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Aerial Common Sensor

Agenda



- *Purpose*
 - *System Description/Deployment*
 - *Subsystem Capabilities*
 - *Modernization Plan*
 - *Summary*

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IEW&S
PROGRAM EXECUTIVE OFFICE

Aerial Common Sensor

ARL Purpose



- *Provide an Information Briefing on the Airborne Reconnaissance Low, Multifunction (ARL-M) Intelligence Collection System*

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ARL-M System Description

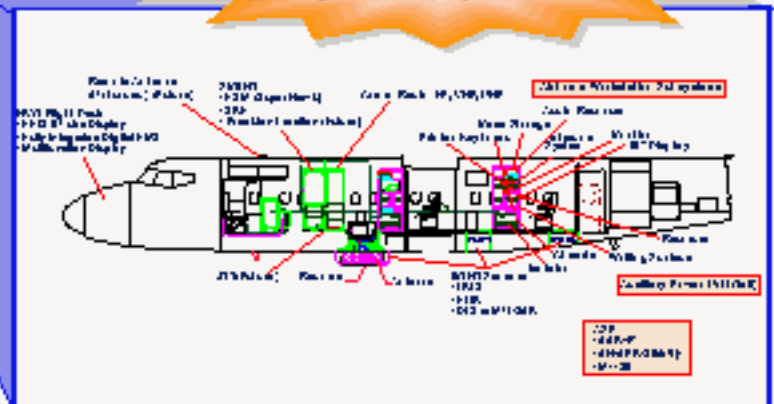


ARL is a Theater/Joint Land Force Airborne SIGINT/IMINT System Capable of Providing Near Real-Time Indications/Warnings, Targeting and Support to OOTW/Force Projection Operations

- Formulation: Airborne Reconnaissance Low
- Mission Design Series: RC-7
- Type Designation: A5/ASQ-23

Mission Equipment

- COMINT
 - Super Hawk COMINT/DF
 - SRE
 - Precision Targeting (FY01)
- IMINT
 - FLIR
 - IR Line Scanner
 - Daylight Camera
 - MTI/SAR Radar
- Reporting
 - LST-5 SAT COM/LOS
 - ARC-210
 - JTT-3 (FY99)



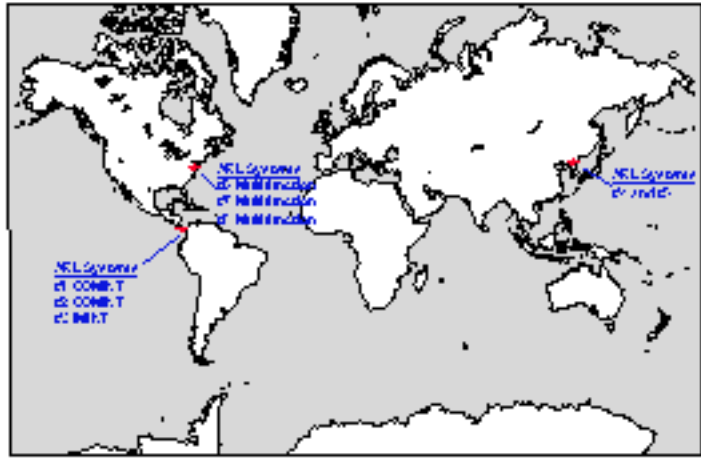
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ARL Units Worldwide



Total CINC Requirement

- USARPAC Requirement = 6 ARL With MTI/SAR (Working Document)
- US SOUTHCOM Requirement = 9 ARL-M
- EUCOM

Current Program

- C1, C2 - COMINT Only, SOUTHCOM
- I-IMINT Only, SOUTHCOM and EUCOM Occasionally
- M1, M2 - IMINT (incl WAMT/SAR) COMINT Capable - Korea
- M3 - Full Multi Function - Korea (Oct 97)
- M4, M5 - Full Multi-Function (JSAF COMINT) (FY99)
- Approved Upgrades
 - JSAF SIGINT (6 Systems) (FY01 - 03)
 - CTT/H3 (FY99)

Current Plan Does Not Meet CINC Demand

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Aerial Common Sensor ARL-M Subsystems

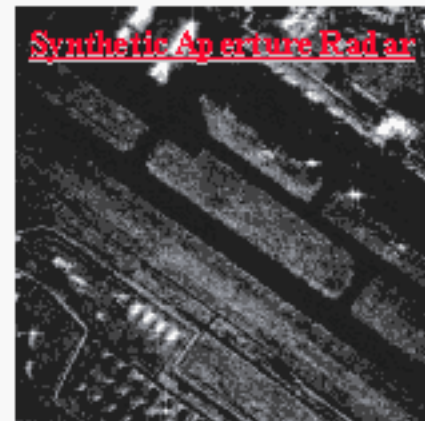
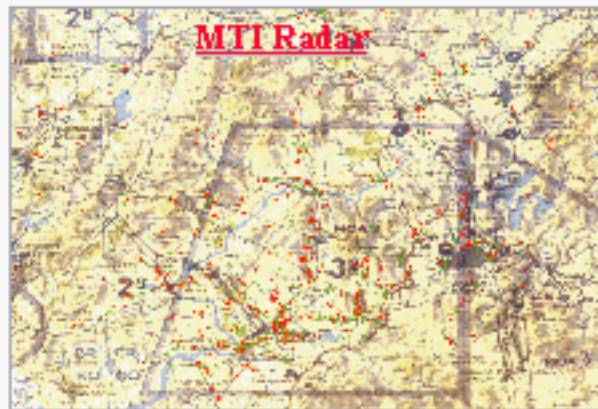


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Aerial Common Sensor ARL-M Capabilities

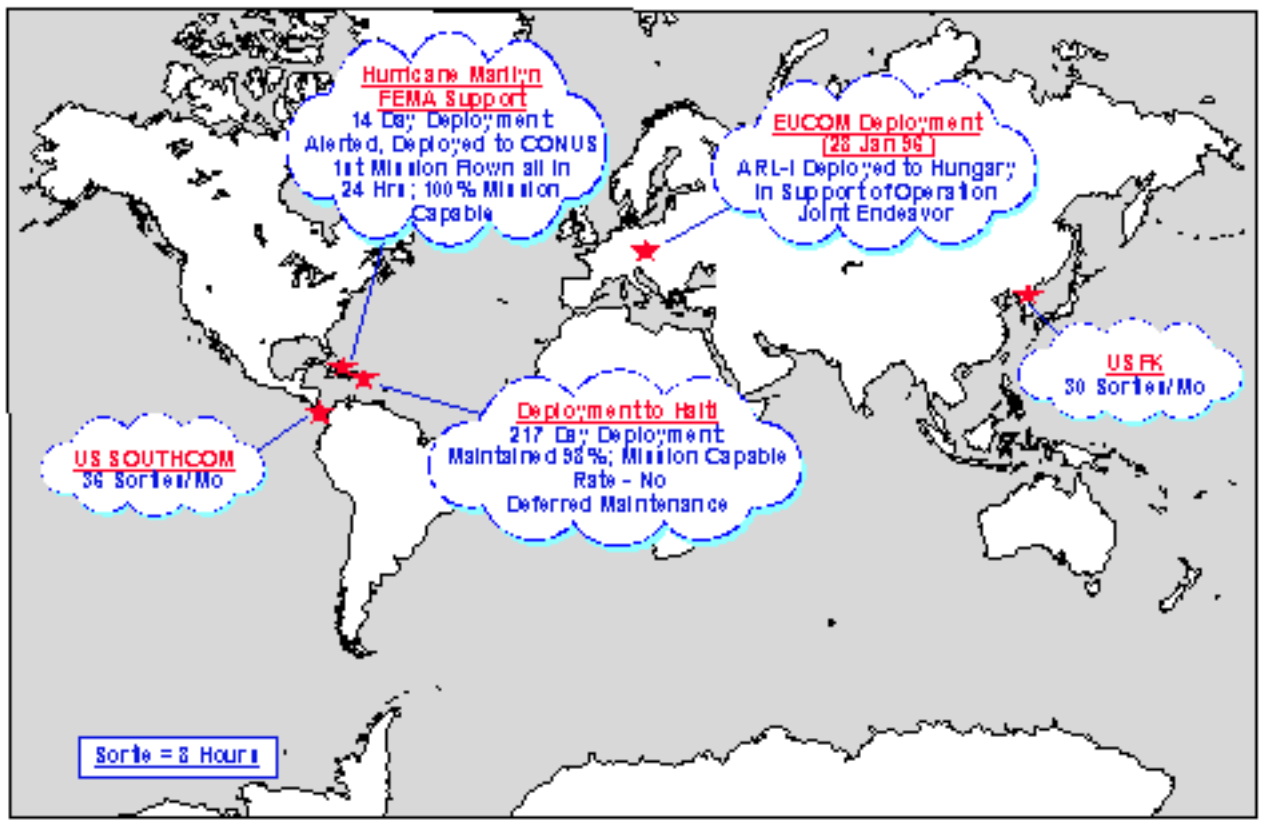


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Aerial Common Sensor ARL Deployments/OPS Tempo



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- *CINCSOUTH Message - 29 Jan 93: "... ARL ... Collects, Processes, and Disseminates COMINT and IMINT in Real Time to Ground Deployed Units ..."*
"... One of it's Real Values ... Unlike Other Collection Platforms, Host National Observers are Allowed on board Without Restriction. The Systems are Exceeding Original Expectations ..." *"... I am Looking Forward to Having (ARL) in Theater ... This Timely and Badly Needed Capability ..."*
- *CG, 18th Abn Corps Message - 01 Sep 94: "... (ARL) is Ideally Suited to Enhance ... Force Projection ... of the XVIII Abn Corps"* *"... Capable of Supporting Forced Entry and Follow on Combat Operations ..."* *"... ARL is One of the Most Impressive Collection systems ..."* *"... Recommend This System be Reviewed to Enhance the Intelligence Acquisition Capability of Other Units Throughout the Army ..."*
- *USFK J2 - 8 Oct 96: "Our Bottom Line is That ARL-M has Added Tremendous I&W Capability to This Command".*
- *GEN Barry McCaffrey Ret. - 28 Aug 96: "ARL is a Miracle Asset With Tremendous Capability".*

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Aerial Common Sensor



- ***ARL***
 - ***Operational MTI Capability in Less Than 9 Months***
 - ***Integration of Multi-INT Payloads on a Single Small Self Contained Platform***
 - ***Extensive Leverage of Commercial Technology to Rapidly Meet Tactical Operational Requirements***

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Aerial Common Sensor Modernization Glide Path



ARL

- CDL
- JSAF
- Interoperability
- CHALS-X Capability
- JTT-3

Today



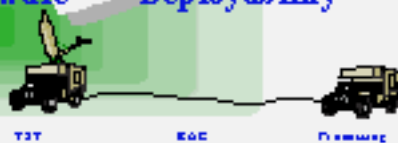
GR/CS

- CDL
- Connectivity
- Sensor Upgrades
- Interoperability



IPF

- Processors
- Modular/Scaleable
- Common Software
- Connectivity
- Down sized
- Interoperability/Deployability



ACS Prototype

Demos Exercises



ACS Objective System

Common Concept can Provide Integrated Approach

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Aerial Common Sensor Summary



- *ARL (System 4,5) Fielded to USFK in Less than 9 Months*
- *ARL is a Model for Streamlined Acquisition*
- *ARL Provides the Joint Land Force Commander With Near Real-Time, Multi-Intelligence for C2I*

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