

THE USE OF UAVS IN THE ARMED FORCES

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It's no secret that military affairs are a whole independent science. Like any other field of knowledge, they are constantly developing and enriching. In the modern world, the use of advanced technologies plays a significant role in the development of the Armed Forces; such innovations including the use of UAVs (unmanned aerial vehicles). UAVs in the armed forces are becoming increasingly popular and widespread, as their use in military operations can increase the efficiency and safety of performing various tasks, as well as reducing risks to human life.

The UAV is a multifunctional combat unit that can have varying degrees of autonomy - from remotely controlled to fully automatic. UAVs can be used for the following purposes:

1. Intelligence and surveillance. UAVs can be used to collect intelligence information, monitor enemy positions and their movements, and detect targets in hard-to-reach places [2].

2. Fire control and target designation. The UAV provides search, detection and identification of targets, preparation of weapons for firing, guidance, fire adjustment and solving the problem of hitting a target with fire.

3. Strikes at ground and sea targets. To carry out strikes, UAVs are divided into attack drones and kamikaze drones. Attack drones can be equipped with guided bombs, cluster bombs, incendiary devices, air-to-surface missiles, air-to-air missiles, anti-tank guided missiles and other types of precision-guided munitions, autocannons and machine guns. Kamikaze drones have a combined warhead to destroy manpower and lightly armored vehicles.

4. Electronic warfare. UAVs can be used to jam radio communications, radar and other electronic systems.

5. Delivery of goods. UAVs can be used to deliver ammunition, medical equipment, food and other necessary supplies to frontline positions.

Modern drones have high-quality technical equipment, surpassing classic manned vehicles in several factors:

1. Savings on operation. The production of UAVs costs tens of times less than modern aircraft; the flight does not require special training or the participation of pilots.

2. The ability to simultaneously perform several tasks such as: reconnaissance, coordination, information, attack, cargo transportation.

3. Removing the problems of the “human factor”. During combat operations, the pilot receives high overloads, which are imposed on the psyche when it is necessary to make an important decision in a short period of time. With the use of drones, this problem is not relevant, since the actions of the drone are programmed or controlled by an operator who is not in danger and is able to reason rationally.

4. No risk to human life. The drone flies without human participation in combat, where the military personnel lives are at risk.

Currently, active work is underway to reduce the size of drones and their functionality. Reducing the size, we will reduce cost and maneuverability. Work is also underway on using a group of drones to achieve set of goals. During the flight, the devices exchange information with each other and distribute tactical missions.

Unmanned aerial vehicles have become an integral part of the armed forces of many countries in recent decades. Their use plays an important role in ensuring the safety and effectiveness of military operations. With the development of technology and the advent of GPS, the production and use of drones has received a new round of development [1]. Modern devices are distinguished by high autonomy, the ability to land independently, perform tactical tasks in combat and stay in the air for more than 12 hours. UAVs are superior to traditional manned vehicles in cost, mobility and overall effectiveness in military environments. But we must not stop there!

References

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