

Lockheed Martin, Verizon, Keysight, ODC And Astris AI Demonstrate Technology For Public Airspace Protection With NVIDIA Technology

NetSense™ system combines 5G, commercial technology and AI to detect Unmanned Aerial Systems

BETHESDA, Md., Aug. 12, 2026 [/PRNewswire/](#) -- Lockheed Martin (NYSE: LMT), in collaboration with Verizon, NVIDIA, Keysight Technologies, ODC and Astris AI, recently showcased how commercial off-the-shelf (COTS) technologies can make detecting and tracking unmanned aircraft systems (UAS) more accessible, faster to deploy, and easier to scale for public and critical infrastructure protection.

In a July demonstration in the Miami area, the NetSense™ Airspace Awareness-as-a-Service™ system demonstrated an AI-enabled system capable of identifying, tracking and monitoring UAS utilizing existing 5G networks.

The technology has broad commercial applications across critical infrastructure, large-scale events at stadiums, utilities like power plants, and the everyday places people depend on, like schools, hospitals and airports. City, state and federal government customers can also gain proactive monitoring and alerts from the NetSense solution.

THE BIG PICTURE

As drones become more affordable, capable and widely available, the need for persistent, intelligent airspace awareness to protect the public grows. By leveraging existing technology, the NetSense solution can help protect people and critical infrastructure across a wide range of environments.

The successful live demonstration took place in a critical, high-traffic, urban area important for American protection, showcasing NetSense's components, capabilities, and UAS detection and alert systems in real-time. Leveraging an existing Verizon 5G network spectrum, ODC's AI-native Radio Access Network (RAN) software, NVIDIA's AI Aerial platform, and Keysight's advanced radio frequency (RF) simulation platform, NetSense detected and alerted the team to the presence of drones and maintained track custody through the flight.

HOW IT WORKS

The NetSense solution combines Lockheed Martin's warning and tracking systems, which work together using AI to read RF disturbances, predict and track a UAS's flight path and automatically send real-time alerts.

The NetSense solution revolutionizes airspace awareness through:

- **AI-native sensing:** Uses NVIDIA AI Aerial to analyze RF signal disturbances in real time and feed them to Lockheed Martin's NetSense algorithms.
- **Speed and agility:** Can be procured and deployed faster than traditional or custom-built systems leveraging COTS.
- **Innovation and cost-effectiveness:** The competitive commercial market can drive down costs and foster innovation.
- **Integration potential:** Open architecture commercial systems let new interceptors and technologies be added to existing platforms without the need for entirely new hardware.
- **Scalability:** The solution can grow from protecting a single critical site to supporting a mobile command and control system for larger operations.
- **Open architecture design:** Makes continuous enhancements of the offering possible, including deployment of existing Lockheed Martin capabilities for improved data interpretation and target classification.

The demonstration proved the NetSense system can sense UAS without changing existing cellular radio deployments. This approach means at-scale, cost-effective sensing is available without recapitalization of cellular infrastructure, ahead of the timeline for 6G Integrated Sensing and Communication (ISAC).

The NetSense system and its algorithms are also complementary to 6G ISAC and can enhance those systems when they are available. The NetSense system currently leverages Verizon's 5G network spectrum, with a roadmap toward broader deployment across 5G and future 6G networks.

NEXT STEPS

The NetSense system will be delivered as a subscription that interfaces with customer's existing security operations. Pilot deployments are planned for the second half of 2026 and early 2027, with commercial general availability planned for 2027. Early deployments will be limited to select customers that urgently need the capability. Interested organizations can contact Astris AI, Lockheed Martin's wholly owned subsidiary: <https://astrisai.com/request-a-briefing>.

EXPERT PERSPECTIVES

"As drones become more affordable and accessible, airspace awareness technology needs to evolve rapidly to outpace potential threats. That's why we developed the NetSense solution," said Sarah Hiza, senior vice president, Technology and Strategic Innovation at Lockheed Martin. "By working within the established 5G network spectrum, we're able to collaborate with the commercial technology industry and deploy a solution that's ready at the time of need."

"By applying AI to the RF signal measurement data already traversing our 5G infrastructure, we can effectively turn our network into an intelligent sensing platform," said Anil Guntupali, senior vice president of Technology and Product Development at Verizon. "By collaborating with Lockheed Martin to apply intelligence to our existing 5G spectrum, we're proving that the most complex security problems often have an answer embedded in the network."

"The NetSense system demonstrates how AI can transform existing telecommunications infrastructure into a real-time sensing platform," said Ronnie Vasishta, senior vice president of telecoms at NVIDIA. "NVIDIA AI Aerial and AI-RAN turn existing 5G infrastructure into an AI-powered sensing platform, bringing the power of AI and accelerated computing to the network edge, so RF signal disturbances can be analyzed instantaneously, enabling faster detection, more accurate classification and immediate alerts for public safety and critical infrastructure protection."

"By providing RF modeling, simulation, digital twin, emulation and test capabilities across the full engineering workflow, we are helping customers prove out feasibility, reduce complexity, and bring mission-critical technologies to market faster," said Kailash Narayanan, senior vice president of Communications Solutions Group, Keysight. "This collaboration reflects Keysight's commitment to enabling the next generation of defense innovation with trusted design, simulation, emulation, and test solutions."

"This strategic collaboration marks a decisive milestone in the evolution of joint Counter-UAS and layered homeland air defense for low-flying objects," said Shaygan Kheradpir, chairman of the ODC board of directors. "By leveraging our AI-Native, Zero Trust AI-RAN platform, ODC enables true Integrated Sensing and Communications (ISAC) via a standards-compliant commercial architecture — turning everyday mobile network infrastructure into an intelligent, wide-area sensor fabric that detects, tracks and identifies low-altitude threats at the forward edge via applications such as NetSense."

About Lockheed Martin

Lockheed Martin is a global defense technology company driving innovation and advancing scientific discovery. Our all-domain mission solutions and 21st Century Security® vision accelerate the delivery of transformative technologies to keep those we serve ahead of ready. More information at www.lockheedmartin.com.

About Verizon

Verizon Communications Inc. (NYSE, Nasdaq: VZ) powers and empowers how its millions of customers live, work and play, delivering on their demand for mobility, reliable network connectivity and security. Headquartered in New York City, serving countries worldwide and nearly all of the Fortune 500, Verizon generated revenues of \$138.2 billion in 2025. Verizon's world-class team never stops innovating to meet customers where they are today and equip them for the needs of tomorrow. For more, visit verizon.com or find a retail location at verizon.com/stores.

About Keysight

At Keysight (NYSE: KEYS), we inspire and empower innovators to bring world-changing technologies to life. As an S&P 500 company, we're delivering market-leading design, emulation, and test solutions to help engineers develop and deploy faster, with less risk, throughout the entire product life cycle. We're a global innovation partner enabling customers in communications, industrial automation, aerospace and defense, automotive, semiconductor, and general electronics markets to accelerate innovation to connect and secure the world. Learn more at [Keysight Newsroom](http://KeysightNewsroom) and www.keysight.com.

About ODC

ODC is a leader in AI-Native Radio Access Network ("AI-RAN") technology and the architect of the U.S.-based Odyssey software platform. By integrating advanced AI sensing and inference into the RAN, ODC enables telecommunications providers to unlock new revenue streams and mission-critical capabilities across the industrial, commercial, and public sectors. More information at www.orandevco.com.

About Astris AI

Astris AI, a subsidiary of Lockheed Martin, is committed to enabling the adoption of AI solutions across the U.S. defense industrial base and other industries seeking high assurance solutions. Astris AI provides customers access to foundational AI tools, processes and talent to enable the deployment of secure AI solutions at scale, ensuring they stay ahead of rapid technological advancements. Astris AI is part of the Lockheed Martin Evolve portfolio, an organization that creates and scales new commercial and non-traditional businesses to bolster the defense industrial base. Astris AI is the commercial home of NetSense™ Airspace Awareness-as-a-Service™. Visit AstrisAI.com to learn more.

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