

## TRANSPORTATION OF MATERIALS IN MOUNTAINOUS CONDITIONS WITH ARMORED AND VEHICLES

**IKROMOV DILSHOD BAKHTIYOROVICH**

**Senior Lecturer, Military Security and Defense University**

**Annotation:** this article reflects the peculiarity of ensuring the safety of movement in mountainous conditions, management of automotive techniques, and the requirements imposed on them, the study of the experience of leading foreign countries in the methods of safe movement of automotive techniques in the mountains, the analysis and identification and implementation of techniques in modern armed conflicts in the mountains

**Keywords:** car, technique, movement, security, mountain, conditions, fluff, transformation.

**Introduction.** The requirements for existing automotive equipment in the armed forces have changed, that is, the army must be mobile, compact and able to quickly perform any task. Modern automotive equipment is the material basis of the mobility of troops and one of the main means of ensuring their operational and tactical actions. The Ministry of Defense, the Department of Automotive Equipment, pays great attention to ensuring the quality of automotive equipment and its guaranteed service during its use, therefore, at the same time, it is required to improve the skills of personnel, maintain automotive equipment in a constant state of high combat readiness, organize the high-quality use of equipment, and radically eliminate the occurrence of malfunctions.

**Main part.** It is precisely in difficult and mountainous conditions that the use of armored and automotive equipment and ensuring the safety of movement are difficult, mountainous and desert territories differ in their complexity, natural and climatic conditions, characteristics of vegetation cover, diversity of layers, and other factors. These factors create a number of difficulties in driving vehicles in mountainous areas and significantly affect safe movement.

Analysis of combat training conducted in the troops, as well as the experience of combat operations in recent years, shows that battles in various conditions are mainly conducted along passable routes, on flat slopes, hills, in cities and valleys. At the same time, the complex terrain forces them to conduct combat operations in safe and isolated directions.

Advanced foreign experience shows that one of the specific features of using and moving vehicles in mountainous conditions is that drivers of mountain units undergo special courses on driving in mountainous conditions, and drivers who receive

excellent and good grades are allowed to drive vehicles in mountainous conditions. After that, these drivers are awarded special badges.

Factors affecting the use of armored vehicles and ensuring the safety of movement in mountainous conditions (Figure 1), the readiness of troops and military equipment is determined by the conditions of their use after a certain period of use, after a calendar period, or at a certain stage of use.



is carried out with a planned-mandatory maintenance system that provides for some type of full-scale mandatory maintenance.

**Figure 1.** Movement of material resources with armored vehicles in mountainous conditions

In addition, in urban, rural and populated areas, unexpected exits and emergence of residents on the roads and other obstacles negatively affect the safety of movement. Therefore, it is advisable to distribute motor vehicles and other means of power by units.

In some cases, it restricts the movement of armored vehicles off the roads. The use and movement of armored and motor vehicles in mountainous conditions has long been one of the problems facing humanity.

When using armored vehicles in mountainous conditions and ensuring the safety of movement, it is advisable for drivers to occupy the main slopes of the road and high slopes of motor vehicles in the direction of sudden turns.

Therefore, the use of armored vehicles in mountainous conditions and ensuring the safety of movement and the placement of vehicles pose a number of difficulties. In particular, in mountainous conditions, the scattered location of vehicles on low slopes, the lack of uniformity of equipment in units, and the incomplete construction of engineering support, i.e. various types of barriers, can have a negative impact.



**Figure 2. Movement of material means of transport by car in mountainous conditions**

When driving in mountainous areas, a large number of turns, elevations and depressions force the use of steering and braking mechanisms many times, which in turn leads to rapid wear of friction elements and running parts, as well as a decrease in average speed and rapid fatigue of drivers, and requires the qualification and skill of drivers.

When monitoring the technical condition of motor vehicles, it is necessary to carefully check the serviceability of the engine, transmission and running parts, weapons, control and monitoring devices, especially gearboxes and brakes.

Failure of the steering gears, their disconnection during driving in the mountains can lead to an accident or a crash, which can result in the death of the crew (accountants, drivers) and the inability to repair the vehicles.

Driving vehicles is considered to be an awareness of special skills, knowledge, and qualifications, and in this process, drivers are required to demonstrate such qualities as self-confidence, emotional balance, superiority, stress resistance, creativity, striving for success, entrepreneurial spirit, responsibility, reliability in performing tasks, independence, and sociability. In particular, in mountainous conditions, the scattered location of vehicles on steep slopes, the lack of uniformity of vehicles in units, and difficulties in engineering support are the main reasons.

Conclusion: improving the methods of using armored and automotive vehicles in mountainous areas means thoroughly knowing the essence of the work being performed and managing within one's competence, understanding the relationships between various phenomena and processes, and finding possible ways and methods to achieve the intended goals. The experience, skills, and role of drivers in ensuring the safety of armored vehicles are invaluable, so the life experience gained over the years is of great importance.

**REFERENCES:**

1. Muxamadiev G.M. Avtomobil tayyorgarligi. I qism. (Avtomobil tuzilishi va undan foydalanish asoslari): darslik/ – T.: O‘R QK Akademiyasi, 2019. – 268 b.
2. Avtomobil texnikalari (KAMAZ-4320) texnik tavsifi va foydalanish bo‘yicha qo‘llanma 2-qism. T.: O‘RMV, 2013 y.
3. R.T. Xalikov, F.D. Sattorov. KamAZ-4310 avtomobil texnikasining tormoz tizimi./ o‘quv qo‘llanma – T.: O‘R QK Akademiyasi, 2019. – 59 b.
4. Автомобили КамАЗ 6х6 руководство по эксплуатации.–М.: Воениздат.
5. X. Mamatov Avtomobillar. 2-qism. - T.: 1998. – 282 b.