



22nd WMD Civil Support Team

22nd WMD CST Response Operations

MAJ Rodolfo Colón



22nd WMD Civil Support Team

Outline

- CST Introduction
 - Mission
 - Purpose
 - Equipment
- Actions Upon Arrival at Scene
- Capabilities
- How do we get the answer?
- First Responders Interaction
- Final Remarks
- Questions



22nd WMD Civil Support Team

History of Civil Support Teams

- In 1995, after the Oklahoma bombing and the Tokyo Subway attacks with Sarin new WMD threats became real and a big concern for United States and it's territories.
- In May 1998, President Bill Clinton announced that the nation would do more to protect its citizens against the growing threat of chemical and biological terrorism.
- The Department of Defense would form teams to support state and local authorities in the event of an incident involving weapons of mass destruction.
- On 2001, after the 911 attacks, Congress approved and mandated all WMD CST to be fully operational and full time Units



OK Bombing



Tokyo Sarin Attack



Sep 11 Attacks



Anthrax Letters Attack



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History of Civil Support Teams (Cont.)

- In 2005, during hurricane Katrina it was proven that CSTs have capabilities that can be used for mission other than WMD incidents.
- 2013 Boston Marathon, WMD CST's were providing support while conducting area random monitoring for radioactive material, TIC's and TIM's. Also supported FBI investigator and Bombs squad after the explosions and during the investigation



Hurricane Katrina



BOSTON Marathon



22nd WMD Civil Support Team

Mission

... is to ***support*** local and state and federal authorities at domestic WMD/NBC incident sites by ***identifying*** agents and substances, ***assessing*** current and projected consequences, ***advising*** on response measures, and ***assisting*** with requests for additional military support.



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Purpose

- ...respond to terrorist incidents involving Weapons of Mass Destruction, as well as other disasters and catastrophic events, both natural and man made.
- ...provide support to local emergency responders in their efforts to save lives and mitigate property damage.



22nd WMD Civil Support Team

**Commander, ISG
& Deputy**

**Operations
Section**

**Administration and
Logistics Section**

**Communications
Section**

**Med Ops
ALS**

Recon / Survey

**Recon / Survey
A Team**

**Recon / Survey
B Team**



22nd WMD Civil Support Team

Equipment



Command Vehicle

Operations Section

Administration and Logistics Section

Communications Section

Medical Section



Recon/Survey Section





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What does it take to take us there?

- TAG orders on behalf of Governor
- Agreement with agencies (e.g. PREMA, FBI others).
- The situation has developed to a level requiring our assistance.
- State/local assets are overwhelmed.
- However, CST are NEVER in charge of any incident (not IC).



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Action upon arrival

- Liason with Incident Commander
- Brief on capabilities/limitations
- Assess if :
 - situation is overwhelming
 - beyond local/state capabilities/knowledge
 - If weaponized agents were employed



22nd WMD Civil Support Team

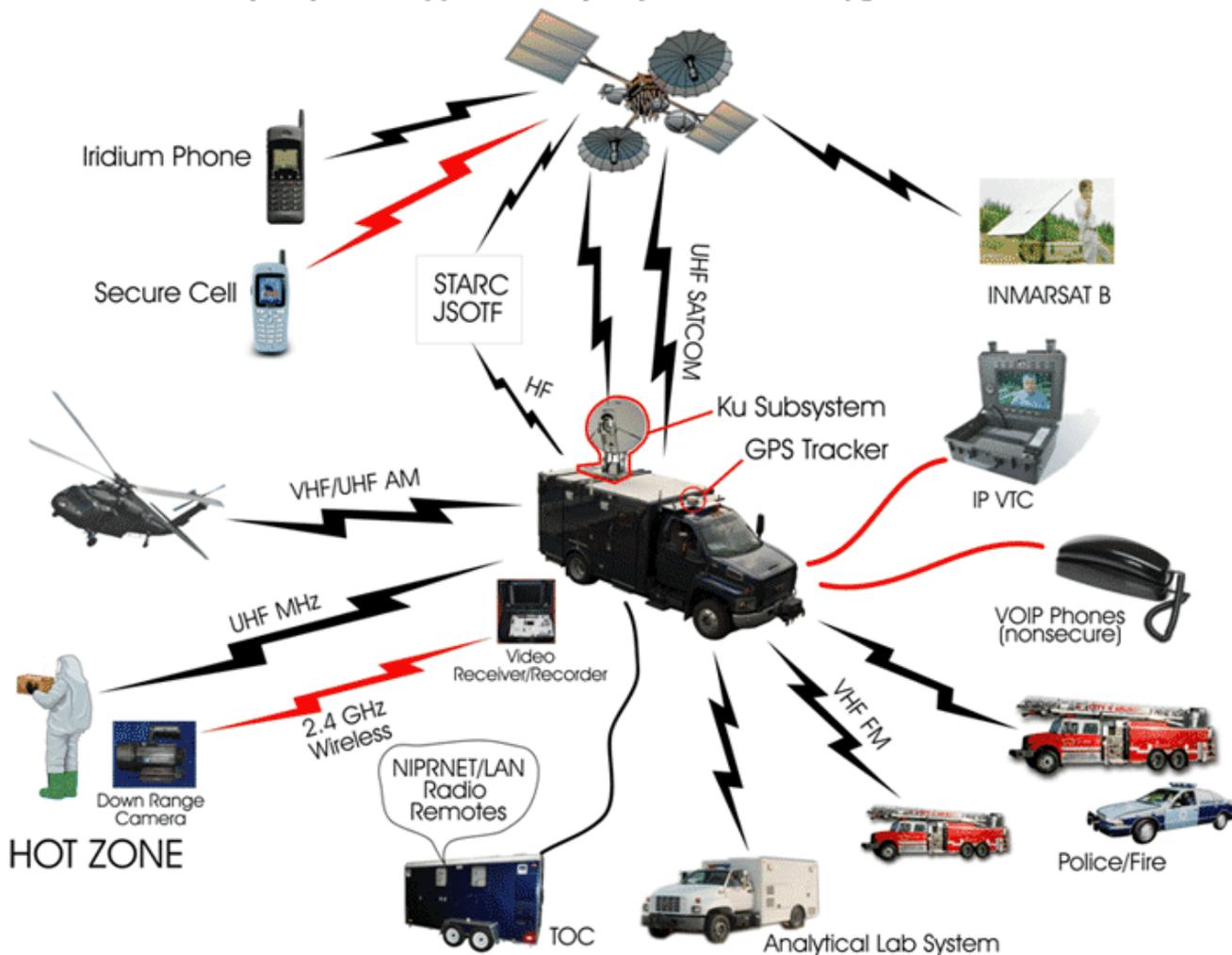
Capabilities

- Communications
 - Satellite phones
 - Secure communications (phone, fax, internet)
 - Traditional phone, fax, internet
 - Video teleconference
 - Signal synchronization with other agencies



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Unified Command Suite (UCS) Civil Support Team (CST) Increment 1 Upgrade





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Capabilities

- Survey
 - Site characterization
 - Scene evaluation
 - Pictures, video
 - Field monitoring and tests (air, liquid, solid, radiation)
 - Presumptive results
 - Air monitoring
 - Sampling
 - Solid, liquid, powder
 - Simple Mitigation



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HAPSITE Field-Portable GC/MS
On-Site VOC Analysis In Minutes





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Capabilities

- Modeling
 - Potential/actual dispersion of agent
 - Takes into account
 - Weather
 - Agent physical properties
 - Geological features



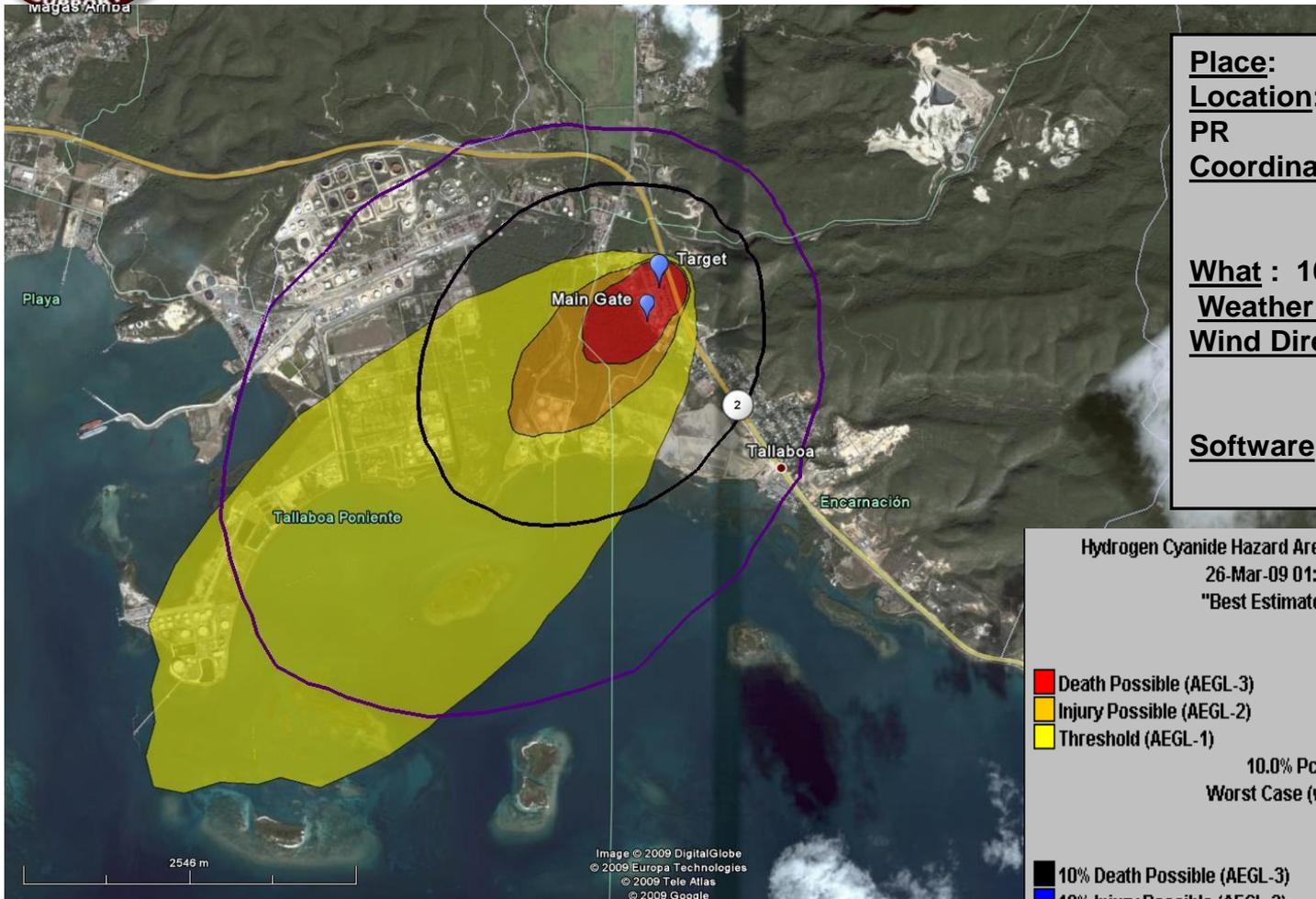
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Capabilities

- Modeling
 - Uses
 - Evacuation decisions
 - Spread of contaminant
 - Means of egress
 - Potential affected population
 - hospitals
 - schools
 - malls
 - main roads



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Place: CORCO
Location: 127 Street Penuelas, PR
Coordinates: Target Building
 18° 00' 13.53" N
 66° 43' 25.34" W
What : 10,000gal Cyanide(HC)
Weather : NOAA
Wind Direction : From NE

@2mph
Software: HPAC 4.04 and Google Earth Pro

Hydrogen Cyanide Hazard Area : AEGL-30min - Surface Dosage
 26-Mar-09 01:27:05Z (12,000 hr)
 "Best Estimate" - Mean Contours

	mg-min/m ³	In contour population
Death Possible (AEGL-3)	690.0	139
Injury Possible (AEGL-2)	330.0	304
Threshold (AEGL-1)	84.0	1,000

10.0% Pc Exceedance
 Worst Case (w/WX Uncertainty)

	mg-min/m ³	In contour population
10% Death Possible (AEGL-3)	690.0	1,559
10% Injury Possible (AEGL-2)	330.0	3,502



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Capabilities

- Lab analysis/ Characterization
 - Provides identification/ characterization of suspected agent involved.
 - Recommend treatment protocols, decontamination procedures and solution.
 - Recommend sampling handling and further testing procedures.



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Capabilities

- Lab analysis/ Characterization
 - How
 - Chemical
 - Gas Chromatograph / Mass Spectrometer (GC/MS)
 - Fourier Transform Infrared Spectroscopy (FTIR)
 - Polarized Light Microscope (PLM)
 - Rapid Agent Detector Monitor (RAID M)



22nd WMD Civil Support Team

Capabilities

- Lab analysis/ Characterization
 - How
 - Biological
 - Real Time Polymerase Chain Reaction (RT-PCR)
 - Electrochemiluminescence Assay (ECL – M1M)
 - Polarized Light Microscope (PLM)
 - Gram staining
 - Fluorescence microscopy



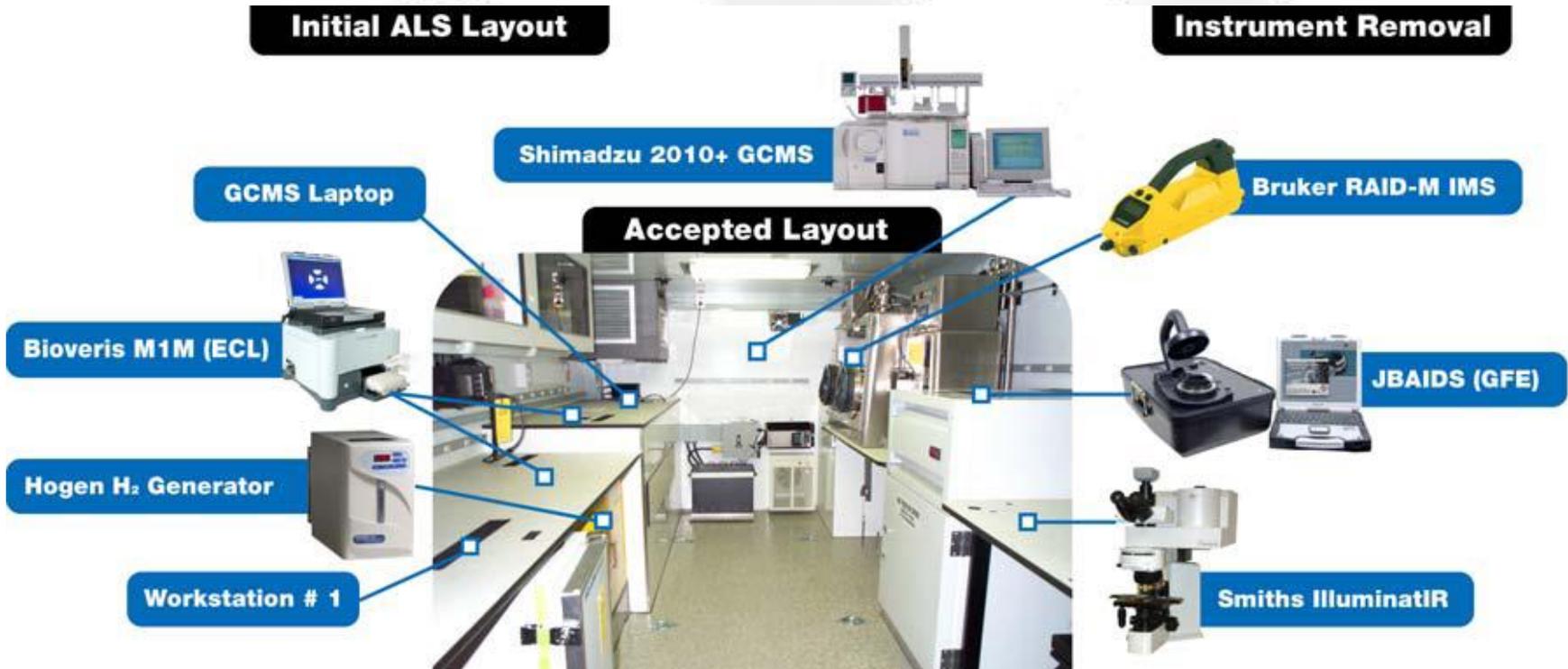
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Capabilities

- Lab analysis/ Characterization
 - How
 - Radiation
 - Gamma Spectrometer
 - Identification of isotope
 - Recommendations on:
 - » Shielding
 - » Safe distances
 - » Decon
 - » Medical treatment



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Capabilities

- Medical Support
 - Lab protocols to diagnose the type of exposure/illness
 - Medical treatment protocols/advise
 - Medical transportation coordination
 - Hospital link up
 - Follow up on casualties condition



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Limitations

- 72 hrs operations by, state side/USVI elements on stand by
- Water source for decon
- Medical assets (formulary)
- No mass casualties decon/ treatment capacity
- MEDEVAC
- Waste management (is the IC responsibility)
- Force protection



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How do we get the answer?

- Current data from agencies involved
- Location
 - Public area \longrightarrow target
 - Private area \longrightarrow site of preparation
- Signs and symptoms, if any
- Field equipment readings
- Lab analysis results
- Scene evaluation
- Casualties response to specific medical treatment



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How do we integrate with other agencies?

- Training with them
- Information briefings
- Exercises
- Sharing knowledge, expertise and experiences
- Providing guidance (both ways)



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Final Remark:

Civil Support Teams provide a unique asset to the state in their effort to bring the situation back to normal after WMD event or major natural disaster.



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- Questions....

