MILITARY SCIENCES

FEATURES OF THE USE OF THE DEFENSE FORCES IN THE CONDITIONS OF MILITARY CONFLICTS, IN THE CONTEXT OF COVERING OBJECTS FROM AIR ATTACK MEANS

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Based on the experience of local wars and military conflicts of recent decades, NATO military experts focus on the ever-increasing role of troop air defense in modern combat (operations) and, in this regard, highlight the emerging trend of attracting more and more forces and means to suppress it. Therefore, in recent years, the military-political leadership of each country has specified tasks, revised views on its organization, construction and development of means [1–3].

It is concluded that when developing military air defense systems, more attention should be paid to the development of anti-aircraft systems capable of forcing an air enemy to descend to extremely low altitudes (less than 100 m), where it is very difficult to break through the air defense system. Here are the most difficult conditions for aviation operations: the flight range is reduced, piloting and navigation become more complicated, and the possibilities of using airborne weapons are limited. Thus, the probability of detecting targets by an aircraft flying over a flat area at a height of about 60 m at a speed of 300 m/s is 0.05. And this is unacceptable for air combat operations, since only one out of every 20 targets will be detected and possibly fired upon. In general, it is believed that it is advisable to "tightly close" large heights, and leave small ones "partially open". Reliable overlapping of all heights is a complex and expensive matter [4].

Given the above, as well as the fact that it is practically impossible to create continuous and highly effective air defense at all altitudes in a theater of operations, the emphasis is on reliable cover for the most important groupings of troops and objects due to multi-layered zones of destruction. To implement this principle, it is planned to use long-range, medium-range and short-range

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air defense systems, portable air defense systems and anti-aircraft artillery systems. Based on the high mobility of troops and the maneuverability of combat operations, rather stringent requirements are imposed on all fire and support means in terms of mobility, noise immunity, operational reliability, and the ability to conduct continuous autonomous combat operations in any weather conditions. The air defense groupings created on the basis of such complexes will be capable of hitting air targets at distant approaches to covered objects in a wide range of altitudes and flight speeds. At the same time, an important role is given to portable air defense systems, which have high mobility, quick response and are a means of direct cover from air strikes from extremely low and low altitudes. Subunits armed with them can be used to cover combined-arms units and subunits, positions of artillery, missile units and subunits, command posts and rear facilities both independently and in combination with other air defense systems.

Since air defense systems are not enough for the simultaneous and reliable protection of all objects, the priority in providing cover is set based on their operational-tactical importance, which can change in each specific situation. Their most typical ranking is as follows: troops in concentration areas and on the march, command posts, rear facilities, airfields, artillery units and subunits, bridges, advancing reserves, and critical infrastructure facilities [5–6].

With the advent of new weapon systems and their adoption into service, we should expect a change in the organizational structure of air defense units and units. Currently, for example, they include divisions (batteries) of mixed composition, consisting of short-range air defense systems and anti-aircraft artillery systems, as well as portable air defense systems platoons.

A set of such measures will strengthen the air defense system.

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