



# Thunderstorm Program General Overview

# Report Documentation Page

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# Thunderstorm Program

## Methodology & Venues



Conducts a series of events each fiscal year for DoD selected areas of interest

### Analytical Gaming Workshop

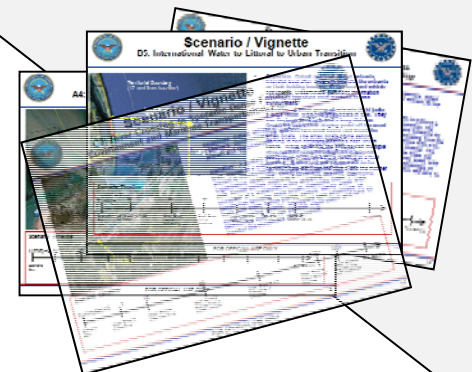
- Think Tank Forum for Subject Matter Experts (SMEs) to refine threat concepts to inform future Thunderstorm demonstrations
- Increases understanding of threats and technologies to increase effectiveness of mitigation approaches
- Broadens consideration of implications/ impacts
- Increases interagency relationships and engagement and raises Thunderstorm Program focus awareness
- Design of event tailored to each specific challenge
- Participants invited based on expertise and to ensure diverse perspectives
- NeXTech framework used as lens to analyze impact of convergence
- Considers a broad range of potential threat concepts

### Tabletop Experiment (TTX)

- Scenarios are used to focus on process, procedures and potential capabilities
- SMEs attend from various DoD agencies and operational partners from across the government
- Can be conducted at a any classification level
- Can be held at one location or distributed to multiple locations via a secure network
- Assists in identifying current or potential challenges and gaps across the operational partners' respective organizations
- Capability gaps are selected and prioritized in order to be considered for technology demonstrations

### Technology Field Demonstrations

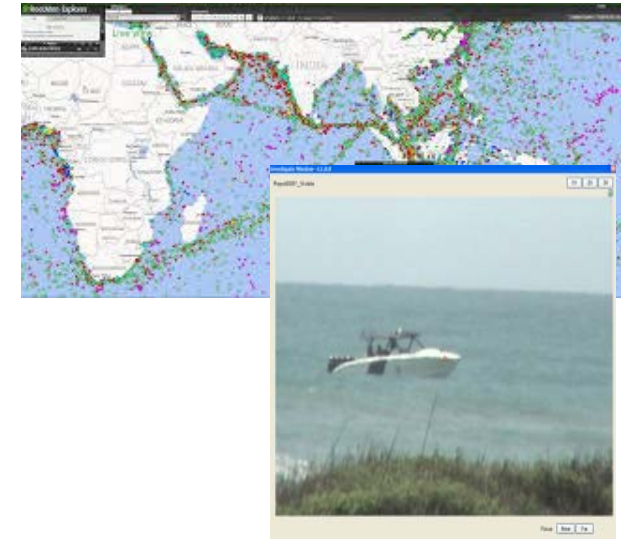
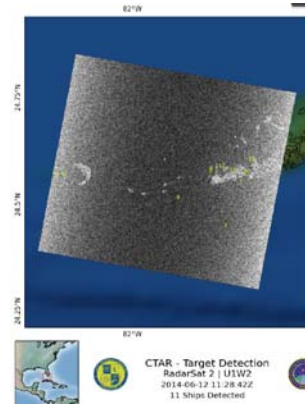
- Potential capabilities are solicited through FedBizOpps and word of mouth
- Selected demonstrators must "Pay-to-Play"
- Evaluates and assesses new and emerging technologies to address identified gaps
- Conducted in geographically relevant areas which provide an operational environment
- Uses scripted scenarios and actors to mimic threat activities observed within the Area of Responsibility (AOR)
- Explores low cost solutions, technologies, information sharing, and improved techniques, tactics, and procedures at the Technology Readiness Levels (TRLs) 3-7
- Not a formal test event or substitute for developmental or operational test and evaluation; No Penalty if it doesn't work (gives tech developers value feedback/insights from potential customers)



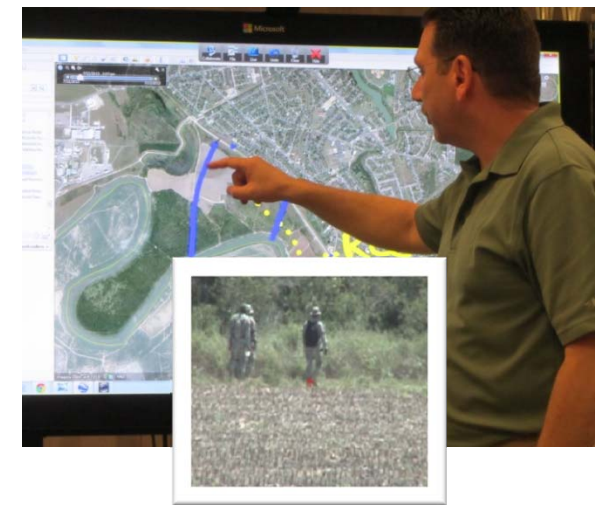




# Benefits the Operational Partners

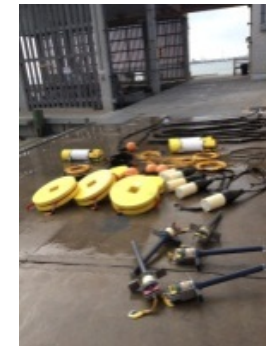
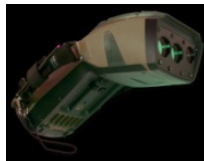


- Collaboration for addressing operational environment challenges
- Opportunity to brainstorm and war-game in a controlled setting
- Venue to observe new and emerging technologies in the AOR
- Opportunity to pair technologies for improving effectiveness





# Benefits the Demonstrators

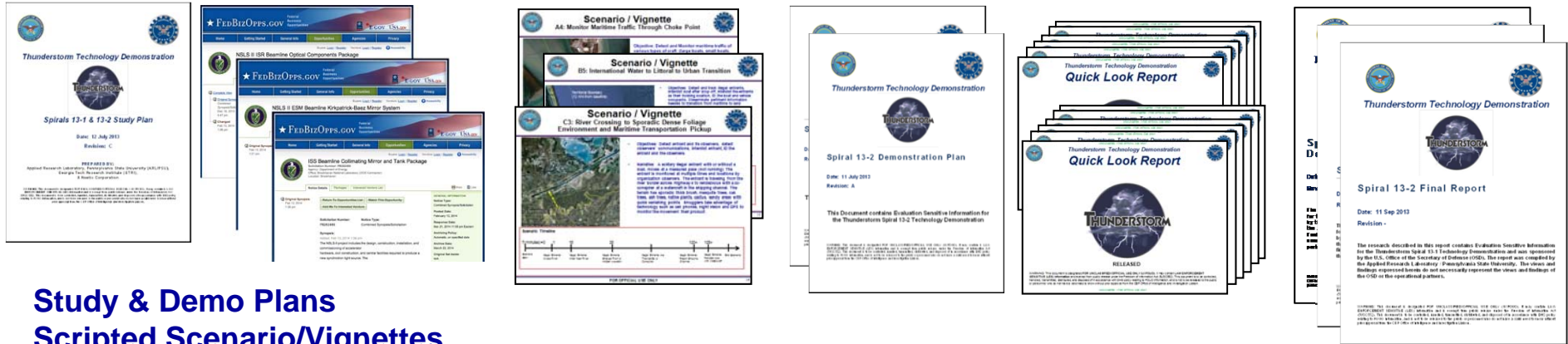


- Realistic technology deployment
- Ability to demonstrate low TRL technologies
- End user interaction
- Constructive feedback
- Insight to operational environment challenges
- Opportunity to interact and collaborate with other demonstration technologies





# Conduct of Demonstration



Study & Demo Plans  
Scripted Scenario/Vignettes  
Requests & Permits (Land, Frequency, FAA)

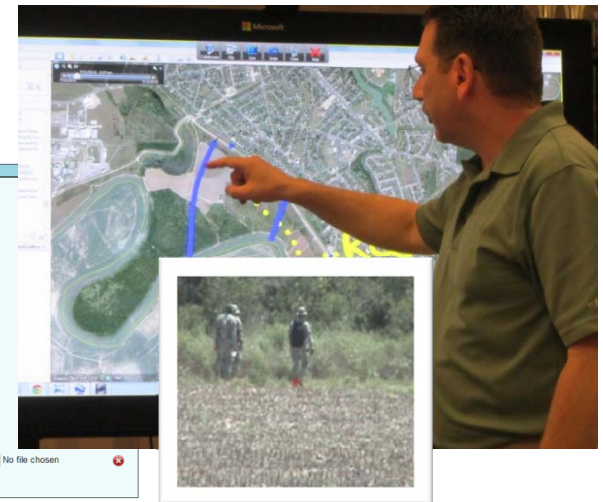
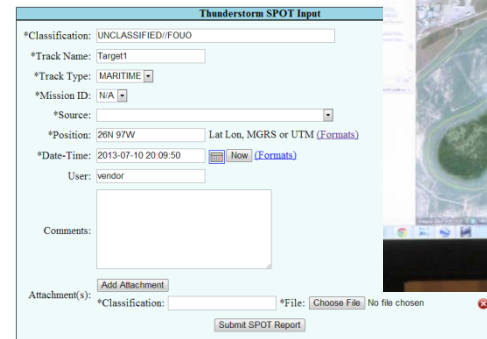
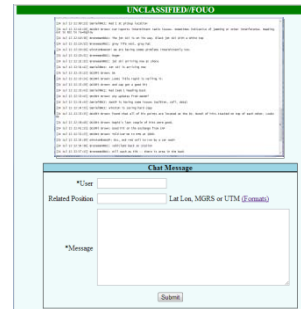
Capabilities Solicitation (FedBizOpps)  
Technologies Selected

Coordinate with Operational Partners (Blue Cell)  
Provide Demo Controllers' Roles (White Cell)  
Establish Scripted Actors (Red Cell)

Technology Coordination Visits  
Demonstration Site Visits  
Senior Steering Group - Program Reviews

Link-In Data Sharing Nodes

Reports (Daily Quick Looks & Final Reports)





# Previous Thunderstorm Spirals



Demonstration	Operational Partner(s)	Focus	Location	Demonstrated Technologies
Spiral 2 Field Demonstration (9-20 Jun 2009)	JIATF-S	Maritime Domain Awareness	Key West, FL; US SOUTHCOM AOR	14
Spiral 3 Field Demonstration (1-16 Mar & 19-27 Mar 2010)	JIATF-S	Maritime Domain Awareness	Key West, FL; US SOUTHCOM AOR	10
Spiral 4 Field Demonstration (2-13 May 2011)	CBP, JIATF-S	Border Security	Southern AZ; CBP, Tucson Sector	4
Spiral 5 Field Demonstration (13-24 Aug 2012)	CBP, USCG, JIATF-S	Border Security	Southern TX; CBP, RGV Sector	6
Spiral 13-1 Field Demonstration (6-17 May 2013)	10 Operational Partners	Border Security	Southern TX; CBP, RGV Sector	13
Spiral 13-2 Field Demonstration (15-26 Jul 2013)	10 Operational Partners	Border Security	Southern TX; CBP, RGV Sector	16
Spiral 14-1 Threat Convergence Analysis (TCA) Panel (26-27 Mar 2014)	<i>(25 organizations participated)</i>	TCA on Robotics, Cyber, Bio, EW	Reston, VA	N/A
Spiral 14-2 Tabletop Experiment (TTX) (26-28 Feb 2014)	18 Operational Partners	Countering Chem/Bio WMD via South East Maritime Pathways to CONUS	Key West, FL and Reston, VA	N/A
Spiral 14-3 Field Demonstration (27 May – 6 Jun 2014)	18 Operational Partners	Countering Chem/Bio WMD via South East Maritime Pathways to CONUS	USCG Base, Key West, FL	36





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Vendors with relevant technologies and capabilities are encouraged to respond to the Thunderstorm FEDBIZOPS postings.

**For more information on the program and how to engage, please contact the:**

Rapid Reaction Technology Office

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