

# 2005 REQUIREMENTS SYMPOSIUM



**BREAKOUT TOPIC:  
Common Avionics  
Intercommunications Set  
(CAIS)**

**542d  
Electronics  
Sustainment  
Group (ESG)**

**Briefer: Mr. Jere Cater, P.E.**

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# Overview



- Brief Program / Issue Description
- Current Status of Program / Issue
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# Program / Issue Description

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## MAJOR SYSTEM TO BE REPLACED

- AN/AIC-18 is the major USAF intercom system that will be replaced by CAIS.
- Supportability Assessment – AN/AIC-18 is experiencing DMSM and obsolescence of component repair parts. WR-ALC is the repair facility for the AN/AIC-18 ICS. The CAIS replacement unit will provide a low cost F<sup>3</sup> replacement (~\$5K) that is scalable, modular, expandable, and easily upgraded.



# Program / Issue Description (cont.)

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- Common Avionics Intercommunication Set (CAIS) R&M Improvement Program
  - Vendor: TBD
  - Fit and form replacement for AN/AIC-10, -18 & -25 ICS
  - Retrofit approximately 6,000 different aircraft across 26 Mission Design Series (MDS)
  - Accounts for 72% of ICS installed Air Force-wide (est. 10346 installations)
  - Future Option: Addition of wireless function to CAIS
    - Meets AFSOC AWIS documented requirements
    - Solves safety issues (crew entanglement)
    - WR-ALC envisions competitive award



# Program / Issue Description (cont.)

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- Requirement for CAIS:
  - Currently, the Air Force manages 15 unique intercoms on Mission Platforms
    - Aging technology (1950's-1980's)
    - Rising cost of sustainment
    - Lack of configuration control
  - Replacement with CAIS:
    - Increased supportability
    - One common system
    - Reduced O&M costs



# Current Status of Program / Issue

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- **Technology Demonstration Phase**
  - Completed Dec 1999
- **System Demonstration Phase**
  - Development and fabrication of functional prototypes – (Mar 03 - Mar 04)
  - Qualification test (Feb 04 - Sep 04)
- **Production Phase**
  - Projected start – FY06
  - Deployment – FY07



# Acquisition & Sustainment Strategy



- **CONTRACTING STRATEGY**
  - Full and open competition
- **DATA RIGHTS**
  - Unlimited
- **PROGRAM PHASES**
  - Looking for production funding.
  - Will be a form, fit, functional replacement for AIC-10/18/25.
- **SUSTAINMENT**
  - WR-ALC/MAI is currently the Depot for AIC-18. Anticipate that it will become the Depot for CAIS.
- **Wireless**
  - Use Army AWIS contract vehicle
  - Team with Army and Navy on COMSEC module development



# Program Requirements Roadmap

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- Projected service life – 30 Years
- Organic depot planned



# Funded Requirements (Not On Contract)

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- Not applicable



# Program Budget



	R&D	Acquisition
FY 06	\$675,000	\$14,226,250
FY 07	\$5,075,000	\$28,452,500
FY 08	\$0	\$14,226,250



# Unfunded Requirements



- Program
  - Production is Not Funded
- Schedule
  - See Budget
- Funding & Execution Probability
  - Funding has been requested thru the POM several times.
  - Anticipate that program will be developed using Preferred Spare Concept



# Program Challenges / Opportunities

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- Funding
  - Only real challenge to the program
  - Program is ready to move forward when funding becomes available



# Area / Issues Needing Improvement or Assistance



- As previously discussed the challenge is funding and how to produce. Some potential platform sponsors appear on the horizon but nothing is definite.
- The method of production as it interfaces with Industry is critical. If total funding were available, production of approximately 12000 units would become very attractive; however, if only minimal funding is available we (USAF) need to know what a minimum order quantity would be.
- Any industry ideas to help us implement the Preferred Spares Concept would be appreciated.
- We have a design ready for market.



# Technology Insertion Roadmap/Plans

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- CAIS has been designed as a modular system. We would like to incorporate wireless features into the basic system at some point in the future.
- Today!!! The best alternative for wireless appears to be the Army's AWICS program.



# Government Focal Points



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# Summary



- CAIS summarized:
  - An on going funded ICS R&M replacement program.
  - Will be re-configurable to meet future requirements.
  - Low per unit cost.
  - Increased Mean Time Before Failure rate.
  - Opportunity for joint participation.