



Russian Ground Forces to Acquire 20 Tornado-S 300mm MLRSs

OE Watch Commentary: The 9K58 / BM-30 Smerch is a 300mm Multiple Launch Rocket System (MLRS) usually found in the MLRS brigades directly subordinate to the military districts. The standard MLRS brigade consists of 12 launchers (typically, each MLRS brigade consists of three battalions, with each battalion having two launch batteries, with each launch battery having two launchers). The Smerch is a long-range MLRS designed for engaging multiple targets on distant approaches; personnel in the open, as well as fortifications; unarmored, lightly armored, and armored vehicles of motorized infantry and tank units; artillery units; tactical missiles; air defense systems; airfields; command posts; communications centers; and facilities of the military-industrial importance. The accompanying passages from *Krasnaya Zvezda* and *Kommersant* discuss Russian plans to purchase a replacement for the Smerch, the 9K515 Tornado-S MLRS. The Tornado-S is a modified version of the Smerch MLRS, and underwent state trials in 2015. Aside from an increased range (90km vs 120km) and GPS/GLONASS guided rockets, the Tornado-S is also reported to boast a modular pod-mount loading system that more quickly facilitates reloading operations than its predecessor. **End OE Watch Commentary (Bartles)**

“The main advantage of the Tornado-S MLRS is the use of fundamentally new 300mm guided rocket projectiles with fragmentation and shaped-charge fragmentation submunitions and a range of fire up to 120 kilometers.”
- Vladimir Lepin, Tekhmash General Director

Source: Vladislav Savin, “Новые реактивные системы залпового огня повышают боевую эффективность (New Multiple Launch Rocket Systems Increase Combat Effectiveness),” *Krasnaya Zvezda* Online, 23 September 2019. <http://redstar.ru/novye-reaktivnye-sistemy-zalpovogo-ognya-povyshayut-boevuyu-effektivnost>

New Multiple Launch Rocket Systems Increase Combat Effectiveness

Machinebuilding Technologies Concern (Tekhmash) of State Corporation for Assistance to the Development, Production, and Export of Advanced-Technology Industrial Products (Rostekh) is continuing the development of new advanced models of Russian arms, including modernized multiple-launch rocket systems, which surpass international analogues in terms of their combat characteristics.

...the new Tornado-S (9K515) MLRS with 300mm guided rocket projectiles is the result of in-depth modernization of the 9K58 Smerch MLRS. It has improved specifications and performance characteristics compared with the predecessor, and particularly a substantially increased range and accuracy. This advanced Tornado-S MLRS recently received an advertising certificate and is ready to enter the international arms market...The 9K515 Tornado-S (S -- Smerch) system includes a modernized fighting vehicle equipped with an automated guidance and fire control system (ASUNO), new 300-mm guided rocket projectiles, as well as the 9M542 guided rocket projectile with separable fragmentation-high explosive and cluster warhead.

The main advantage of the Tornado-S MLRS, according to Tekhmash Concern General Director Vladimir Lepin, is the use of fundamentally new 300mm guided rocket projectiles with fragmentation and shaped-charge fragmentation submunitions and a range of fire up to 120 kilometers...These new guided projectiles have been created on the basis of Smerch MLRS 300mm rocket projectiles through the inclusion in the unit design of a control system built on a strapdown inertial navigation system supported by onboard satellite navigation gear. The new modernized system envisages the capability of communicating individual flight mission data to each projectile.

The Tornado-S MLRS is designed for delivering fire against personnel, equipment, and fixed and moving single and multiple targets. The MLRS can be employed against artillery and missile subunits, including precision-guided munition systems, in concentration areas, on the march, and at firing and launch positions. The system also is capable of engaging motorized infantry and tank subunits, command and control facilities, air and missile defense weapons, electronic warfare weapons, and aircraft and helicopters on runways...Tekhmash currently is working on a further improvement of MLRS munitions...



Continued: Russian Ground Forces to Acquire 20 Tornado-S 300mm MLRSs

Source: Dmitry Astakhov, “«Мотовилихинские заводы» загрузят залпом Группа заключила крупный контракт на РСЗО «Торнадо-С» (‘Motovikhinskiye Factories’ Design Bureau Gets Big ‘Tornado-S’ Order),” *Kommersant* Online, 24 September 2019. <https://www.kommersant.ru/doc/4102655>

‘Motovikhinskiye Factories’ Design Bureau Gets Big ‘Tornado-S’ Order

As *Kommersant* has learned, the Closed Joint-Stock Company “Special Design Bureau” (ZAO SKB), [Закрытое Акционерное Общество “Специальное Конструкторское Бюро” (ЗАО СКБ)] at which military production was concentrated after Motovikhinskiye Factories’ bankruptcy, has received its first big military order. We are talking about deliveries of the Tornado-S multiple rocket launcher system. According to the sources, the value of the contract could be worth 6-7 billion rubles, which would be enough to produce about 20 machines. According to experts, the fact that Motovikhinskiye Factories itself is still in bankruptcy proceedings will not affect the contract’s fulfillment...

Gennadiy Kuzmitskiy, the former general director of the Perm Gunpowder Plant, believes that the army will continue to order special products at Motovikhinskiye Factories enterprises despite the parent company’s bankruptcy – there is nowhere else to make such products. According to Mr. Kuzmitskiy, the parent company’s bankruptcy does not threaten the subsidiary fulfilling the defense contract with problems; the funds for its execution are held in special accounts, against which the tax service and creditors cannot not impose interim measures.



9A52-2 launch vehicle of 9K58 / BM-30 Smerch MLRS.

Source: Vitaly Kuzmin via Vitalykuzmin.net, <https://www.vitalykuzmin.net/Military/IDELF-2008/i-sLZrq3x>, CC BY-NC-ND 4.0