



Increasing Multi-Domain Capabilities: The Iskander Engages the Sea

OE Watch Commentary: The Iskander missile system fills an important niche in Russian force projection. In general, Russia believes that the US/NATO will maintain air superiority and has thus invested heavily in missile technologies. Iskander missile systems are found in missile brigades operated by the Russian Ground Forces' Missile and Artillery Troops. These brigades are usually part of an Army Group (Combined Arms Army or Tank Army) or Army Corps. In terms of capabilities, the Iskander missile system is a significant improvement over its predecessors like the OTR-21 *Tochka* (SS-21 Scarab) and OTR-23 *Oka* (SS-23 Spider) and has little in common with them. The system is capable of not only transporting and launching two missiles, but also firing two different types of missiles. The Iskander, which Russia classifies as a tactical-operational missile system, can fire two SRBMs or two ground-launched cruise missiles GLCMs, referred to as the R-500 or Iskander-K in Russian. These missiles can carry a variety of payloads weighing 480-700 kilograms, including cluster warheads (anti-personnel/anti-material), fragmentation submunitions, area denial submunitions, high explosive, thermobaric, high explosive earth penetrators for bunker busting, electromagnetic pulse, decoy, and nuclear warheads.

The accompanying excerpted article from *Izvestiya* discusses new developments regarding the Iskander, namely the use of electro-optical and radar targeting capabilities that can target naval vessels. The Russian Federation already possesses a variety of coastal defense missiles including the *Granit* (SS-N-19 Shipwreck), *Onyx* (SS-N-26 *Strobile*), and *Kh-35* (AS-20 *Kayak*/SS-N-25 *Switchblade*/SSC-6 *Sennight*). These additional capabilities could also be of great benefit for the Army Group commander in terms of the disruption of enemy Reception, Staging, Onward movement, and Integration and sustainment activities at a Sea Port of Debarkation (SPOD). Previously, if the Army Group commander had to use an organic asset to target a SPOD, he probably would use the Iskander to target key pieces of critical infrastructure (fuel depots, gantry cranes, etc.). Now, the Iskander can destroy or damage ships in their berthing areas or in the immediate vicinity of the SPODs, actions that would significantly hinder port operations. **End OE Watch Commentary (Bartles)**

“As part of the scheduled reoutfitting of military district troops, high-power self-propelled artillery battalions in artillery brigades are being rearmed and are beginning scheduled combat training.”



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9P78-1 TEL of 9K720 Iskander-M SRBM.

Source: Vitaly Kuzmin, <https://www.vitalykuzmin.net/Military/ARMY-2018-Demonstration-part-2/I-15MHQGr>, CC 4.0.

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Continued: Increasing Multi-Domain Capabilities: The Iskander Engages the Sea

Source: Roman Kretsul and Aleksey Ramm, “«Искандер» стал морским убийцей (The Iskander Has Become a Navy Killer),” *Izvestiya*, 21 August 2018. <https://iz.ru/775092/roman-kretcul-aleksei-ramm/iskander-stal-morskim-ubiitcei>

The servicemen of the missile formations have begun training on the destruction of surface ships. The first exercises occurred in Southern Military District. To date, the Iskander-M missile complexes have not been capable of effectively destroying moving targets...The missile formations' capability to destroy naval surface targets will make the Russian coasts impregnable...

The maneuvers that occurred – are the Russian military personnel's first experience on combating naval surface targets. Prior to this, it was thought that the Iskander-M missile complex can effectively destroy only fixed targets. The fact is that the missile was guided not to a specific target but to a point on the terrain and flew based upon the designated coordinates. That warhead can be guaranteed to destroy headquarters, munitions dumps, or a missile silo. However, the system was not effective against ships and other moving targets.

The successful launches against naval surface targets, which were conducted in Russia's south, could indicate the fact that homing systems are arriving in the missile troops, Military Expert Dmitriy Kornev pointed out. From all appearances, we are talking about electro-optical and radar systems. First of all, a visual representation of the target, the photograph of a ship, for example, is loaded into the software component. During the approach, the missile literally sees the target and compares it with the loaded picture, while independently adjusting its course. The radar system compares the terrain relief with the specified image. While exposed above the water surface, the target with definite dimensions is a unique feature for the missile, which it compares with the data, which reconnaissance received earlier.

“The Iskander's accuracy is such that it can destroy a specific portion of an aircraft carrier, the width of which is 50 meters,” Dmitriy Kornev said. “The ballistic missile's high-explosive warhead can punch through the main deck or even pass through the ship. One missile can guarantee the sinking of a corvette or a frigate. And it can put a major ship out of commission. The ammunition of one missile brigade is sufficient in order to counter an entire squadron”.

The Iskander-M operational-tactical missile complex can employ both ballistic [SS-26 Stone] and also cruise missiles [SSC-7]... The most effective employment of the Iskanders – is in the composition of reconnaissance-strike complexes. A reconnaissance aircraft locates the target and transmits the information to the missile formation's command post, after which the target is destroyed. The entire process from the moment of detection to the moment of destruction takes several minutes...

To date, the main weapon to counter surface ships has been the Bastion coastal missile complex. The new Onyx [SS-N-26 Strobile] supersonic anti-ship missiles, against which any state-of-the-art air defense systems are powerless, are entering the basic load of ammunition of these coastal missile complexes. The Orlan-10 unmanned aerial vehicles and the target designation helicopters, which permit the detection and “illumination” of targets at the remote approaches, are expanding the capabilities of these systems.

“The country's capabilities to combat carrier strike groups and amphibious groups will dramatically increase,” Naval Expert Dmitriy Boltenev explained. “In the event of a military conflict, many more missiles will fly to the enemy, which will travel along different trajectories.”



9M723K-E missile for Iskander-E system.

Source: Vitaly Kuzmin, <https://www.vitalykuzmin.net/Military/Engineering-Technologies-2014/r-4zqzKzN/A>, CC 4.0.