

Target Oversight & Target Investment Management

Jessica Wyatt DOT&E Targets

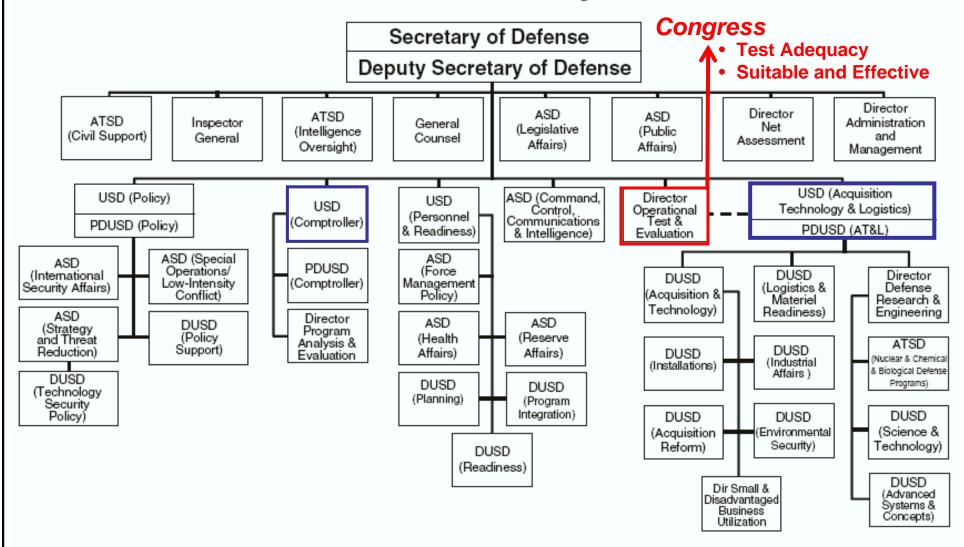
Office of the Secretary of Defense,
Operational Test & Evaluation Directorate



Overview

- Organizational Overview
- TMI Program Overview
- TMI Process
- FY07 Program
- FY08 Program

Office of the Secretary of Defense



Date: March 2001



Director Operational Test & Evaluation Dr. Charles McQueary

David W. Duma
Principal Deputy Director

Stephen C. Daly Deputy Director Land & Expeditionary Warfare

Michael D. Crisp Deputy Director Air Warfare

Thomas B. Blann Deputy Director Naval Warfare & Net-Centric Systems

Larry W. Miller Deputy Director Missile Defense & Director Live Fire

Land Warfare Systems
Expeditionary Warfare Sys
Future Combat Systems
Battle Command
Land Munitions
Rotary & Tilt-Rotor Aircraft
Tactical UAV
Chem-Bio Defense Program

Joint Rapid Acquisition Cell Targets Integrated Resource Analysis Threat Systems Office Joint IED Defeat Air Combat Systems Strategic Air Combat Systems New Aircraft Carriers Air Launched Munitions Endurance UAVs Air Warfare C4ISR Systems IR/UV/RF Def Combat Sys Airlift Systems

Joint T&E Program
Joint T&E Roadmap
Center for Counter Measures

Surface Combatant Ships Amphibious Ships Submarines Naval Munitions Space & Strategic Systems Net-Centric Systems Strategic C4ISR Systems Major Automated Info Sys Chemical Weapons Demil

Network Information Assurance & Interoperability Assessment Missile Defense Systems Live Fire – Land, Air, Naval Lethality & Survivability

Joint Live Fire Program Joint Aircraft Survivability Joint Technical Coordinating Group-Munitions Effectiveness



Targets/TMI Program Staff

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- Joshua Messner Ground Systems
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- Patrick Burris Aerial Systems
 - Phone: 256-425-0010 ext 107, burris@ari2.com
- Vacancy



TMI Program

Focused upon improving targets

- <u>Improved Threat Realism!</u>
- Improved cost of operations
- Interoperability
- Flexible and Responsive

RDT&E Funding: \$5-7M

- Studies
- Prototypes
- Demonstrations
- No Production



TMI Program Process

- Target Resource Survey (June Sept)
- Focus Area Call for Proposals (October)
 - Based upon prior Survey
 - Call to Services'
 - TMI Website and conferences
- Proposal Review (Jan Feb)
 - (Service, Agency and Industry Proposals)
- Initial Proposal Prioritization
- Proposal Vetting
- Project Selection and Prioritization
- Funding Line Determination
- Project Approval Notification (Sept)



FY07 TMI Program

Legacy Projects

- Satellite Emulation
- Metal Target Surrogate Analysis and Validation
- Subsonic Subscale (SSAT) Demonstration Program
- Standard Interface for Target Control
- Information Operations Targets
- Expendable Air to Ground Target

New Start Projects

- Realistic Low Cost Targets
- Pneumatic Launcher Modeling
- DOT&E Directed Studies
- Multi-Spectral Mobile Ground Target Systems



FY07 Resource Adequacy Survey

- Operational Test Resource Concerns
 - Operational Test Agencies (OTA's)
 - DOT&E Action Officers
 - IRAT
 - Service Program Reviews
 - DOT&E Annual Report
 - Threat Systems Annual Report
 - TRMC Strategic Plan
 - DOT&E Targets Staff

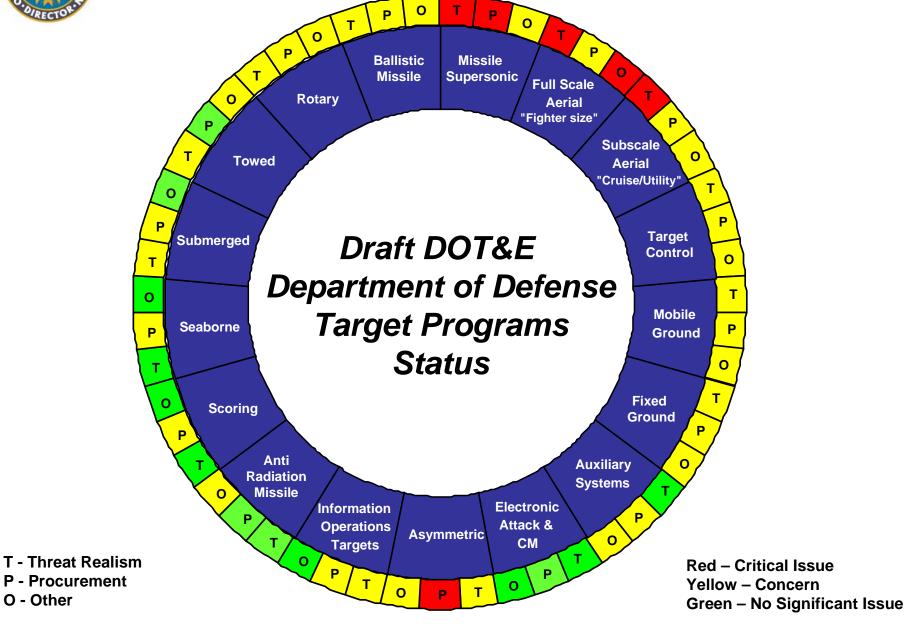


FY08 TMI Program

- October
 - Focus Area's released to Services' and on TMI Web Site
- February
 - Proposal Review



Target Program Status





FY08 TMI Focus Areas

- 1. Fixed Ground Targets
- 2. Full Scale Aerial Targets
- 3. Mobile Ground Targets
- 4. UAV's
- 5. Anti-Ship Cruise Missiles (ASCM's)
- 6. Space Based Targets
- 7. IO/EW Targets
- 8. Surface Targets
- 9. Submerged Targets
- 10. Scoring
- 11. Target Control
- 12. Asymmetric Threat Targets
- 13. Rapid Capability Development
- 14. Misc.



Summary

- New DOT&E Director
- FY07 Program Executing
- FY08 Program Under Development

DOT&E Target Management Initiative

www.tmi.osd.mil





Satellite Emulation

Project Description

Develop a new capability to include satellite emulation to test satellite interceptor sensors & controls in HITL capability.

This project is a proof of concept to add satellite emulation to existing ground test infrastructure

Test Programs Supported

Total TMI Funding



Project Milestones & Schedule



Metal Target Surrogate Analysis and Validation

Project Description

 Perform radar signature analysis validation and predictive model creation for metal surrogate targets.





Test Programs Supported

AARGM

Project Funding Profile

Project Milestones & Schedule

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 Project Initiation 	Mar	06
 Quick Look RCS Report 	Apr	06
Mid Year Review	Jun	06
 Detailed RCS Report 	Jul	06
Project Rescope	Aug	06
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Final Report



Subsonic Subscale (SSAT) X Program

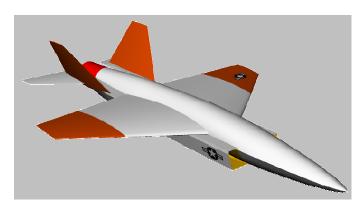
Project Description

Conduct test flights of alternative vendor for Navy new subscale target.

Test Programs Supported

SSDS; Aegis; DDX; SM-6 (FY-09)

Project Funding Profile



Project Milestones & Schedule

 Contract Award 	Dec 05
 Trade Study Results 	Mar 06
 Preferred Concept 	Jul 06
 Cost estimates 	Aug 06
 Prel Life Cycle Analysis 	Sept 06
 Final Report 	Sept 06

PD: Charles G. Manson; Navy/PMA-2081B; 301-757-6113; Charles.Manson@navy.mil



Standard Target Control Interface

Project Description

Develop and demonstrate a common interface for aerial targets using a combination of RS-422 and a Controller Area Network (CAN) interfaces that are compatible with current target control systems.

BQM-167A L-Band DFCS ESDL RS-422 JAUS CAN JAUS Ethernet UHF 430-450 UHF 380-400 PC Freewave

Test Programs Supported

None in particular, this projects provides the ranges the ability to fly targets with either interface.

Project Milestones & Schedule

- Contract award September 2006
- Initial flight test November 2006
- Final report Apr 2007

Project Funding Profile



Expendable Air to Ground Target

Project Description

Design and build a set of expendable stationary metal surrogate threat vehicles for DoD DT/OT testing programs requiring medium to high fidelity MMW radar signatures.

Test Programs Supported

AARGM, GMLRS, AESA, F/A-18E/F/G, Hellfire, APKWS,

Project Funding Profile



Project Milestones & Schedule

First Set (SA-6 TEL, SA-6 TELAR, Modified Big Bird)

Units Built Aug 05
RCS Measurements Sep 05
RCS Analysis Jan 06

Second Set (Tin Shield, SA-20 TEL,)

Units Built Aug 06 RCS Measurements Sep 06 Final Report Nov 06

PD: Doug Walters, PMA-242-1, AARGM Program T&E, 301-757-6070, douglas.walters@navy.mil



Realistic Low Cost Target

Project Description

This project will develop alternative methods for providing high infrared fidelity on 2^{1/2} D gunnery targets. Current systems are susceptible to gun fire and must be replaced or repaired frequently.

Test Programs Supported

EFV, MEFFV

Project Funding Profile



Project Milestones & Schedule FY07

Contract Award, Requirements Report Materials Analysis

FY08

Prototype Build, IR Augmentation Test and Validation, Validation Report Final Report

PD: Ken Lardie / MCOTEA / 540-288-1387 / ken.lardie @efvmcotea.com/ USMC



Pneumatic Launcher Modeling

Project Description

This TMI project will develop and characterize a mathematical model of a generic pneumatic launcher for subscale aerial targets. The model will be adaptable to predict performance of low and high energy launchers currently in use or in design.

Test Programs Supported

No test programs are directly supported by this effort.

Project Funding Profile



Project Milestones & Schedule

Contract Award Dec 06 Launcher Survey Report Math Model Complete Design Report Final Report

Sept. 07



Hi-Seed Target Semi-Autonomous Control

Project Description

This project will add the capability to control actual wheeled and tracked vehicles to the current Shoot-able Remote Threat Ground Target (SRTGT) – Target Control System.

Test Programs Supported

SDBII, Enhanced JDAM, OLN-AFMC

Project Funding Profile



Project Milestones & Schedule

Contract Award	Dec 07
Evaluate Current Software	Jan 07
Hardware Procurement	Mar 07
Wheeled Prototype	May 07
Test Wheeled Prototype	Jun 07
Define Software for Tracked	Aug 07
Tracked Prototype	May 08
Test Tracked Prototype	Jun 08

PD: Maurice Bobbitt / 46TW/TSRF / 850-882-1901/ maurice.bobbitt@eglin.af.mil / USAF



DOT&E Directed Studies

Project Description

The rapidly changing threat environment requires the ability to quickly determine the appropriate means of representing these threats. DOT&E directed studies provides a quick means of examining these

Test Programs Supported

Future programs

Project Funding Profile



Project Milestones & Schedule

- Threat Review Sept/Dec
- Study Sept/Dec
- Target Quick Reaction Capability Formulation - Jan/March
- Demonstration?



Multi-Spectral Mobile Ground Target System FY07 Project

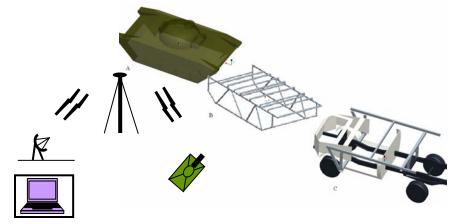
Project Description:

FY07 funding continues Multi-spectral Mobile Ground Target System development. Advances the Mobile Ground Target Control System, signature augmentation, threat countermeasures, and testing at the full system level.

Test Programs Supported:

The MMGTS will support testing of weapon systems that require moving threat ground vehicles. Examples include: LJDAM, ERMP, MRM, FCS, SDBII

Project Funding Profile:



Project Milestones & Schedule:

Project Kickoff Meeting	Dec 06
Full TVARCS Integration	Feb 07
Integrate Emitters/TCS	Mar 07
Refined TCS S/W	Jun 07
Test & Demo	July 07
Software Documentation Package	Aug 07
Hardware Design Package	Aug 07
Final Report	Sept 07

Sub-projects:

Shoot-able Remote Threat Ground Target (SRTGT)
Advanced Ground Target Threat System (AGTTS)