Homeland Security MASINT: A Rich Stew of Signatures and Challenges

Facing The WMD Challenge

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Welcome to Homeland Security
Know Thy Customer
What Makes Homeland Security Intelligence Really Challenging?

- Everything we do must be tailored, timely and actionable
- Collection ("harvesting") from all-sources
- Analysis unique, complex and daunting
- Dissemination is to everyone who cares
- Tradecraft is new – experts are few!
- YOU don’t really know who we are or what we do…yet!

Homeland Security
Homeland Security Operations are Diverse, Complex, and High-Profile

**Screening & Enforcement**
- Visas and immigration
- Transportation Security
- Border Security
- Customs and Trade Enforcement

**Prevention & Protection**
- VIP & special events
- COOP planning exercises
- Support to military operations
- Cargo Security
- Critical infrastructure

**Investigation & Prosecution**
- Currency fraud
- Counter narcotics
- Cyber attack and intrusion

**Response & Recovery**
- National disasters
- Search and rescue
Creating a Shield of Protection from WMD Attacks is Really Challenging
What makes WMD Threats Unique?

WMD or CBRN attacks are:

- Technically complex
- Politically unique
- High consequence
- Low probability events
WMD Pose Unique Challenges to the Intelligence Community

Majority of information available is from non-traditional sources and must be distinguished from benign reporting.

Sorting the technically feasible from the likely to occur is very difficult.

Reporting on transfer of knowledge, materials, and people from state actors to terrorists groups is very limited.

If it is so easy to do why hasn’t it happened yet?
## WMD Threats Are Not All Created Equal

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<th>Deaths and Casualties</th>
<th>Economic Impact</th>
<th>Societal/Political Impact</th>
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<td><strong>Catastrophic</strong>&lt;br&gt;(national-scale)</td>
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CBRN\text{Ag(E)} Threats can be Differentiated Based on Consequences

WMD Catastrophic (national-scale)
- Nuclear (all)
- Biological (high-risk agents defined by 2006 Biothreat Risk Assessment)
- Agricultural (Foot and Mouth Disease)

WMD Limited (regional/local-scale)
- Biological (medium-low risk from 2006 RA)
- Chemical (all)
- Radiological (all)
- Agricultural (other foreign animal diseases and crop attacks)
Data is NOT Actionable Intelligence

Data collection

Once aggregated becomes

Information

Once analyzed, fused, and assessed becomes

Intelligence

Once tailored to meet end-user needs becomes

Actionable Intelligence

Strategic Assessments of trends/patterns

Data/Intelligence collection

ENABLE

Drive

ENHANCE

Prioritize

Inform

Identify

Stimulate

Policy-making

Operations

Countermeasures development & deployment

Technology gaps

State/local and private sector response

Homeland Security
What? To Whom? Why? Impact?

Assess adversaries interest, motivation and capability to execute an attack in the U.S. using WMD

Detect and deter the transport of WMD weapons and materials into the U.S.

Screen and prevent extremists with or seeking WMD knowledge and experience from entering the U.S.

Prevent access to WMD materials within the U.S.

Dissuade extremists groups in the U.S. from developing, acquiring and using WMD

Inform and educate DHS operators, state/local entities, and the private sector to recognize, interdict, and respond to WMD events or attacks
Collection and Analysis of WMD Threats is Three-fold

Materials
- Raw materials and devices of concern
- Their location (US and OCONUS)
- Their accessibility/protection (US and OCONUS)
- Our ability to find/detect them

People
- Weapons experts (who they are?, where are they?)
- Terrorist/Extremists groups (who? where?)
- State/non-state exchanges
- Lone Wolfs

Knowledge
- What is available via open source?
- What is technically feasible?
- What education and training is needed?
Actionable Intelligence: Key Components

Social-Behavioral – motivation & intent
Technical – attack scenarios
Capability – adversary ability
Scientific – knowledge & experience

Operational Advisories - Indications/Warnings
- Groups/individuals of concern
- Transport modes, smuggling routes
- Materials, components, equipment
- Investigation tips

Homeland Security
What can MASINT do to make HS WMD Intelligence More Effective?

- Develop operational indicators not just more data
- Collect material samples and signatures
- Pioneer predictive knowledge tools & approaches
Protecting the Homeland is Our Commitment

“How do we avoid becoming beguiled by the risk we have already experienced and distracted from those that our enemy might be planning in the future?”

- Secretary Chertoff, March 2005