



Lockheed Martin and Venus Aerospace Collaborate to Advance Next-Generation Propulsion for Long-Range Precision Fires

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DALLAS, July 21, 2026 /PRNewswire/ -- Lockheed Martin (NYSE: LMT) and Venus Aerospace announced a joint technology development agreement to evaluate and mature Rotating Detonation Rocket Engine (RDRE) technology for future long-range precision fires applications, accelerating the transition of advanced propulsion from flight demonstration to operational capability.



The collaboration combines Venus Aerospace's flight-tested propulsion technology with Lockheed Martin's expertise in developing, integrating and rapidly fielding advanced defense systems. Together, the companies will assess how this emerging propulsion architecture could support next-generation precision fires capabilities that require greater range, speed and operational flexibility.

THE BIG PICTURE

As threats evolve and mission demands multiply, the U.S. Department of War is seeking technologies that deliver meaningful performance improvements while remaining affordable, manufacturable and scalable. By combining emerging propulsion technologies with proven launch systems, precision guidance and production expertise, Lockheed Martin continues to expand the pipeline of future capabilities available to the U.S. and its allies.

WHY IT MATTERS

- Rotating detonation propulsion could enable future precision fires systems to achieve significantly greater range and speed while remaining compatible with the Army's need for affordable, scalable production.
- Unlike conventional rocket engines that rely on subsonic combustion, RDREs generate thrust through continuously traveling detonation waves. This approach has the potential to improve propulsion efficiency while reducing complexity, enabling systems to travel farther and respond faster to emerging threats.
- The agreement enables Lockheed Martin to evaluate RDRE technology within the context of operational military requirements to transition the advanced propulsion concept from a subsystem demonstration environment into practical missile applications.
- Lockheed Martin's expertise in system integration and advanced manufacturing allows advanced technologies to move more quickly from laboratory development into deployable defense solutions that can be produced at scale.
- By working with innovative U.S. technology companies, Lockheed Martin is strengthening the nation's defense industrial base and helping accelerate advanced manufacturing capabilities critical to future readiness.

EXPERT PERSPECTIVE

- "Lockheed Martin is focused on rapidly delivering advanced capabilities that strengthen deterrence and provide decisive advantages for the warfighter," said Tim Cahill, president, Lockheed Martin Missiles and Fire Control. "Our collaboration with Venus Aerospace allows us to evaluate a promising propulsion technology and determine how it can be integrated into future precision fires solutions. Partnerships like this help accelerate innovation, reduce risk and rapidly advance from

emerging technology to operational capability."

- "Defense customers are asking for more than incremental gains from legacy propulsion," said Sassie Duggleby, co-founder and CEO of Venus Aerospace. "Our RDRE technology offers a different propulsion architecture for systems that need more range, more speed and a realistic path to production. This agreement with Lockheed Martin moves our breakthrough closer to real precision fires applications."

About Lockheed Martin

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