



Drones in Action: Revolution in Medical Operations on the Battlefield - VIDEO

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On May 15, during a demonstration of *Swift Response 2025* in the Pabrade training area in Lithuania, a US Army drone delivered simulated blood on a battlefield. This test took place as part of the *DEFENDER 25* exercise, the largest annual exercise of the US Army in Europe.

The TRV-150 drone, used during the demonstration, is an autonomous system with vertical take-off and landing (VTOL) capabilities. This UAV has a cruising speed of nearly 110 km/h, a maximum range of over 70 kilometers, and a flight time of 36 minutes. But the most significant aspect is its payload capacity, which reaches up to 68 kilograms, a significant value for aerial resupply missions, like the one tested in Lithuania. The TRV-150 has been tested in various environments, from arctic to scorching climates, demonstrating its versatility and robustness in extremely challenging conditions.

This demonstration is part of *DEFENDER 25*, an exercise involving about 25,000 soldiers from 29 allied and partner nations. The exercise includes three simultaneous operations: *Swift Response*

, *Immediate Response*, and *Saber Guardian*, which will take place in 15 countries from May 11 to June 24. The main objective is to strengthen NATO forces' interoperability and readiness by testing rapid deployment structures and commands in complex and multi-domain scenarios.

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Innovation in battlefield logistics

The simulated blood delivery represented a significant advancement in battlefield logistics, particularly in difficult or high-risk environments where conventional medical evacuation (medevac) options might not be feasible. The drone launch was designed to demonstrate the potential of unmanned systems in supporting medical operations and improving survival rates for injured personnel.

Moreover, the TRV-150's ability to carry loads up to 68 kilograms opens new opportunities to resupply troops in the field, including critical materials like ammunition, food, and medical supplies. However, it is not limited to these operations: the drone's superior model, the TRV-400, has an even higher payload capacity of 180 kilograms. This makes it particularly suitable for casualty evacuation missions, an important step towards the regular use of drones in war scenarios for medical and logistical management.

A step forward in integrating drones into medical operations

This innovation follows the practical implementation by Ukrainian forces, who were the first to adapt the use of drones for blood delivery during active combat. As reported by the Ukrainian site *Militarnyi*, a drone successfully transported blood for an emergency transfusion during heavy fighting near Pokrovske. The wounded soldier, belonging to the 14th Separate Mechanized Brigade "Chervona Kalyna", was severely injured and inaccessible to ground medical units due to Russian shelling.

"The only possibility to save him was an emergency transfusion," stated the brigade. "But in field conditions, without a surgeon nearby, without plasma, and with limited supplies, it seemed almost impossible. Almost."

NATO assessments on the use of drones in medical operations

Ukraine's success in integrating drone logistics into field medicine has drawn attention within NATO. The Alliance is now evaluating such concepts for broader implementation, considering their potential to improve the efficiency of medical operations and rapid response capabilities in high-intensity combat scenarios. The evolution of drone technology, such as that of the TRV-150 and its superior model TRV-400, could make faster and more precise logistical and medical support possible, with significant implications for the preparedness and effectiveness of armed forces in complex scenarios.

News link: <https://www.europeafrica.army.mil/DefenderEurope/SwiftResponse/dvpTag/TRV-150Finland/>