# ScanEagle® VTOL

## 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**

## Same capability, smaller footprint

FLARES is a battery-powered vertical launch and recovery system for fixed-wing ScanEagle.

- No aircraft modifications required
- No stationary launch and recovery equipment required

#### **VTOL** without the sacrifice

Retains 18 hours of endurance carrying 17 lb of Insitu best-in-class, modular payloads.

### Increased portability & self-sufficiency

Small packout and footprint enable rapid repositioning and operation in tight spaces on land or ship.

 Unpack and launch with three operators in as little as 30 minutes

### **Optimized for maritime**

Operates in challenging conditions like heavy seas and gusty winds, where tailsitter aircraft cannot.

- Launches/recovers from small vessel. helicopter decks
- Small stowage footprint
- Leverages lower center of gravity and wide base to handle high pitch and roll
- FLARES reliably completes mission even with a rotor out

#### **Common Ground Control Station**

Small, modular, and expandable to minimize your footprint for expeditionary missions

- Multiple configurations for ultimate flexibility
- Available with auto-launch feature



**30 YEARS** 

1.5 MILLION **FLIGHT HOURS** 

**OPERATIONS** 

SYSTEM MODULARITY

SERVICES. **ACQUISITION** AND FMS

**OPERATIONAL EXPERIENCE** 

GLOBAL

# ScanEagle® VTOL

# Mobile operations—with ScanEagle payload & endurance preserved





## SCANEAGLE SPECIFICATIONS

#### **SIZE AND WEIGHT**

Max takeoff weight: 62 lb / 28 kg\*

Max payload weight: 17 lb / 7.7 kg

Length: 5.6 ft / 1.71 m\*

Wingspan: 10.2 ft / 3.1 m

#### **PERFORMANCE**

Endurance: 18+ hours\*

Ceiling: 19,500 ft / 5,950 m

Max horizontal speed: 80 knots / 41.2 m/s

Cruise speed: 50-60 knots / 25-30 m/s

 Engine: Heavy fuel (JP-5 or JP-8) or C-10 gasoline engine\*

On-board power: Up to 150 W for payload

#### **SENSOR AND PAYLOAD OPTIONS**

- EO telescope (high-zoom, day FMV)
- MWIR/EO dual sensor (day & night FMV)
- Wide-area maritime search (Al-assisted)
- AIS: Maritime vessel identification
- Laser designator, pointer, rangefinder options
- SIGINT, EW, comms relay

### 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

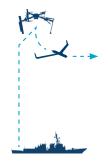
# PACKOUT FOR FULL MISSION SET

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 on deck.



\*Available in multiple block variants and configurations