

Better Questions for Better Solutions: The Value of Needs Assessments

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Introduction



- AMTI is a leading provider of professional and technical services strategically focused on two principle areas:
 - Homeland Security
 - Global War on Terrorism (GWOT)
- Our Homeland Security efforts support Federal, State, and local clients as well as the private sector
- Our expansive support to the GWOT emerged from our early involvement with Special Operations Forces and their supporting services and agencies





Core Business Areas

Government &	Exercise Design &	Technology Devel	CBRNE	EOD & IED	Integrated Info	Visual	Product	Information
		& Management					Development	Operations

- ✓ Government and Corporate Security: Risk Analyses, Security and Vulnerability Assessments, Red TeamSM Services, Tactical Training, Travel Facilitation, and Major Event Security Planning
- **Exercise Design and Development:** Drills, Tabletop and Computer-Based Exercises, Functional Exercises, Full-Scale Exercises, and Major Event Security Exercises
- ▼ Technology Development and Management: Technology Engineering and Integration, Professional Services, and Operational Test and Evaluation
- **CBRNE Solutions:** Research, Development, Acquisition, Verification, and Testing
- Explosive Ordnance Disposal and Improvised Explosive Device Operations: Technology Insertion and Integration, Training, Exercise Development and Support, and Robotic Solutions
- Integrated Information Solutions: Communications Engineering and Information Technology Support
- Visual Communications: Multimedia Solutions, Computer-Based Training, and Advanced Distance Learning
- Product Solutions: Information Technology, Communications, IED, Personal Protection, and other Products, and custom Product Development and Logistics Services
- Information Operations: Systems Engineering, Design, Integration, Testing and Long-term Support of Advanced Tactical Communications, and Intelligence and Electronic Warfare Systems







We think we understand a given problem, then we attempt to solve it (often with technology).

Incomplete understanding of the root problem is the cause of many failures (especially with <u>application</u> of technology).







Initial Needs Assessment

- What information do we need?
- How quickly/often do we need the information?
- Who needs the information?
- How does the information integrate with existing systems?





- Need to think beyond just the alarm
 - Reaction & Response
 - Recovery & Restart
- Assume that failures will occur
 - Consequences of false positives
 - Mitigation options
 - Redundancy
 - Orthogonal verification

Think several layers deep and several steps forward.





Ideal Solution Implementation

Assess

- Identify threat (specific to the industry/sector/...)
- Prioritize threats

Construct security <u>system</u> according to prioritized threat

- Budget for training and maintenance
- Staff to maintain the system

Train

- Tailored to each level of response
- Maintenance of equipment

Exercise

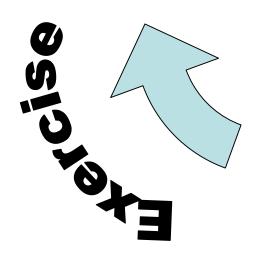
- Responses to alerts
- Adherence to Procedures and Standards
- Maintenance

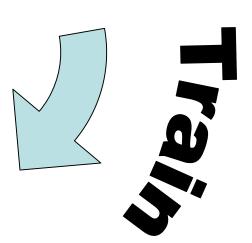




Success Requires Iteration











A Tool for Assessment: Red Teams

- Simulate Adversary Activities During Exercises
- Performed by individuals with unique skills and expertise to apply knowledge of a potential adversary's tactics, techniques and procedures, including
 - Surveillance, Targeting, and Attack Planning
 - Probe and Penetration operations
 - Tactical Operations to Test Response Capabilities
 - Technologies of Potential Utility to Adversary





Why Employ Red Teams?

- Deepen understanding of the adversaries, esp. their motivations, capabilities and intent
- Create a wider and deeper understanding of potential adversary options and behavior
- Hedge against the social comfort of "the accepted assumptions and the accepted solutions"
- Hedge against inexperience
 - (a not uncommon situation in Government Agencies where leadership tenures tend to be short)

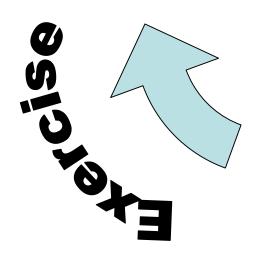
SOURCE: Defense Science Board Task Force on "The Role and Status of DoD Red Teaming Activities," September 2003

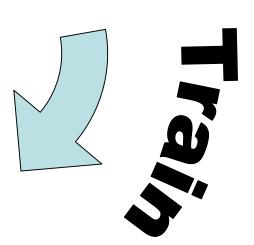




Opportunities for Standards?











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