

# The Role of Modern Technology-Based Systems in the Organization of Interaction in the Army

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**Abstract.** *Timely and secure processing, transmission, reception and analysis of information is the highest priority when organizing the interaction of different types of troops. To address these issues, surveillance, intelligence and combat management tools, computer-based electronic data analysis systems are widely used.*

**Keywords:** *Combat Management System, Automated Management System, unmanned aerial vehicles.*

## I. INTRODUCTION AND PROBLEM STATEMENT

An absolute success in modern combat and military operations of any scale can be achieved only through the joint interaction of all military forces and units involved. Interaction is organized in accordance with the tactical, operational and strategic levels, depending on the purpose and scale of combat operations with the application of a joint Combat Management System (CMS) [3].

Timely and secure processing, transmission, reception and analysis of information is the highest priority when organizing the interaction of different types of troops. To address these issues, surveillance, intelligence and combat management tools, computer-based electronic data analysis systems are widely used. The application of such tools, which have a number of modern technological capabilities, ensures the fastest exchange of information between the troops and allows to make the most optimal decisions in combat operations [2].

One of the key elements in the organization of interaction in the combat is the establishment of interaction between aviation and other types of troops. Considering the high speed of fighter jets in combat operations, addressing the issues of organizing the interaction with other types of troops poses many challenges with regard to timing. Many of these challenges, which play a crucial role in the organization and implementation of interactions, are eliminated through the application of an Automated Management System (AMS) based on modern technologies [3].

In recent years, the military leadership of various leading countries in the world has paid much attention to improving the CMS by simplifying the organizational structure and using modern technologies in the reforms and modernization of the army. The main component of this process has been the increase of network-based combat capabilities, the development and application of automated combat control systems using new technologies that meet the requirements of modern times [1].

The main task of the new AMS is to ensure reliable and continuous exchange of information between the Control Points and headquarters. It should also be noted that modern CMS includes many reconnaissance vehicles, including unmanned aerial vehicles (UAVs) and satellites. All information is displayed on an electronic map in real time and the means of information exchange built into a single scheme allows you to quickly change documents, orders and revise the course of operational activities on the spur of the moment.

With the widespread use of UAV as a key component of the CMS, several important functions can be effectively performed, such as gathering information about the enemy's position, activities, air, ground, radio-electronic impacts, radiation, chemical and bacteriological situation in the operational area [1].

The prevalent application of UAVs in the army has necessitated radical changes in military science and combat tactics.

The outcome of the counter-offensive operation carried out by the Azerbaijani Army against the Armenian armed forces on September 27, 2020, once again proved it. Despite the large number of available weapons, the advanced engineering fortifications of the years and their advantage in terms of location, the Armenian armed forces seemed impotent in the face of modern UAVs found in the inventory of the Azerbaijani Army. At the outset of the war, the vast majority of the echeloned air defense systems of the Armenian Armed Forces were destroyed [4].

In this operation carried out by the Azerbaijani Army against the army of the occupying state, along with the destruction of military equipment, the UAVs played a crucial role in performing other types of tasks. Thus, in the operation, the UAV has a wide range of capabilities in the implementation of many tasks, such as constant monitoring of the operational area, continuous access to intelligence, organization of interaction between units and formations during the movement, deployment and disguise of troops [4].

Having considered the abovementioned facts, the CMS in the organization of interaction in future combat operations using modern technologies, especially armed and unarmed aerial vehicles will be more prevalent, due to the increased efficiency and reliability of technological development.

Thus, the decisive role in the organization of interaction during combat operations between different types of troops will belong to modern technology - modern combat management systems.

## REFERENCES

- [1] Ibrahimov B.G., Talibov A.M. Researches efficiency functioning systems processings information flows automobile services. T-Comm, vol. 13, no.5. 2019., pp. 56-60.
- [2] Ибрагимов Б.Г., Талыбов А.М. Анализ показателей систем обработки информационных потоков автомобильных служб специального назначения / Сучасні напрями розвитку інформаційно-комунікаційних технологій та засобів управління. Матеріали дев'ятої міжнародної науково-технічної конференції, 11 – 12 квітня 2019 року. Баку – Харків – Жиліна – 2019. – с. 60-61.