

SuperWedge™ Launcher



The patented SuperWedge launcher gives *Insitu's* UAVs their initial velocity and rate of climb. In less than ¼ second, the carriage accelerates the aircraft at 12g to approximately 25 m/s (50 knots), releases the aircraft, and arrests its own motion. The optimized curve on the lower track allows the carriage to maintain constant acceleration, which minimizes the track length and pneumatic actuator volume. Accumulator pressure and seal speeds are also kept low, so safety and reliability are maintained.

The 16-foot assembly weighs approximately 800 pounds, requires only a small footprint, and deploys easily.

SkyHook™



The patented SkyHook retrieval system captures the ScanEagle, providing near-vertical recovery on land or aboard a sea vessel. The SkyHook includes a GPS unit and antenna, which the UAV uses to make an extremely accurate approach, with precision measured in centimeters. The UAV is snagged on contact, by flying into the SkyHook rope, which is dangling approximately 50 feet above the surface. A hook on the UAV wingtip grabs the line and quickly stops the aircraft.

The SkyHook system's unique flexibility is well-suited for a wide variety of landing environments, and can be deployed easily. This innovative retrieval technique keeps *Insitu's* UAVs clear of hazards and eliminates difficulties experienced

by larger aircraft retrieval methods. For deployment at sea, the SkyHook system is custom-installed on the vessel as required.