information system is a three-layer flexible shell, the outer layer of which consists of a photosensitive material, the middle layer of the material, which converts the optical signal into the electrical and internal layer of the insulation material. The middle layer of the material converting the optical signal into an electrical one is completed with a number of miniature devices which provide amplification and indication of electrical signals. It should be noticed that the hat of the information system in appearance is absolutely identical to those hats that are made of ordinary textiles and used by soldiers for masking purposes.

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THE USE OF NAVIGATION SATELLITE SYSTEMS IN THE ARMED FORCES OF UKRAINE IN THE AREA OF THE COMBINED FORCE OPERATIONS

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Solving various military problems is impossible without the use of space technology, namely the appropriate navigation and time support through the use of GNSS – global navigation satellite systems.

The main issues of navigation and time support, which requires immediate solutions to ensure the combat readiness of the Armed forces of Ukraine is guaranteed provision of navigation services in different battle conditions in a diverse environment a stable work of the system in conditions of influence of natural, artificial and intentional interference, rapid alert consumers about the violation of the integrity of the radio navigation field, the appropriate metrological service of the user equipment of GNSS.

During the modernization and creation of new samples of armament and equipment it is necessary to provide picking means navigation using GNSS signals of domestic and foreign production.

Space technology allows with high reliability to solve a number of problems of a military nature, namely:

- evaluation of precision performance of weapons; ensuring high accuracy during the testing and use of both modern and future weapons systems;
- operate weapons systems on the battlefield unprepared;
- promptly prepare the weapon system for combat use;
- interoperability of forces during a joint military action in a coalition of armed groups;

- the operational provision of accurate clevises during fire control and adjustment;
- the provision of opportunities for the application of point fire strikes, preventing collateral damage in densely populated areas, which is important during warfare in the area of the Combined Force Operations (CFO);
- reduce the cost of military training units and save the resource of military equipment during training on virtual grounds and training complexes and systems;
- implementation of information technologies and information systems (reconnaissance, navigation, communication systems and data transfer) into a single set of combat equipment future soldier.

But along with the positive traits of GNSS, there are certain disadvantages that directly affect the accuracy of processing the radio navigation signals. This is due to technical errors of the navigation apparatus (the playback timeline of measuring the components of the velocity vector and the coordinate determination of appropriate frequency standard signals), and qualitative characteristics of the navigation field (the effect obstacle situation, the probable nature of the integrity and availability of the navigation field).

The deterioration of the navigation signals can also be due to the influence of the atmosphere, and with the failure of the onboard equipment of satellites, deliberate introduction by the owner of GNSS errors to reduce the accuracy characteristics of systems navigation and time support of disloyal consumers.

Given that the use of the equipment consumption GNSS provides the solution of specific military (tactical) tasks, the use of satellite technology remains one of the main ways to improve tactical and technical characteristics of weapons and military equipment with their development or upgrading.

Whatever perfect global positioning system was not there are objective and subjective factors, which do not allow to solve the navigation task with the desired accuracy without additional adopted technical and organizational measures in the system of navigation-time support of the Armed forces.

Thus today there is practically no regulation of specific requirements to the equipment of GNSS, which should be included in the tactical-technical task for the development (upgrade) of weapons and military equipment.

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