

# 2005 REQUIREMENTS SYMPOSIUM



**BREAKOUT TOPIC:  
ALQ-135 Band 1  
Antenna**

**542d  
Electronic Warfare  
Sustainment  
Group (EWSG)**

**Briefer: Ms. Megan Crane**

**Title: ALQ-135 Band 1 Antenna**



# Overview

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- Brief Item Description
- Current Status of Item
- Acquisition & Sustainment Strategy
- Budget
- Challenges/Opportunities
- Technology Insertion Roadmap/Plan
- Government Focal Points
- Summary



# Brief Item Description

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- Competitive repair of the ALQ-135 Band 1 Antenna
- Part of the Tactical Electronic Warfare System (TEWS)
- Installed on F-15A and C aircraft only (roughly 440 aircraft)
- Anticipated requirement is 12 per year



# Current Status of Item

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- Planning Purchase Request in work for repair contract
- Anticipate RFP release in Nov 05
- No system upgrades or improvements projected
- F-15A aircraft retiring, therefore requirements are expected to decrease



# Acquisition & Sustainment Strategy

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- Full and open competition will be used
- Unqualified sources must accomplish the following:
  - Develop and pass both Acceptance Test Procedures and Qualification Test Procedures
  - Submit Qualification Test Reports



# Budget



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	R & D	Acquisition	Sustainment
FY 05	\$0	\$0	\$36,312
FY 06	\$0	\$0	\$39,943
FY 07	\$0	\$0	\$40,266
FY 08	\$0	\$0	\$40,266



# Challenges/ Opportunities

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- Some DMS issues transpired in the past
- Current repair source able to resolve DMS issues
- Drawings updated with latest information



# Technology Insertion Roadmap/Plans

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- No plans to upgrade or modernize this antenna
- No technology shortfalls or issues
- Testing of item would require an anechoic chamber to measure antenna gain



# Government Focal Points



- ALQ-135 Program Manager: Megan Crane
  - EWSG/GBWBC
  - [Megan.Crane@robins.af.mil](mailto:Megan.Crane@robins.af.mil)
  - (478)926-2571
  
- Contracts POC: Rick Yeager
  - EWSG/PKT
  - [Rick.Yeager@robins.af.mil](mailto:Rick.Yeager@robins.af.mil)
  - (478)926-4101



# Summary

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- Competitive repair requirement
- No technological issues



# Requirements Symposium

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## 542 EWSG Technology Needs



# Technology Insertion Roadmap/Plans



- **Proposed Project Title: Circuit Card Assemblies DMS issues**
- **Proposed Project Objective**
  - Reduce chip/board count
  - Increase Reliability (MTBF)
  - Retain system & SE interfaces
  - Maintain / Increase functionality
  - Decrease repair costs
- **Proposed Project Method**
  - Replacing multiple components with FPGAs
  - Replacing functionally-similar CCAs with Interchangeable CCAs
  - Replacing multi-CCAs with a single CCA
- **Center Ranking: TBD**
- **Currently Funded: NO**



# Technology Insertion Roadmap/Plans



- **Proposed Project Title**  
**Improved High Power Amplifiers for Legacy Electronics Warfare Systems**
- **Proposed Project Objective**  
**Provide a readily available source of replacement amplifiers for obsolete microwave high power amplifiers in legacy Electronic Warfare (EW) systems to provide higher/or directed ERP.**
- **Proposed Project Method**  
**Develop a common series of scalable Microwave Power Modules (MPMs) that can be tailored to the performance requirements of legacy EW microwave high power amplifiers and are easily adaptable to the legacy form factors.**
- **Center Ranking: TBD**
- **Currently Funded: NO**



# Technology Insertion Roadmap/Plans



- **Proposed Project Title**  
**Common Core Downsized Modular Integrated Support Stations and Support Tools**
- **Proposed Project Objective**  
**Standardize EW and Avionics Integrated Support Stations and support tools to a common core downsized modular and scalable design to mitigate obsolescence, improve reliability, modernize capabilities, reduce support and maintenance costs, and reduce the amount of lab space consumed.**
- **Proposed Project Method**  
**Develop a modular and scalable standard for Electronic Warfare and Avionics Integrated Support Stations and support tools. Replace custom built software integration and independent verification and validation tools with commercially available software development tools.**
- **Center Ranking: TBD**
- **Currently Funded: NO**



# Technology Insertion Roadmap/Plans

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- **Proposed Project Title**  
**Common Core Modular Depot Test Stations**
- **Proposed Project Objective**  
**Standardize Depot Test Stations to a common core modular and scalable design to mitigate obsolescence, improve reliability, modernize capabilities, and reduce support and maintenance costs.**
- **Proposed Project Method**  
**Develop a modular and scalable standard for Electronic Warfare and Avionics Depot Test Stations.**
- **Center Ranking: TBD**
- **Currently Funded: NO**