Nuclear & Radiological Field Training Center

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VISION

The Nuclear & Radiological Field Training Center serves as the premiere training venue for Federal, state, and local organizations to detect, prevent, or mitigate the effects of nuclear and/or radiological incidents or attacks.

Background

In response to growing concerns over the use of WMD by rogue nations or transnational terror groups:

- The Department of Defense has created specialized units to disable/eliminate enemy nuclear research and production facilities
- The National Guard has created Civil Support Teams (CST) to respond to radiological and nuclear incidents in the United States
- Many Federal agencies have established specialized nuclear and radiological response teams
- Major metropolitan police and fire departments have established emergency response teams capable of operating in chemical, biological, radiological, and nuclear environments

US Army Nuclear Disablement Team
Baghdad, Iraq 2003

Training Center Development

The Nuclear and Radiological Field Training Center was developed in 2006 at the Department of Energy's Y-12 National Security Complex in Oak Ridge, Tennessee in order to address the shortage of collective training venues that can provide relevant quantities of nuclear and radiological materials in a realistic scenario driven environment. Training may include:

- **Search, Identify and Secure**
- **Package and Recover**
- **Site Characterization**
- **Site Exploitation**
- **Consequence Management**
- **Contaminated Casualty Extraction**
- **Hot Line Operation**
- **Decontamination**
- **Equipment Testing**
- **Other (Defined By Unit)**

U.S. Army 20th Support Command conducts training at the NRFTC in September 2006

Nuclear & Radiological Field Training Facility

The Centerpiece of the Field Training Center is Building 9213 - a training facility where units can operate in a realistic environment

- A former nuclear research facility, the field training facility has characteristics that are likely to be encountered in many real-world scenarios
- With over 20,000 square feet of space, the training facility contains a mixture of hot cells, control rooms, research laboratories, office space, and high bays, which can provide multiple configurations for the selected scenario (dirty bomb attack, commercial reactor accident or sabotage, radioactive material accident or spill, etc.)
- Site is located within the Y-12 security perimeter enabling use of realistic quantities of nuclear and radiological materials, as well as providing a secure training environment
- Other training areas available pending scenario

4th WMD Civil Support Team - GA

Nuclear & Radiological Field Training Facility

The Nuclear & Radiological Training Center enables teams to conduct unique training, customized to their own mission. For each training session, the customer can choose:

- **Scenario**
- **Facility Configuration (nuclear R&D, storage, office, etc.)**
- **Types of material (uranium, cesium, cobalt, etc.)**
- **Level of oversight and instruction**

High Bay (left) configured as a nuclear research laboratory (right) for the US Army Nuclear Disablement Team training

Training Scenarios

4th Civil Support Team characterizes office complex following a dirty bomb Attack.

Training Scenarios

Laboratory Facilities

Incident Command

Training Realism

Terrorist Vehicle Incident

Nuclear & Radiological Training Center

Site has ample space for tactical field training

Set-up of Tactical Operations Center

Hotline and Decontamination Station

Nuclear & Radiological Training Center

Many nuclear materials and radiological sources are available for training and testing:

- **Uranium – natural, depleted, low enriched, and high enriched**
- **Cesium**
- **Cobalt**
- **Strontium**
- **Medical Isotopes as needed**

The US Army Nuclear Disablement Team searches for nuclear material

Training on many types of detectors

Additional Training Options

In addition to the field training scenarios, units can select a variety of hands-on training classes to improve the individual skills of their members. These classes may include:

- **Applied Radiological Response Techniques Level 2 and 3**
- **Nuclear and radiological materials identification**
- **Detector physics and operations**
- **Radiation Worker II Certification**
- **Confined Space Entry**
- **Respirator training and certification**
- **Material packaging and transportation**
- **Contamination control**
- **Uranium Conversion**
- **Criticality Safety**

Summary

The Nuclear and Radiological Field Training Center:

- DEVELOPING NEW COURSE – Applied Radiological Emergency Response Techniques, target audience is Federal, state and, local responders
- Provides realistic training scenarios to enable units to “train as they would respond.”
- Various types of uranium for reachback opera
- Supports development of CONOPS and tactics, techniques, and procedures (TTPs)
- Provides a venue for evaluation and certification
- Supports interagency response through use of the NIMS system.