



Rolling Out Russia's New BMP-2M

OE Watch Commentary: The BMP-2M is part of the Russian military's push to modernize 70% of its equipment by the end of this year. It has been up-engined, up-armored, up-gunned and has a new sighting system and communications. Part of the package is the Berezhok, unmanned turret system. The word *berezhok* means a little bit of beach or shoreline and could refer to the amphibious capabilities of the BMP-2M. The BMP-2M is certainly an improvement, and Algeria and India are having their BMP-2s upgraded in the same program. **End OE Watch Commentary (Grau)**



BMP-2M with B05Ya01 Berezhok turret.

Source: <https://www.vitalykuzmin.net/Military/Victory-Day-Rehearsal-in-Moscow-17-June-2020/i-GxsjQv9>

“In the next two years, the Defense Ministry will receive over 120 of the latest BMP-2M Infantry fighting vehicles with the Berezhok turret. This is enough to equip no fewer than four motorized rifle battalions. It is expected that all the vehicles will be sent to the Western Military District.”



Continued: Rolling Out Russia's New BMP-2M

Source: Anton Lavrov and Roman Kretcul, "Army receives first battalion sets of the new BMP-2M with the *Berezhok* turret", *Izvestia*, <https://iz.ru/1055498/anton-lavrov-roman-kretcul/krutoi-berezhok-armiia-poluchit-pervye-batalony-novykh-bmp-2m>, 2 September 2020

Army receives first battalion sets of the new BMP-2M with the Berezhok turret

In the next two years, the Defense Ministry will receive over 120 of the latest BMP-2M Infantry fighting vehicles with the Berezhok turret. This is enough to equip no fewer than four motorized rifle battalions. It is expected that all the vehicles will be sent to the Western Military District. The vehicle is equipped with a whole arsenal of weapons -- the Kornet antitank missile system, a machine gun, a 30-mm cannon, and even an automatic grenade launcher. The updated combat vehicle is also equipped with the most modern optronic systems, onboard computers, and digital sensors. According to experts, the BMP-2M with the Berezhok is now the most powerful infantry fighting vehicle in the composition of the Russian Armed Forces.

According to the contract...the military will receive 124 BMP-2M with the Berezhok turret before the end of the 2022 year. The first batch of updated combat vehicles may arrive as early as 2020. The BMP-2M is part of a complete overhaul of the BMP-2 infantry fighting vehicle... The result is entirely new equipment... In addition to the Berezhok module new turbo-powered engines will be installed on the updated vehicles, the suspension will be improved, and the armor will be enhanced...

Currently there are several dozen BMP-2M vehicles with the Berezhok turret in the army. Their experimental-troop employment and final tests have been ongoing since 2018. They were shown at the 24 June parade in Moscow...

According to military expert Aleksei Khlopotov, the BMP-2M features significantly enhanced combat performance, new sighting systems and thermal imaging devices installed. It is armed with newer and more powerful missiles. "Previously, before battle, it was necessary to get the guided missile from the storage compartment, to reach out, and to install it on the rail. During the fight, the munition was quite vulnerable, as it was protected only by a plastic case. The new vehicle carries four launchers of the latest Kornet missile with a tandem warhead. They are capable of penetrating vehicles fitted with active armor. The missiles are protected against bullets and fragments with armored shields. The missiles are now integrated with the fire control system. The updated BMP-2 has acquired a "long reach" of a sorts, and is now capable of destroying tanks at a distance of five kilometers. It has improved search capabilities. And the 30-mm automatic cannon has been equipped with an all-weather sighting system.

According to the developers' data, the upgraded BMP-2M surpasses the American Bradley two fold, in terms of combat effectiveness, and four fold over the original version of the BMP-2. This improvement was achieved thanks to the Berezhok turret, developed on the basis of an ordinary turret of the BMP-2. In addition to the 30-mm cannon and coaxial machine gun, it now has four Kornet-E antitank missiles systems mounted. Further, an automatic grenade launcher capable of conducting arching trajectory fire is included.

Depending on the model, the Kornet guided missiles can destroy ground and air targets at distances from 5 to 10 kilometers. Their 1,200-mm armor penetration capability is sufficient to destroy any modern tank even if struck in the frontal armor... The possibility of overcoming the latest enemy active protection systems by intercepting incoming is envisaged as well. In order to do this, the Berezhok fires two missiles at the same target with a second-long interval. Even if the first missile is intercepted, the second one will hit the target.

Unlike the standard issue Konkurs antitank missile system for the BMP-2, the new missiles can be fired while on the move. They are no longer linked by, as the new missiles are guided by a laser beam. If necessary, the Kornet systems are also capable of striking low-speed airborne targets at low altitudes -- helicopters and unmanned aerial vehicles, as well as buildings. For this purpose, the arsenal includes not only armor-piercing, but also powerful thermobaric munitions.

The 30-mm automatic grenade launcher is much more effective than a BMP cannon when targeting the infantry, hiding in trenches or behind shelters. Its maximum range is up to two kilometers with the new grenades.

The commander and the gunner have separate sights with night and thermal observation channels. The weapons and observation devices are stabilized and can automatically hold the target in the sights day and night, as well as when on the move. The modern laser rangefinder determines the distance to it up to 10 km away.

New Equipment

The BMP-2M with Berezhok turret was exhibited at the Army-2020 forum with a set of additional protection. It featured slat and applique armor that protect the vehicle body against bullets from heavy-caliber machine guns and can withstand a hit by RPG-7 antitank grenades. The weight of this kit is around one ton. It can be installed and dismantled by the crew.

The new diesel UTD-23 turbocharged engine is one-third stronger than the one installed in the pre-upgrade version. It achieves 400 horsepower. The high-power hydraulic shock-absorbers and reinforced bogeys make it possible to cope with the heavier BMP-2M carrying increased protection. Rubber-metal tracks serve longer and cause less damage to roadways.

Its communications equipment has also been updated. The vehicles will receive the R-168 Akveduk modern digital radio station with increased range and improved quality of communications. The ability to connect the BMP to modern automated combat operations control systems is yet another important feature.