

УДК 623.746-519:351.862.4
DOI: 10.31733/15-03-2024/2/350-351

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DEVELOPMENT AND USE OF UAV TECHNOLOGIES IN SERVICE AND COMBAT ACTIVITIES OF SECURITY AND DEFENSE SECTOR FORCES

The relevance of the topic of development and use of unmanned aerial vehicles (UAV) technologies in the military operations of the security and defense sector is extremely high today. With the development of modern conflicts and security threats, the growth of geopolitical tensions and the need to effectively counter military threats, the use of UAVs is gaining more and more importance. Given the rapid pace of technological progress and constant changes in the modern military environment, research into the use and improvement of the functionality of UAVs is becoming extremely relevant to ensure the effectiveness and safety of military operations.

The emergence of new threats and modern military conflicts pose new challenges to the security forces, which require appropriate technological solutions. In particular, the development and use of UAV technologies provides opportunities for precision strikes, effective reconnaissance and risk reduction for one's own personnel. Considering this, consideration of this topic is necessary for understanding and studying new strategies and methods of conducting military operations in the conditions of a modern military conflict.

The purpose of this work is to analyze the use of unmanned aerial vehicles (UAV) technologies in military operations of the security and defense sector. The work is aimed at studying the impact of these technologies on the effectiveness and safety of military operations, as well as revealing the prospects for the development of this direction in the future.

The use of unmanned aerial vehicles (UAVs) during the modern Russian-Ukrainian war created new opportunities for military personnel to perform tactical tasks. However, it also led to the emergence of new requirements for specialists who serve in the army. Some models of UAVs require the soldier to synchronize work with an augmented reality helmet, which allows you to get a circular view of space in three hundred and sixty degrees. However, despite the advantages, the use of these technologies carries risks for the physical and psychological health of military personnel, such as headaches, temporary disorientation in space, nausea, and others [1].

Progress in the field of unmanned aviation determines the direction of development of new strategies and methods of conducting military operations in modern conditions. The use of unmanned aerial vehicles, in particular Bayraktar TB2, in combination with kamikaze drones and artillery means for attack, mainly on air defense, missile forces and artillery, allows to achieve strategic advantages or even air dominance with the minimization of personnel losses [2].

It can carry four aerial bombs with advanced laser guidance or two anti-tank guided missiles. To control the drone, three operators are used from a station that is moved by a car. Bayraktar has the capability of autonomous flight. This weapon is able to effectively eliminate command posts, electronic warfare stations, as well as anti-aircraft missile systems [3].

The Armed Forces of Ukraine actively use unmanned aerial vehicles to strike strategic targets far from the zone of active hostilities. Reconnaissance drones are used with great efficiency to determine the coordinates of Russian ammunition depots, command posts, electronic warfare systems and artillery batteries. In Ukraine, there is an initiative called «Drone Army», which aims to maximize the use of reconnaissance and attack unmanned aerial vehicles in order to compensate for Russia's great superiority in air and artillery power [4].

The Ukrainian military often cannot afford to simply randomly fire at enemy positions, since accurate information about their location is important for effective artillery operations. Our

scouts were able to successfully use affordable and simple serial drones, such as DJI or Autel, to determine the positions of the Russian military and direct artillery strikes. Drones helped destroy a significant amount of enemy equipment, personnel and artillery. For example, assistance from the Mavik-3 drone, which has a value of about UAH 100,000, contributed to the destruction of the Ural vehicle, valued at approximately UAH 2 million. [5].

From the analysis presented in this study, it can be concluded that the development and use of unmanned aerial vehicles (UAVs) is becoming a significant factor in the field of law enforcement and defense. According to the stated data, the use of UAVs opens up new opportunities for conducting military operations, in particular for performing tactical tasks and delivering precise strikes on strategic targets. UAV technologies are used for reconnaissance, establishing the coordinates of enemy objects, as well as for directing artillery strikes, which contributes to more effective warfare and reducing risks for personnel.

It also states that scouts and drone operators have learned to successfully use affordable and simple drones to locate enemy positions and deliver strikes.

This allows to destroy enemy equipment and personnel with minimal losses on the part of their own troops. For example, the use of Mavik-3 drones contributed to the destruction of an enemy object, which is worth much more than the drone itself.

This approach to the use of UAV technologies, which is based on their availability and capabilities, allows to increase the effectiveness of combat operations, as well as to reduce risks for one's own personnel. Programs aimed at maximizing the use of reconnaissance and attack UAVs show that developers and the military are rapidly adapting to new challenges in modern military technology to ensure the safety and effectiveness of military operations.

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**PRIORITIES FOR ENSURING CYBERSECURITY OF UKRAINE
IN THE CONTEXT OF ARMED AGGRESSION**

In today's world, which is becoming increasingly digital and dependent on information technology, the role of cybersecurity is extremely important and crucial. It creates the basis for security and resilience in the information space, protecting individuals, companies, government agencies and national interests from potential threats.