Keep Autonomy Alive: As GNSS Disruptions Rise, a Shift in How Autonomy Is Evaluated Is Underway

MI, UNITED STATES, April 27, 2026 /EINPresswire.com/ -- Ahead of XPONENTIAL USA 2026, infiniDome highlights a growing gap between autonomous system capabilities and their navigation resiliency in real-world contested environments.

As autonomous systems continue to expand across the United States, from defense and security to infrastructure inspection and logistics, a critical challenge is becoming increasingly difficult to ignore:

Navigation reliability is emerging as one of the primary constraints on autonomy.

An interactive station at the infiniDome booth will allow visitors to evaluate the performance of its solutions under interference conditions.

GNSS disruptions (intentional and unintentional) are now part of the operational environment. In practical terms, this means loss of positioning during critical missions, degraded system performance, and interrupted operations across both defense and commercial use cases. As a result, U.S. programs and operators are rethinking how autonomous systems are evaluated.

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> *Omer Sharar, infiniDome CEO*

Historically, autonomy has been measured by performance accuracy, efficiency, and intelligence. Today, a new benchmark is taking shape: can the system continue to operate when GNSS conditions are compromised?

This shift is driving growing demand for resilient navigation architectures that combine multi-layer positioning strategies, real-time mitigation of GNSS interference, and systems specifically designed to operate in degraded and denied environments. In other words, mission continuity is becoming the defining metric.

“The industry has long approached this as an anti-jamming problem,” says Omer Sharar, infiniDome Solutions CEO. “But operators aren’t looking for a feature, they’re looking for control and predictability.” Maintaining control over positioning and mission execution, even under interference, is essential as autonomy moves into real-world, high-risk environments.

This shift redefines navigation as a core enabler of autonomy, rather than a supporting component, ensuring that even when GNSS is degraded or denied, autonomous platforms can continue to function effectively.
As the industry gathers at XPONENTIAL USA in Detroit, these questions are expected to take center stage. infiniDome, a developer of GNSS protection and navigation resiliency solutions, will showcase its latest developments, including Aura, a compact, SW-defined, 4-element anti-jamming module, and IroNav, a layered navigation solution that combines anti-jamming with a VBN (Vision-Based Navigation) designed to maintain operational capability even in fully GPS-denied environments.

Visitors to the infiniDome booth (35022) will also have the opportunity to attend a guided demonstration, led by the company’s CEO (13.5, 15:00), showcasing how autonomous systems can maintain positioning and control under GNSS disruption. The demonstration will be presented as a recorded session with live guidance, reflecting real-world operational scenarios.

The company will focus on how autonomous systems can maintain operational continuity in GNSS-challenged environments, a topic gaining urgency across both defense and commercial sectors.

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