

PEO
STRI

TRAINING & SIMULATION

INDUSTRY SYMPOSIUM



COL Mike Zarbo

*Project Manager Instrumentation, Targets and
Threat Simulators (PM ITTS)*

Update for IITSEC



PM ITTS Mission and Vision



Mission

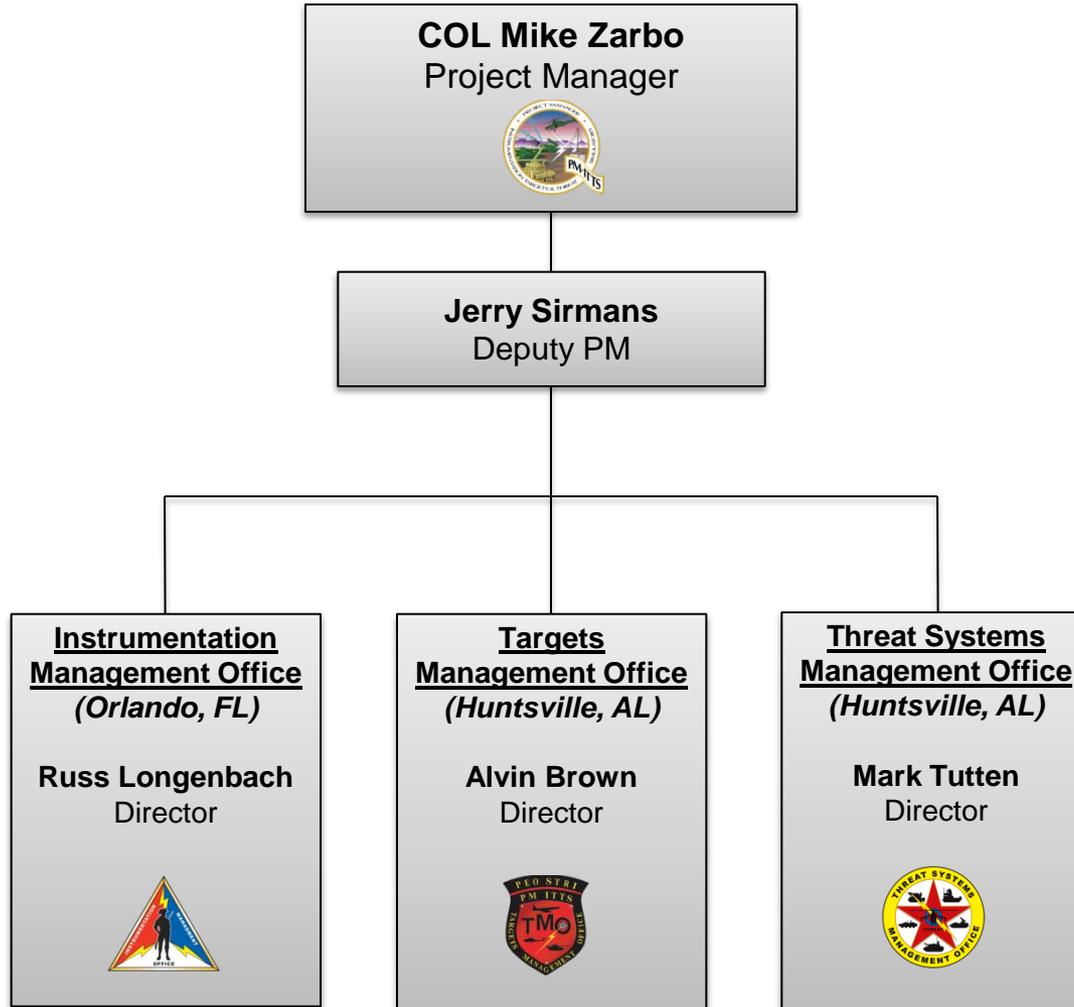
Manage the acquisition of optimized Instrumentation, Target, Threat & Foreign System products and services in support of U.S. Army, Department of Defense, Government, Industrial and International Customers and execute non-traditional missions as assigned or directed by the PEO.

Vision

To be recognized as the customer-preferred source for Instrumentation, Target, Threat and foreign System solutions.



PM ITTS Organization Chart



PM ITTS at a Glance



➤ Geographically Dispersed Management Offices (MO)

- PM Headquarters and Instrumentation Management Office (IMO) located in Orlando, FL
- Targets and Threat Systems Management Offices (TMO and TSMO) at Redstone Arsenal, Huntsville, AL

➤ 67 Locations

- IMO: 13
- TMO: 44
- TSMO: 10

➤ 69 Active Programs

- IMO: 22
- TMO: 16
- TSMO: 31

➤ Sources of funding

- DA Direct Mission Funding (9 POM lines - RDTE, OPA, MIPA, OMA)
- Execute Assigned OSD Programs Funded from CTEIP, REP, TSWG, T&E/S&T, TMI, and JMETC
- Over 50 Customers
- Foreign Military Sales



PM ITTS Primary Support

The Test and Evaluation Community



Department of Defense

Office of the Secretary of Defense

Director, Operational Test & Evaluation (DOT&E)



TMI



Undersecretary of Defense, for Acquisition, Technology, and Logistics (USD (AT&L))



Test Resource Management Center (TRMC)



CTEIP



JMETC



Secretary of Defense
Deputy Secretary of Defense

Joint Chiefs of Staff
Chairman, Joint Chief of Staff

Chief of Staff, Army

Vice Chief of Staff, Army

Army Test and Evaluation Command (ATEC)



Army Evaluation Center (AEC)



Developmental Test Command (DTC)



Operational Test Command (OTC)



Department of the Army

Secretary of the Army

Deputy Under Secretary of the Army, Test & Evaluation (DUSA(TE))



Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT))



Program Executive Office for Simulation, Training, & Instrumentation (PEO STRI)



Program Manager for Instrumentation, Targets, and Threat Simulators (PMITTS)



Test Resource Management Center (TRMC) Support



Central Test & Evaluation Investment Program (CTEIP)



CTEIP is focused on proactively identifying joint test requirements of the future and developing the test capabilities needed to address them.

Joint Improvement and Modernization (JIM)



Joint Urban Test Capability (JUTC)

Objective Helicopter Icing Spray System (OHISS)

- Directed Energy Test & Evaluation Capability (DETEC)
- Threat Communication Capability (TCC)
- *Advanced Range Tracking and Imaging System (ARTIS)*
- *Synthetic Battlefield Emitter*

Resource Enhancement Project (REP)

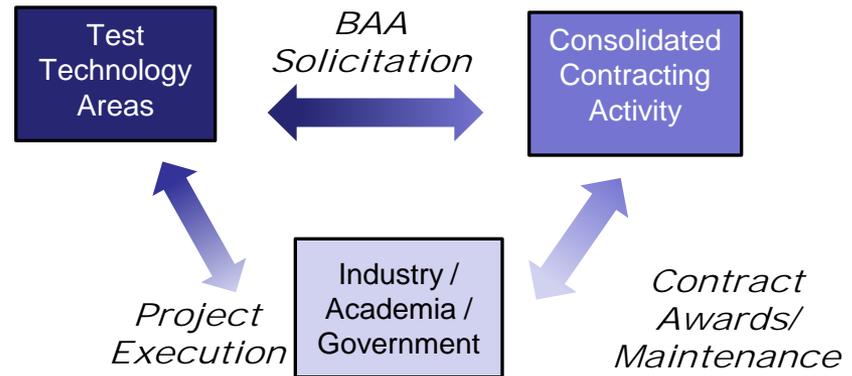
- Precision Targets Signatures (PTS)
- Multi-Spectral Sea and Land Target Simulator (MSALTS)

Test & Evaluation/Science & Technology (T&E/S&T)



The purpose of T&E/S&T is to develop new technologies and processes for future T&E requirements as well as to expedite the transition of new technologies from the laboratory environment to the T&E community.

PM ITTS Supporting 7 Test Technology Areas:
Directed Energy (PM ITTS Executing Agent), Multi Spectral*, Advanced Propulsion, Advanced Instrumentation Systems, Netcentric Systems, Spectrum Efficiencies, Unmanned Autonomous Systems



Instrumentation Management Office (IMO) Products



Mission: Develop devices that detect, measure, record, transmit and process data in support of Developmental Testing (DT) and Operational Testing (OT)

Operational Test-Tactical Engagement System (OT-TES) Communications Upgrade (CU)

- State-of-the-art hybrid network with quad-band radio to provide exceptionally reliable communications coverage. Designed to simulate engagements including direct fire, indirect fire, non-line-of-sight, guided, SMART, and nonlethal weapons.



Digital Network Migration (DNM)

- Mode Sensor interface solution to support IP connectivity to include Sensor interface development and Network stack configuration. Within last six months, Dense Wave Division Multiplexing (DWDM) upgrade, testing completed, and initiated transition to Government.

Systems Test & Integration Laboratory (STIL)

- Simulation, human-in-the-loop, hardware-in-the-loop, and installed system test facility techniques to maximize testing on the ground in order to focus and optimize subsequent open air flight testing.



Targets Management Office (TMO) Products



Mission: Develop, operate and support Aerial and Ground targets in support of Customer Testing, DT, OT, Live Training and FMS

Precision Targets (PT)

- Includes Precision Target Signatures (PTS) project, and multiple FMS Range target cases for precision scoring hardware. PTS project implements state-of-art Visual and Infrared (EO/IR) signature technologies and will produce full-scale, validated 3-D decoys that can be stationary or used on existing mover equipment.



Air Defense Artillery (ADA)

- Provide targets, ancillary devices and contractor support services for mandated live-fire crew gunnery weapon qualifications and missile engagement events. Steady and continual support to many weapons platforms PMs (Patriot, Lower Tier, SLAMRAAM)

Remotely Piloted Vehicle Target (RPVT)

- Dual-use T&E /Target (Outlaw) used by all U.S. Army ADA Battalions to qualify two times a year on table 8 gunnery using Machineguns, Stingers and Avengers.



Threat Systems Management Office (TSMO) Products



Mission: Develop, operate and support threat representative systems in support of DT, OT, Training and FMS

Networked Electronic Support Threat Sensors (NESTS)

- Provides a three-tiered threat SIGINT and Direction Finding capability. Previously acquired systems were modified to represent low and medium level NESTS Systems.

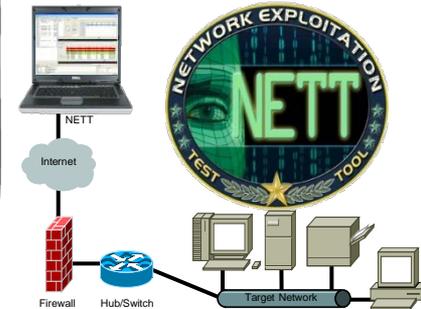


Integrated Threat Force (ITF)

- Provides a command and control, visualization, and communication capability fully integrated with TSMO's threat systems. Capabilities include: Threat representative command and control system, visualization and collaboration tools for test planning, execution, and after action analysis, and targetable and non-targetable communications and seamless integration of live, virtual, and constructive systems.

Threat CNO Teams (TCNOT)

- Provides a realistic representation of threat CNA and CNE capabilities employing threat doctrine, tactics, and techniques through the use of properly trained and certified professionals capable of executing threat computer operations. The primary tool used is the Network Exploitation Test Tool (NETT), developed by TSMO for TCNO Test events.



Range Radar Replacement Program (RRRP)



Description/Summary of Program Requirements

- Replace tracking radars at Aberdeen Test Center (ATC), Redstone Test Center (RTC), Yuma Test Center (YTC), and White Sands Test Center (WSTC).
- Increased sensitivity, power, accuracy, and data to meet current and future test needs. Plans to reduce total number of systems required for coverage, manpower, and maintenance during tests by providing remote controlled, mobile, and reliable systems.
- Currently divided into two performance zones:
 - Fly-out – currently fulfilled by the FPS-16.
 - Close-in – currently fulfilled by various X-Band pulse Doppler radars.

Acquisition Strategy	Period of Performance	Milestones		
<ul style="list-style-type: none"> • Full and Open Competition 	<ul style="list-style-type: none"> • FY12-FY22 	3QFY10  MDD	2QFY11  Draft RFP Release	2Q FY12  Anticipated Contract Award
Point of Contact	Funding	Current Contract/Original Developer/OEM (if recompet)		
Name: Bob Arora Organization: PM ITTS/IMO Phone: (407) 384-3976 Email: bob.arora@us.army.mil	<ul style="list-style-type: none"> • Anticipated funding: <ul style="list-style-type: none"> • \$104M RDT&E • \$75M to \$200M OPA 	<ul style="list-style-type: none"> • Not yet awarded. 		

TRMC T&E/S&T BAA



Description/Summary of Program Requirements

Test Resource Management Center (TRMC) Test & Evaluation / Science & Technology (T&E/S&T) Program

Test Instrumentation S&T (6 separate focus areas):

- DOD TRMC S&T funding.
- S&T applied technology (6.3) projects mature development of test technologies that directly support weapon systems T&E at DOD test ranges/facilities.
- Army Single Face to Industry (ASFI) and FEDBIZOPPS Broad Agency Announcements (multi-year) under six distinct technology/focus areas.

Acquisition Strategy	Period of Performance	Milestones												
<ul style="list-style-type: none"> • Two-phased BAA bids: 1) White Paper submission ; 2) RFP invitation • Awards based on prioritized benefit and available funds S&T / APPLIED TECHNOLOGY	<ul style="list-style-type: none"> • Typical total project length: 30 - 40 mo • Projects phased as base + options for risk mitigation (typically 3 total phases) • Expected 30-35 awards annually 	<table border="0"> <tr> <td>Mar-Apr</td> <td>May</td> <td>Jul-Aug</td> <td>Oct-Nov</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BAA Contract Issuance Award</td> <td>White Papers</td> <td>Proposal Due</td> <td>Decision</td> </tr> </table>	Mar-Apr	May	Jul-Aug	Oct-Nov					BAA Contract Issuance Award	White Papers	Proposal Due	Decision
Mar-Apr	May	Jul-Aug	Oct-Nov											
														
BAA Contract Issuance Award	White Papers	Proposal Due	Decision											
Point of Contact	Funding	Current Contract/Original Developer/OEM (if recompetete)												
Name: Glenda Torres Organization: PEO STRI Contracts Phone: (407) 384-4413 Email: glenda.torres@us.army.mil	<ul style="list-style-type: none"> • \$80M/yr funding supports issuance of new contracts across 6 technology areas and provides incremental funding to continue prior years' awarded contracts 	<ul style="list-style-type: none"> • 6 Separate multi-year BAA's • Annually updated with new topics • Government/Academia/Industry solicited 												

TRMC T&E/S&T BAA



Test Resource Management Center (TRMC) Test & Evaluation / Science & Technology (T&E/S&T) Program – \$40M FY10 funding

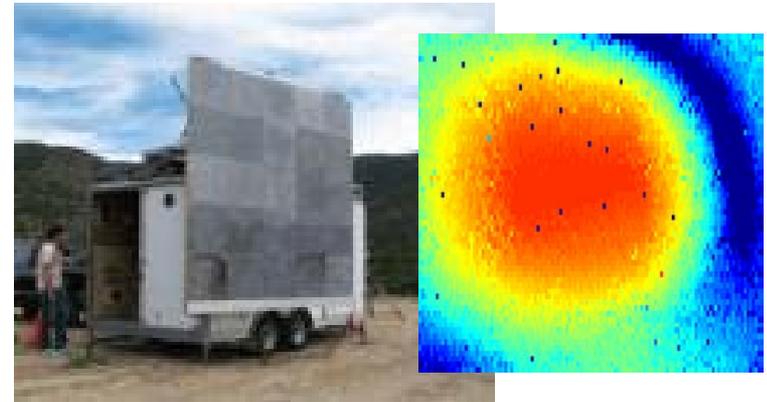
Test Instrumentation S&T (Six separate Test Technology Areas)

- **DoD Test Resource Management Center (TRMC) S&T funding**
- **S&T applied technology (6.3) projects mature development of test technologies that directly support weapon systems T&E at DoD test ranges/facilities**
- **Army Single Face to Industry (ASFI) and FEDBIZOPPS Broad Agency Announcements (multi-year) – current solicitation numbers:**
 - **Advanced Instrumentation Systems Test (AIST): W900KK-09-R-0037-0001**
 - **Advanced Propulsion Systems Test (APTT): W900KK-08-R-0017-0002**
 - **Directed Energy Test (DET): W900KK-10-R-0010**
 - **Net-centric Systems Test (NST): W900KK-08-R-0018-0002**
 - **Spectrum Efficient Technology (SET): W900KK-08-R-0019-0002**
 - **Unmanned and Autonomous Systems Test (UAST): W900KK-09-R-0038-0001**

Example S&T project successes from Directed Energy Test:

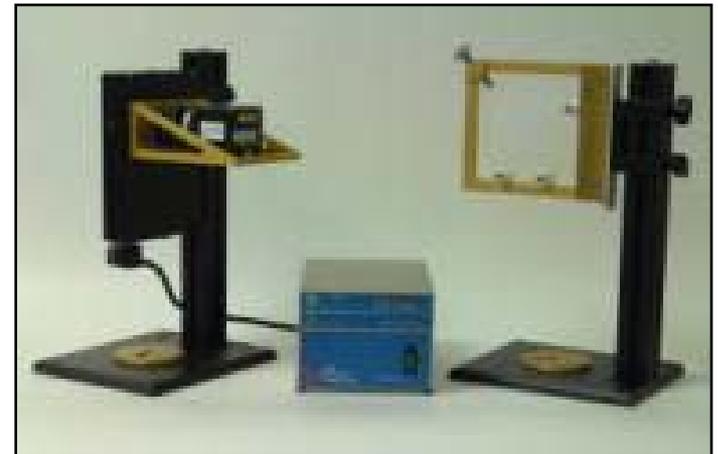
High Power Microwave Scanning Target Board

- Transitioned prototype to Air Force Research Laboratory (Kirtland AFB) in May 2010
- Under frequent use by Active Denial System test staff to improve system characterization and operation



High Energy Laser Target Board

- Transitioned prototype to Air Force Research Laboratory (Kirtland AFB) in Jun 2010
- In use by AFRL staff for laser testing
 - Higher spatial resolution than existing scatterplate
 - Supports continuous test shot schedule
 - Maintains better calibration for beam irradiance profiles



Joint Urban Test Capability (JUTC)



Description/Summary of Program Requirements

The JUTC offers a complex urban environment where system developers can conduct test events ranging from small scale developmental tests (DT) demonstrating limited technical capabilities to large scale operational tests (OT) of complex networked systems in a joint branch services environment.

The initial requirements include:

- Design a physical urban environment that accurately represents a specified geographic region.
- Provide reconfigurable multi-story physical structures that realistically affects RF technologies.
- Broadcasting theater-accurate EME effects into the physical environment.
- Collecting test data within an EME disruptive environment.
- Capability for distributed connectivity via JMETC.

Acquisition Strategy	Period of Performance	Milestones						
<ul style="list-style-type: none"> • Acquisition Strategy under development. 	<ul style="list-style-type: none"> • Period of Performance not yet defined. 	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 50%;">1Q11</td> <td style="width: 50%;">3Q11</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>TCRD Approved</td> <td>AoA</td> </tr> </table>	1Q11	3Q11			TCRD Approved	AoA
1Q11	3Q11							
								
TCRD Approved	AoA							
Point of Contact	Funding	Current Contract/Original Developer/OEM (if recompute)						
Name: Lorraine Castillo Organization: PMITTTS/IMO Phone: (407) 384-5235 Email: lorraine.castillo@us.army.mil	<ul style="list-style-type: none"> • Funding profile not yet defined - dependent upon finalized requirements. 	<ul style="list-style-type: none"> • Contract is not yet awarded 						

Towed Targets



Description/Summary of Program Requirements

- Targets Management Office's (TMO) Towed Targets Program
 - Design and Fabricate:
 - New towed target systems.
 - New tow reeling devices.
 - Modify existing tow targets and reeling systems
- Supports various Air Defense Artillery (ADA) weapon system testing/training.

<p>Acquisition Strategy</p> <ul style="list-style-type: none"> • A competitive Cost Plus Fixed Fee (CPFF) contract • 40,500 contractual hours of Engineering Support 	<p>Period of Performance</p> <ul style="list-style-type: none"> • Base year and four option years 	<p>Milestones</p> <table style="width: 100%; text-align: center;"> <tr> <td>Oct 2010</td> <td>Dec 2010</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>RFP Release</td> <td>Contract Award</td> </tr> </table>	Oct 2010	Dec 2010			RFP Release	Contract Award
Oct 2010	Dec 2010							
								
RFP Release	Contract Award							
<p>Point of Contact</p> <p>Name: Llane McGee Organization: AMCOM Acq Cntr Phone: (256) 842-1702 Email: Llane.Mcgee@us.army.mil</p>	<p>Funding</p> <ul style="list-style-type: none"> • Approximate \$7M dollar effort over 5 years 	<p>Current Contract/Original Developer/OEM (if recompetete)</p> <ul style="list-style-type: none"> • Meggitt Defense Systems current contractor (DAAH01-96-C-0147) • Follow-on competitive contract 						

Rotary Wing (RW) Targets



Description/Summary of Program Requirements

- Replacement threat representative RW targets:
 - Provides threat representative Visual, Radio Frequency and Infrared signatures.
 - Inexpensive lifecycle costs.
 - Minimal development.
- Approximately 20 targets needed over the life of program.
- Currently unfunded.

Acquisition Strategy	Period of Performance	Milestones	
<ul style="list-style-type: none"> • Procure a non-developmental solution to meet DOD needs. A technology demonstration desired prior to contract award. 	<ul style="list-style-type: none"> • Base year plus four option years 	<p>Nov 2010</p>  <p>Draft RFP Release</p>	<p>Jun 2011</p>  <p>Contract Award</p>
Point of Contact	Funding	Current Contract/Original Developer/OEM (if recompetete)	
<p>Name: Llane McGee Organization: AMCOM Acq Ctr Phone: (256) 842-1702 Email: llane.mcgee@us.army.mil</p>	<ul style="list-style-type: none"> • RW TMI funded for flight demonstration only 	<ul style="list-style-type: none"> • Full & Open • TBD 	

Mobile Ground Targets (MGT)



Description/Summary of Program Requirements

- Procurement of foreign threat ground hardware functionality ranging from fully-operational systems to spare parts and manuals.
- Used by Department of Defense (DOD) Test & Evaluation (T&E) agencies.
- Full and Open Competition for Firm Fixed Price (FFP) Procurements.

Acquisition Strategy	Period of Performance	Milestones									
<ul style="list-style-type: none"> • Five Year FFP IDIQ Contract • Full and Open Competition • Multiple Vendors Award Contracts 	<ul style="list-style-type: none"> • Base year plus any planned options 	<table> <tr> <td>Mar 2011</td> <td>Aug 2011</td> <td>Aug 2011</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>RFP Release</td> <td>Contract Award</td> <td>Initial Delivery Order</td> </tr> </table>	Mar 2011	Aug 2011	Aug 2011				RFP Release	Contract Award	Initial Delivery Order
Mar 2011	Aug 2011	Aug 2011									
											
RFP Release	Contract Award	Initial Delivery Order									
Point of Contact	Funding	Current Contract/Original Developer/OEM (if recompetete)									
<p>Name: Amy Donlin Organization: AMCOM Acq Center Phone: (256) 313-3695 Email: amy.donlin@us.army.mil</p>	<ul style="list-style-type: none"> • Approximate \$25M-\$30M dollar effort over 5 years 	<p>Current MGT IDIQ Vendors</p> <ul style="list-style-type: none"> • ATLAS • TAOS Industries • Vose • SASI 									

Aerial Targets IDIQ



Description/Summary of Program Requirements

- Multi vendor award.
- To acquire and support future aerial targets, engineering services, launchers, ground support equipment, repair & spare parts and logistical support.

Acquisition Strategy	Period of Performance	Milestones	
<ul style="list-style-type: none"> • Full and Open Competition 	<ul style="list-style-type: none"> • Base year plus four option years 	Jun-Jul 2011  Draft RF Release	Jul-Aug 2012  Contract Award
Point of Contact	Funding	Current Contract/Original Developer/OEM (if recompetete)	
Name: Pam Parker Organization: TMO Phone: (256) 876-5950 Email: pamela.parker5@us.army.mil	<ul style="list-style-type: none"> • Approximate \$50M dollar effort over 5 years 	<ul style="list-style-type: none"> • None • RFI posted - 8/3/10), W31P4Q-10-R-0321; closed - 9/3//10 • See POC for additional info 	

Threat Signal Injection Jammer (TSIJ)



Description/Summary of Program Requirements

- Represents a wide range of communications jamming waveforms over a large frequency range.
- Advancing current baseline capabilities:
 - two-channel man-portable unit
 - five-channel vehicle borne next-generation signal injection device
- Plan to produce new all-weather, low-power Control Signal Transmitter (CST).

Acquisition Strategy	Period of Performance	Milestones	
<ul style="list-style-type: none"> • STOC II • Production Contract 	<ul style="list-style-type: none"> • 30 months 	2QFY12  RFP Release	2QFY13  Anticipated Contract Award
Point of Contact	Funding	Current Contract/Original Developer/OEM (if recompetete)	
Name: Jean Borowski Organization: PSG - Contracts Phone: (407) 380-4261 Email: jean.borowski@us.army.mil	<ul style="list-style-type: none"> • \$12.5M 	Scientific Research Corporation (SRC)	