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ANALYSIS OF THE WAYS OF DEVELOPMENT AND USE OF THE SPECIAL STRIKE CARS IN CURRENT ARMED CONFLICTS

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Abstract

This paper analyzes the main ways of development of the special strike cars that are in service with the leading countries in the military sense. Furthermore based on current armed conflicts and experience of Ukrainian Armed Forces participation in the anti-terrorist operation this paper outlines possible ways of these cars application in the logistical units

Keywords: special strike cars of small class, stealth movement, high speed, mobility

In countries with advanced military capability constantly are working on creation of new and modernization of existing military vehicles. It is connected with the constant use of military vehicles in armed conflict, which today is increasingly taking a so-called hybrid nature. With the help of automobile technics are solving various tasks related to the installation and towing of arms, providing of transportation of ammunition, fuel, personnel, including in terms of against sabotage actions of units, mining roads, placement of controls and communications tools, electronic warfare, engineering mechanisms, means of airfield services, medical support, and also tasks of repairing, evacuation and logistical support of troops with everything necessary for life and fight [1].

The most widespread group of military automobile technics is a multi-purpose military vehicles, which today constitute 50% of parks of militarily developed countries. They perform a wide range of tasks from moving of cargoes, passengers, towing of trailer systems, till installation of weapons and military equipment. Depending on the purpose multi-purpose military vehicles are divided into special strike cars, tactical vehicles, transporters and tanks [2].

Depending on the combat weight and overall dimensions special strike cars are divided into small (total mass 750-2700 kg), medium (total mass 3500-4500 kg) and large (5000-6000kh). Currently cars of these classes are in service with the US, UK, France, Italy, Israel and other countries.

Analysis of foreign information materials has shown the following development trends of the special strike cars of small class:

use of special strike cars as combat platforms for installation of various arms and military equipment (guns, automatic grenade launchers, anti-aircraft missile systems, anti-tank systems);

use of diesel engines, turbocharged and intercooled charge air cooling, liquid cooling;

use of independent suspensions, which increases the passability of cars, and use of automatic transmissions;

improving of stealth of vehicles due to low silhouette and low noise of the engine.

It is necessary also to note the use mobile vehicles: motorcycles, ATVs [3]. Combat experience in armed conflicts of recent decades, including the use of national forces in anti-terrorist operation, evidences of significant changes of forms and methods of using not only troops, but also weapons and equipment. Thus the basic factors that complicate the effective use of weapons: the absence of well-defined front line, fast changing of tactical situation, the conflict parties use civilians and infrastructure facilities, the presence of journalists, intermediaries, observers, etc. [4].

Today the organization of support to troops must be based on the principle of the responsibility of senior chief for ensuring of junior. In the existing support system it was realized through accumulation and altitude separation of material and technical means to different levels of troops with minimizing routes of its delivery. In link subunit-unit is difficult to hold significant reserves due to the high probability of its destruction through the use of multiple launch rocket systems, this is confirmed by the experience in anti-terrorist operations.

In modern conditions due to the impact of destruction means are traced needs in repair: current (small labour required) or capital (irreversible losses). To conduct the current repair is necessary the defined range of spare parts, special tools and prepared specialist. Considering the dispersing of samples in sectors of units' responsibility, limited possibilities of the repair units to create the repair and recovery groups, these measures may be performed with the help of mobile vehicles: motorcycles, ATVs, special strike cars of small class etc. This is related with the fact that such mobile vehicle can pass an obstacle by the crew forces depending on the type of vehicle. Besides the possibility of movement on roads and off road allows to quick get out of infantry fire and other means of destruction.

REFERENCES

1. Крайник Л. В. Формування концепції та тактико-технічних характеристик середньотонажних військових автомобілів нового покоління / Л. В. Крайник, М. Г. Грубель, Ю. О. Василенко // Військово-технічний збірник. Вип. №1 (8), 2013. – Львів: АСВ, 2013. – С. 23-25.

2. Тенденции развития зарубежной военной автомобильной техники. / В. А. Полонский, В. В. Шипилов, В. А. Рязанов и др. – М. : Редакционно-издательский центр Министерства оборони Российской Федерации, 2005. – 176 с.

3. Мобільні транспортні засоби: минуле та сьогодення / М. Г. Грубель, В. М. Зіркевич, І. В. Овчаренко и др. // Матеріали доповідей та повідомлень учасників науково-практичної конференції «Актуальні проблеми історії Другої світової війни (До 75-річчя початку Другої світової війни та 70-річчя визволення України від німецько-фашистських загарбників)». – Львів: АСВ, 2014. – С. 93-95.

4. Аналіз використання озброєння і військової техніки 3 ОІБ за результатами виконання завдань за призначенням у Південному Лівані: Звіт командування 3 ОІБ. – К. : Озброєння ЗС України, 2000. – 146 с.

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