## RUSSIA, UKRAINE, EUROPE





## **New Artillery Rounds Will Extend Russian Artillery Range**

**OE** Watch Commentary: The first accompanying excerpted article from *Rossiyskaya Gazeta* discusses Russia's development of a new technology that will extend the reach of Russia's 152mm Msta howitzers to over 70 km. As the second passage from the same newspaper reports, Russia is not only extending the ranges of artillery pieces, but also developing the associated C4ISR capabilities to accurately lay these fires at extended ranges. If these developments prove successful and become widespread throughout the Russian armed forces, the Russian Federation will greatly enhance its capabilities at not only fighting insurgencies, but also peer-level adversaries in high-intensity conflict situations. **End OE** Watch Commentary (Bartles)

Source: Aleksey Moiseyev, "Российский снаряд с реактивным двигателем поразит противника за 70 км (Russian Round with Rocket Engine Will Strike Enemy at Over 70 Kilometers)," *Rossiyskaya Gazeta Online*, 14 November 2017. <a href="https://rg.ru/2017/11/14/rossijskij-snariad-s-raketnym-dvigatelem-porazit-protivnika-za-70-km.html">https://rg.ru/2017/11/14/rossijskij-snariad-s-raketnym-dvigatelem-porazit-protivnika-za-70-km.html</a>

The latest Russian artillery round will exceed the firing range of domestic self-propelled and towed artillery by more than two times... When it is accepted into the inventory it will significantly surpass munitions used at the present time, and its characteristics will be at the level of the very best foreign advanced developments. It is expected that the product will appear in two versions, one of which will have a caliber of 152 millimeters. In the opinion of military experts this will allow it to be used both in the advanced 2S35 Koalitsiya-SV howitzers, as well as in the Msta-S self-propelled and Msta-B towed guns used at the present time...According to various data there are also plans to create a 203-millimeter version of the round for the Pion and Malka self-propelled cannons.

The record firing range of 70 kilometers and beyond is achieved by virtue of adding a ramjet rocket engine to the construction of the munition, placed either in the forward section or at the base of the round. The engine is turned on shortly after firing, after the fired round has already stabilized its rotations and it is gaining speed on its trajectory...Military experts are proposing to equip these rounds with special satellite guidance modules to increase their accuracy characteristics. This advanced development was demonstrated during the Armiya-2017 Military Technical Forum.

Source: Aleksey Moiseyev, "Видео: Новый российский дрон наводит артудары по террористам в Сирии (Video: New Russian Drone Guides Artillery Strikes Against Terrorists in Syria)," *Rossiyskaya Gazeta Online*, 19 November 2017. <a href="https://rg.ru/2017/11/19/video-novyj-rossijskij-dron-navodit-artudary-poterroristam-v-sirii.html">https://rg.ru/2017/11/19/video-novyj-rossijskij-dron-navodit-artudary-poterroristam-v-sirii.html</a>

Artillery in Syria has begun the large-scale use of high-precision munitions whose laser guidance is performed by UAVs. This can be judged after watching a video posted on the Web on 18 November. The action takes place in the Albu Kamal area and its environs. The very effective operation against various targets is delightful. Terrorists' vehicles, river-crossing equipment, fire points, and munition dumps are destroyed...

Pinpoint targeting in an urban setting is worthy of the highest assessments. Targets are knocked out with minimal damage to surrounding buildings. That is the advantage of guided mines and shells. For example, the mass of explosives in Krasnopoltype munitions ranges between 6.5 and 11 kg, depending on the modification...Aircraft employ correctable bombs weighing 250-1,500 kg. Understandably, artillery strikes are pinpoint and more sparing.

What is noteworthy is that captions appear in the upper left corner of the video recording: "Podsvet LTsD [laser target designator-range finder]," "illumination," and "cooling." This attests that the drone is equipped with a laser target designator. We do not yet know which model of UAV we are talking about...This video is known to have already caused great concern among servicemen of countries that are not amicably inclined toward Russia...

