

Fly like an eagle: New launch and recovery system takes UAV into the future

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A shipboard-capable system designed to support both the launch and recovery of the Scan Eagle unmanned aerial vehicle (UAV) successfully completed final demonstration flight testing Sept. 27 at a testing range in eastern Oregon.

Sponsored by the [Office of Naval Research](#) (ONR), the Compact [Launch](#) and Recovery System (CLRE) will provide a small-scale solution for the unmanned surveillance craft's operations.

"This system's shipboard capability is unique," said John Kinzer, who manages ONR's Air [Vehicle Technology](#) Program. "It's more compact than other systems, so you can install it on a small special operations boat—or save additional space on a larger ship, since space is always at a premium on any vessel."

The Scan Eagle is designed to provide the warfighter with advanced capabilities for real-time situational awareness and force protection information.

CLRE uses a compressed-air launcher to shoot the Scan Eagle into the sky. Once airborne, the UAV transmits real-time electro-optic and infrared (IR) imagery to a ground station where it can be recorded for analysis.

To land, small hooks on the UAV's wings catch hold of rope suspended from the system's extendable mast and arms. Once the mission is completed, the whole system can be folded up, like a folding chair or table, for storage.

Developed by Insitu Inc., the system is smaller and lighter than the current SuperWedge launcher and Skyhook recovery systems combined. Its design accommodates all weight classes of the company's Scan Eagle UAV design, including a model equipped with an IR camera, and provides the same air vehicle successful recovery rate.

The system currently is trailer mounted for testing and ease of towing behind [ground vehicles](#), but Insitu is exploring modifications of this version for rapid deployments. Its turntable base allows for mounting to a variety of integration structures.

Today, it is primarily the U.S. Marine Corps that uses Scan Eagle, but other forces—including the U.S. Coast Guard—also could have uses for the unit. Coast Guard officials attended testing last week.

Provided by Office of Naval Research

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