

Insitu Integrator VTOL Proves Long-Range Multi-INT Capability at Balikatan 2026



Integrator VTOL with FLARES ready to launch from FARP location
From Insitu

BINGEN, WASH, June 2, 2026: Insitu, a Boeing company, successfully demonstrated its Integrator VTOL Uncrewed Aerial System (UAS) during Exercise Balikatan 2026, showcasing long-endurance, extended-range, multi-INT and AI-enabled battle management integration capabilities at density altitudes including above 12,000 feet and in heat indices reaching 107°F.

Integrator VTOL delivered expeditionary performance and remote

split operations in extreme heat and humidity while operating from unimproved, austere sites replicating Forward Arming and Refueling Positions (FARPs) at Balikpapan 2026.

During the exercise, Integrator VTOL:

- Completed a 22.4-hour sortie at 6,500–9,000 feet density altitude, returning with 1.5 hours of reserve fuel
- Performed extended Maritime Domain Awareness and ISR operations at 200 NM ranges with 6+ hours of time on station in a multi-INT configuration employing the IMSAR NSP-5 Synthetic Aperture Radar, cross-cueing a Hood Technologies multi-spectral EOIR6 gimbal
- Demonstrated detection of vessels at 35 NM through marine haze using Arkeus' Warden passive Hyper-Spectral Optical Radar (HSOR), cross-cuing an onboard AC09 narrow field of view gimbal.
- Used the small-packout FLARES VTOL system to execute landing and relaunch cycle from a covert austere position in just 38 minutes, demonstrating the agility required for USMC Expeditionary Advanced Base Operations (EABO)
- Detected, identified, and collected detailed imagery of vessels from combat-relevant stand-off ranges
- Employed a backpack-portable, battery-powered Ground Control Station at the FARP demonstrating truly mobile ground control

- Integrated safely into uncontrolled airspace using Boeing's airspace management and deconfliction software, PLEO SATCOM, and advanced avionics
- Seamlessly integrated sensor data with an AI-enabled battle management system (BMS), providing real-time actionable intelligence across a networked common operating picture

"Integrator with FLARES VTOL offers significant range and endurance while carrying multiple-intelligence payload sets, and our recent demonstrations at Balikpapan in extreme heat and high-density altitude conditions prove that it's not just marketing," said Diane Rose, Insitu CEO. "We brought our systems into some of the most challenging conditions, and they performed as designed. Integrator truly delivers Group 4-5 ISR and targeting capabilities at a fraction of the cost."

Integrator VTOL was operated by Insitu Field Services Representatives with decades of combined combat operations experience. Exercise evaluators praised Insitu's team as "obvious professionals," underscoring the company's ability to support the warfighter.

"I'm incredibly proud of our teammates for demonstrating operational excellence in harsh, demanding conditions," added Rose. "From rucking the system into an austere FARP site, to operating in extreme heat while responding to dynamic tasking, our team showed the best of what our systems can offer."