# FUTURE WAR - WAR OF THE ROBOTS?

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Abstract: The article deals with security situation in the Middle East where the armed conflicts have remained for years in Syria, Afghanistan and Iraq. The complexity of the situation adds diverse interests of the world powers in this area. The contribution refers to the recent fights in the area where the most modern weapons systems of Russia were used against militants of the Islamic State. Unmanned airborne and ground means to successfully carry out strikes on Islamist positions and allow the Syrian troops occupy their positions. It also shows the individual robots that have been controlled over a long distance.

Keywords: soldier, weapons, battle, tactics, operation, robot, Islamist

#### 1. INTRODUCTION

The security situation in the world since the Second World War has never been as complicated as in the past years. In Africa (Egypt, Algeria, Morocco, Sudan, Libya, Somalia, Nigeria, Central African Republic), in Europe (Ukraine) and mainly in Asia (North Korea, The most difficult situation is in Iraq, Afghanistan and in Syria, where the expansion of the Islamic State (IS) has forced all the world power (the USA, Russia, UK, France) and other NATO countries from the region to engage in the armed conflict. Each of the parties of the conflict follows its own interests and so there comes odd situations. The U.S. and allies are attacking forces and installations of the Islamic State, but they also support opponents of the Asad regime who are called the rebels. Russia attacks the Islamic State but also the rebels, whom they call terrorists. The rebels, or terrorists trained to fight by the USA should in particular fight against Asad, but they collaborate with Islamists. France has the hit centre in Africa, but after the Paris events it has participated also in the Middle East, Turkey also attacks the Islamists, and the Kurdish units as well, which make the core of the land forces fighting against IS today. Saudi Arabia and Egypt are leading strikes against Islamists mainly in their or nearby territory (1). It is actually very difficult today to find out who fights with whom and who supports whom. One thing is certain; however, in the fight against Islamists we are not missing the tactical knowledge, competence or skills, but the strategy of problem solving, coordination of operation from the air and on the ground, and the clarification of who is the real enemy number one.

In addition to the clear political or economic interests in the given area, the armed conflict means an excellent opportunity for the great powers to test new weapon systems and ways of the armed operation.

#### 2. NEW WEAPON SYSTEMS AND THE WAYS OF THEIR COMBAT USE

Development of new weapon systems conditions the emergence of new kinds of forces as well as the new ways and forms of leadership of the armed struggle, the tactics, combat and operational use of troops. The quality of the combat potential and devastating effects of the weapon systems have been considerably changing as well. The development is moving forward and the old truths that every other war is completely different from the previous one, still applies.

When it comes to ground forces, on the one hand, we can observe the improvement of the quality of individual equipment, equipment and the protection of the soldier, where many versions of the soldier of the 21st century evoke earlier characters from science fiction movies or robotic characters from fairy tales rather than the typical soldier, an infantryman of  $20^{th}$  century – fig. 1.



**FIG. 1** A soldier of 21<sup>st</sup> century

On the other hand, it is a qualitative shift in terms of the different types of weapon systems, for example, modernization of tanks or armoured vehicles, better or more efficient rocket means or artillery, more modern equipment for engineering troops or logistics. What is most essential of this fact is that many modern means do not have the human crew, but they're robots remotely controlled by robots. This is not only about the drones or UAV, which have been used for decades, but mainly about new ground-based robots with massive firepower.

### Combat use of robots in Syria and new types of Russian combat robots

In January 2016 Russian robotic unit carried out an attack on one of the support points of the Islamists in the Syrian Latakia in conjunction with Syrian soldiers. Robots conquered the strategic heights that were occupied by Syrian troops. The attack involved six robots Platform M and four robots ARGO (Fig.2). The survey was provided by unmanned aircrafts Orlan 10 and information was passed down through the field open centre management Andromeda (D) (Fig.3) directly to the National Centre for management of Defenses of the Russian Federation, where the entire operation was controlled from (2).



FIG. 2a Robot Platform M



FIG. 2b Robot Argo



FIG.3a Unmanned aircraft Orlan 10



FIG.3b Field control centre Andromeda D

Russian combat robots at the head of Syrian units destroyed the epicenters of rebellion and allowed Syrian soldiers to occupy height without serious protest with virtually any losses, while on the side of the Islamists more than 70 gunmen were killed and the others fled from the battlefield.

For the first time, Russia used the combination of air and ground robots in the combat operation. It confirmed the effectiveness of the concept of the use of robotic systems in offensive operations. According to sources from the Russian general staff, Russia will seek the full robotisation of battle tactics, and any time soon we may be witnessing that the robots will lead individual combat operations.

The process of robotisation of the Russian Army has rapidly been progressing, recently there has been the robot URAN-9, which has excellent fighting and maneuver characteristics (Fig.4), included into the robotic equipment. The armament consists of 30 mm 2A72 cannon, coupled with a machine gun calibre 7.62 mm, four anti-tank missiles ATAKA and six antiaircraft missiles IGLA.

The robot is equipped with a system for the detection of laser beam irradiation, equipment for detection, identification and monitoring of objectives and a video surveillance system permitting activity during the day and at night. URAN-9 is intended for reconnaissance and fire support and may act in the field as well as in the towns. The formation consists of two fighting robots, towing vehicle for their transport and mobile control unit.



FIG. 4 Combat robot URAN – 9

Very soon, there will be the completion of the robotisation of tank T-14 ARMATA, which has a number of unique elements, conducted. Non-crew tower is operated by a crew from the tank hull protected by composite armour. The wiev is replaced by cameras and display, the power drive is ensured by the engine with a power of 1500 HP (Fig. 5).



FIG. 5 Tank T-14 ARMATA

Cannon of the tank has calibre of 125 mm or 152 mm with sophisticated system of fire control, sensors and a perfect self-defence system. All of this ensures its superiority over other similar tanks such as M1A2SEP ABRAMS or Leopard 2A7.

#### 3. CONCLUSION

Some time ago, I said at the end of the Conference: "It can be assumed that the new kinds of forces, such as space will appear, the battle and the war will be decided by the sophisticated UAVs, on Earth, the war of robots will start to be controlled remotely from the centres hundreds of miles away.

Could this be science-fiction? Let us look at the development of military affairs in Let us look at the development of military. When we look at the published data from the Syrian Latakia, we see that the predictions are not too far, since we can assume that the best and the most powerful hotshots are hidden by each party in there.

However, the fact has been fully confirmed that the most important factor which influences combat use of modern weapon systems remains simply a man – his intelligence, education and technical thinking. Modern weapon systems, technical resources and information security increasingly require a high-quality education, training, and their perfect mastery. And here is the space for military education, military science researchers, which have ceased to exist in recent years.

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