Today, the military reforms in Ukraine are carried out taking into account the standards and procedures adopted by NATO [1], which are based on a network-centric concept of conducting operations.

As is known, network-centric concept provide for the organization and conduct of operations in a single information space by joint forces in the absence of a continuous line of combat clash of troops.

A single information space provides an opportunity: to use armed formations as part of a single flexible spatially distributed reconnaissance and fire system [2, 3].

In many countries of the world there is a revision of the theory of construction and practice of application of both new complexes and existing models of weapons, taking into account the organization and conduct of operations in a single information and cyberspace [4]. The question of how to achieve a reduction in the time of the full cycle of combat use of the weapons complex to outrun the enemy during its fire defeat is solved [5].

Based on the above, it is advisable to study the construction and operation of reconnaissance fire systems, in order to take into account the experience of their operation in justifying technical solutions for their integration and increase the stability of operation.

The main task of reconnaissance and fire systems is to gain an advantage in various areas of confrontation due to kinetic, energy, informational cybernetic and other influences, and its strikes should lead the enemy to the inability to resist or abandon their plans. [6]

Reconnaissance and fire systems built on the principles of leastcentrism were used in almost all military conflicts of the late 20th and early 21st centuries. [7]

During the fighting in Iraq, Operation Desert Storm used reconnaissance fire systems that integrated intelligence and destruction and used high-precision
ammunition. However, according to [8], out of 43 Iraqi mobile tactical missile systems, only 8 were found and fired from the air.

In many cases, the interval between the moment of detection of a ground mobile target and the moment of obtaining complete information about this target was 3-4 hours.

During Operation Freedom of Iraq, the RQ-4 Global Hawk and Predator were used as part of the RVS. The total time of information processing, its distribution and delivery to the performers did not exceed 10 minutes. According to these data, 13 anti-aircraft missile batteries, 70 vehicles, more than 300 tanks were destroyed [9].

With all the positive points, it should be noted that reconnaissance UAVs have disadvantages - high vulnerability to air defense, insufficient depth of reconnaissance, to control the flight and reconnaissance equipment of such UAVs as Predator requires constant participation of the operator, change the flight task of UAV Global Hawk is possible only in during pre-flight training.

During the fighting in Yugoslavia in Operation Allied Force, UAVs from several NATO countries were included in the RVS for the first time. They acted in conjunction with the Task Force Hawk Task Force Hawk. MLRS multiple rocket launchers were used.

NATO Command praised the effectiveness of the use of unmanned aerial vehicles in the RVS, however, the total loss of drones during the war amounted to 27 units, including six crashed aircraft: US-9 (2 Predator, 5 Hunter, 2 Pioneer), Germany -5 (CL-289), France -5 (3 Crecerelle, 2 CL- 289), Great Britain - 2 (Phoenix).

During the military operation "Unshakable Freedom" in Afghanistan as part of the RVS actively used reconnaissance UAVs: Predator - 8 units. and Global Hawk-3od. UAV Predator. Their use was complicated by low and high temperatures. During the fighting, UAV losses amounted to 2 Predator UAVs (lost due to icing) and 1 Global Hawk (technical malfunction).

During the Arab-Israeli confrontation in 2005, Hermes-450 UAVs were used as part of the RVS. During operation 3 UAVs crashed due to technical problems and errors of operators.

At present, the creation of RVS can be carried out in the course of a specific task, using the forces and means available.

According to the results of the analysis [10, 11, 12, 13] and other open sources, it can be stated that situational RVS were repeatedly formed by the Russian military in Syria and eastern Ukraine in 2015-2017.

Unfortunately, the sources do not cover the results of the use of RVS in this conflict, but based on the situation in which the Russian troops in Syria found it possible to conclude that they are not successful enough.

Reconnaissance and fire systems are being actively created in the area of the Joint Forces operation in eastern Ukraine.

To increase the effectiveness of artillery fire in the Armed Forces of Ukraine, RVS "Kropyva" is used, the main element of which is the control system "Mars". It should be noted that the integration of ACS, which implements the network-centric concept of management, the system reduces the time to prepare fire on targets, 20-30% increase in fire accuracy and 30-40% probability of hitting targets. [14]. However, the considered reconnaissance fire system has the following disadvantages: it does not have a clear method of determining the composition; is not resistant to the effects of electronic warfare; failure of one of the elements significantly reduces the efficiency of the entire system.
The main advantage of reconnaissance fire systems is the highest ability to perform tasks of fire destruction of enemy objects (higher speed, higher accuracy of fire, etc.), on the other hand - the complexation of such systems requires higher costs for their creation and operation. Also, existing systems cannot be predicted in terms of the ability to perform tasks from enemy fire damage, sufficiently reliable systems operate differently, show different efficiency, fail where they should not.

Thus, it can be noted that there is a sign that affects the functioning of the reconnaissance fire system and is insufficiently studied before. The analysis suggests that this is the stability of the system.

References: