





Major Matthew Woolums
Commander

## **CST Background**



- 1997: Secretary of Defense directed the establishment of Rapid Assessment and Identification (RAID) teams
- To meet a capabilities gap in responding to domestic use of WMDs and in response to recent attacks
  - First World Trade Center bombing (1993)
  - Tokyo subway Sarin attack (1995)
  - Oklahoma City Federal Building (1995)
  - Khobar Towers bombing (1996)
- First 10 CSTs were validated in 2001
   (One CST per FEMA region)



## 1<sup>st</sup> CST Mission Statement



- Support civil authorities at a domestic incident site by identifying CBRNE agents/substances, assessing current and projected consequences, advising on response measures, and assisting with appropriate requests for additional support.
- Intentional or unintentional release of nuclear, biological, radiological, toxic or poisonous chemical materials.
- Natural or man-made disasters in the United States that result in, or could result in, catastrophic loss of life or property.

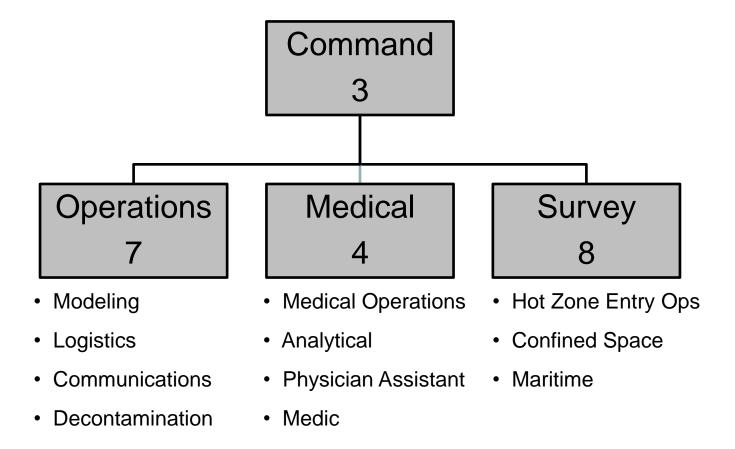
# **CST Organizational Facts**



- 22 Air & Army National Guard personnel
- Strike Team on 1 hour alert 24/7
- Federally funded
- Full time (Title 32)
- Reports to the Incident Commander
- Tailored response package

## **Organizational Structure**

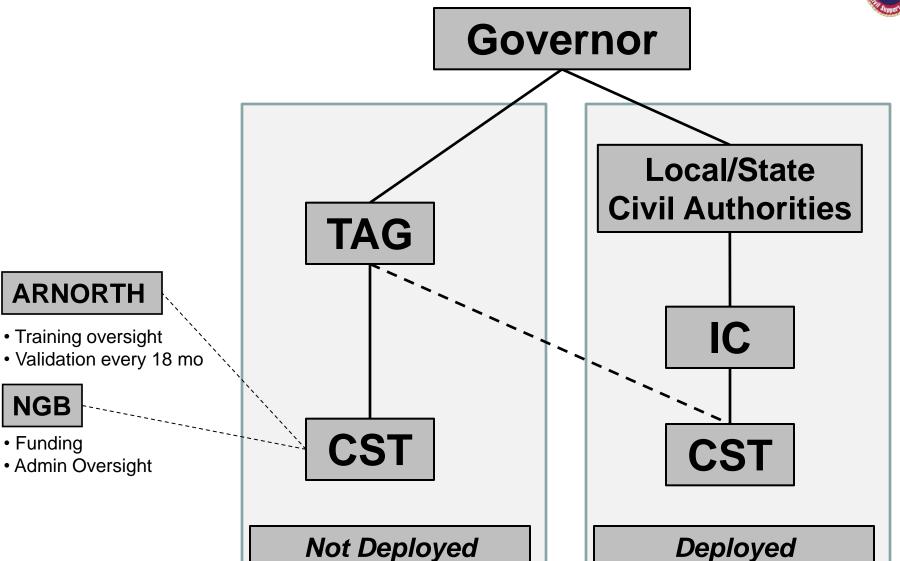




Designed to fall in on an existing Incident Command Structure

## **Command Relationships**





## **CBRN** Response Enterprise



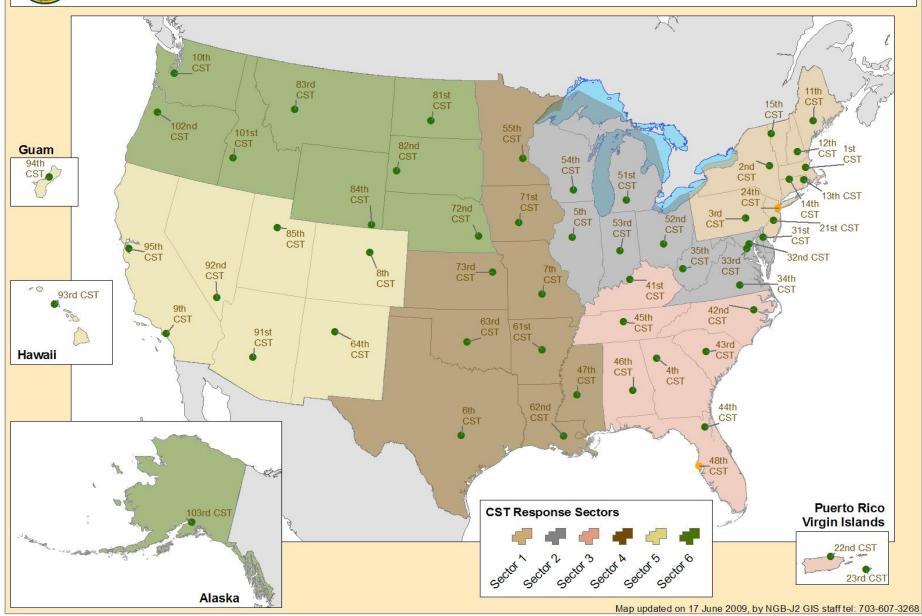
State Response			Federal Response	
State NG assets may operate under State or Federal control		HRF (10 units) 566 / 5,660 (no FSRT)	DCRF 5200 personnel FP 1 (2,100) FP 2 (3,100)	C2CRE A & B 1,500 Each
WMD-CST (57 Teams) 22 / 1,254 -Detection / ID -Rapid	CERFP (17 units) 186 / 3,162 (FSRT 17 teams 11 / 187)  -Search & Extr -Decontamination -Emergency Med	-C2 -Search & Extraction -Decontamination -Emergency Medical -Security	-C2 -CBRN Assessment -Search & Extraction -Decontamination -Emergency Medical -Level 2 & 3 Med w/ Surg Cap -Security -Engineering -Logistics -Transportation -Ground MEDEVAC & CASEVAC -Aviation Lift -Aviation MEDEVAC & CASEVAC	-C2 -CBRN Assess -Search & Extr -Decon -Emerg Med -Lvl 2 Med -Engineering -Logistics -Transportation
Assessment of Hazmat				Prep'd to Dply NLT N+96 Hrs
Prepared to Deploy NLT N+3 Hours	Prepared to Deploy NLT N+6 Hours	Prepared to Deploy NLT N+6-12 Hours	Prepared to Deploy FP 1 NLT N+24 Hours FP 2 NLT N+48 Hours	+ Additional RFF Forces

**Dedicated Forces** 

Contingency Sourced



## Civil Support Team Locations/Sectors



## **CST Training Requirements**



#### Entire Team

- NFPA HAZMAT Technician
- Incident Command System (ICS)
- Trained to MA DPH Lab Standards
- Trained to FBI Evidence Collection Standards

#### Specialized Training

- Medical Effects of Ionizing Radiation
- Medical Management of Chem/Bio casualties (Edgewood)
- Advanced Microscopy
- Confined Space/Collapsed Structure
- Field Identification of Biological Warfare Agents
- Chemical & Biological Warfare Courses

#### **Average Specialized Individual Training = 740 hrs**

## Support Capabilities to the IC



- Survey and sampling
- Robust communications interoperability
- Rapid identification of Chemical, Biological, Radiological and Nuclear (CBRN) hazards
- CBRNE plume modeling
- WMD medical expertise
- Stand-by for pre-planned events
- Support from a remote location
- Training assistance



New Bedford Mustard Response, June 2010

## **Technical Reach-Back**



- Defense Threat Reduction Agency (DTRA)
- Edgewood Chemical Biological Center (ECBC)
- FBI WMD Coordinator (HMRT/HMRU)
- Las Alamos National Laboratory
- Center for Disease Control (CDC)
- Department of Public Health (DPH)
- Massachusetts Institute of Technology Lincoln Labs (MIT-LL)
- United States Army Medical Research Institute for Infectious Diseases (USAMRIID)

## **Communications Equipment**





**Advance Echelon (ADVON)** 



**Unified Command Suite (UCS)** 

- Military secure satellite (NIPR/SIPR)
- Secure/non-secure satellite phone, fax, data
- Radio capabilities (HF, VHF Low and High, UHF Low and High, 800MHz)
- Cross Banding Capabilities: Incident Commander's Radio Interface (ICRI) and ACU 1000
- UHF tactical satellite and INMARSAT
- Downrange recordable video
- Voice Over Internet Protocol (VOIP)
- Field Video Teleconference (VTC)

# **Hazard Prediction/Modeling**



#### **CATS**

- Near real time damage and CM assessment
- Assesses personnel / property at risk

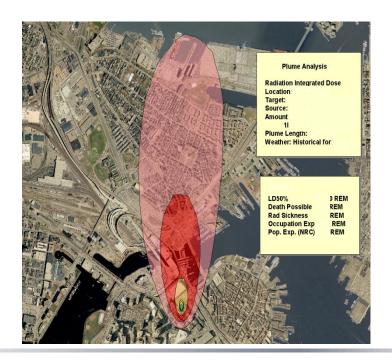
#### **ArcGIS**

Situational Awareness Mapping



#### **HPAC**

 Workstation-based for modeling winds over complex terrain



## **Self-Sustaining Capabilities**



- Technical Decontamination
- Medical Treatment
- Logistics
  - No burden to the IC



Medical Recovery Vehicle



Lightweight Inflatable
Decontamination System
(LIDS)

## **Additional CST Vehicles**









F-450 Logistics/Decon Truck



Polaris Ranger

## **Personal Protective Equipment**









Class 2 Lion Suit



Level B DuPont



Level C Saratoga



Draeger SCBA





Draeger BG4



M40/M53 Protective Mask

## **Equipment:** Chemical



M8/M9 Paper



M256 Kit



**Draeger CDS Kits** 



LCD



JCAD



MultiRAE Pro



**MultiRAE** 



First Defender



TruDefender



Improved Chemical Agent Monitor (ICAM)



M22 ACADA



**AreaRAE** 



HazMat ID



**GasID** 



Hapsite

# **Equipment:** Radiological





Micro-Detective HX



IndentiFINDER





AN/PDR-77



AN/VDR-2 RADIAC



AN/UDR-13



Inspector+

# **Equipment:** Biological





SASS 3100 + SASS 3010



BioCapture 550 and 650



Hand Held Assays

## Sampling



- Solid, liquid, bio, environmental samples
- Air/vapor samples (Tedlar bags)
- Radiological spectra
- FBI, DPH standards







# Analytical Laboratory System (ALS)

\* \* \*

- Class III Containment Glove Box
- GC/MS
- Fluorescent Microscope
- Fourier Transform Infrared Spectrometry (FTIR)
- Immunoassay Tickets
- Polymerase Chain Reaction (PCR)
- Electro-chem-illuminescence Detector (M1M)

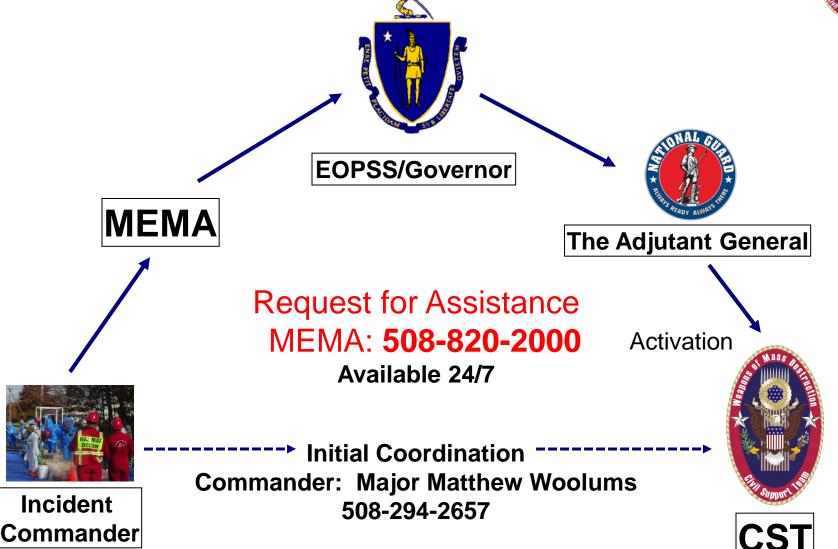






## How to Request the 1<sup>st</sup> CST





# 1<sup>st</sup> Civil Support Team (Weapons of Mass Destruction)



Commander: N	1aj Matthew Woolums	508-294-2657
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**Deputy Commander:** MAJ Jeff Winn 508-294-2689

**1SG:** 1SG Gary Mauk 508-328-2195

**Operations:** CPT Veronica Mack 508-294-2722

Medical: Maj Christina Sampsonis 508-294-2741

Analytical: 1LT Caley Heckman 508-328-0186

Survey Team: CPT Johnny Kula 508-328-2176

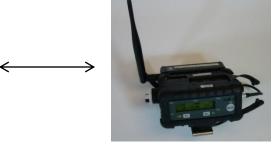


## **Questions?**

# Mobile Field Kit (MFK)











- Video/image
- Text
- Logging
- GPS tracking
- Overhead imagery

