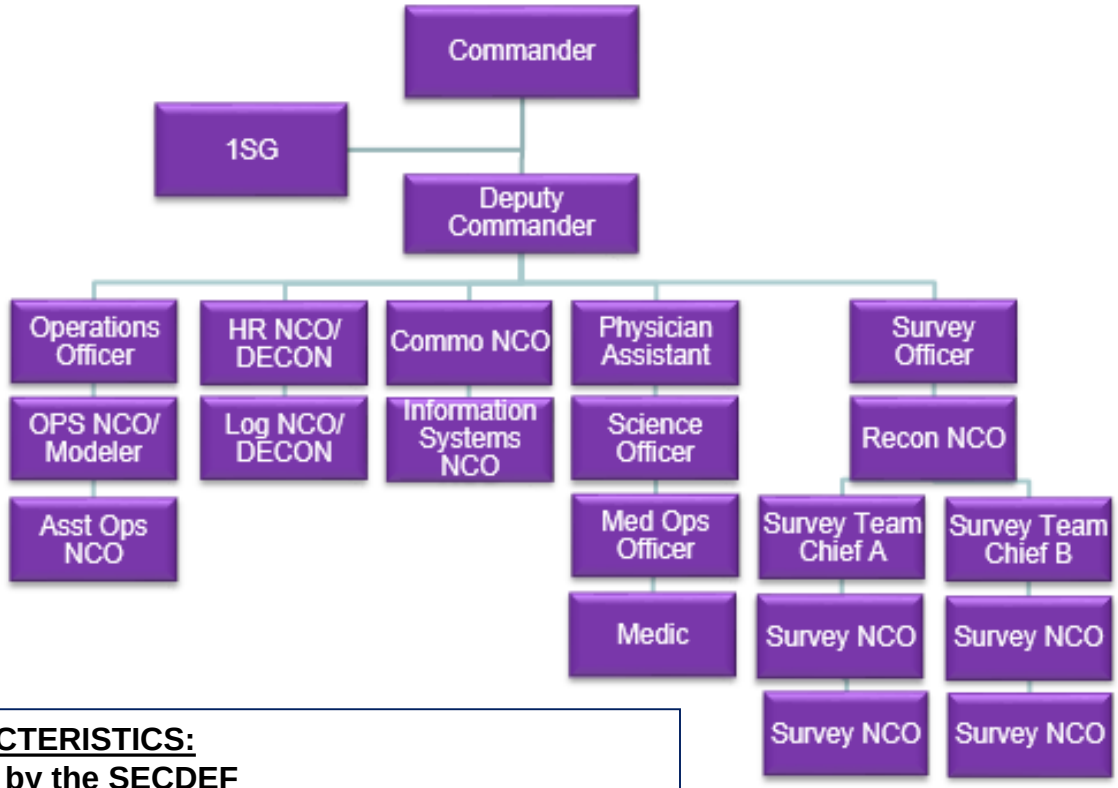
WMD-CST

As of: 19 FEB 2020

WMD-CST Mission

Support civil authorities at a domestic incident site during specified events, which include use or threatened use of a WMD; terrorist attack or threatened terrorist attack; intentional or unintentional release of nuclear, biological, radiological, or toxic or poisonous chemicals; natural or manmade disasters in the United States that result, or could result, in the catastrophic loss of life or property by **identifying** hazards, **assessing** current and projected consequences, **advising** on response measures, and **assisting** with appropriate requests for additional support.

WMD-CST Organizational Structure



WMD-CST KEY CHARACTERISTICS:

- **Each team certified by the SECDEF**
- **57 Teams (1 per State & territory/CA, NY, FL 2 ea)**
- **22 Full-time, T32 AGR, Joint Manned Army/Air**
- **On alert 24/7/365**
- **Sophisticated technical reach-back system**
- **Interoperable with First Responders (80% COTS gear)**
- **All WMD-CST personnel are HAZMAT TECH certified**

Survey and Detection

Mission: Utilizes specialized equipment to detect CBRN hazards. Collects hazardous samples for detailed analysis and confirmation using validated sampling protocols and chain of custody procedures.

- **HAZMAT Technician Certified**
- **Confined Space Certified**

All equipment meets NIOSH/ANSI/OSHA/NFPA Safety/Protection Standards

Capabilities:

- Conduct Sensitive Site Assessment/Exploitation
- Detect/characterize CBRN hazards including emerging threats/Non-Traditional Agents
- Presumptive identification of hazards in hot-zone
- Collect samples for confirmatory analysis
- Documented Chain of Custody for all samples

Significant Detection Equipment:

• Radiological Detection / Identification

- High Purity Germanium (HPGe) / GM Tube / Sodium Iodide
- Alpha, Beta, Gamma, Neutron, X-Ray

• Biological Identification / Sampling

- Hand Held Assay and Reader
- Air Sampling (IBAC / SASS)

• Chemical Identification / Sampling

- AreaRae / Multi-Rae Multi Gas Detectors (VOC, TOX, O2)
- Joint Chemical Agent Detector (G Nerve, H Blister)
- Raman Spectroscopy (First Defender)
- Fourier Transform Infrared (Hazmat ID, TruDefender FTIR)
- Gas Chromatograph / Mass Spectrometer (Hapsite GCMS)
- Colorimetric (Draeger Tubes, M256, M8, M9, Agentase/CIDAS)

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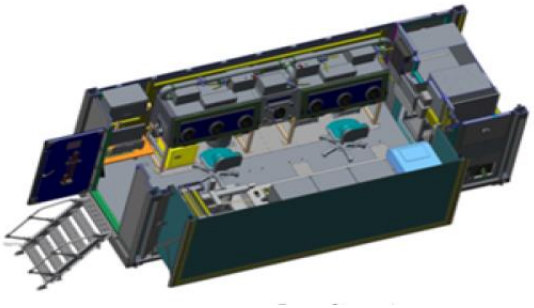
Analytical Laboratory System

Mission: Utilize specialized laboratory instrumentation to identify potential chemical and biological threat agents at the field confirmatory level.

The WMD-CST Laboratory Program is accredited by the American Association for Laboratory Accreditation (A2LA) to conform to ISO 17025 Laboratory Standards



Primary Capabilities:

- Detection/Identification of BWAs
- Detection/Identification of nucleic acid biomarkers
- Detection/identification of unknown chemicals/CWAs/TICs/TIMs/FGAs/PBAs
- Biological Analysis/White Powder Analysis
- Radiological Data Analysis and Interpretation
- Basic Wet Chemistry Capability
- Reach back to State and Federal laboratories
- Secure and Nonsecure Interface to the Unified Command Suite for the transmission of digital sample information
- Environmental Confirmation of Sample

Significant Detection Equipment:

- Class 3 Glovebox for BSL-4 Agents
- Ion Mobility Spectrometer for identification of chemicals
- Hand-held Immunoassays for detection / identification of Biological Warfare Agents (BWA)
- Electrochemiluminescence Immunoassay (ECLIA) for antigen based detection of BWA s
- Polymerase Chain Reaction (PCR) for detection / identification of nucleic acid biomarkers
- Fourier Transform Infrared Spectroscopy (FTIR) for detection / identification of unknown chemicals
- Gas Chromatography Mass Spectroscopy (GC-MS) for detection of Chemical Warfare Agents (CWA) and Toxic Industrial Chemicals / Toxic Industrial Materials (TIC/TIMs)
- Raman Spectroscopy for detection of CWA and TIC/TIMs
- Polarized Light Microscopy for “white powder” analysis
- Fluorescent Light Microscopy for biological analysis

Determine Contaminated Area

Mission: Utilizes specialized equipment to conduct a survey around the contaminated area in order to determine the presence and extent of contamination. Generate a plume model for vulnerability analyses and site characterization.

All Survey members trained and certified to the HAZMAT Technician level (CFR 1910-120)

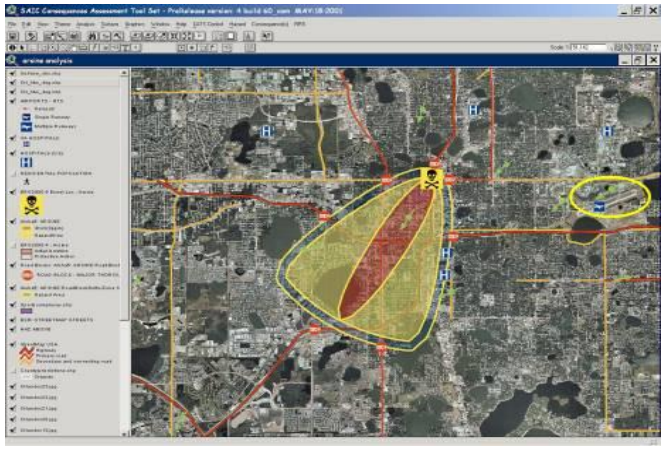
All equipment meets NIOSH/ ANSI/OSHA/NFPA Safety/Protection Standards

Primary Capabilities:

- Conduct initial assessment of the affected area
- Locates source of CBRN or other hazards
- Develop plume model
- Collects CBRN samples for confirmatory analysis
- Provides continual monitoring through the use of detection equipment

Other Relevant Capabilities:

- Video and photographing items of interest
- Reporting casualty information



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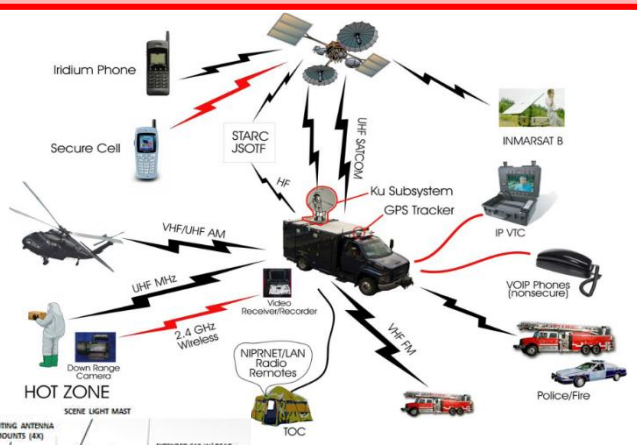
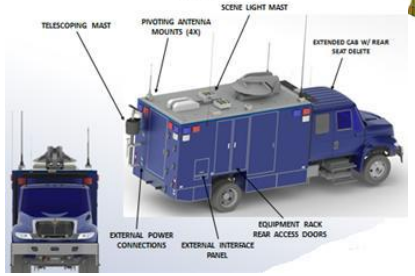
Communications Support

Mission: Establish reach-back capabilities and provide incident-area interoperable communications during operations and provide a critical link to follow-on forces, supplies, and expertise for CBRN incidents and natural / man-made disasters.

All UCS Operators are trained and certified to meet DoD Directive 8570.01M Change 3 Information Assurance Standards





Capabilities:

- Establish interoperable communications (Secure/Unsecure)
- Provide reach-back access from incident site to other local, state or federal agencies and ALS to National Laboratories
- Provide Common Operating Picture (COP) support
- Establish unit-level voice and data networking support
- NG CIMS (real time sensor data/imagery from downrange)

Significant Support Equipment:

- Unified Command Suite (UCS):
  - Voice interoperability (radio, IP telephony)
  - HF/UHF/VHF/800MHz radio support
  - SATCOM
  - DSN and Commercial telephony
  - NIPR and SIPR data access
  - Onboard SCIF
  - Collaborative voice and video teleconferencing
- Advanced Echelon (ADVON) Vehicle:
  - Mobile and stationary voice/data/fax communications
  - Handheld and hands-free radio support
  - Satellite and VoIP telephony
  - Satellite and local radio
  - GPS navigation system
- Secure communications via COMSEC equipment, keying material management, link establishment and maintenance support of Classified documents
- IC communications augmentation support
- Coordination with civil and military agencies for follow-on support

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