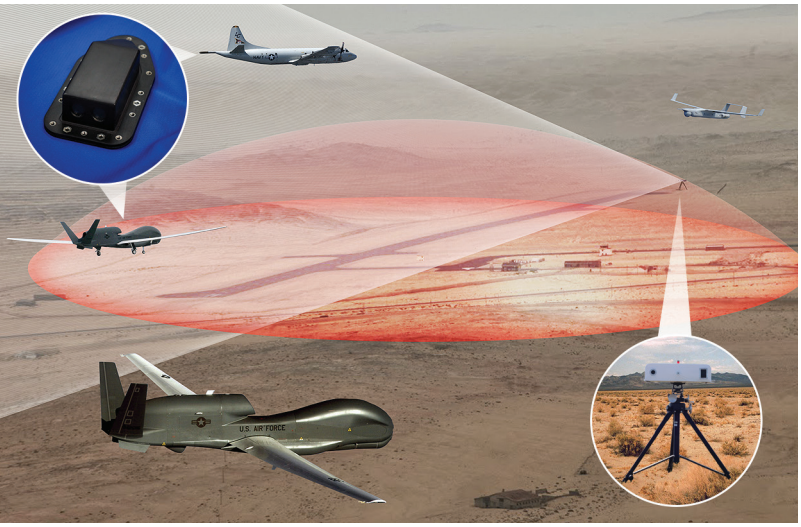
LARS

Laser Aided Recovery System

ADSYS CONTROLS INC.

Navigation for RF/GPS-denied conditions



Precision navigation and timing in GPS-denied area

Aircraft recovery without dependence on GPS or RF Transmissions

LARS provides precision 3D navigation for GPS-denied and RF-denied environments. The airborne element is extremely low-SWaP for compatability with any size platform.

LARS allows for operational range capability up to 100 kilometers and is day/night, all-weather compatible in the most challenging, visually degraded environments. The system is completely RF independent allowing use on LPI/LPD/EMCON missions within GPS-denied environments.

FEATURES

- Day/night and all-weather operation
- 3D precision navigation signals supports multiple aircraft concurrently
- Extremely low SWaP airborne element (~15 in^3, < 1 lb, ~5W)
- Incorporates motion compensation for moving platforms supporting precision ship-relative navigation in high sea states
- Operational range capability up to 100 km in nominal environmental conditions
- Simplifies and expands UAS operations while reducing operational costs

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Adsys Controls provides state-of-the-art solutions for the most challenging problems

LARS
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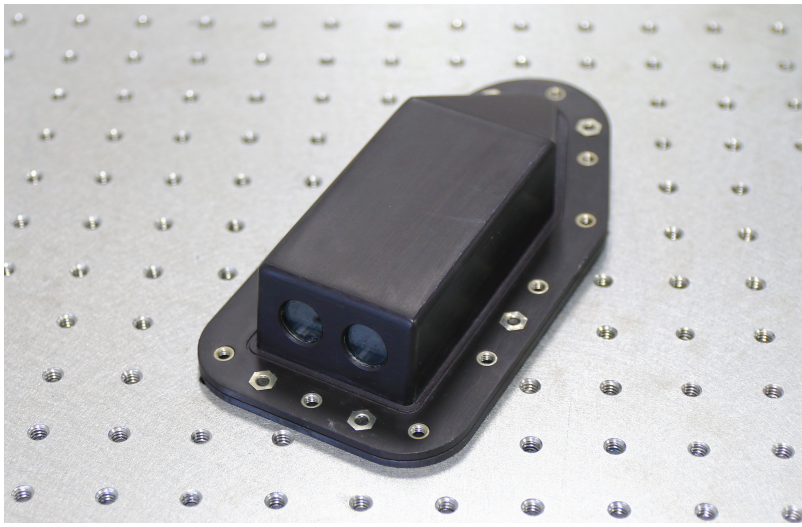
LARS airborne navigation unit is extremely low SWaP, making it suitable for flexible placement on fixed-wing and rotary wing aircraft of all sizes.



Using eye-safe lasers, LARS broadcasts navigation signals to multiple aircraft concurrently and is virtually jam-proof. Using optical communications, LARS allows for system reconfiguration, vehicle deconfliction, and flexible user-vehicle command, as required by specific conditions or mission updates. With dissimilar technology, LARS can be utilized as a primary or redundant element for greater vehicle navigation and recovery reliability.

LARS Reference Station (LRS)

» Eye-safe lasers
» On-the-fly reconfigurable
» Inherently LPI/LPD
» Flexible emplacement: Ground-based, Ship-based, or Air-based
» Simplified integration / Low SWaP

LARS Navigation Unit (LNU)

» Weatherproof, rugged design has no moving parts
» Can interface directly with aircraft flight control computer
» Extremely low SWaP (~15 in^3, < 1 lb, ~5W)
» Small size allows simple, flexible installation
» Suitable for broad range of platforms
» Fixed- or rotary-wing aircraft
» Manned or Unmanned

Adsys Controls provides solutions for precision control systems, advanced electro-optical systems, laser systems, modeling and simulation, and unmanned aerial systems for military and commercial markets. From electronics design, embedded RT software, and image processing to game-changing laser and electro-optical systems for ISR&T, weapons, communication, and navigation, Adsys Controls provides state-of-the-art solutions for the most challenging problems.

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