

First Responder Electronic Jamming Exercise

About

First responders across the country are facing increased Electronic Warfare (EW) threats, notably GPS jamming or jamming of radio and wireless systems. Many of these EW threats may interfere with responder communication equipment, often without responders' awareness, and leave them without vital communications or critical situational awareness.

The Department of Homeland Security (DHS) Science and Technology Directorate (S&T) is hosting a multi-agency operational exercise to assess the impact of EW threats on first responder communications systems and identify mitigation strategies. The DHS S&T First Responder Electronic Jamming Exercise requires participation from first responders of all disciplines, along with suites of equipment they typically use as part of their mission. DHS S&T is funding the use of the White Sands Missile Range (WSMR) test site, procurement of the EW equipment and access to subject matter experts. The exercise will take place over five days in July 2016 at WSMR in New Mexico. The outcome will be a consolidated final report outlining results of the exercise, lessons learned, training recommendations and mitigation strategies for first responders.

First Responder Participation

DHS S&T Needs from First Responders

DHS S&T is looking for at least 10 teams of 4-15 first responders representing a mix of:

- Federal, state, local, tribal and territorial organizations from across the United States
- Law enforcement, fire services, emergency medical services, emergency management, search and rescue, HAZMAT, bomb squads, etc.

Required Commitment

- Participate in at least one day of live exercises with your team
- Participate in planning conversations
- Identify participant names by February 29
- Submit Range Access Forms by March 15
- Bring communications suites and emergency response vehicles for use during the exercise (where able)

Opportunities for First Responders to

- Assess and understand the impact of EW on first responders' mission response and identify gaps in training, techniques and procedures
- Leverage WSMR's test range to conduct testing to meet internal objectives
- Gain exposure to cutting-edge technologies (e.g., State of New Mexico pilot of FirstNet)
- Develop partnerships with major federal law enforcement agencies
- Leverage limited invitational funding from S&T FRG to offset costs of effort on a first come first served basis

It is critical to have a variety of first responder teams present at the exercise because one of the primary goals is to assess how first responders handle EW threats in real-world emergency scenarios. Diversity will help ensure results are unbiased by differences between first responders' organizational training, techniques and procedures.



First Responder Electronic Jamming Exercise

Schedule and Logistics

During five days of live exercises, DHS S&T will run at least two operational scenarios per day to test first responder teams against different EW equipment. Two of the live exercise days will focus on unmanned aircraft systems. The operational scenarios will focus on typical 911 calls responders receive, and first responders will act out the scenarios according to their normal procedures. EW threats will be injected at specific points during the scenario to determine how first responders and their equipment are impacted and overcome the interference.

Set Up and Dry Run		Live Exercises					Tear Down
July 9	July 10	July 11	July 12	July 13	July 14	July 15	July 16

Volunteer first responder teams are not expected to participate in all five exercise days; the exact schedule will depend on how many volunteer teams register. While the minimum participation is one day of live exercises, each team will ideally participate in two to three days of the exercise, requiring at least four days of travel. A VIP demonstration will be held during the live exercise; exact date and format to be determined.

First Responder Equipment

Participating first responder teams are requested to bring their communications suites and other assets that transmit, including command vehicles. If logistics are prohibitive, first responder teams who are travelling may be able to use local responder equipment instead. The following are examples of the equipment first responders are requested to bring:

- **Radios**
 - P25 trunking deployable systems
 - Conventional deployable systems
 - Portable subscriber radios
 - Mobile radios
 - Federal VHF
 - Public safety UHF
- **Vehicles**
 - Squad cars, ambulances, firetrucks, SWAT vans, etc., equipped with mobile data terminals, navigation systems and other representative communication suites
- **LTE Systems**
 - Band class 14 fixed and deployable systems
 - Commercial systems

How to Participate

If your first responder organization is interested in participating, please RSVP by **February 29, 2016** to Jessica Kaputa from the DHS Office of Emergency Communications, Stakeholder Engagement Branch:

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