

# Airborne Reconnaissance Low (ARL)

Detects, locates, and reports threat activities using a variety of imagery, communications-intercept, and moving-target-indicator sensor payloads.



## DESCRIPTION AND SPECIFICATIONS

The Airborne Reconnaissance Low (ARL) is a self-deploying, multi-function, day and night, all-weather reconnaissance, intelligence, echelons-above-corps asset. It consists of a modified DeHavilland DHC-7 fixed-wing aircraft equipped with communications intelligence (COMINT), imagery intelligence (IMINT), and synthetic aperture radar/moving target indicator (SAR/MTI) mission payloads. The payloads are controlled and operated via on-board open-architecture, multi-function workstations.

Intelligence collected on the ARL can be analyzed, recorded, and disseminated on the aircraft workstations in real time and/or stored on board for post-mission processing. During multi-aircraft missions, data can be shared between cooperating aircraft via ultra high frequency (UHF) air-to-air data links allowing multi-platform COMINT geolocation operations. The ARL system includes a variety of communications subsystems to support near-real-time dissemination of intelligence and dynamic retasking of the aircraft.

There are currently two configurations of the ARL system:

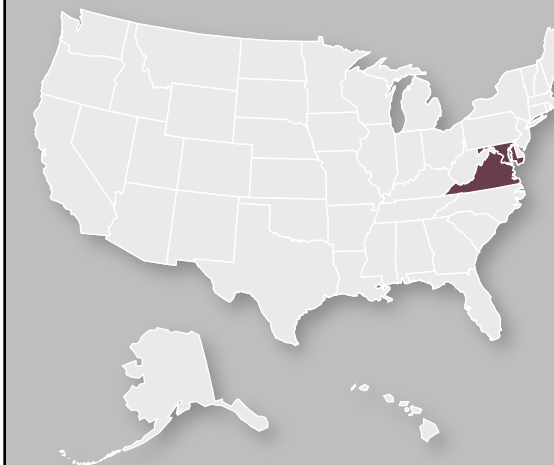
- The ARL-COMINT (ARL-C) configuration with a conventional communications intercept and direction finding (location) payload.
- The ARL-Multifunction (ARL-M) configuration equipped with a combination of IMINT, COMINT, and SAR/MTI payload and demonstrated hyperspectral imager applications and multi-INT data fusion capabilities.

## PROGRAM STATUS

- **3QFY04** Government acceptance of the sixth ARL-M (M6)
- **3QFY04** Complete standardization of cockpit configurations on the two ARL-C (C1, C2) platforms
- **4QFY04** Install aircraft survivability equipment (ASE) upgrades on C1, C2, M4 and M5
- **4QFY04** Re-field M5 with upgraded COMINT capability. Eight ARL systems have been fielded to date (C1, C2, M1, M2, M3, M4, M5, and ARL-I). Two ARL-Ms and both ARL-Cs are stationed at Ft. Bliss, TX, and primarily support Southern Command requirements; three ARL-Ms provide support to PACOM (Korea); ARL-I is no longer in existence.
- **1QFY05** Field M6

## PROJECTED ACTIVITIES

- **2QFY05** Complete ASE upgrades on M1, M2, M3 and M6
- **4QFY05** Field federated COMINT upgrades on M1, M2, M3, PACOM (Korea)



## CONTRACTORS

**Aircraft Survivability:** Litton Advanced Systems (Gaithersburg, MD)  
**Engineering Support:** CACI (Berryville, VA)

INVESTMENT COMPONENT  
Modernization

ACQUISITION PHASE  
• Production and Deployment

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