Saildrone Deploys New Technology to Operate in GPS-denied Environments



A Saildrone Voyager USV equipped with hardware and software to operate in a GPS-denied environment at sea during IMX 2025. US Navy Photo by Chief Petty Officer Arif Patani.

The Saildrone Voyager platform has been equipped with new hardware and software algorithms, making it capable of operating in areas of GPS jamming and spoofing.

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AQABA, Jordan – Saildrone, the world leader in maritime autonomy, has successfully demonstrated operations in the Middle East with new hardware and software capabilities that allow saildrones to operate in a GPS-denied environment.

The US Navy established Task Force 59 in 2021 as part of the US Naval Forces Central Command (NAVCENT) and US Fifth Fleet to advance the operational employment of unmanned systems and

artificial intelligence in fleet operations. Due to recent regional events, GPS jamming and spoofing have hindered unmanned operating systems in the area.

Following intensive development and testing by Saildrone engineers to create a resilient positioning system, Saildrone now has the ability to autonomously operate in GPS-denied or spoofed maritime environments. Saildrone's innovative solution leverages multiple forms of localization, ensuring seamless operation without relying exclusively on satellite systems, and allowing operations to continue in contested environments. This was notably demonstrated during IMX 2025, where Saildrone was the only unmanned platform able to navigate and provide persistent surveillance in a denied environment.

"Satellite positioning and connectivity can no longer be relied upon in potential future conflicts," said Richard Jenkins, Founder and CEO at Saildrone. "It is essential that our unmanned systems can continue to operate in denied environments, and Saildrone once again leads the way with demonstrated resilience in real operational missions with US Navy."

Saildrone USVs are actively conducting wide-area surveillance in the CENTCOM AOR, enhancing maritime domain awareness and supporting US Navy operations. US forces have been engaged in the region supporting Operation Prosperity Guardian since December 2023, safeguarding commercial shipping and countering regional threats.

Saildrone is now in its fourth year of operations with the US Navy, with USVs on the water in the Middle East, Atlantic, Caribbean, and Pacific Oceans.