

46th Civil Support Team, Alabama National Guard: Weapons of Mass Destruction

**Integration for Hazardous Response
Teams Conference
May 15, 2012**

Produced by the Alabama Department of Public Health
Video Communications and Distance Learning Division

Faculty

**LTC Rick Pelham
Commander
46th Civil Support Team
Alabama National Guard**

CST Program Purpose

***“ To provide military unique capabilities,
expertise and technologies to assist
State Governors (to) prepare for and
respond to CBRNE incidents.
Team must complement and enhance
(not duplicate) State CBRNE
response capabilities.”***

– DoD Program Review, Sep 01

Agenda

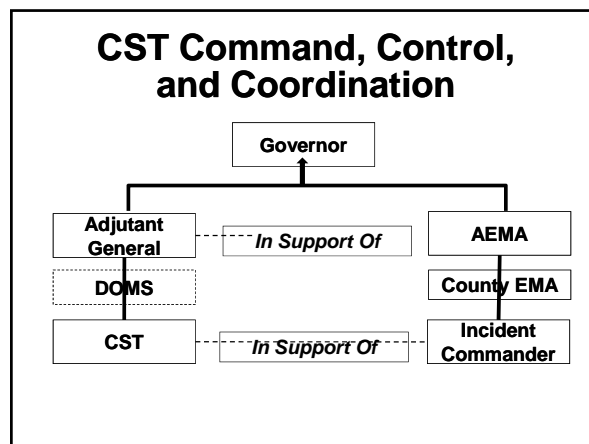
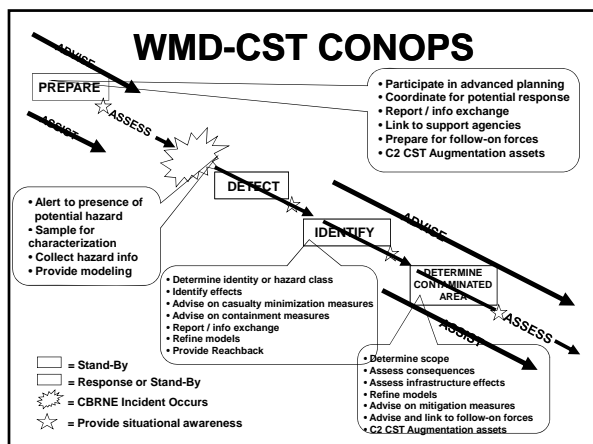
- **Mission**
- **Command and control**
- **Employment / RMP**
- **Team overview / training**
- **Capabilities**
- **Contact procedures**

Mission

- **Support civil authorities at a domestic CBRNE incident site by identifying CBRNE agents/substances**
- **Assess current and projected consequences**
- **Advise on response measures, and**
- **Assist with appropriate requests for state support**

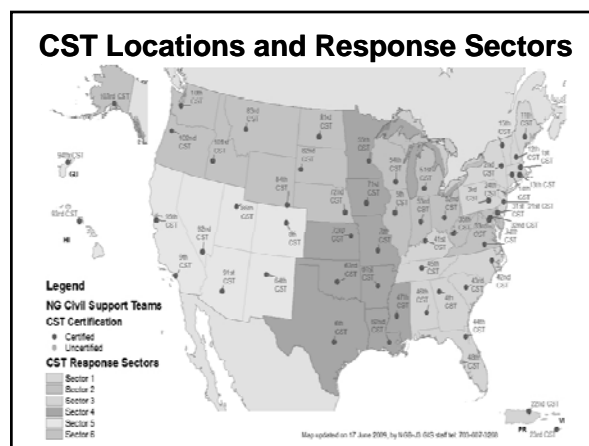
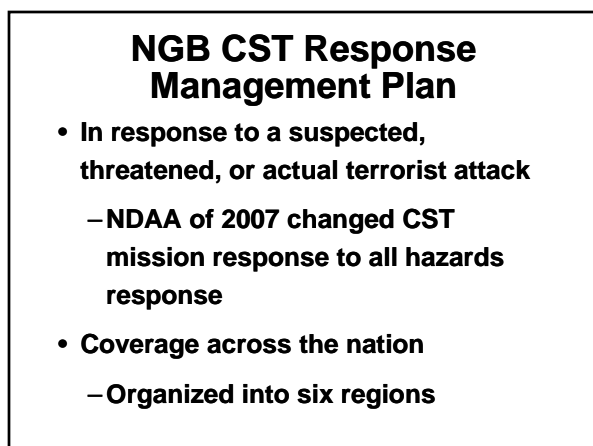
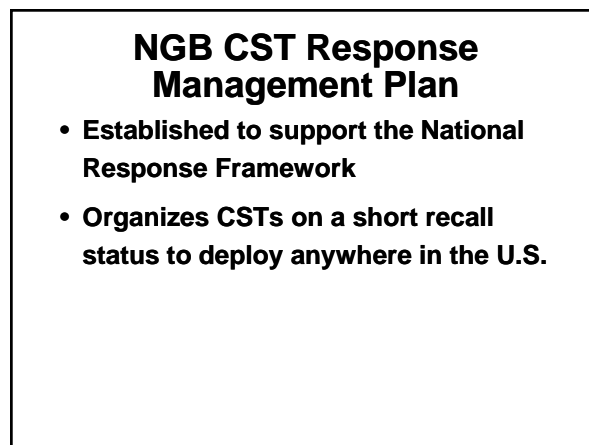
Key Characteristics

- **Must be certified by Secretary of Defense (6 March 2003)**
- **Unique to National Guard**
- **Main role is support to Governor and Incident Commander**
- **Sophisticated Reach-back System**
- **Interoperable with Civil Responders**



Employment Status

	STATE <i>State Active Duty</i>	FEDERAL <i>Title 32</i>	FEDERAL <i>Title 10</i>
Command and Control	Governor	Governor*	President
Area of operation	IAW State Law	CONUS	Worldwide
Pay	State**	Federal	Federal
Mission types	IAW State Law (riot control, emergency response, etc.)	Training and other federally authorized	Overseas training and as assigned after mobilization
Discipline	State Military Code	State Military Code	UCMJ
Support Law Enforcement	Yes	Yes	Limited by Posse Comitatus



Response Status

- **Gold: Immediate Response**
 - Deployment of the advanced party of the CST NLT N+ 90
 - Deployment of the main body NLT N+ 3

Response Status

- **Silver: Reinforcing Response**
 - Unit focuses on preparing for possible priority response missions outside their home state
 - Main body must deploy to incident site NLT N+24 hours

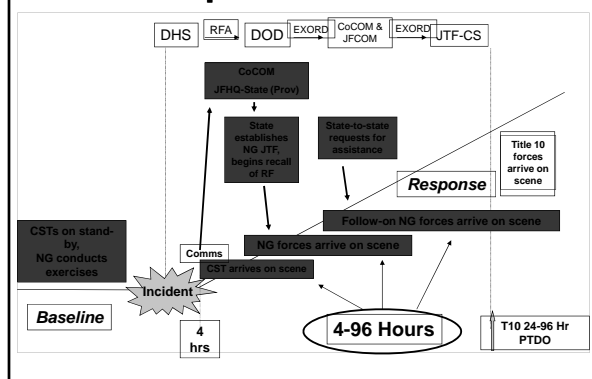
Response Status

- **Bronze: Stand-by Response**
 - Units focus on areas such as training requirements and personal leave
 - Main body must deploy to incident site NLT N+72 hours

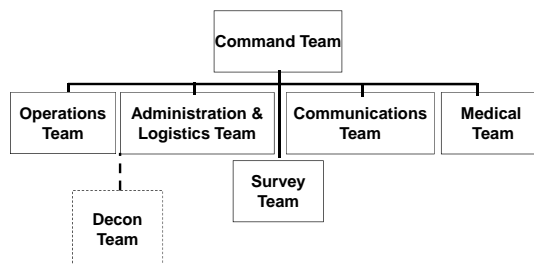
Response Status

- **Black: No Response**
 - Unit is in a non-mission capable status
- **N=Official Time of Notification**

Response Timeline

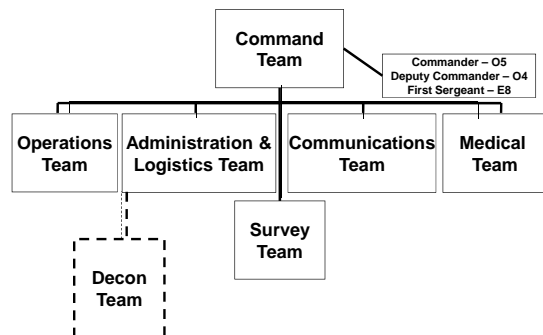


Task Organization



Comprised of 22 Army and Air Personnel

Team Overview: Command



Command Responsibilities

- Interface with external agencies and organizations central to the accomplishment of the CST Mission
- Anticipates and plans for unique challenges of operating in a CBRNE environment

Command Responsibilities

- Receives the Incident Commander's (IC) objectives and obtains updated situation information
- Advises the IC on CST assets, capabilities, and limitations

Command Responsibilities

- Assists the IC in integrating the CST into the overall incident response
- Provides updates to the IC as critical information becomes available

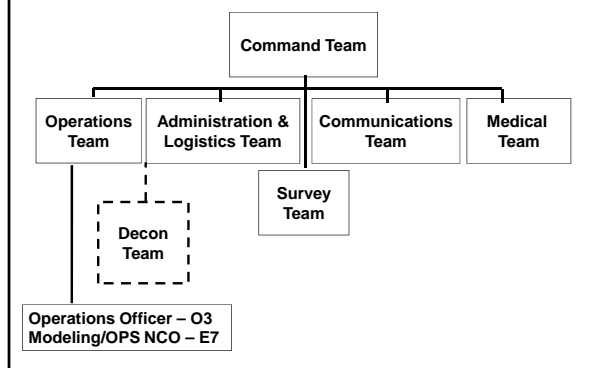
Advanced Liaison Vehicle (ADVON)

- INMARSAT Phone (non secure)
- VoIP telephone on site
- Wireless Internet on site
- Iridium secure satellite telephone
- Internet/fax/phone capable enroute
- Incident Commander's radio interface (ICRI)

Advanced Liaison Vehicle (ADVON)

- XTL-5000 mobile radio
- On board print/fax/scan capability
- Point-to-Point microwave communications

Team Overview: Operations



Operations Capabilities

- Establishes the CST footprint at incident site based on Commander's guidance
- Develops and maintains a common operating picture of both civil and military forces conducting operations

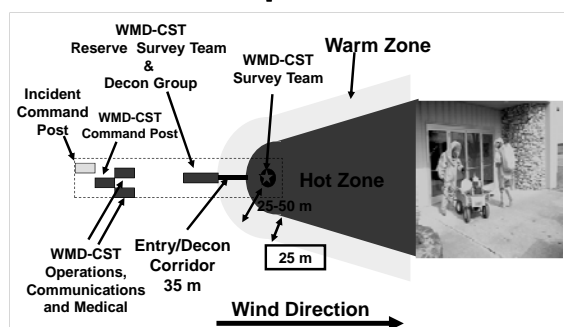
Operations Capabilities

- Prepares initial hazard model assessment and updates hazard models as weather conditions and additional incident information as it becomes available
- Coordinates the actions of the other CST sections to insure CST Commander's and IC's objectives are met

Operations Capabilities

- Maintains the reach-back capability to off-site subject matter experts

CST Operations



Modeling Capabilities

- Provide program projected plumes for hazard areas
- Advise the Incident Commander on courses of action involving critical infrastructure within the hazard area

Modeling Capabilities

- Current modeling software utilized:
 - HPAC
 - CATS
 - PEAK
 - Cameo/Aloha
- Reach-back available to the Defense Threat Reduction Agency

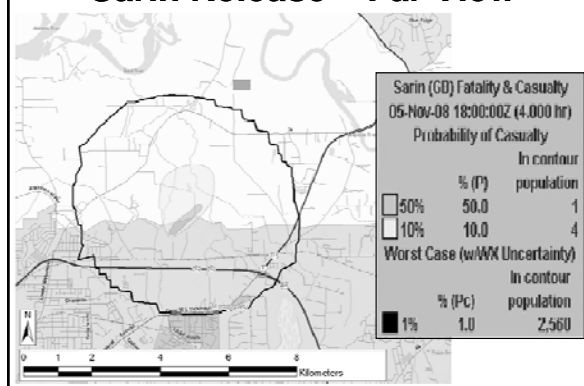
Sarin Release – Facts

- Location: Montgomery, AL 32.43076 N / 86.25233 W
- Strike time: 1400Z 05 Nov 2008
- Type: Sarin
- Amount: 5 lbs
- Strike weapon: Ground spray

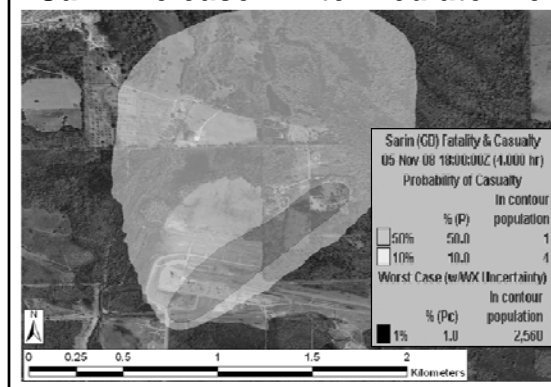
Sarin Release – Facts

- Weather: wind from south with a speed of 3 mph, 70 F, 53% humidity, 0% precipitation
- Model: HPAC 5.0 SP1
- Static Population Estimates: Land-Scan 2007

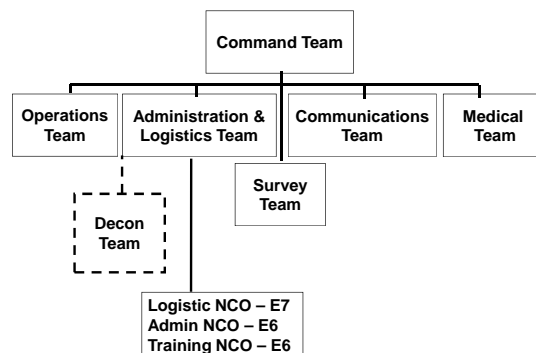
Sarin Release – Far View



Sarin Release – Intermediate View



Team Overview: Admin/Logistics



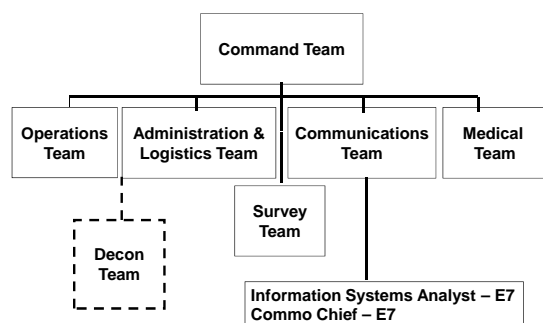
Logistics Capabilities

- Coordinates for rapid replenishment of consumed equipment during deployment
- Provides a command with status of consumed equipment as needed
- Assists with technical DECON of personnel as needed

Decontamination Capabilities

- Provide technical DECON for CST members and attached personnel
- Advise IC on mass casualty DECON
- Equipment DECON
- Man-Down and emergency DECON

Team Overview: Communications



Unified Command Suite

- Radios
 - UHF/VHF Transceiver (135-178 MHz, 403-470 MHz, 470-520 MHz, and 851-868 MHz)
 - SATCOM, INMARSAT-B (Civilian)
- HF SSB
 - Team to Military Comms

Unified Command Suite

- Phones
 - DSN/commercial
- Data
 - NIPRNET, SIPRNET
- Video
 - Collaborative video conferencing tools
- On board 15 kW generator

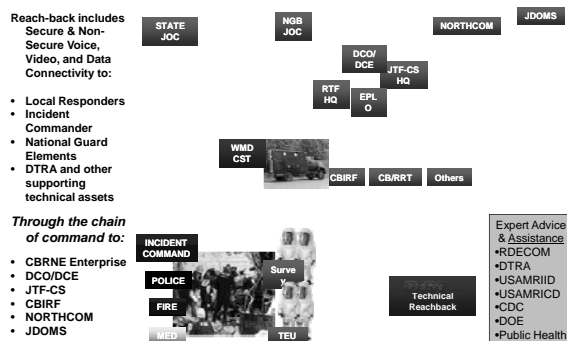
Unified Command Suite

- Multi-band frequency scanners
- Military VHF/UHF/UHF
- SATCOM radios (30-512 MHz)
- LAN for laptop computers
- ACU 1000
 - Crossband up to 10 VHF/UHF frequencies

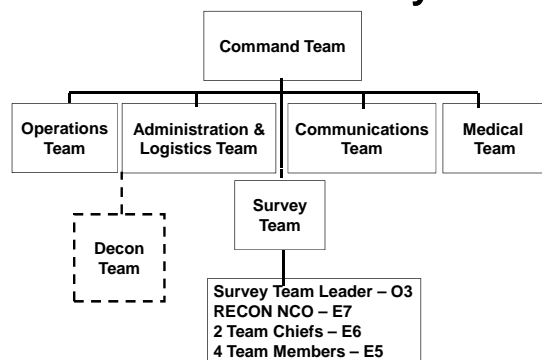
Unified Command Suite

- Satellite television
- Point-to-point microwave communications

IC Reach-back Capabilities



Team Overview: Survey Team



Survey Team Capabilities

- Instrumental detection abilities
- Crime scene preservation
- Evidence and sample collection
- Identification of chemical, and biological warfare agents
- Identification of toxic industrial chemicals and toxic industrial materials (over 160,000)

Survey Team Capabilities

- Presumptive identification of narcotics and explosives
- Identification of gamma radiation isotopes
- Detection of neutron, alpha, beta, and x-ray radiation

Survey Team Capabilities

- Area monitoring and particulate sampling capabilities
 - Rad, Chem, and Bio

Survey Team Capabilities

- Extended downrange operations in all protective levels
- Photographic reconnaissance
- Limited rescue capabilities
- Hazardous area reconnaissance
- Modified decontamination system
- Mitigation and hazard containment support and advice

Survey Equipment

- HAPSITE
 - Gas Chromatograph/ Mass Spectrometer
- Gamma Spectrometer
- Draeger Colormetric Tubes
- Multi Rae Combustible Gas Ind.
- SensIR

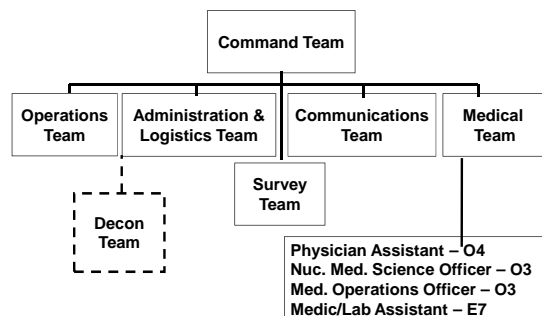
Survey Equipment

- Area Rae with Gamma Monitor
- RADPAK
- BT 650
- Ahura First Defender
- Ahura TruDefender
- M256 Kit

Survey Equipment

- Radiac Meters
 - UDR13, AN/VDR2, AN/PDR77
- Joint Chemical Agent Detector (JCAD)
- Improved Chemical Agent Monitor (ICAM)
- Field Bio Immunoassay Tickets (HHAs)

Team Overview: Medical/Analytical



Medical Capabilities

- Medical
 - On-scene medical support
 - Medical hazard analysis
 - Casualty management and tracking
 - Medical treatment recommendations

Medical Capabilities

- **Analytical**
 - On-scene analysis
 - Chemical and biological agents, toxic industrial chemicals/materials
 - Hazard Characterization
 - PPE, decon, and mitigation advice

Medical Capabilities

- **On-Scene Medical Support**
 - CST and attached personnel
 - Formulary and antidotes
- **Medical Hazard Analysis**
 - Signs and symptoms, requested lab work

Medical Capabilities

- **Casualty Management and Tracking**
 - Direct patient tracking via liaison with Alabama Department of Public Health (ADPH)
 - Quarantine/isolation recommendations

Medical Capabilities

- **Medical Treatment Recommendations**
 - Specific to on-scene agents and provided directly to treatment facility and ADPH

Analytical Capabilities

- **On-Scene Analysis (Class III Containment Glovebox)**
 - Chemical
 - GC/MS – Liquid/Vapor and Solid Phase Micro-Extraction (SPME) analysis
 - FTIR - >32,000 spectra

Analytical Capabilities

- Microscopy
- RAID-M IMS Detector
- Narcotics Test Kit
- HAZCAT Kit
- M-256A1 Kit

Analytical Capabilities

- Biological
 - DoD Hand Held Assay (HHA)
 - 17 biological and toxin antibody based assay tests
 - Polymerase Chain Reaction (PCR)
 - DNA analysis of biological WMD agents and foodborne pathogens and toxins

Analytical Capabilities

- Microscopy
- M1M Bioanalyzer
 - DNA analysis of biological WMD agents and foodborne pathogens and toxins

Analytical Capabilities

- Hazard characterization
 - PPE and decon recommendations
 - Agent-specific recommendations
 - Sample prioritization and protocols
 - Mitigation advice

Analytical Capabilities

- Reach-back Capabilities
 - Defense Threat Reduction Agency (DTRA)
 - Smiths Detection
 - McCrone

CST Training

- Individual/Institutional
 - Civil Support Skills Course, Ft. Leonard Wood, Missouri
 - Position-specific specialized training

CST Training

- Collective
 - DHS exercises
 - Multi-CST exercises
 - ARNORTH exercises
 - State/Local exercises
- Average specialized individual training = 900 hours

Individual Training

- **Civil Support Skills Course – Provides initial HAZMAT Tech Certification**
- **ICS 100, 200, 300, 400, 700, and 800**
- **CWA/BWA Production**
- **Applied Radiological Response Techniques**
- **Technical Escort**

Individual Training

- **Nuclear Radiation Incident Management**
- **Medical Effects of Ionizing Radiation**
- **Confined Space/Collapsed Structure Course**
- **Advance GC/MS Training**

NGB Training Guidance

- **Collective training management**
 - CSTs are post mobilization, forward deployed units and cannot be partially trained

NGB Training Guidance

- **Training requirements**
 - CSTs will participate in a minimum of twelve training exercises per year for a total duration of 60 days to include a maritime event
 - Will conduct at least 1 multi-CST exercise annually

NGB Training Guidance

- **Ensure that medical personnel meet professional certification requirements**
- **Training should emphasize**
 - **At least one externally supported full scale collective training event each six months**
 - **Interoperability with other CSTs**

CST Response Missions

- **Multiple white powder responses**
 - **Most recently at the Senate / Congressmen Offices (Jan 2010)**

CST Response Missions

- Analytical support to Montgomery Police Department
- Analytical support to FBI Mobile Field Office WMD Coordinator
- Analytical support to Birmingham Field Office WMD Coordinator

Emergency Contact Procedures

Emergency First Responder Agency
 ↓
 Local/County Emergency Management Agency
 ↓
 State Emergency Management Agency
 (205) 280-2200
 ↓
 The Adjutant General of Alabama
 (through Directorate of Military Support)
 (334) 213-7753
 ↓
 46th WMD C ST Notification and Deployment
 (334) 954-3400

CST Primary Contacts

Commander,
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Deputy Commander,
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