

2005 REQUIREMENTS SYMPOSIUM



**BREAKOUT TOPIC:
AN/TRC 170
and
AN/GRC-239**

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

Briefer: Ricardo Serrano, M.E. Title: System Engineer



Overview



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Program Description



- AN/TRC-170
 - Extensively Used Beyond Line of Sight Communications System: V2 and V3
 - Depot Rep. Tobyhanna Army Depot, PA
 - Users: AF MAJCOM, ANG, Army, Marines
 - OEM: Raytheon and Unisys





Program Description



- AN/GRC-239
 - System Widely Used for Quick Response Line of Sight Comm and as Critical Link in Battlefield Management
 - Interfaces with TRC-170 Digital Troposcatter Radio
 - Users: AF MAJCOMS, ANG, Army, Marines
 - Equip Manufacturer – Microwave Radio Communications, North Billerica, MA
 - Depot Rep. Tobyhanna Army Depot, PA





Current Status of Program



- Both systems will continue to be active through 2020
- Reparable items not returning to depot
- Desert conditions cause premature failures
- **AN/TRC-170**
 - 1970s technology fielded in the 1980s
 - Expand System Bandwidth, Decrease System Footprint, Increase System Range
- **AN/GRC-239**
 - System Interoperability



Acquisition & Sustainment Strategy



- Contracting Strategy
 - Not limited to any one in particular
- Data Rights
 - Govt. Purpose
- Program Phases
 - Depends on the project
- Sustainment
 - Organic, Tobyhanna Army Depot



Acquisition & Sustainment Strategy



- AN/TRC-170 and GRC 239
 - Proactive Component Improvement
 - Continue Working Product Improvement Needs Through PIWG (Product Improvement Working Group) & Theater Joint Tactical Networks Config Control Board (TJTN CCB)
 - Establish User Groups



Program Requirements Roadmap



- 10 Active Contracts on TRC-170, 3 on GRC-239
- No Research and Development Budget for Either One
 - Our goal is to use COTS whenever possible
- Spares: For TRC-170 about \$1M, for GRC-239 about \$150k every year.
- Engineering: About \$1M for TRC-170 and GRC-239 every year.



Funded Requirements Not On Contract



- Nothing at the current moment.



Program Budget TRC-170



	Spares	Sust. Engineering
FY 05	\$1M	\$2.6M
FY 06	\$1M	\$2.6M
FY 07	\$1M	\$2.6M
FY 08	\$1M	\$2.6M



Program Budget GRC-239



	Spares	Sust. Engineering
FY 05	\$150k	\$1.1M
FY 06	\$150k	\$1.1M
FY 07	\$150k	\$1.1M
FY 08	\$150k	\$1.1M



Unfunded Requirements



- Sustaining Engineering (Combined Totals)
 - TRC-170 \$2.6M/year
 - GRC-239 \$1.1M/year



Program Challenges / Opportunities



- Sustainment till 2020
 - Supply of parts
 - Keep up with technology
- Increase usage of these two systems...
 - More bandwidth
 - More use, more failures
 - Need to increase reliability of components



Area / Issues Needing Improvement or Assistance



- Develop Source of Supply
 - RAAM (Remote Antenna Alignment Meter)
 - Extender Board
- Develop Source of Repair
 - Power Supply
 - Oscillator
- At some time in the near future, we will be submitting a quote for full and open competition on the modem upgrade on the TRC-170.



Technology Insertion Roadmap/Plans



- No Issues



Government Focal Points



- **Program Manager**
 - Launce Burgan, Program Manager, LSACG, 478-926-7642
- **Equipment Specialist**
 - Royce Hulseley, Equipment Specialist, LSACG, 478-926-7643
- **Engineer**
 - Ricardo Serrano, System Engineer, LSEAC, 478-926-7641



Summary



- Systems will continue to be active through 2020
- Increase usage of these two systems
- Issues need to be addressed to keep systems compatible with emerging technology and sustainable until 2020