

Insitu Going Strong at 30, Focusing on Maritime Operations



Insitu's FLARES system carries an Integrator SUAS aloft to launch it. Photo Credit: Insitu

By Richard R. Burgess, Senior Editor

NATIONAL HARBOR, Md. – Insitu, one of the most experienced companies in the small unmanned aerial systems (SUAS) market, will mark 30 years of operations in May.

The company (in parent company Boeing's Booth 1337), noted for its ISR (intelligence, surveillance, and reconnaissance) services and sales of modular SUAS such as ScanEagle and Integrator, especially for U.S. and allied operations in Afghanistan, is emphasizing maritime deployment of its SUAS with the shift of U.S. focus to the Indo-Pacific region, Diane Rose, president and CEO of Insitu, said in an interview with Seapower.



The Integrator UAS gets VTOL capability using the FLARES system. Photo Credit: Insitu

Insitu's SUAS have flown 175,000 sorties, accumulating 1.5 million flight hours, including 70,000 hours of maritime operations, Rose said. The SUAS are operated by or for 40 customers – to include 20 navies and coast guards – in 35 countries. The SUAS have been operated from 28 classes of naval vessels.

Insitu's SUAS have been provided to Ukraine via Foreign Military Sales and have been "very successful in that space," she said, and Insitu will "continue to support that effort."

Insitu continues to manufacture air vehicles and provide spare parts, system upgrades, and training to users. Modular sensors, provided by partner companies, can be swapped in the field to flexibly meet mission requirements.

“Our architecture allows us to integrate very quickly third-party sensors and payloads,” Rose said. “With the customer’s interests and missions in mind, we have a unique capability to offer solutions that support whatever the customer’s needs may be.”

Rose said there was a downtick in ISR services at land-based sites for the United States military since the end of the war in Afghanistan, but an uptick in international interest in Insitu’s products and services, especially focused on the maritime domain in the Indo-Pacific region, with an associated evolution in technology to satisfy emerging and changing customer needs.

The U.S. Navy and Coast Guard continue to use Insitu’s ISR services. The Navy also has procured Insitu SUAS. Navy units continue to use the RQ-21A Blackjack version of the Integrator, while Navy Special Warfare units use the RQ-27B version of the ScanEagle.

“Maritime operations are hard, and this is what 30 years of experience gives us,” Rose said. “Shipboard movement, shipboard radars and antennas, the EMI [electro-magnetic interference] environment, the harsh weather conditions, global logistics – how do you re-supply your systems, how do you meet the ships at the various ports?

“There’s a lot to supporting maritime operations, and I think that’s really why you see the success of our systems’ enduring,” she said, speaking of the long service of ScanEagle in the ever-evolving field of uncrewed aerial systems.

For customers who procure Insitu SUAS, the company provides training on how to operate the systems and also operates a

24/7 Operations Action Center, which provides customers engineering support and responses to trouble reports.

This year at the Navy League's Sea-Air-Space (SAS) Expo, Insitu will be highlighting its vertical takeoff capability in the FLARES (Flying Launch and Recovery System (FLARES) octocopter, which it introduced at the 2023 SAS. FLARES can carry an Integrator UAS aloft 500 feet and launch it on its mission, enabling the Integrator to maintain its range, endurance, and payload capacity. The octocopter alleviates the need for a launch rail, reducing the footprint of the system and making shipboard and expeditionary operation easier. The recovery method remains the same.

Rose said Insitu has one customer so far for FLARES that carries a ScanEagle aloft.



At Sea-Air-Space, Insitu will highlight its FLARES systems, which provides VTOL capability to fixed-wing UAS Photo Credit: Insitu

She said the 570-employee company is interested in growing its technical talent but emphasizes lean and efficient operations in a highly competitive industry.

Insitu continues to press forward to address battlespace challenges, including SUAS operations in a GPS-denied environment and with kinetics. The company has conducted inert-drop flight tests from Group2/3 SUAS.