MERS Capabilities Briefing

MERS – Mobile Emergency Response Support

September 23, 2009
Who or What is MERS?

- We are **mission oriented**.
  - Our job is not to:
    - Take over
    - Make a name for ourselves
    - Play politics
    - Get in the way
  - Our goal is to:
    - Help – simple and straight forward
    - Find a way
    - Accomplish the mission
    - Build practical relationships with other agencies
Who or What is MERS?

- Six detachments across the United States:
  - Maynard, MA
    - Covers FEMA Regions 1 & 2
  - Thomasville, GA
    - Covers FEMA Regions 3 & 4
  - Denton, TX
    - Covers FEMA Regions 5 & 6
  - Denver, CO
    - Covers FEMA Regions 7 & 8
  - Bothell, WA
    - Covers FEMA Regions 9 & 10
  - Frederick, MD
    - Covers NCR (National Capitol Region)
FEMA Regions
MERS Locations

- Bothell, WA
- Frederick, MD
- Maynard, MD
- Denver, CO
- Denton, TX
- Thomasville, GA
Who do we support?

- **FEMA/Regions**
  - The majority of our missions involve FEMA/disaster support.
  - Thomasville MERS is assigned Regions 3 & 4.
  - During disasters, our primary focus is supporting the Region and FCO.

- **Federal / DHS / FEMA Special Events and Exercises**
  - G20, Inauguration, State of the Union, Space Shuttle Recovery
  - DICE, JUICE, and other exercises

- **State, County, Local, and other agencies**
  - DOD, FBI, Secret Service, Search and Rescue
  - Jackson County, TN; New Orleans Mayor’s Office
Who do we report to?

Department of Homeland Security (DHS)

Federal Emergency Management Agency (FEMA)

Disaster Operations Directorate (DOD)

Disaster Emergency Communications Division (DEC)

Tactical Emergency Communications Branch (TECB)

Mobile Emergency Response Support (MERS)
(Six Detachments)
MERS Detachment Organization

Bothell MERS  Denton MERS  Denver MERS  Thomasville MERS  Frederick MERS  Maynard MERS

MERS Chief

MERS Security Officer

Operations Chief

Communications Chief

MOC (24/7 MERS Operation Center)

20+ IT Specialists and Communications Specialists

Logistics Chief

6+ Logistics Specialists, Diesel Mechanics and Utility Specialists

Disaster Preparedness Officer

David Simonsen  September 23, 2009  8
MERS Mission

Provide mobile telecommunications, operations support, power generation, and life support required for the on-site management of disaster response activities.
What can MERS provide?

- Communications Support:
  - Mobile/tactical Communications with access to:
    - FEMA, HSIN, and DHS Networks
    - PSTN (Public Switched Telephone Network)
    - VOIP (Voice over IP), ROIP (Radio over IP), and Video conferencing
    - LMR (Land Mobile Radio) networks and interoperability
    - Public Internet
  - Special and/or custom connections with other networks.
    - Example: During Hurricane Gustav, the Louisiana State Patrol lost their T1 connectivity between HQ and a remote repeater tower. We provided a satellite “point-to-point” T1 to re-establish connectivity while a new T1 was being installed.
What can MERS provide?

- Mobile/tactical packages and vehicles:
  - “Fly-away” packages
    - Small communications packages that may be carried aboard airlines, government vehicles, and/or rental cars.
  - “Rapid Response” Incident Response Vehicle (IRV)
    - 1-5 people inside vehicle and up to 10 more outside.
  - “Small” Mobile Emergency Response Vehicle (MEOV)
    - 1-8 people inside vehicle and up to 25 more outside.
  - “Medium” Mobile Emergency Response Vehicle (MEOV)
    - 1-12 people inside vehicle and up to 25 more outside.
  - “Large” Mobile Emergency Response Vehicle (Green Hornet)
    - 1-35 people inside vehicle and up to 100 more outside.
What can MERS provide?

- Specialty services and vehicles:
  - Land Mobile Radio (LMR) Assets
    - VHF, UHF, 800 MHz, and Aviation
  - Line-of-Sight (LOS) Communications
    - LOS microwave equipment
  - Streaming Video over IP
    - Provide on location situational awareness
    - Can downlink video from equipped aircraft
  - Satellite Communications
    - Variety of satellite communication vehicles and equipment
  - Secure Communications (Special request)
    - Secure voice, fax, and video conferencing
What can MERS provide?

- Specialty services and vehicles:
  - Joint Field Office (JFO) support
    - Communication Cargo Vehicles
  - Tactical/emergency building setup
  - Technical expertise
  - Limited administrative support
  - Mobile conference room facilities
  - Ability to expand and contract
What can MERS provide?

- Logistics support:
  - Emergency power generation
  - Life support
  - Diesel fuel
  - Potable water
  - Mobile HVAC (up to 16,000 sq. ft.)

- Operations support:
  - 24 hour / 7 day MERS Operation Center (MOC)
  - Agency coordination
  - Incident reporting
  - Serves as the primary liaison for the MERS Detachment
MERS Vehicles
“Fly-Away” Packages

Wide variety of portable communications equipment

- Iridium 9505a
- INMARSAT
  - BGAN
  - Explorer 700 and 500
- Situational Awareness (SA) Kit
  - Streaming Video
- QSEC Secure Cell Phones
Incident Response Vehicle (IRV)

“Rapid Response” vehicle

- Supports 1-5 people inside with up to 10 more outside of the vehicle.

- Primary uses:
  - Situational Awareness
  - Incident command post
  - Forward deployed operations

- Typical deployed Package
  - 2-person crew
  - IRV
  - F350 w/ Support Trailer
Incident Response Vehicle (IRV)

(IRV) – “Rapid Response” vehicle

- The IRV can provide:
  - FEMA Intranet
  - Public Internet
  - Video Conferencing
  - PSTN
  - VOIP, ROIP
  - VHF Repeater
  - HF, VHF, UHF, 800 MHz radio
  - Radio Interoperability
    - Cisco IPICS
    - ACU-1000
  - Audio/Video Capability
    - Streaming Video
Mobile Emergency Operations Vehicle (MEOV) – “small” vehicle

- Supports 1-9 people inside with up to 25 more outside of the vehicle.

- Primary uses:
  - IMAT (Incidence Management Assessment Team) Support
  - FCO (Federal Coordinating Officer) Support
  - Mobile DRC (Disaster Recovery Center)
  - Mobile Office – General Purpose

- Typical deployed Package
  - 3-5 person crew
  - MEOV
  - F350 w/ Satellite trailer
  - Admin/Support Vehicle
Mobile Emergency Operations Vehicle (MEOV) – “small” vehicle

- The MEOV can provide:
  - FEMA Intranet
  - Public Internet
  - Video Conferencing
  - PSTN
  - VOIP, ROIP
  - VHF, UHF, 800 MHz radio
  - Radio Interoperability
    - Cisco IPICS
    - ACU-1000
Mobile Emergency Operations Vehicle
(MEOV - Kentucky) – “Medium” vehicle

- Supports 1-12 people inside with up to 25 more outside of the vehicle.

- Primary uses:
  - IMAT (Incidence Management Assessment Team) Support
  - FCO (Federal Coordinating Officer) Support
  - Mobile DRC (Disaster Recovery Center)
  - Mobile Office – General Purpose

- Typical deployed Package
  - 3-5 person crew
  - MEOV
  - F350 w/ Satellite trailer
  - Admin/Support Vehicle
The MEOV can provide:
- FEMA Intranet
- Public Internet
- Video Conferencing
- PSTN
- (With future upgrade)
  - VOIP, ROIP
  - VHF, UHF, 800 MHz radio
  - Radio Interoperability
    - Cisco IPICS
    - ACU-1000

This vehicle is on display outside.
Mobile Emergency Operations Vehicle  
(MEOV – Green Hornet) – “Large” vehicle

- Supports 10-35 people inside with up to 75 more outside of the vehicle.

- Primary uses:
  - IMAT (Incidence Management Assessment Team) Support
  - FCO (Federal Coordinating Officer) Support
  - Mobile Office – General Purpose

- Typical deployed Package
  - 5-7 person crew
  - Green Hornet
  - F350 w/ Satellite trailer
  - Support Vehicle
  - Admin Vehicle
Mobile Emergency Operations Vehicle
(MEOV – Green Hornet) – “Large” vehicle

- The Green Hornet can provide:
  - FEMA Intranet
  - Public Internet
  - Video Conferencing
  - PSTN
  - (With future upgrade)
    - VOIP, ROIP
    - VHF, UHF, 800 MHz radio
    - Radio Interoperability
      - Cisco IPICS
      - ACU-1000
Portable KU Satellite Trailer
(PKU) – Mobile Satellite vehicle

- The PKU can provide:
  - Multiple KU satellite downlinks
  - BGAN (INMARSAT) services

- Typical uses:
  - Provide satellite connectivity for the MEOV’s
  - Point-to-point satellite extensions

- The PKU requires:
  - Crew: 1 person
  - Vehicle: F350
Multi-Radio Van
(MRV) – Satellite / Radio vehicle

The MRV can provide:
- Multiple satellite downlinks
- Line-of-Sight (LOS)
- HF, VHF, UHF
- VHF and UHF Repeaters
- FEMA Intranet
- PSTN
- Secure Voice and FAX

Typical uses:
- Provide satellite connectivity for the MEOV’s
- Point-to-point satellite extensions
Other Vehicles
(LMR) – Land Mobile Radio trailer

- The LMR can provide:
  - Line-of-Sight (LOS)
  - HF, VHF, UHF
  - VHF and UHF Repeaters
  - BGAN / INMARSAT

- Typical uses:
  - Provide VHF/UHF repeater coverage
  - Radio Interoperability

- This vehicle is on display outside
Other Vehicles

- HVAC Truck
  - HVAC distribution through temporary ducts.
  - 16,000 sq. ft.

- Potable Water Tanker
  - 6,200 gallons
Other Vehicles

- Diesel Fuel Tanker
  - 2400 gallons

- Diesel Fuel Tanker
  - 3500 gallons
Other Vehicles

- Mobile Generator
  - 100 KW
- Mobile Generator
  - 400 KW
Other Vehicles

- Communications Cargo Truck
  - “Rolling Radio Shack”

- Equipment Cargo Trucks
You call – we’ll be there

By Air

By Sea

By Land