Integrator VTOL

High Seas, Long Endurance

INSITU
A Boeing Company

UNMANNED AIRCRAFT SYSTEM

Expand your mission with VTOL capability unlike other systems. Integrator with FLARES Vertical Take-off and Landing brings the smallest possible operational footprint along with best-in-class, modular payloads while preserving maximum endurance for long-range ISR and targeting.

FLARES 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 Integrator.

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

Integrator's full range, endurance and payload capability preserved

Retains greater than 16 hours of endurance carrying 40 lbs of Insitu best-in-class, modular payloads.

Increased portability & self-sufficiency

Integrator VTOL system enables rapid repositioning and operation in tight spaces on land or ship.

- Unpack and launch on a mission with three operators in less than sixty minutes

Optimized for shipboard operation

With its excess power capacity, Integrator VTOL operates in challenging conditions such as high seas and gusty winds.

- Launches/recovers from small vessel helicopter decks
- Small stowage footprint
- Leverages lower center of gravity and wide base to handle high pitch and roll (sea states)—giving it an advantage over tailsitters
- 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

1.4 MILLION FLIGHT HOURS | **50 GLOBAL SITES OF OPERATION** | **MODULAR FAMILY OF SYSTEMS** | **SERVICES, ACQUISITION AND FMS**

LEARN MORE | Contact us at solutions@insitu.com
insitu.com

DU032823

Integrator VTOL

Proven on land and sea in the harshest conditions

INSITU
A Boeing Company

SUCCESSFULLY DEMONSTRATED AT SEA ON USN DDG-51 CLASS IN THE PACIFIC

FLARES SPECIFICATIONS

WEIGHT

- Max Integrator weight up to 165 lbs (75 kg)

TEMPERATURE RANGE

- -20 to +45 C

WIND RANGE

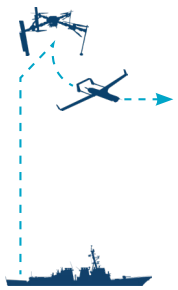
- 0–30 knots
- 10 knot gusts

DECK MOTION

- +/- 10 degrees roll
- +/- 5 degrees pitch

PACKOUT FOR FULL MISSION SET

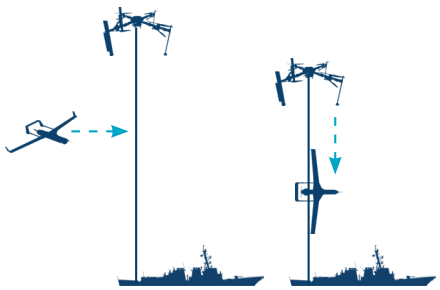
- 463L pallet: 108 x 88 x 62 inches (2.74 x 2.24 x 1.57 m)



LAUNCH

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

- FLARES returns to land/ship following reference GPS.
- In case of aborted launch, FLARES returns and lands vertically with Integrator still attached.



RECOVERY

FLARES takes off vertically tethered, hoisting capture rope into the air (~300 ft). Integrator 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 Integrator settles onto top of mast.
- Unloaded FLARES lands on deck.

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