REDDI – the Regional Explosives Detection Dog Initiative

Homeland Security
Science and Technology

THE CHALLENGE

The Homeland Security Enterprise (HSE) maintains more than 4,000 explosives detection canine teams across the federal, state, local and tribal law enforcement community. There is a need for a centralized focal point within DHS to address mission requirements, conduct operationally relevant research, facilitate knowledge sharing, and act as a repository of expert advice on common problems across government, academia and the private sector.

Canines are a demonstrated effective resource, but many of our nation's explosives detection canine teams have limited access to the latest knowledge on explosive threat odors. This could prevent them from realizing their full potential. For example, many teams have limited access to critical training materials and/or limited time to establish rigorous training scenarios. To help, DHS Science and Technology Directorate's (S&T) Detection Canine Program is conducting the Regional Explosives Detection Dog Initiative (REDDI), an effort aimed at advancing the knowledge and capabilities of our nation's detection canine teams.

MULTIFACETED SOLUTION

Through REDDI, S&T is providing a series of regionally-based events for detection canine teams in the law enforcement community. The events will include classroom instruction and exercises demonstrating common issues which will improve explosives and odor knowledge and appreciation for the participating canine handlers. Fundamental odor recognition evaluations and operational searches based on real-world scenarios will help identify strengths and weaknesses within the HSE and inform the direction of priority S&T program investments. REDDI's goal is to improve explosive detection canine team training effectiveness and efficiency in order to improve overall operational proficiency.

REDDI event highlights:

- Odor recognition trials
- Reality-based operational search scenarios
- Explosives Overview and Science and Testing Concepts instruction
- Lessons learned/results sharing
- Opportunity to imprint on REDDI targets
- Networking with other local handlers/agencies

ARE YOU REDDI?

Participating in a REDDI event will help local detection canine teams understand the importance of having a rigorous operational testing capability and the critical need of efficient and effective maintenance training. This leads to significantly improved mission performance, lower lifecycle costs, and expedited training and deployment. REDDI kicked off in Lee County, Florida in March 2017, and plans are underway to continue bringing REDDI to other regions around the nation.

"This is an opportunity for S&T's Detection Canine Program to provide further outreach and assistance to the larger regional law enforcement canine community," said Don Roberts, S&T Program Manager. "It also provides participants, through demonstration and knowledge sharing, a venue to validate what they are doing right, and identify potential focus areas to strengthen the capabilities of their teams. At the same time, by observing trends, the program will gain additional insights on how to best meet the needs of the whole of the detection canine community."

An explosives detection canine team works an odor recognition trial.

PARTNERS

S&T's Detection Canine Program is working with subject matter experts to design and plan REDDI events:

- Battelle Memorial Institute
- Naval Surface Warfare Center Indian Head Explosive Ordnance Disposal Technology Division

To learn more, please visit the S&T Detection Canine Program website at this link.