2008 Homeland Security S&T Stakeholders Conference East
“Partnering for a Safer Nation”

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Take Aways

- WSTIAC Provides Weapon Systems Technology Information and Technical Expertise
- Extensive Weapon Systems Technology Database
- Technical Assistance Provided Through the WSTIAC Contract:
  - Competed, Single-Awarded Contract - Saves Time and Money
  - Long Periods of Performance-Reduces Procurement Costs
- Large Number of Subject Matter Experts to Assist You With Your Needs
Agenda

- What is WSTIAC?
- Customers/Work Performed/Functions
- Information Vs. Contract Work
- WSTIAC Website
- Quarterly Publication and eNews
- Training Program
- “WSTIAC 10”
- Alion’s Core Business Areas
- Potential Uses/Benefits for Homeland Security
- WSTIAC TAT: RFID
- Summary
What is WSTIAC?

• An OSD (Director, Defense Research and Engineering (DDR&E) Program Provided by the Defense Technical Information Center (DTIC)

• Two-Fold Mission for DoD Customers
  – Provide Scientific and Technical Information (i.e. Relevant Information/Data)
  – Provide Technical Services and Solutions (i.e. Expertise/Contracting Vehicle for Solutions)

• Alion Science and Technology Corporation Administers WSTIAC
Who are the WSTIAC Customers?

- Requirements Developers/Combatant Organizations/Warfighters
- Materiel Developers (PMs)/Acquisition Community/Contracting Officers and Their Representatives
- Engineers and Scientists

What is the Type of Work Performed?

- Requirements Analysis
- Assessment of Weapon Systems Technologies and Capabilities
- Readiness Analysis
- Independent Reviews
- Engineering and Scientific Expertise

With the Purpose of:
- Supporting Weapons-System Development And Enhancement
- Enhancing Lethality, Accuracy & Affordability
- Providing Subject Matter Expertise For Consultation And Analysis To Solve Problems
Scientific and Technical Information (STI) Management

- Information Acquisition, Access, & Collection
- Information Processing & Management
- Information Analysis
- Information Dissemination
  - Website
  - Specialized Training
  - Quarterly Newsletter

WSTIAC Functions

Technical Solutions/Expertise
Contract Work ($)

- Extensive Expertise From Alion/Subs
- Sole Source Tasks Contract Pre-competed
- Incremental Funding Via Military Inter-departmental Procurement Request (MIPR)
- Up To 3 Years Period Of Performance
- Quick Turn-On Vice Traditional Competed Contracts

Information
Database/Repository

Technical Area Tasks (TATs)
What are the Primary Contract Aspects?

- Research and Development
- Purpose is to Advance Scientific and Technical Knowledge
- Focus is on Product, Not Manpower; Completion Versus Term
- Relies on Technical Experts’ Input

- Item of Interest: Pass Through/Work Share With Subs

- Areas Outside of Scope
  - Advisory and Assistance Services
  - Services/Support
  - Acting as a Government Representative
  - Evaluating/Advising on a Government Source Selection
  - Data Not Value Added to DTIC/IAC Library

WSTIAC Is For Technically Oriented, R&D Efforts; Not Service Support!
What Types of Systems Have Been Worked Under WSTIAC?

- Aircraft
- Ships
- Satellites
- Guns
- Munitions
- Missiles
- Rockets
- Bombs
- Submunitions
- Projectiles
- Mines/Countermines
- Munitions Dispensing Canisters
- Lasers
- Reconnaissance Systems
- Command Guidance Com Links
- Undersea Weapons
### Information
(Scientific and Technical Information or STIs)

- WSTIAC Library/Database of Scientific and Technical Literature (up to & Including Secret)
- Subject Matter Expert Database
  - Contact information for >400 experts
  - Broad Areas of Expertise
- Website: http://wstiac.alionscience.com
- Training Courses
  - Smart/Precision Weapons
  - Introduction to Sensors/Seekers for Smart Munitions/Weapons
  - Directed Energy Weapons
  - Weaponeering
  - System Engineering for Product Life Cycle Management
  - IEDs (Under Development)

### Contract Work
(Technical Area Tasks or TATs)

- Separately Funded Work Efforts
- >$145M since 1999
- Alion Science and Technology With Its Teammates Provide:
  - Requirements Analyses
  - Materiel Development Expertise
  - Business Management Expertise
  - Engineering
  - Science
- Customer Profile; 62 Active TATs
  - Navy 8%
  - Army 25%
  - Marine 2%
  - Air Force 30%
  - DoD 35%
WSTIAC Website  http://wstiac.alionscience.com

• Access to Free Services
  • WSTIAC Library/Database of Scientific and Technical Literature >97,000 records
  • Subject Matter Expert Access
  • Calendar of Industry Events
  • Related Website Links
  • WSTIAC Quarterly PDF download
  • Mail list Registration
  • Training Registration
WSTIAC Quarterly and eNEWS

- Quarterly delivered to over 18,000 WS Professionals
  - Relevant, authoritative STI delivered to over 18,000 professionals

- WSTIAC eNews
  - Distribution 5,000
  - Delivers information real-time to user’s desktop
WSTIAC Training Program

- Provides a firm understanding of information related to conventional and directed energy weapons, their development, and production
- Open and Onsite venues
- Expert Instructors
- Most of the weapon systems training is performed on-site and is tailored to meet targeted needs

Training Courses

- Systems Engineering
- Directed Energy Weapons
- Smart/Precision Weapons
- Sensors/Seekers
- Weaponeering
- IEDs
- Customized Topics
**“WSTIAC 10”**

Key Areas That WSTIAC Provides Capabilities...

- Power and Energy
- Lethality
- Weapon System Command and Control/Situational Awareness
- Non-Lethal
- Weapon Systems and Munition Readiness and Asset Visibility

- Target Identification and Engagement
- Asymmetric and Irregular Warfare Weapon Systems
- IED Defeat
- Embedded Training Systems
- Capabilities, Effectiveness, and Requirements Analyses

**WSTIAC 10: Critical Focus Areas Across All Services Related to Weapon Systems**
Potential Uses/Benefits for Homeland Security From WSTIAC

Areas That WSTIAC Can Help Homeland Security With:

- Counter-IED
- Counter Sniper
- Weapons Performance Analyses
- Weapons Technologies Assessments
- Electronic Warfare
- Weapon System Asset Visibility and Tracking
- Network Aspects
- Non-Lethal Weapons
- Test Equipment, Techniques, and Analytical Analyses
- Weapons Component Analyses
- And Many More Areas…
WSTIAC TAT Example:

Weapon Systems Transformation/Experimentation: Advancing Logistics Techniques…RFID Tracking of Ammunition & Total Asset Visibility

• Customer: US Army

• Objectives:
  – Research, Development, and Analyses for Integrating Automatic Identification Technologies for Ammunition
  – Assessing Technically How to Bring Real Time Visibility (Wireless) to Depots for Inventory Management

• Accomplishments:
  – Awarded In September 07; 36 Month Effort
  – Successfully Integrated Active RFID Networking Devices for Depot Level Operations
  – Integrated State of the Arm Broadband and Equipped Crew Vehicles to Communicate Depot Operations in Real Time
  – Coupled Effort and Integrated Into a 3D Visualization Simulation Model (Model Attached to a Live Database!)
  – All HERO and NetCom Certified
Alion Science and Technology: WSTIAC Administrator

Core Business Areas

• Naval Architecture & Marine Engineering
• Defense Operations
• Systems Engineering
• Modeling & Simulation
• Information Management & Technology
• Chemical, Biological, Nuclear & Environmental Sciences
• Wireless Spectrum Engineering
• Industrial Technology
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Through WSTIAC, Can Get You The Expertise and Capabilities You Need Quickly and Effectively!