The Airborne Reconnaissance Low (ARL) is a multifunction, day/night, all weather reconnaissance intelligence asset developed and fielded by the U.S. Army in support of an urgent requirement for a low profile intelligence aircraft. ARL is a modified Bombardier DHC-7 with a U.S. Army designation of EO-5C, fixed wing aircraft with Communication Intelligence (COMINT), Imagery Intelligence (IMINT) and radar mission payloads controlled and operated via on-board multi-function workstations. The U.S. Army selected the DHC-7 aircraft due to its ability to operate off of austere runways and carry the mission payload, plus its great endurance.

The ARL system was developed to accommodate diverse mission requirements through the implementation of an open architecture and modular, re-configurable mission sensors. ARL systems have operated globally. The ARL fleet is on a common baseline which will facilitate future enhancements.
ARL Features

- **Missions:**
  - Deliberate operations
  - Command and control
  - Area, route and border reconnaissance
  - Force protection
  - Dynamic tasking
- **Aircraft:** DeHavilland DHC-7 Aircraft - Commercial four engine prop aircraft
- **Architecture:** Common to downlink to net-centric ground stations
- **Primary Sensors:**
  - Wescam MX-20 series, HD/SD EON/EOW/FLIR
  - Wescam MX-15 series, HD/SD EON/EOW/FLIR
  - Legacy COMINT
  - MTI/SAR
- **Communications:**
  - BLOS: Arclight2/iDirect/INMARSAT/TACSAT, DAMA, ARC-220 HF
  - LOS: ARC-210/231
  - AN/PRC-117G
- **Aircraft/Crew Survivability Equipment:**
  - AAR-47 (GEN III)
  - APR-39

ARL Systems

The COMINT sub-system has an HF/VHF/UHF intercept and Direction Finding (DF) capability. The IMINT sub-system includes: Electro-Optical and Infrared (EO/IR), Moving Target Indicator (MTI) radar and Synthetic Aperture Radar (SAR).

Datalinks on ARL range from tactical Line of Sight (LOS) to Wide Band Beyond Line of Sight (BLOS) utilizing latest technologies in modern waveforms and encryption.

ARL Performance

- **Max Speed (VNE):** 265 MPH / 230 knots
- **Service Ceiling Altitude:** 25,000 ft.
- **Endurance:** 7.0 hours
- **Max Gross Take Off Weight:** 47,000 lbs.