon, is weighed at the same time as taking up space firing position. For planned firing positions, it can be brought in advance in the required amount.

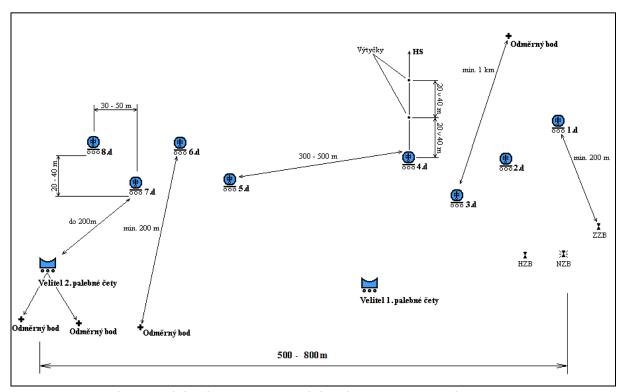


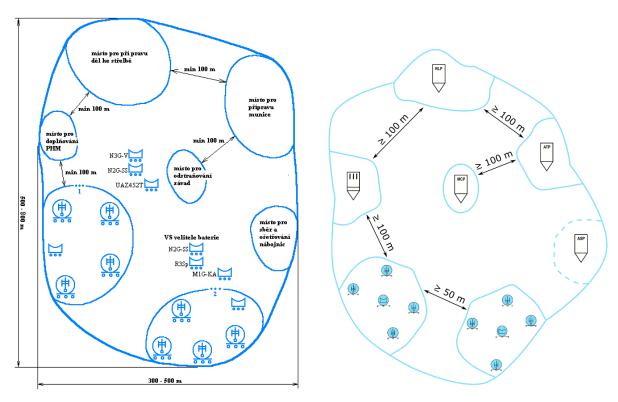
Schéma palebného postavení palebné baterie 152mm ShKH vz. 77

The firing position is taken immediately before the firing. After firing, the firing position leaves as quickly as possible and the unit moves to the waiting position or to the next firing position. Firing positions are numbered by a two-digit number, where the first number is usually the battery number and the second firing position number.

A cash unit may be designated to ensure an immediate response and to perform urgent fire support tasks. The cash unit is deployed in a ready firing position before the firing task is issued.

Waiting position

In the waiting position, the units are deployed until the start of fire and after its end. Where possible, the waiting position is chosen in secret, engineered, masked and secured in accordance with the needs of troop protection. Waiting occupies an area of 300-500 x 500-800. The placement of cannons (mortars) must allow immediate departure of covers and maneuver into firing positions.



Waiting Position Scheme

Position (deployment) of forces and means of artillery reconnaissance

The position (deployment) of forces and means of artillery reconnaissance is designed to conduct reconnaissance of the enemy, terrain and other objects of intelligence interest in the area of intelligence responsibility of the unit (group), fire control, maintaining cooperation with combat unit commanders and the initial evaluation of reconnaissance data. The observation posts are occupied at the front edge of the set of own units.

Artillery reconnaissance units assigned to all-army (combat) units, units (task forces) become part of their combat formations, but remain an integral part of the artillery fire control system. Artillery reconnaissance units are deployed at observation posts in reconnaissance vehicles or outside vehicles in the field (trench.), Usually near the tactical command post (observation post) of the commander of the combat unit (task force). For the purposes of conducting artillery reconnaissance and fire control, side and advanced observation posts may be occupied. The advanced observation post can also be taken in the enemy's formation.

The radar platoon (ARTHUR) is usually not assigned to the firing units, but is controlled by the section fire control center. Radars occupy a combat formation on the main direction of their own artillery. Radars are active emitters of electromagnetic radiation and can thus be detected by means of electronic combat of the enemy. The active use of radars must therefore be in accordance with the plan or with the consent of the superior commander (commander of the task force), in order to avoid undesirable disclosure of the combat formation of their own units.

Meteorological units usually develop in the middle of the space of firing positions of the section at a sufficient distance from other elements of the assembly of sections.

Space of forces and means of logistical support - rear of the section

Space of forces and means of logistical support - the rear of the section is designed to eliminate defects in weapons and other equipment, take over and prepare ammunition, organize the removal of damaged equipment, refueling and lubrication, food preparation, treatment and removal of wounded and sick. To this end, in the rear area of the artillery regiment (section) usually develops a place for troubleshooting, a place to take over ammunition, a place of refueling, an economic dispensary, and usually also elements of medical security. The space of deployment of forces and rear means is based on the concept of logistics and medical security of the combat operation and is usually chosen in the rear of the combat unit (unit), outside the expected direction of the enemy's main strike (action) while maintaining the ability to follow the main maneuver.

4) Artillery Maneuever Area

Autonomous artillery weapon systems are such means that have the ability to independently determine their position and the direction in which the barrel of the weapon is aimed, thereby fundamentally changing the nature of their firing positions. In the future, the ACR artillery units should also be armed with autonomous weapon systems.

The main difference lies in the lower need to prepare the space of firing positions by reconnaissance units. However, it is necessary to realize that artillery reconnaissance will be an essential part of the introduction of autonomous works because:

- carries out a basic survey of axes and space,
- prepares coordination points for updating navigation systems,
- prepares the areas of firing positions in case of malfunction of navigation systems.

Autonomous weapon systems operate in such a way that in the Artillery Maneuever Area (AMA) several Artillery Restricted Areas (ARA) are selected in which autonomous cannons occupy their positions based on predetermined parameters.

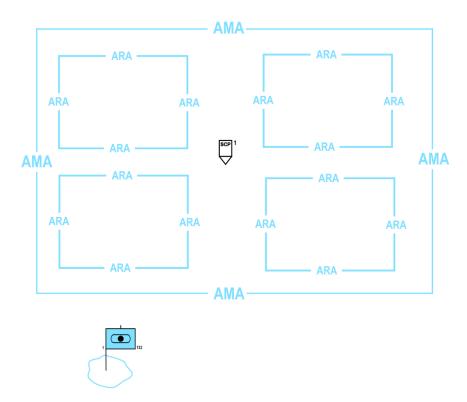
The firing positions of autonomous works thus contain:

- firing range areas;
- control point (s);
- places of hidden deployment.

They may also contain:

- place of command (depending on the fire control system used);
- places for refilling ammunition,
- other premises.

In the middle of the firing range, the coordination point is determined and marked by artillery reconnaissance units, which serves to update the navigation systems of the works. This point must have precisely defined coordinates and directions to several landmarks (depending on the type of navigation system).



Artillery Maneuver Area



Artillery Restricted Area

As part of combat operations, firing units operate in designated areas of firing stations, in which cannons select their firing positions. It is necessary to realize that the cannons do not pass independently, but in an organized manner under the control of the platoon leader, who introduces them into the space and determines where the cannons will be deployed. The cannons are then distributed together within the defined space.

After completing a firing task or another "Trigger" (initiator), the units are moved to another area of the firing positions to reduce the risk of being hit by anti-battery fire. The initiator for the maneuver between the firing range areas can be:

- number of completed tasks from one firing range area,
- number of lines fired from one firing range area,
- time spent in a given firing range, even if the cannons did not fire.
- other, determined by decision of the master.

In the area of firing positions, places are also determined for the hidden deployment of individual cannons, which cannons occupy in case of non-fulfillment of the firing task in order to mitigate the risk of detection by enemy reconnaissance.

References

Basic

HREBÍČEK, Miroslav a Ivan MRÁZ. Rozmístění dělostřelecké baterie mimo boj. Vyškov: VVŠ PV, 2001. (S3165)

Děl-1-1, 2018. *Bojové použití dělostřelectva armády České republiky*. Praha: Ministerstvo obrany ČR.

Pub-35-14-01. Bojové použití dělostřelectva. Vyškov: Odbor doktrín VeV-VA, 2013. 203 s.

AArtyP-5, 2015. NATO Fire Support Doctrine. NATO NSO.

Děl-3-1. Palebná služba pozemního dělostřelectva. Praha: MO, 1995. 185 s.

HREBÍČEK, M. MRÁZ, I. Rekognoskační skupina dělostřeleckého oddílu a rekognoskační družstvo dělostřelecké baterie v boji. Vyškov: VVŠ PV, 2000. 69 s. (S-3171)

Recommended

IVAN, Jan. Situační značky a zkratky pro dělostřelectvo: (vojenská symbolika a taktické značky pro dělostřelectvo dle APP-6): studijní text. Brno: Univerzita obrany v Brně, 2019. ISBN 978-80-7582-122-5. (S3083)