

Expanded Outline

MERA End User Training

I. Introduction

- A. Introduction of topics to be covered
- B. Pass out handouts & materials
- C. Current status of the system
 - Usage matrix located on the MERA Website – Board meeting minutes.
- D. MERA Facts
 - MERA uses 30 frequency pairs in the 480 MHz UHF-T band
 - System designed 1580 radios, but has approximately 2875 today
 - Eastern simulcast zone** consists of six transmit/receive sites and two receive-only sites, each with eleven trunked radio channels, and provides radio coverage for the dense urban area along the corridor formed by U.S. Highway 101.
 - Western simulcast zone** consists of three sites, each with seven trunked radio channels, and provides radio coverage for the rural parts of the County along U.S. Highway 1
 - Three additional sites provide fill-in radio coverage, Sonoma Mt. with six channels and Bay Hill and Bolinas with five trunked radio channels each.

II. Definitions

- A. Chapter 4 of the MERA Policy

III. Templates

- A. Zones & Modes Explained. Designed so that units only have to change modes (\Rightarrow), not zones (\Downarrow). 95% of their use will be on their primary line or zone. Dispatch, Admin, and Tactical TG's for Law/Fire are the focus of the primary zones.
- B. Understanding their agency's talkgroup template
 - 1. Which talkgroups display on their portables and mobiles
- C. Understanding other talkgroup templates
 - 1. **Fire** Universal
 - 2. **Law** generic
 - 3. **Local Government** generic
 - 4. **Their city (or county) Public Works** template
- D. Radio Aliases and swapping portable radios

IV. Portable Training

- A. Power On
- B. Power Off (single button for fire, two button off for law)
- C. Volume Up/Down
- D. Selecting talkgroups (zones/modes)
- E. Home Button
- F. Transmit/receive
- G. Turn Scan On/Off
- H. Viewing a Scan List
- I. Programming a Scan List (optional, may not want to impact what may be a mandatory scan list in their portables)
- J. Nuisance Delete (optional)
- K. Fire Scan Lists (Fire users only)
- L. Mute Keypad Tones (optional)
- M. Display Light On/OFF (optional)
- N. EMERGENCY button (for police and fire)
 - 1. Activations by field users
 - 2. Policy considerations
 - 3. Equipment considerations for dispatch (silence, acknowledge, knockdown)
 - 4. How field user resets portable to remove emergency
- O. Call Alert Page
- P. Out of Range
 - 1. It is possible to get an “OUT OF RANGE” indication on a portable or mobile radio, accompanied by a low, continuous tone when the user tries to transmit. Out of Range, while preventing communications, is not a system failure. It occurs for two reasons:
 - a) The radio is out of range of the repeater’s ability to transmit.
 - b) The talkgroup they have selected does not have access at the repeater site their radio is affiliated with. If this occurs, they can switch to a countywide talkgroup to contact someone anywhere on the system, or switch to a conventional channel for someone nearby.
- Q. Site Trunking
 - 1. This is where part of the MERA system goes down (either E Simulcast or W Simulcast). Units will be able to hear other units in the same Simulcast region but may not be able to hear units in another Simulcast region. This is a “Zone Controller” failure, not a tower failure. The transmitter site that a radio is affiliated with has lost the ability to communicate with the Zone controller. When in SiteTrunking, portable and mobile radios will display “SITE TRUNKING” and they will only be able to communicate with other radios affiliated with that site. They may not be able to communicate with their dispatcher or other units if they are long distances away.

- R. Failsoft
 - 1. The MERA system goes down! Units hit “Home” on their portables and mobiles and may find themselves sharing a radio frequency with units from other agencies. Dispatchers will have to use the control stations (also hitting “home”). When Failsoft occurs, portables and mobile radios display “Failsoft” and receive a beep every 10 seconds. Dispatchers may receive circled red Xs on their talkgroup resources. When the problem is corrected, or when radios are able to affiliate with a repeater that is working properly, the portable and mobile radios will automatically leave the Failsoft condition.
- S. Busy Indicators
 - 1. System/Talkgroup Busy – You will hear a bonk on your radio when you try to transmit. Wait for the call back tone which indicates the system is ready for you to transmit. Do not continue to push the PTT because you are just adding more channel requests into the system que, therefore busying the system even more.

V. Mobile Training

- A. Power On/Off
- B. DIM
- C. Volume Up/Down
- D. Selecting talkgroups (zones – down, modes - across)
- E. Home Button
- F. Transmit/receive
- G. Turn Scan On/Off
- H. Viewing a Scan List
- I. Programming a Scan List (optional, may not want to impact what may be a mandatory scan list in their mobiles)
- J. EMERGENCY button (for police and fire)
 - 2. Activations by field users
 - 3. Policy considerations
 - 4. Equipment considerations for dispatch (silence, acknowledge, knockdown)
 - 5. How field user resets portable to remove emergency
- K. Call Alert Page
- L. Out of Range – *see coverage of this under portable training*
- M. Error Code 01/99 – Caused by faulty cable of power source
- N. Site Trunking – *see coverage of this under portable training*
- O. Failsoft – *see coverage of this under portable training*

VI. Interoperability – Scenario-Based Training

- A. Comm Policy Chapter 7: Dispatch Centers
 - 1. Mandatory Monitored Talkgroups are:
 - a. Primary & Secondary of your agency (SMP, SMP3)
 - b. PD CLL, PD APB, BLUE CMD.
 - c. 911

- d. Area Command Talkgroup for your area (CA CMD)
- e. Blue 2
- 2. Radio Paging
- 3. Patching
- 4. Multi-select
- 6. Emergency Button Activations
- B. Comm Policy Chapter 10: Law Users (Law Users Only)
 - 1. Agency Dispatch Talkgroups
 - 2. Agency Tactical and Investigation Talkgroups
 - 3. Agency Administration Talkgroups
 - 4. Jail and Court Talkgroups
 - 5. Emergency Button Activations
 - 6. Encryption
 - 7. BLUE CMD – Law Enforcement Mutual Aid Coordination
 - 8. BLUE 6,7,8,9
 - 9. Jail Call (JL CLL)
 - 10. Law Conventional Channels (CAR 1, CAR 2)
 - 11. CLEMARS – UHF (CALAW4 Direct CALAW4 Repeater). CHP can use CALAW4 can then be patched into a MERA talkgroup.
 - 12. SRT Talkgroups (SRT)
 - 13. PD APB Talkgroup (PD APB)
 - 14. UCALL, UTACS (Conventional)
 - 15. Marin Command (Conventional)
 - 16. County Wide Mutual Aid - CWMA (Conventional)
 - 17. Golden Gate National Recreation Area Talkgroups (GGNRA)
 - 18. Sonoma County Sheriff's Channels (SCSO)
 - 19. Petaluma Police Department Channels (PET 1-3)
 - 20. Golden Gate Transit District Channels
 - 21. 700MHz Conventional Mutual Aid Channels
 - 22. Pursuits.
 - a. May choose to stay on your primary, or elect to switch to Blue 2.
 - b. If pursuit leaves Marin, it is a good idea to have one unit switch to CALAW4 to coordinate with out of county resources. If out of MERA coverage, can use other conventional channels (CAR1, CAR2, CALAW 4 direct) for units to keep in contact with each other.
 - c. If pursuit comes into Marin, does the agency have CALAW4? This can be patched to BLUE CMD (or BLUE 8, 9 or 10).
 - 23. Road Blocks (777). Will be broadcast on PD APB, BLUE CMD (and possibly BLUE 6, 7, 8, or 9). Field units may be requested to change talk groups.
 - 24. Mutual Aid Requests
 - 25. Other Law Agencies Talkgroups
 - 26. Other Agencies Talkgroups
 - 27. Monitoring Expectations

- C. EMS Users
 - 1. ALS Talkgroups
 - 2. BLS Talkgroups
 - 3. Dispatch Talkgroup
 - 4. All Hospital Talkgroup
 - 5. Tactical Talkgroup
 - 6. Emergency Button Activations
- D. Fire Users
 - 1. Talkgroup designators
 - 2. Fire Dispatch Talkgroups
 - 3. Agency Control Talkgroups
 - 4. Agency Tactical Talkgroups
 - 5. Regional Administration Talkgroup
 - 6. Emergency Button Activations
 - 7. Fire Conventional Channels (CNV 13 & 14)
 - 8. Fire Information Talkgroup (FD INFO)
 - 9. Golden Gate National Recreation Area Talkgroups (GGNRA)
 - 10. Other Agencies Talkgroups
 - 11. Monitoring Expectations
 - 12. VHF Overlay
- E. Public Service and Special Districts
 - 1. Agency Talkgroups
 - 2. Public Works Common (PW)
 - 3. Flagging Talkgroups (FLAG)
 - 4. Marin County Parks and Recreation Talkgroups (CPR RG)
 - 5. Humane Society (HUMANE)
 - 6. Marin County Transit District (MCTD)
 - 7. Marin Municipal Water District (MMWD)
 - 8. Marinwood Community Services District (MWCSO)
 - 9. Marin County Open Space District (OSD)
 - 10. Marin County Radio Shop (RADIO and SHOP)
 - 11. Emergency Button Activations (USAR and MMWD Only)
 - 12. Other Agency Talkgroups
 - 13. Monitoring Expectations
 - 14. VHF Overlay
- F. Search and Rescue (SAR) and Urban Search and Rescue (USAR)
 - 1. SAR Talkgroups (SAR 1-3)
 - 2. USAR 1 and 2 Talkgroups
 - 3. USAR Conventional Talkgroups (11-15)

VII. Wrap-Up

- A. Questions & Answers from any of the course instruction