## Lockheed Martin's PrSM Proves Reliability



Lockheed Martin successfully tested its next-generation longrange missile designed for the U.S. Army's Precision Strike Missile (PrSM) programme at White Sands Missile Range, New Mexico. All objectives were achieved in the third and final flight demonstration as part of the Technology Maturation and Risk Reduction phase of the programme. The recent performance follows a highly accurate inaugural flight last December and equally successful March 10 test event. PrSM was fired from Lockheed Martin's High Mobility Artillery Rocket System (HIMARS) launcher and flew approximately 85 kilometres to the target area, culminating in an accurate and lethal warhead event. Test objectives included confirming flight trajectory, range and accuracy from launch to warhead event, as well as warhead lethality, HIMARS launcher integration and overall missile performance.

Last month, the success of PrSM's test flights, programme execution and overall performance allowed Lockheed Martin to move to the next phase and continue maturation of the next-generation longrange precision fires solution for the U.S. Army.

The next-generation precision-strike, surface-to-surface weapon system will deliver enhanced capabilities for attacking, neutralising, suppressing and destroying targets at depth on the battlefield and gives field artillery units a new long-range capability while supporting brigade, division, corps, Army, theatre, Joint and Coalition forces.

For more than 40 years, Lockheed Martin Missiles and Fire Control has been the leading designer and manufacturer of long-range, surfaceto-surface precision strike solutions.

## UAVOS Successfully Tests Parachute System

VAVOS has successfully tested its new two-stage parachute system. The new parachute system design is aimed to provide slow descent of the unmanned air system (UAS) at high speed. It includes two parachutes – the pilot chute and the main chute used to slow and stabilise the UAS. The decrease in the load speed on the UAS occurs due to the main chute opening delay function, when the pilot chute opens first. The parachute system is designed for UAS with speeds of up to 280 mph (450 kph) and weight of up to 110 lb (50 kg).

The pilot chute allows safe slow descent of the UAV during the main parachute deployment, as well as to open up the main chute at a minimum altitude.

After landing, the group of the main parachute lines is automatically unfastened to collapse the canopy of the main chute and releases after touchdown to avoid dragging the aircraft along the ground. Unfastening is carried out by the lock of a three-step release: opening the pilot chute, opening the main chute and release of the group of lines of the main parachute.



Aliaksei Stratsilatau, CEO and Lead Developer of UAVOS said: "Computer modeling cannot capture all the complexities. Parachutes encounter turbulent and dynamic airflow, which is almost impossible to replicate with computers. The only way to get a handle on all the possibilities is test."