Central Test and Evaluation Investment Program



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OUTLINE

□ Program Overview
 □ Joint Improvement Modernization Project (JIM)
 □ Resource Enhancement Project (REP)
 □ Test Technology Development and Demonstration (TTD&D)
 □ Summary



PROGRAM OVERVIEW BACKGROUND

- ☐ Established in FY90
- □ 1999 -- CTEIP Transferred to DOT&E
- ☐ Funding Level Approximately \$120M/year



PROGRAM OVERVIEW OBJECTIVES

- □ Apply State-of-the-Art Technologies to Correct Test Deficiencies
- □ Improve Interoperability and Interconnectivity Between Facilities, Ranges, and Test Centers
- □ Achieve Consistency, Commonality, and Interoperability in *Targets*, Test Instrumentation, and Threat Simulators



PROGRAM OVERVIEW PROJECT CATEGORIES

- □ Joint Improvement and Modernization (JIM)
 - Improves Test Capabilities Base
 - > 75% of CTEIP Budget
- □ Resource Enhancement Project (REP)
 - > » \$20M
 - > Short Term (within 2 years) OT Shortfalls
- □ Test Technology Development and Demonstration (TTD&D)
 - > ***** \$6-8M
 - > Transition Technology From Labs to Test Capabilities



JIM CRITERIA

- ☐ Have Multi-Service Applicability
- **□** Be Developmental in Nature
- □ Not Be Used for Procurement



JIM TARGET RELATED PROJECTS

- ☐ Multi- Service Target Control System (MSTCS)
 - Advanced Target Control Development
 - Enhanced Range Applications Program (EnRAP) Commonality
- □ Joint Advanced Missile Instrumentation (JAMI)
 - Cooperative Vector Scoring
 - > GPS Technology Development



JIM MSTCS

- ☐ Goal Is to Upgrade Existing Tri-Service Target Control Systems While Providing Interoperability
 - Spectrally Efficient and Reliable Radio Frequency Links
 - Interoperable Ground Station
 - > IOC FY05
- □ Will Provide Same or More Target Control Capability Than Existing Service Capability
- □ Reqts Coordination and Cost Comparisons
 Have Been Completed



MSTCS Advanced Target Control Development

- □ Service Interoperable High Capacity Data Links
- ☐ Universal Application of GPS for TSPI With Attendant Enhanced 3-D Accuracy
- □ Autonomous Control Using Onboard TSPI and Waypoint Navigation
- □ Automatic Full-Scale Target Landing Without Radar Instrumentation Augmentation (Using Kinematic GPS)



REP OBJECTIVES

- □ Ensure that Service and DoD Agency Acquisition Programs Are Provided the Resources to Test in the Most Realistic Operational Environment
- Resolve Near-Term OT Resource Shortfalls
 That Could Introduce High Risk in
 Scheduled Evaluation of New Weapons
 Systems or System Upgrades



REP CRITERIA

- ☐ Meets Near Term (Usually 2 Years) High Priority OT&E Requirements
- □ Responds to Emerging Technologies, New Test Requirements and Changes in Intel
- □ Unanticipated OT Shortfall Which Precludes Service/Agency Programming and Budgeting



REP TEST CAPABILITY EXAMPLES

- □ IR Signature Models of DoD Full Scale Target (QF-4)
- ☐ Anti-Submarine Warfare (ASW) Target
- ☐ Mobile Programmable USW Countermeasure Threat Emulator



TTD&D OBJECTIVES

- □ Facilitate the Transition of Mature Technology From Laboratories to the T&E Community for the Purpose of Enhancing Test Capabilities
- □ Reduce Technical Risk in Testing for Future Weapon Programs



TTD&D CRITERIA

- □ Facilitate the Development or Demonstration of a New Technology
- ☐ Subprojects Expected to Be Available for Transition to Field Use Within Three Years
- □ Subproject Funding Limited to Approximately \$500K Per Year



TTD&D THRUST AREAS

- ☐ Identified on an Annual Basis to Ensure They Support:
 - National T&E / Training / Warfighting Priorities
 - DoD Guidance and Policy As Published in the Defense Technology Area Plan
 - Evolving Technologies Focused on T&E / Training / Warfighting
 - Current and Future T&E / Training / Warfighting Capabilities
- ☐ Subproject Proposals Are Not Constrained to "Thrust Areas' Only



TTD&D EXAMPLE SUBPROJECTS

- ☐ Multi-Band Telemetry Antennas for Tactical Munitions
- □ Plug and Play Open Architecture Participant Package
- □ Common Event Network Test Instrumentation System



SUMMARY

- □ CTEIP Established to Fund High Priority,
 Critical Joint-Use Test Capability Projects
- □ Applies State-of-the-Art Technologies to Correct Deficiencies in DoD Capabilities
- □ Fosters Consistency, Commonality, and Interoperability
- ☐ Improves the Overall Efficiency of the Test Process



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