



Public Safety Broadband for disaster response

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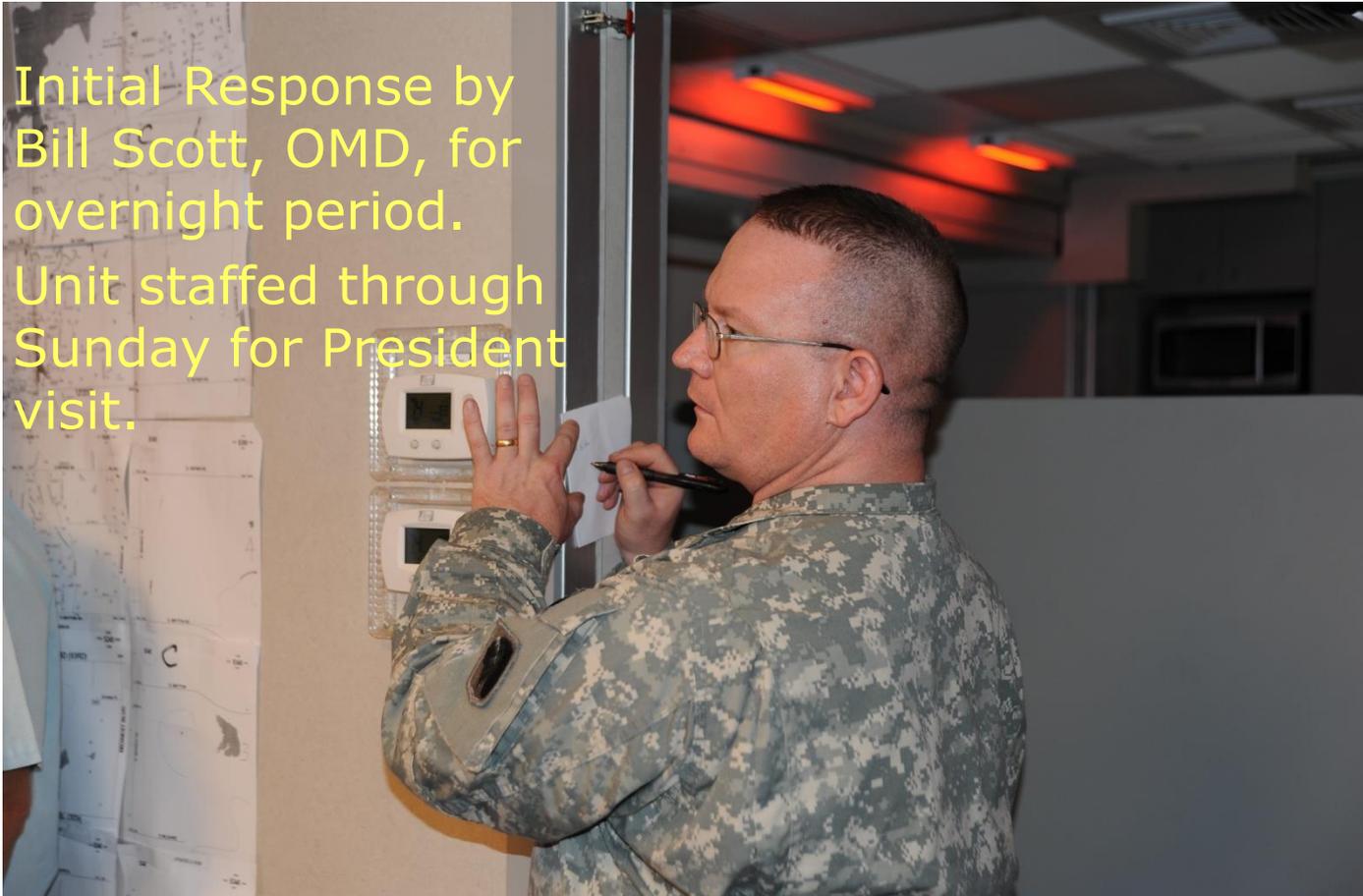
The 2013 Moore Tornado Background





The Moore Tornado Communications Unit Response

- ▶ Initial Response by Bill Scott, OMD, for overnight period.
- ▶ Unit staffed through Sunday for President visit.





The Moore Tornado Communications Unit Response





Using Commercial Broadband in a disaster

- ▶ “Normal capacity” is usually not available
 - Towers & Infrastructure impacted by disaster
- ▶ *Everyone* is attempting to use this limited capacity:
 - Victims are trying to reach loved ones and friends for support and information sharing
 - *Everyone* is uploading video (including, in some cases, first responders...)
 - Broadcast media “latch on” to cellular voice channels and never let go...





How many reporters does it take to report a story?

Each reporter in front of a camera is using a cellular voice channel.





Using Commercial Broadband in a disaster

► Unknowns:

- Time frame for “full capacity”
- What, exactly, “full capacity” means
- How, exactly restoration will take place:
 - Will the Telco NOC reconfigure existing fixed capacity?
 - Will the company dispatch COW’s or COLT’s?
 - Are those resources coming from out of state?
 - Where are they going?
 - How long will it take to deploy them?
 - Will these gizmos actually help the incident?





A hefty dose of skepticism regarding data connectivity

- ▶ Response kit includes:
 - All position-specific forms and job aids in print, on a thumb drive, portable hard drive, or combination of the above.
- ▶ This mindset automatically limits the response:
 - Paper maps that may show old data.
 - No expectation of video or pictures.





My network is better than your network

INCIDENT RADIO COMMUNICATIONS PLAN			Incident Name Moore Tornado Response			Date/Time Prepared 05-21-2013 / 1500			Operational Period Date/Time 05-21&22-2013 / 1900 - 0700		
Ch #	Function	Channel Name/Trunked Radio System Talkgroup	Assignment	RX Freq N or W	RX Tone/NAC	TX Freq N or W	TX Tone/NAC	Mode A, D or M	Remarks		
	Fire Command	RMA CN 2E	Divs 1,3,4,CC,TF	OK-WIN		TRS		A	These two channels are patched at Norman		
	Fire Command	SMA 1E	Divs 1,3,4,CC,TF	OK-WIN		TRS		A			
	Fire Command	RMA CN 2H	Division 2	OK-WIN		TRS		A			
	Law Command	Norman Tac3	IC	OK-WIN		TRS		A	These channels are co-command		
	Law Command	Moore 6A	IC	OK-WIN		TRS		A			
	Law Command	SMA 1H	IC	OK-WIN		TRS		A			1911
	Fire Dispatch	Moore 7A FD DISP	Command	OK-WIN		TRS		A	Fire Command takes 911 calls here		
	Staging	RMA CN 2F	Staging	OK-WIN		TRS		A			
	EMS Operations	RMA CN 2M	Midwest EMS	OK-WIN		TRS		A			
	IC Medical	8-Tac 94D	Med Branch	853.0125 W	156.7	853.0125 W	156.7	A	Incident Medical		
Prepared By (Communications Unit) Comstock, John // COML // 405-509-1720						Incident Location: Moore Fire Sta 1 County Cleveland State OK Latitude 35.33.3 N Longitude 097.56.8 W					

The convention calls for frequency lists to show four digits after the decimal place, followed by either an "N" or a "W", depending on whether the frequency is narrow or wide band. Mode refers to either "A" or "D" indicating analog or digital (e.g. Project 25) or "M" indicating mixed mode. All channels are shown as if programmed in a control station, mobile or portable radio. Repeater and base stations must be programmed with the Rx and Tx reversed.

ICS 205 Excel 3/2007





Agency-specific command posts





Your trendy store is tracking you....

- ▶ Retailers use wireless signals to determine shopper preferences.
- ▶ At an incident, though, it's likely that command staff is unaware of everyone's location.





How a PSBN would benefit disaster response:

- ▶ Less costly data charges = more devices with 1st responders
- ▶ “Public Safety-grade” network = higher trust factor of reliability and capacity
- ▶ More devices and higher trust factor = better use and increased usage of available data tools
- ▶ Using available technology = a better disaster response and potential lives saved.



Questions?

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