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Two Russian TOS-1A Thermobaric Artillery Systems Wiped Out by Ukraine—ISW

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Ukrainian forces have destroyed at least two of Russia's "highly destructive, but scarce" thermobaric launchers in the past few days using Western weapons, according to a new assessment.

Ukraine's military have destroyed a pair of Russia's TOS-1A thermobaric artillery systems in the southern Ukrainian Zaporizhzhia region during counteroffensive operations, according to geolocated footage, the Institute for the Study of War (ISW) said on Saturday.

Russia has lauded the performance of the TOS-1A systems, which it has been using since the early days of the war in Ukraine. It has previously called the TOS-1A, which it designates a "heavy flame-thrower," a "formidable weapon."

The thermobaric launchers are "highly destructive, but scarce artillery assets," the ISW added.

They are a "high-priority item" for the Russian military, but Moscow only has a "small number" of operational systems, defense and military technology expert David Hambling previously told *Newsweek*.

In March 2022, the British Defense Ministry said the "impact of the TOS-1A is devastating," adding, "It can destroy infrastructure, and cause significant damage to internal organs and flash burns, resulting in death to those exposed."

Thermobaric weapons use two detonations to create more destructive explosions than conventional weapons. Thermobaric weapons, also known as vacuum bombs, were used by Soviet forces in Afghanistan and Chechnya, as well as by the U.S. military in the 1960s.

They are "some of the most devastating and vile rockets in existence," Jordan Cohen, a policy analyst at the Cato Institute, previously told *Newsweek*.

"Russian forces' apparent reliance on specific artillery assets is noteworthy," the ISW added. Successful Ukrainian strikes on the TOS-1A systems "could potentially complicate" Russia's ability to be on the defensive, the think tank said.

"Russian forces are unlikely to possess enough TOS-1A systems to provide the same level of fire support all along the front line," the ISW continued.

The system involves a "rapidly expanding fireball explosion" that does not contain shrapnel, Hambling said. The launcher then causes an "extremely powerful shock wave which can shatter buildings," he added.

The TOS-1A is a "mighty and unique" system, according to Russian state military exporter, Rosoboronexport.

In early April 2023, the Russian government said its paratroopers had received the weapons for the first time for use in Ukraine.

"You are being handed over formidable weapons that have no rivals in the arsenals of the collective West and cause panic among our enemies," a Russian military commander said in a statement released by the Russian Defense Ministry.

Newsweek has reached out to the Russian Defense Ministry for comment via email.