

VTOL for ScanEagle

**VTOL without compromise—
for our best-in-class UAS**



UNCREWED AIRCRAFT SYSTEMS



Expand your mission with Vertical Takeoff and Landing (VTOL) capability unlike other systems. ScanEagle paired with FLARES VTOL brings the smallest possible operational footprint while preserving maximum endurance and best-in-class, modular, payload capability.

FLARES (Flying Launch And REcovery System) is developed and produced by Hood Tech Corporation.

KEY FEATURES & BENEFITS

A unique approach to VTOL—without the usual sacrifices

FLARES is an electric, battery-powered vertical launch and recovery system for fixed-wing ScanEagle.

- No aircraft modifications required
- No stationary launch and recovery equipment required
- No booms, no drag—no compromise

ScanEagle's full range, endurance and payload capability preserved

Retains 18 hours of endurance carrying 11 lbs of Insitu best-in-class, modular payloads. (See ScanEagle product card for UAV specifications.)

Optimized for challenging conditions and gusty winds

FLARES leverages lower center of gravity and wide base—giving it an advantage over tailsitters. Reliably completes mission—even with a rotor out.

Increased portability & self-sufficiency

ScanEagle VTOL system enables rapid repositioning and operation in tight spaces.

- Unpack and launch on a mission with three operators in as little as thirty minutes
- Mobile operations—launch from one location and recover from another
- Small storage footprint—transportable via standard pickup truck or cargo van

Common Ground Control Station

- Small, modular, and expandable to minimize your footprint for expeditionary missions
- Multiple configurations for ultimate flexibility



1.4 MILLION
FLIGHT HOURS

GLOBAL
OPERATIONS

MODULAR
FAMILY OF
SYSTEMS

SERVICES,
ACQUISITION
AND FMS

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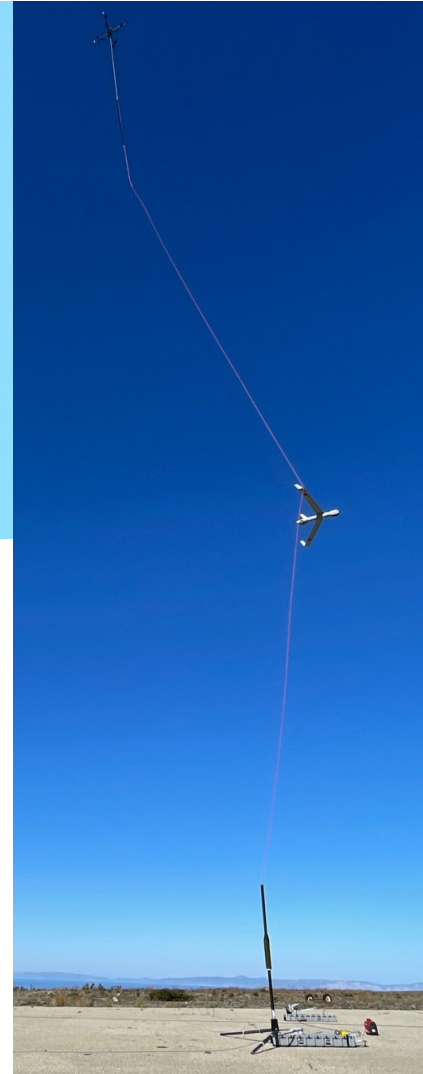
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*Mobile operations—with ScanEagle
payload & endurance preserved*



FLARES SPECIFICATIONS

WEIGHT

- Max ScanEagle weight up to 62 lbs (28 kg)

TEMPERATURE RANGE

- -20 to +45 C

WIND RANGE

- 0–30 knots
- 10 knot gusts

PACKOUT FOR FULL MISSION SET

- Fits within 463L pallet:
108 x 88 x 62 inches
(2.74 x 2.24 x 1.57 m)

LAUNCH

FLARES mated with ScanEagle, climbs vertically to altitude (500 ft AGL), dashes into wind and releases ScanEagle into fixed-wing flight (<5 minutes).

- FLARES autonomously returns to launch point.
- In case of aborted launch, FLARES returns and lands vertically with ScanEagle still attached.

RECOVERY

FLARES takes off vertically tethered, hoisting capture rope into the air (~300 ft). ScanEagle catches on vertical line via wing hook (<5 minutes).

- FLARES descends as capture rope is spooled onto winch on MARS (Mast Augmented Recovery System) and ScanEagle settles onto top of mast.
- Unloaded FLARES lands.