



# DEPARTMENT OF PUBLIC WORKS

Quality, Excellence, Innovation

Raul M. Rojas  
DIRECTOR

**DATE:** March 9, 2016

**TO:** MERA Executive Board

**FROM:** Pat Echols, Operations Officer

**SUBJECT:** AGENDA ITEM C-2: UPDATE MUTAL AID AND COMMUNICATIONS PLAN

Administration  
PO Box 4186  
San Rafael, CA 94913-4186  
415 473 6528 T  
415 473 3799 F  
415 473 3232 TTY  
CRS Dial 711  
www.marincounty.org/pw

Recommended Action: Review, accept, and make available the updated plan.

Accounting

Background: On May 8, 2013, the Executive Board accepted an update to the Mutual Aid and Communications Plan. The purpose of the Plan is to:

Airport

- a) Describe the MERA Mutual Aid Radio Plan, agreed to by MERA and the Marin Police Chiefs, Marin Fire Chiefs, and Marin Public Works Directors Associations.
- b) Provide guidance to member agencies in the use of their assigned talkgroups.
- c) Provide direction for all members on the use of the Mutual Aid talkgroups and accessing other agency's talkgroups.
- d) Provide consistent procedures for system events, such as Emergency Button Activations and System Failures.

Building Maintenance

Capital Projects

Certified Unified Program  
Agency (CUPA)

Communications Maintenance

County Garage

Disability Access

Engineering & Survey

Flood Control &  
Water Resources

Land Development

Purchasing

Real Estate

Reprographic Services

Road Maintenance

Stormwater Program

Transportation &  
Traffic Operations

Waste Management

As stipulated in Chapter 1, the plan is to be periodically reviewed by the MERA Operational Issues Working Group. The Working Group reviewed the document in November 2015 and recommended at their December 2 meeting that the attached updated version be forwarded to the Executive Board for acceptance. Each agency is responsible for dissemination of the plan contents and training of their staff.

# **Marin Emergency Radio Authority**

## **Mutual Aid and Communications Plan**

**Updated December 2015**

## CHAPTER 1 – Introduction

### INTRODUCTION

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1) Purpose:

The purpose of this document is to:

- a) Describe the MERA Mutual Aid Radio Plan that was agreed to by MERA and the Marin Police Chiefs, Marin Fire Chiefs, and Marin Public Works Directors Associations.
- b) Provide guidance to member agencies in the use of their assigned talkgroups.
- c) Provide direction for all members on the use of the Mutual Aid Talkgroups and accessing other agency's talkgroups.
- d) Provide consistent procedures for system events, such as Emergency Button Activations and System Failures.

2) Periodic Review:

MERA recognizes the need for periodic review of this document. The MERA Operational & Issues Working Group will seek input and review the need for changes biannually or sooner if a major change is identified by any MERA member. Any recommended changes will be forwarded to the MERA Executive Board for review, acceptance, and made available to the Marin County Police Chiefs, Fire Chiefs, and Public Works Directors.

## CHAPTER 2 – Mutual Aid Radio Plan

### MUTUAL AID RADIO PLAN

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1) General:

Mutual Aid Talkgroups are a critical part of Marin County's radio system requirements. The Marin County Mutual Aid Radio Plan will utilize the MERA UHF-T band and other radios frequencies to provide mutual aid communications capabilities at the Local, County, and State levels. The following sections describe the various levels of mutual aid capabilities that will be incorporated in the Mutual Aid Radio Plan.

2) System Management:

- a) The Marin County Communications Center, operated by the Marin County Sheriff's Office, is the County's designated monitoring and control point for Law Enforcement Mutual Aid. The Marin County

Communications Center is also the control point for in-county Fire Mutual Aid. Fire Mutual Aid from outside Marin County is coordinated by the Marin County Fire Department.

b) The Marin County Communications Center and the Marin County Fire Dispatch Center have the capability of monitoring all County and State Fire Mutual Aid Talkgroups and Channels. The Marin County Communications Center, as well as the other Law Enforcement Dispatch Centers, have the capability of monitoring and patching various County and State Law Enforcement Mutual Aid Talkgroups and Channels.

3) Local Mutual Aid Talkgroups:

a) Local Mutual Aid Talkgroups are the County's lowest level of mutual aid capability. These talkgroups will normally be utilized by cities for coordination between different departments within that jurisdiction or area. This may include communications between the local law enforcement agencies, local fire agencies and local public service agencies. In the MERA system, this is accomplished with the local area COMMAND talkgroups.

b) In the MERA radio system, most radios include dispatch talkgroups for other agencies and in many cases include tactical talkgroups for local agencies. While communications between agencies and disciplines can take place on these agency talkgroups, it is anticipated that mutual aid communications between different agencies will be handled on COMMAND or County-level mutual aid talkgroups. The MERA Conventional Channels, such as the CAR1 and CAR2 channels for law enforcement, the FD CNV13 and FD CNV14 channels for Fire, and the FLAG1 and FLAG2 channels for Public Works can also be used for short-range communications.

4) County-Level Mutual Aid Talkgroups:

a) The next higher level of mutual aid communications is the County level. The purpose of the County-Level talkgroups is to provide mutual aid communications capabilities between the different jurisdictional entities that operate within the County. This includes communications between different law enforcement, fire, medical, and public service.

b) The primary method of mutual aid communications at the County-Level will be accomplished on the shared trunked MERA system. The Blue Command, Blue 6 - 9, FD TAC and EMS TAC (EMS10) talkgroups will provide most of the discipline specific, daily mutual aid capability. Large-Multi-agency or Multi-Discipline incidents may use the ICS talkgroups.

5) Statewide Mutual Aid Talkgroups:

a) The third level of mutual aid capability is through the use of the Statewide Mutual Aid Channels. These channels provide for mutual aid communications with properly equipped out-of-county units working in Marin County and for Marin County units working in other counties.

b) On most of the MERA radios, there are conventional channels available for all users. These include CWMA, MRN CMD, UCALL40, and UTAC41, UTAC42 and UTAC43. CWMA is a County multi-discipline mutual aid channel and MRN CMD is a simulcast conventional command mutual aid channel.

These are conventional, non-trunked channel that can be patched into MERA talkgroups, on a temporary basis, by MERA Dispatch Centers. For those agencies that have dual-band capability radios, additional 700 MHz interoperability channels are available. The calling channel is 7CALL50 with additional tactical repeaters located at various mountain top sites. Dispatch centers can activate the tactical repeaters when requested.

c) On the MERA radios, Law Enforcement channel CALAW4, UCALL40, UTAC41, UTAC42 and UTAC43 are available for use within and out of Marin County. In addition, the CALAW1 base sites have been established, at Forbes Hill and Big Rock, to allow out-of-county law enforcement units to contact Marin County Law Enforcement Dispatch Centers and field units. These are conventional non-trunked channels that can be patched into MERA talkgroups, on a temporary basis, by Law Enforcement Dispatch Centers.

d) While not on the MERA radios, Fire users have six statewide mutual aid channels available on VHF radios. These channels are VFIRE21 (Command only), VFIRE22, VFIRE23, VFIRE24, VFIRE25, VFIRE26, VCALL10, VTAC11, VTAC12, VTAC13, VTAC14 and CALCORD. These are conventional channels and cannot be patched into the MERA system. VFIRE21 is monitored by the Marin County Communications Center and by the Marin County Fire Department Dispatch Center and may be used by Fire users both in and outside of Marin County.

6) Priority Levels:

a) Marin County agencies requiring the use of mutual aid talkgroups/channels shall use the lowest level of mutual aid talkgroups that will provide the communications capabilities required for the incident. The talkgroup/channel usage priority arranged from lowest to highest is as follows:

Local Mutual Aid Talkgroups/channels  
County-Level Mutual Aid Channels  
Statewide Mutual Aid Channels

b) Permissible traffic on Local, County-Level, and Statewide Mutual Aid Talkgroups/channels shall conform to the priority levels 1-4 as defined below. These talkgroups/channels are to be used primarily for coordination of activities between different agencies in a mutual aid situation, coordination between different disciplines on a mutual response, or emergency activities of a single agency. When a higher priority use is required, all lower priority use must cease in any area where interference could occur.

Priority 1: Disaster and extreme emergency operations, for mutual aid and interagency communications.

Priority 2: Emergency or urgent operations involving imminent danger to the safety of life or property.

Priority 3: Special event control activities, generally of a preplanned nature, and generally involving joint participation of two or more agencies.

Priority 4: Drill, test, and exercises of a civil defense or disaster nature.

- 2) Use of Radio Codes: All communications on the County-Level and Statewide Mutual Aid Talkgroups shall be conducted in “clear text” using the English language. Encrypted communications are authorized on Blue 2, Blue 6, Blue 7, Blue 8, Blue 9, and ICS 10-15, CAR1, CAR2, mutual aid talkgroups.
- 3) Unit Identifiers: Units operating MERA radios on the Mutual Aid channels shall include their agency name in their unit identification (e.g., “Sonoma County, Novato Police Unit 13-L-1”).
- 4) Aircraft Operation: Use of the Mutual Aid talkgroups in aircraft is authorized providing that such operation is in accordance with all applicable FCC rules and regulations.

### CHAPTER 3 – System Description

#### SYSTEM DESCRIPTION

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1) Coverage Map:



2) Simulcast Regions:

a) The East Simulcast region (11 channels) is essentially the US 101 corridor. This Simulcast region includes the following sites:

Mt. Burdell	Transmit and Receive
Big Rock Ridge	Transmit and Receive
Civic Center	Receive Only
San Pedro	Transmit and Receive
Dollar Hill	Transmit and Receive
Forbes Hill	Transmit and Receive
Mill Valley	Transmit and Receive
Mt. Tamalpais	Receive Only
Mt. Tiburon	Transmit and Receive

b) The West Simulcast region (7 channels) covers most of the rural areas west of the US 101 corridor and includes the following sites:

Mt. Tamalpais	Transmit and Receive
Pt. Reyes Hill	Transmit and Receive
Mt. Barnabe	Transmit and Receive

3) IntelliRepeater Regions:

a) Sonoma Mountain (6 channels) covers southern Sonoma County and parts of Novato and Northern Marin County.

b) Bay Hill (Bodega Bay) (5 channels) covers areas in the northwest corner of Marin County.

c) Stewart Point (Bollinas) (5 channels) covers the Bollinas and Stinson Beach areas.

4) Site Affiliation:

The mobile and portable radios are constantly in contact with the mountaintop sites. The radios will "affiliate" with the site that provides the strongest signal and will stay affiliated with that site until the signal with the affiliated site becomes weak and the radio begins searching for a stronger signal.

5) New Users:

Any agency, jurisdiction or user group requesting MERA access, whether as a separate user or through an existing user, must request and obtain approval from the MERA Executive Board.

a) Any such request shall be forwarded to the MERA Operations Ad Hoc Committee for reviews, discussion and recommendation prior to MERA Executive Board action. This review will consider operational impacts and system loading impacts on the system.

b) The MERA Executive Board should consider and identify the fiscal, operational and system-loading impacts of the new users as well as identifying the new user's fiscal obligations to MERA. MERA shall require that the new users adhere to this policy and MERA training requirements as a condition of joining the system.

## CHAPTER 4 – Definitions and Terms

### DEFINITIONS AND TERMS

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1) Conventional:

Conventional, or non-trunked, operation means the radio transmits and receives on specific radio channels or repeater pairs as selected by the channel selector. The conventional modes are not controlled by the system computers and do not provide emergency, ID or selective calling features.

2) Failsoft:

A condition that occurs when the system your radio is affiliated with fails and cannot perform trunking. Communications will be limited to only other radios affiliated to that site. Since there are only a limited number of frequencies available in Failsoft, you may hear traffic from other agencies or departments. This is normal during Failsoft. When Failsoft occurs, your radio displays "Failsoft" and beeps every 10 seconds. The user needs to return to their home Talkgroup. When the problem is corrected, or when your radio is able to affiliate with a repeater that is working properly, your radio will automatically leave the Failsoft condition.

3) Intelli-Repeater:

A repeater located outside of a Simulcast Cell. IntelliRepeaters only make necessary transmissions when a radio is affiliated with that repeater on your talkgroup.

4) MERA:

Marin Emergency Radio Authority system comprised of and managed by city, county and special district agencies as a Joint Powers Authority.

5) Multi-select:

Allows a dispatcher to transmit simultaneously on multiple talkgroups and/or channels.

6) Patch:

Allows a dispatcher to combine trunked and/or non-trunked channels, such as CALAW4, into a trunked talkgroup for a particular operation and for a limited period of time, allowing users on both systems to talk to each other. An example would be patching CALAW4 into a law talkgroup to allow an out of county law enforcement unit to talk with MERA law enforcement agencies. Patch can also be used to allow users on multiple talkgroups to communicate as if on a single talkgroup.

7) Repeater:

Radio hardware, usually on a mountaintop or other high point, which receives a radio signal and re-transmits the signal. This extends the coverage area for field radios.



8) Simulcast Cell:

A set of transmitters that transmit a radio signal to cover a large area. In MERA, there are two Simulcast Cells, one east and one west. Within each cell are multiple transmitters and receivers. The radio system considers all of these sites within a Simulcast Cell as one site, either East Simulcast or West Simulcast.

9) Site Trunking:

A condition that may occur when the transmitter site that your radio is affiliated with has lost the ability to communicate with the Zone controller. When in Site Trunking, your radio will display "SITE TRUNKING" and will only be able to communicate with other radios affiliated with that zone. You may not be able to communicate with your dispatcher or other units if they are in other zones.

10) Talkgroup:

A logical group of radio users who need to communicate. Commonly associated with the terms channel or mode.

11) Trunking

The method of using relatively few frequencies to accommodate many users. MERA is a trunked radio system. When you press the PTT (Push-To-Talk) button, your radio tells the Zone Controller you need a frequency. The controller assigns everyone on your Talkgroup a frequency so they can hear your transmission. Upon completion of your transmission, the controller releases the frequency.

12) Zone Controller:

Computer that coordinates the assignment of frequencies to radios on a Talkgroup.

## CHAPTER 5 – System Failures

### SYSTEM FAILURES

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1) Out of Range:

It is possible to get an "OUT OF RANGE" indication on your radio, accompanied by a low, continuous tone when you try to transmit. This occurs for two reasons:

- a) Your radio is out of range of the repeater's ability to transmit.
- b) Out of Range, while preventing communications, is not a system failure.

2) Site Trunking:

The repeater sites are all connected by a system of microwave links. If a malfunction occurs, a repeater may not be able to speak to the system controller over the microwave links. The repeater will then go into "SITE TRUNKING", and will continue to operate in a reduced capacity. The repeater will still trunk calls, but will not send your transmissions to other zones. You will notice your radio display alternating between the talkgroup you are on, and "SITE TRUNKING". Once the problem has been corrected, your radio will return to normal operation.

3) FailSoft:

Even a perfectly working system could malfunction, whether due to natural disaster, equipment failure, or other unforeseen circumstance. MERA is designed to minimize equipment failures or other problems by having back-up equipment. However, in rare cases, a repeater may not be able to transmit a “control channel”, the channel used by the system to manage the radios. If this occurs, the repeater will change to “FAILSOFT” operation. FAILSOFT allows you to continue to communicate with others in your area. During FAILSOFT, your radio display will alternate between the name of the talkgroup you are selected on and “FAILSOFT” and you will hear a single high-pitched beep every 10 seconds. Your radio will attempt to locate another repeater’s control channel. If it is unsuccessful, your radio automatically changes to a pre-assigned conventional frequency. You should change talkgroups to your home talkgroup (primary talkgroup, such as a primary dispatch talkgroup) Other agencies’ radios may switch to the same frequency, so you may hear their radio traffic while in FAILSOFT. Once your radio locates a control channel, it will return to normal operation.

4) Talkgroup Busy:

This system is designed to allow only one user at a time on any single talkgroup. If one user is transmitting on a specific talkgroup, any additional user attempting to transmit, on that same talkgroup, will hear a ‘honk’, indicating that they are not transmitting. The user should release the PTT button and wait until the first user has completed their transmission before attempting to transmit again.

5) System Busy:

This system is designed with a variety of talkgroups sharing a finite number of radio frequencies. Once all available radio frequencies are in use on various talkgroups, a user attempting to use an additional talkgroup will hear a ‘honk’, indicating that they are not transmitting. The user should release the PTT button. The user is placed in a queue and will hear a three beep talk permit tone when radio frequencies are available. This delay in accessing an available radio frequency normally lasts no more than 2 to 3 seconds in our experiences to date. Repeatedly pushing the PTT button delays access to the system in this situation.

6) Failure Training:

MERA and the Marin County Communications Division will be coordinating periodic planned failures to provide users with actual experience in responding to FailSoft, Site Trunking and System Busies in a controlled manner.

CHAPTER 6 – All Users

ALL USERS

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1) Talkgroup Templates:

Field Units should refer to their Agency Template for the location of specific talkgroups on their consolettes, back-up control stations, mobile and portable radios.

2) Call Talkgroups (FD CLL, PD CLL, LG CLL, JL CLL):

Used briefly to contact a radio user from a particular discipline. Once contact is made, both radio users should move to another talkgroup, such as a Talk talkgroup for conversations. Jail Call (JL CLL) is specifically designed to contact Marin County Jail Dispatch, such as by Law Users bringing prisoners into the facility.

3) Talk Talkgroups (FD TLK, LG TLK):

Used to carry out conversations after contact on a call talkgroup. PD TLK is no longer in use.

4) Command Talkgroups (NV CMD, SR CMD, CA CMD, SA CMD, WS CMD MRN CMD):

Used to coordinate multi-agency and multi-discipline response to incidents within a given geographic area. On-duty law enforcement and fire field supervisors and dispatch centers are expected to monitor their area COMMAND talkgroup at all times

a) Marin County is divided into five COMMAND regions as follows:

Novato (NV CMD): City of Novato and surrounding unincorporated areas.

San Rafael (SR CMD): City of San Rafael and surrounding unincorporated areas.

Central Area (CA CMD): Cities and Towns of Fairfax, San Anselmo, Ross, Corte Madera and Larkspur, and surrounding unincorporated areas.

Southern Area (SA CMD): Cities and Towns of Mill Valley, Tiburon, Belvedere, Sausalito, and surrounding unincorporated areas.

West (WS CMD): Unincorporated areas between the incorporated areas and the coast.

Marin Command (MRN CMD): An additional conventional Command Radio Resource not assigned to a specific geographical area.

5) 911 Talkgroup (911) and FD Emergency (FD EMR):

Emergency talkgroups available to all MERA field radios by discipline and monitored by all Dispatch Centers. This talkgroup is the 16th talkgroup in each radio zone in the system. It is primarily for the use of non-public safety radios to request public safety assistance in emergencies. Fire radios have 911 placed elsewhere in their templates.

6) ICS Talkgroups (IC CLL, ICS 3 through ICS 15):

Mutual Aid talkgroups available to all MERA radios. These talkgroups are in Zone C, Modes 2-15 in all MERA radios. IC CLL (Mode 2) is used to request ICS talkgroups from the Marin County Communications Center. The remaining ICS talkgroups can be used in a single discipline or multi-discipline incident and can be used as command or tactical talkgroups. Individual ICS talkgroups can be assigned to a single discipline or to multiple disciplines in a task force assignment. ICS 10-15 are encryption capable.

7) EOC Talkgroup (EOC):

Talkgroup for the local government Emergency Operating Centers and the Marin County Emergency Operations Center to communicate. While this talkgroup appears in many radios, to allow scanning, it is not designed for use by field units.

8) OES Talkgroup (OES):

Talkgroup designed for Marin County Office of Emergency Services operational and training needs.

9) County-Wide Mutual Aid CWMA:

Conventional Multi-Discipline Mutual Aid Channel. This Channel can be used by outside agencies to communicate with MERA agencies. This channel is not part of the MERA trunked system. While on this channel, users will not be able to use the emergency button, radio paging, or scan trunked talkgroups.

10) Marin Command MRN CMD:

Conventional Multi-Discipline Mutual Aid Command Channel. This channel can be used by Marin agencies as a conventional command channel. This channel is simulcast at Big Rock, Mt. Burdell, Dollar Hill and San Pedro. This channel is not part of the MERA trunked system. While on this channel, users will not be able to use the emergency button, radio paging, or scan trunked talkgroups.

11) Scan Lists:

All field units should routinely scan their primary talkgroups. For field units working in a particular Command Area, the area COMMAND Talkgroup should also be scanned. Additional, discipline specific expectations are listed below in Chapter 9, Section 9, Chapter 10, Section 21; and Chapter 11, Section 12.

## CHAPTER 7 – Dispatch Centers

### DISPATCH CENTERS

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1) Monitored Talkgroups:

a) All Dispatch Centers are expected to monitor the 911 talkgroup at all times.

b) Fire Dispatch Centers are also expected to monitor FD CLL, FD INFO, and FD EMR talkgroups at all times.

c) Law Dispatch Centers are also expected to monitor PD CLL, PD APB, and BLUE CMD talkgroups at all times

d) Dispatch Centers that also dispatch public service agencies are expected to monitor LG CLL talkgroup at all times.

e) Dispatch Centers are expected to monitor their Regional Command talkgroups at all times. (NV CMD – Sheriff and Novato PD, SR CMD – San Rafael PD and San Rafael Fire Dispatch, CA CMD – Fairfax, San Anselmo and Twin Cities PD, SA CMD – Sheriff's Dispatch, WS CMD – Sheriff's and County Fire) MRN CMD, UCALL40, 7CALL50 and 8CALL90.

f) The Marin County Communications Center will monitor IC CLL at all times.

2) Call Alert:

Radios may be paged by dispatch centers. Field Users receiving radio pages shall contact their agency dispatcher on their primary dispatch talkgroup.

3) Patching:

Dispatchers may patch more than one talkgroup together from a dispatch console. Once patched, all users on the patched talkgroups can communicate with each other as if they are on the same talkgroup. Certain non-system channels, such as CALAW4, can also be patched with a MERA talkgroup to allow non-system users to communicate directly with system users. An example would be an out of county Law Enforcement unit in pursuit into Marin County. Patching will allow that field unit to talk with Marin County Law Enforcement units. Patching is intended as a short-term technique to enhance communications during an incident.

4) Multi-select:

Dispatchers may Multi-select two or more talkgroups. Multi-select allows the dispatcher to talk to multiple talkgroups simultaneously. Field Users on different multi-selected talkgroups will all hear the dispatcher, but will not hear users on other multi-selected talkgroups. This technique is intended as a short-term technique to allow a dispatcher to provide information to multiple talkgroups during an incident.

5) Emergency Button Activations:

a) Law Enforcement Users: Upon receiving a Law Enforcement Emergency Button Activation, the dispatch center assigned to that unit's agency shall silence the audible alarm and attempt to contact the field unit on the agency's secondary dispatch talkgroup once. If the dispatcher can not confirm that the activation was accidental, at least one law enforcement cover unit shall be dispatched immediately and the agency's on-duty supervisor advised. If the field unit's location is not known, the dispatcher will page the radio and start the cover unit to the field unit's last known location. The agency's on-duty supervisor shall also be advised.

b) Fire and EMS Users: Upon receiving a Fire Emergency Button Activation, the dispatch center assigned to that incident shall silence the audible alarm and attempt to contact the field unit once on the FD EMR talkgroup. If the dispatcher can not confirm that the activation was accidental, the dispatcher shall:

(1) Notify the on-scene supervisor (such as the Battalion Chief or Engine Captain), or

(2) If the dispatcher is unable to contact any on-scene unit, the dispatcher will send at least one law enforcement unit to investigate and notify an on-duty fire supervisor from the involved agency.

c) Emergency activation routing: When a field unit activates their emergency button, it automatically changes that user to a predetermined talkgroup where they will have immediate contact with their dispatcher.

- (1) Police radios are configured to move the Emergency activated radio to respective agency secondary dispatch channel, i.e., SO 3, NP 3, etc.
- (2) Fire radios are configured to move the Emergency activated radio to the Fire Department Emergency Talkgroup (FD EMR).
- (3) The Emergency button is not programmed to operate on other MERA radios because the police and fire dispatchers are not always aware of the status and location of those users (i.e., public works, Whistlestop, parks, etc.)
- d) Emergency activation reset instructions: After verifying the status of an emergency activation, the system must be reset to clear the talk group and the radio.
  - (1) Dispatch center instructions:
    - a. The dispatcher responsible for the unit or agency will receive the emergency activation. They are the one to “acknowledge” the emergency button activation. All others dispatchers are only to end the emergency tones by silencing the activation by clicking the “end emergency tone” icon from the title bar on the Gold Elite or MCC-7500 radio consoles.
    - b. The dispatcher in control of the talk group where the emergency button has been triggered responds to the emergency by pressing the down arrow button the radio resource. That automatically opens up the “emergency” window on the radio resource.
    - c. The dispatcher selects the entry in the emergency QuickList, and then acknowledges by pressing the “Acknowledge” window (it is the Red Cross the with hand pointing). At that point the dispatcher responsible for that unit should try to raise the unit by transmitting on that talk group resource to verify his/her status.
    - d. Once status has been verified, the dispatcher needs to knockdown the emergency by pressing the window “knockdown” window (it is the hand in a red stop sign w/a red cross).
    - e. Lastly the dispatcher will need to press “close” to end the emergency.
  - (2) Field user instructions:
    - a. Once the emergency button activation occurs the radio will be “locked” on the talk group programmed to receive emergencies. After the dispatcher and field unit have acknowledged and handled the emergency activation, the field unit must press and hold the emergency button until they hear a continuous exit tone (approximately 3-5 seconds).
    - b. Simply turning off the radio and turning it back on does not clear the emergency.
    - c. The field user will need to re-select their original talkgroup following emergency button reset.

## CHAPTER 8 – EMS Users

### EMS USERS

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- 1) Consult Talkgroups (NCH 1, KSR 1, and MGH 1):  
Talkgroups designed hospital communications for M.D. consults.
- 2) Report Talkgroups (NCH 2, KSR 2, and MGH 2):

Talkgroups designed for EMS to Hospital communications, such as ALS and BLS ambulances and Law Enforcement.

3) Dispatch Talkgroup (EMS):

Talkgroup for dispatching of private ambulance companies.

4) All Hospital Talkgroup (HOSP):

Talkgroup for Dispatch to Hospital or Hospital to Hospital communications, such as during a Multi-Casualty Incident.

5) Tactical Talkgroup (EMS 10):

Talkgroup for incident medical traffic between field medical units.

## CHAPTER 9 – Fire Users

### FIRE USERS

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1) Talkgroup designators:

Where possible, fire agencies will identify the Talkgroup resource address as part of the resource identification, i.e., the central area primary control channel is Control F2 (displayed as CTL F2), and the southern area fire command channel is Command G5 (displayed as CMD G5).

2) Fire Dispatch Talkgroup:

The mode “1” position in the fire service Talkgroup template is used for dispatching fire and EMS units only. All response and incident control radio communications is conducted on other channels as described below. (Note Marin County FD performs dispatching on their regional zone, mode “2”.)

3) Agency Control Channels:

Talkgroups designated for fire and fire/EMS units to coordinate incident response and status changes. Marin Comm will designate the Control channel assignment during the dispatch. Units will respond on that Control channel and report subsequent response affecting status changes on that channel unless directed by Marin Comm to do otherwise. (Note: Marin County FD will dispatch their units on their mode 2 channel (CTL H2).

4) Agency Tactical Talkgroups:

Talkgroups designated to hold conversations or conduct tactical operations by the designated agency. As with the Control channels, the Tactical channels are identified by their template location (TAC D4, TAC H6, etc.)

5) Regional Administration Talkgroup:

Each of the command regions has a shared administrative channel are designated for designated for non-emergency conversations and administrative radio traffic, i.e., “NF AD”, “SRF AD”, etc... May also be used for Fire Marshal and prevention activities and investigations. These talkgroups are not routinely

recorded and they cannot be accessed by non-fire agencies. Keep in mind that a commercially available scanner can detect any unencrypted radio communications on the MERA system.

6) Emergency Button Activations:

Emergency Button Activations are authorized when a Fire Field Unit needs urgent or emergency assistance and cannot make contact with dispatch over a normal control or tactical channel. It is not to be used for routine assistance requests. Field Units should expect an emergency response from other public safety units following an Emergency Button Activation.

a) Once the Emergency Button is activated, the radio system will automatically move the field unit to the FD EMR talkgroup and send a signal to all fire dispatch centers. At that time, all users on or scanning the FD EMR talkgroup will receive an indication of an emergency activation. The use of the Emergency Button also gives the talkgroup the highest priority on the radio system, should there be no available radio channels at the time of activation. It also maintains that talkgroup as an active talkgroup for the duration of the emergency, rather than releasing the frequencies for other users.

b) If the activation is a valid emergency, the field unit will, if possible, immediately advise their dispatch center of the location and nature of the emergency, as well as the assistance required. If the field unit is unable to advise their dispatch center, the dispatch center will attempt to contact the field unit once. If they receive no response, the Incident Commander will be advised. If the dispatch center is unable to contact any unit at the scene, at least one law enforcement unit will be dispatched and a supervisor for the fire agency will be advised.

c) If the activation is accidental, the field unit will immediately advise their dispatch center that the activation is accidental. The field unit will then clear the activation.

d) Once the emergency has ended, the field unit will advise their dispatch center that the emergency has ended. The field unit will then clear the activation.

e) The radios can not be turned off during an Emergency Activation and the activation must be cleared before turning off the radio. (See chapter 7, section 5 for more details.)

f) Field units must clear Emergency Activations before changing talkgroups. After resetting the emergency button, the field user will need to re-select their original talkgroup.

g) See Chapter 7, Section 5 for Dispatch responsibilities during Emergency Button Activations.

7) Fire Conventional Talkgroup (CNV 13 and CNV 14):

Conventional (non-trunked) channels designated for short-range fire department communications in Marin County. Normally used for extended traffic control, rescue operations, or in areas of poor MERA coverage. These channels are not part of the MERA trunked system. While on these channels, users will not be able to use the emergency button, radio paging, scan trunked talkgroups, or communicate with dispatchers.

8) Fire Information Talkgroup (FD INFO):



Talkgroup designated for broadcasting Fire Department informational broadcasts. This is a forced wide area talkgroup that can be received throughout the system, regardless of affiliated radios. Fire INFO broadcasts may be initiated by any of the fire dispatch centers in the MERA system.

9) Golden Gate National Recreation Area (GGNRA):

Talkgroups designed for interoperability with the Golden Gate National Recreation Area. Encryption is allowed on these talkgroups.

10) Other Agencies Talkgroups:

Field Units and Dispatch Centers should not transmit on other agencies' assigned talkgroups without prior request by or agreement with the assigned agency.

11) Monitoring Expectations:

Fire Dispatch and field units should be monitoring their primary dispatch talkgroup, FD CLL, FD INFO, and their area command talkgroups at all times, with the exception or emergency or tactical operations.

## CHAPTER 10 – Law Enforcement Users

### LAW ENFORCEMENT USERS

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1) Agency Specific Talkgroups:

Each agency (or group, such as Southern Marin Police) has three talkgroups assigned. The first talkgroup, in mode 1, is designed for primary day to day operations (SO, SRP, NPD, etc.). The remaining local agency talkgroups are in mode 3 and mode 4 (NP3, FPD4, SMP3, etc.) can be used as needed by local agencies as records, tactical or administrative talkgroups.

2) Jail and Court Talkgroups:

Talkgroups designated for routine and emergency traffic by Sheriff's Jail and Court personnel.

3) Emergency Button Activations:

a) Emergency Button Activations are authorized when a Law Enforcement Field Unit needs urgent or emergency assistance. It is not to be used for routine cover requests. Field units should expect Code 3 assistance following an Emergency Button Activation.

b) Once the Emergency Button is activated, the radio system will automatically move the field unit to their agency's secondary dispatch talkgroup and send a signal to the agency's dispatch center. At that time, all users on or scanning the secondary dispatch talkgroup will receive an indication of an emergency activation. The use of the Emergency Button also gives the talkgroup the highest priority on the radio system, should there be no available radio channels at the time of activation. It also maintains that talkgroup as an active talkgroup for the duration of the emergency, rather than releasing the frequencies for other users. (Note – Radios assigned to the MCSO Courts will revert to the SO3 talkgroup and radios assigned to the Jail will revert to the SO3 talkgroup during an emergency button activation.)

- c) Field Units using Encryption at the time of the activation will not continue to transmit in encryption on their secondary dispatch talkgroup.
- d) If the activation is a valid emergency, the field unit will, if possible, immediately advise their dispatch center of the location and nature of the emergency, as well as the assistance required. If the field unit is unable to advise their dispatch center, the dispatch center will then attempt to raise the field unit once. If there is still no response, the dispatch center will send at least one law enforcement unit to the field unit's last known location and will notify a supervisor from the field unit's agency.
- e) If the activation is accidental, the field unit will immediately advise their dispatch center that the activation is accidental. The field unit will then clear the activation.
- f) Once the emergency has ended, the field unit will advise their dispatch center that the emergency has ended. The field unit will then clear the activation.
- g) The radios cannot be turned off during an Emergency Activation and the activation must be cleared before turning off the radio.
- h) Field units must clear Emergency Button Activations before changing talkgroups. After resetting the emergency button, the field user will need to re-select their original talkgroup.
- i) See Chapter 7, Section 5 for Dispatch responsibilities during Emergency Button Activations.

4) Encryption:

Certain field units have been equipped with DES-OFB encryption. These are primarily Law Enforcement radios used for sensitive investigations and tactical operations.

d) Encryption will only function on the following talkgroups and channels (additional talkgroups and channels may be added in the future):

- (1) Agency Talkgroups (Mode 3 and Mode 4 only, such as NP3, SRP4, etc.)
- (2) Incident Command: ICS 10-15 only.
- (3) Law Tacticals: BLUE 2, BLUE 6, BLUE 7, BLUE 8, BLUE 9
- (4) Special Response Teams: SRT 1, SRT 2, SRT 3, and SRT 4.
- (5) Law Conventional: CAR 1, CAR 2.
- (6) GGNRA 1-3

e) Unless the encryption key is changed for a particular operation, all encrypted radios will be set to the same encryption key to facilitate mutual aid. After the conclusion of such an operation, the encryption key will be changed back to the original key.

- f) The encryption key should be changed periodically. It is recommended that it be changed no less than once per year for all encryption users.
- g) When Encrypted and Non-encrypted field units are on the same talkgroup, the encrypted units will hear all radio traffic. The Non-encrypted units will only hear non-encrypted radio traffic.
- 5) **BLU CMD:**  
Law Enforcement Mutual Aid Coordination: Talkgroup designated for emergency mutual aid requests, such as pursuit coordination and 11-99's.
- 6) **BLUE 2 AND BLUE 6-9:**  
Talkgroups designated for multi-agency law enforcement use such as joint investigations or operations or for multiple mutual aid events. These talkgroups may also be used as tactical channels for law enforcement units assigned to major events.
- 7) **Jail Call (JL CLL):**  
Talkgroup designated for law enforcement units to contact jail dispatch. Normally used when bring in-custody prisoners to the Adult Jail. MCSO Jail Dispatch will monitor this talkgroup at all times.
- 8) **Law Conventional Channels (CAR 1, CAR 2):**  
Conventional (non-trunked) channels designated for short-range law enforcement communications in Marin County. Normally used for extended traffic control or tactical operations. These channels are not part of the MERA trunked system. While on these channels, users will not be able to use the emergency button, radio paging, scan trunked talkgroups, or communicate with dispatchers.
- 9) **CALAW4):**  
Conventional Statewide Law Enforcement Mutual Aid Channel. This Channel can be used by outside agencies to communicate with MERA Law Enforcement agencies and by Marin Law Enforcement agencies when operating out of county. This channel may not be monitored in all other counties. CALAW4 is a repeater mode and is designed to communicate with repeaters. CALAW4 on direct is a direct, car-to-car configuration. These channels are not part of the MERA trunked system. While on these channels, users will not be able to use the emergency button, radio paging, scan trunked talkgroups, or communicate with dispatchers.
- 10) **SRT Talkgroups (SRT 1, SRT 2, SRT 3, and SRT 4):**  
Talkgroups designated for use by SRT teams for either training or operational needs. Non-SRT personnel are not to transmit on these talkgroups without SRT approval. These talkgroups only appear in radios of those agencies having SRT teams.
- 11) **PD APB Talkgroup:**  
Talkgroup designated for broadcasting Law Enforcement All Points Bulletins. This is a forced wide area talkgroup that can be received throughout the system, regardless of affiliated radios. APB's will be initiated from the Marin County Sheriff's Communications Center.
- 12) **Golden Gate National Recreation Area (GGNRA):**

Talkgroups designed for interoperability with the Golden Gate National Recreation Area. Encryption is allowed.

13) Sonoma County Sheriff's Channels (SCSO 1-5):

Sonoma County Sheriff's Channels designed for mutual aid use with Sonoma Sheriff's units in Marin and for Marin units in Sonoma County. These channels are to be used at the request of or with the permission of the Sonoma County SO. Normally this will occur when Sonoma County SO contacts a Marin Dispatch Center requesting assistance and identifies a SCSO channel for responding units, or by a Marin Dispatch Center contacting Sonoma County SO and requesting a SCSO channel for Marin units operating in Sonoma County, such as in a pursuit. These channels may also be used when working with the Sonoma County SO helicopter, if authorized by Sonoma County SO. While on these channels, users will not be able to use the emergency button, radio paging, scan trunked talkgroups, or communicate with Marin Dispatch Centers. These radio channels appear in all law portable radios and some mobile radios.

14) Petaluma Police Department Channels (PET 1-3):

Petaluma Police Department Channels designed for mutual aid use with Petaluma Police units in Marin and for Marin units in Petaluma. These channels are to be used at the request of or with the permission of the Petaluma Police. Normally this will occur when Petaluma Police contact a Marin Dispatch Center requesting assistance and identifies a PET channel for responding units, or by a Marin Dispatch Center contacting Petaluma Police and requesting a PET channel for Marin units operating in Petaluma, such as in a pursuit. While on these channels, users will not be able to use the emergency button, radio paging, scan trunked talkgroups, or communicate with Marin Dispatch Centers. These radio channels appear in all law portable radios and some mobile radios.

15) Golden Gate Transit District (GG OPS, GG SPV, and GG FRY):

Golden Gate Transit District Channels designed for mutual aid use with Golden Gate Transit District. These channels are to be used at the request of or with the permission of the Golden Gate Transit District. Normally this will occur when Golden Gate Transit District contacts a Marin Dispatch Center requesting assistance and identifies a GG channel for responding units, or by a Marin Dispatch Center contacting the Golden Gate Transit District and requesting a GG channel for Marin units operating with the Golden Gate Transit District. While on these channels, users will not be able to use the emergency button, radio paging, scan trunked talkgroups, or communicate with Marin Dispatch Centers. These radio channels appear in all law portable radios and some mobile radios.

h) Golden Gate Bridge Operations (GG OPS) – Conventional Channel used at the Golden Gate Bridge to coordinate security and tow operations. The Transit District refers to this as “CTL D.”

i) Golden Gate Bus Supervisors (GG SPV) – Conventional Channel used to communicate with Bus Supervisors.

j) Golden Gate Ferry Operations (GG FRY) – Conventional Channel used to communicate with the ferries.

16) Pursuits:

k) Within a Single Jurisdiction – Pursuit can be dispatched on any agency dispatch or tactical talkgroup. If assistance from other agencies is requested, the assisting agencies can be assigned to the originating agency's talkgroups or the pursuit can be moved to BLUE 2, BLUE 6-9. An additional option

is to patch the originating agency's talkgroup to one of the county-wide law enforcement mutual aid talkgroups, preventing the pursuing units from having to change talkgroups during the pursuit.

l) Multiple Marin Jurisdictions – Pursuit should be moved to BLUE 2 OR BLUE 6-9 or patched to the assigned mutual aid talkgroup as the pursuit leaves the originating jurisdiction. BLUE CMD should remain a resource /request talkgroup.

m) Pursuit leaving Marin – Pursuit can remain on the assigned BLUE talkgroup but thought should be given to at least one field unit switching to the CA LAW 4 channel to coordinate with out of county resources. If the pursuit leaves the MERA coverage area, car to car communications can be maintained on CAR 1, CAR 2, CALAW4, UTAC41, UTAC42 or UTAC43 channels.

n) Pursuit entering Marin – If the pursuing agency has CALAW4 capability, the Marin Dispatch Center dispatching the pursuit will patch the CALAW4 channel to the assigned BLUE talkgroup to allow Marin Law Enforcement to communicate with the out of county units.

17) Road Blocks (777):

Countywide Roadblocks will be initiated and supervised by Marin Comm. The original Code 777 request and suspect information will be transmitted on PD APB, BLUE CMD and either BLUE 2 or BLUE 6-9 using multi-select. The broadcast will include the designation of a law enforcement tactical talkgroup for the Code 777 (BLUE 2, BLUE 6-9). Field units involved in the Code 777 will advise their dispatch center when they arrive at their designated location and then switch to the designated county-wide law enforcement tactical talkgroup for the duration of the Code 777. Any updates, including description updates, will be broadcast on PD APB and the designated tactical talkgroup using multi-select.

18) Mutual Aid Requests:

o) Emergency and urgent requests for law enforcement mutual aid will be relayed to Marin Comm on the BLUE CMD talkgroup. The agency requesting mutual aid will designate the talkgroup(s) to be used by responding units. Depending on the scope and complexity of the incident, the mutual aid units can be assigned to the originating agency's talkgroups, a countywide law enforcement tactical talkgroup (BLUE CMD, BLUE 2 or BLUE 6-9 or an ICS talkgroup (ICS 3-15).

p) Routine requests for mutual aid cover can be made by phone or on BLUE CMD. The requesting agency will identify the talkgroup to be used by responding units. The unit(s) assigned to respond will switch to that talkgroup and be dispatched by the originating agency for the duration of the mutual aid assignment.

19) Other Law Agencies Talkgroups:

Field Units and Dispatch Centers should not transmit on other agencies' assigned talkgroups without prior contact with the agency, except as described in Chapter 10, Sections 15, 16, and 18, above.

20) Other Agencies Talkgroups:

Field Units and Dispatch Centers should not transmit on other agencies' assigned talkgroups without prior arrangement or agreement.

21) Monitoring Expectations:

Law Enforcement Dispatch and field units should be monitoring their primary dispatch talkgroup, PD CLL, PD APB, BLUE CMD, and their area command talkgroups at all times, with the exception or emergency or tactical operations...

CHAPTER 11 – Public Service and Special Districts

PUBLIC SERVICE AND SPECIAL DISTRICTS

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1) Agency Talkgroups:

Talkgroups designated for the routine dispatching and field traffic for the designated agency.

2) Public Works Common Talkgroups (PW T8-11):

Talkgroups designated for mutual aid and cross-agency communications between the county and local public works agencies. These talkgroups may also be used by a single agency, on a short-term basis, if they need more than their assigned talkgroups for a particular incident or event.

3) Flagging Talkgroups (FLAG 1-4):

Channels to be used by Public Service agencies for flagging operations. One example of this would be directing traffic around a construction area. FLAG 1 and FLAG 2 are conventional channels. FLAG 3 and FLAG 4 are trunked talkgroups. While using FLAG 1 and FLAG 2, users will not be able to use the emergency button, radio paging, scan trunked talkgroups, or communicate with dispatchers.

4) Marin County Parks and Recreation (CPR RG):

Talkgroup designated for the dispatching and field traffic of the Marin County Parks and Recreation Rangers.

5) Humane Society (HUMANE):

Talkgroup designated for the dispatching and field traffic of animal control units.

6) Marin County Transit District (MCTD):

Talkgroup designated for the dispatching and field traffic of Marin County Transit District resources.

7) Marin Municipal Water District (MMWD and MMW T1):

Talkgroups designated for the dispatching and field traffic of Marin Municipal Water District resources.

8) Marinwood Community Services District (MWCSD):

Talkgroup designated for the dispatching and field traffic of Marinwood Community Services District resources.

9) Open Space District (OSD):

Talkgroups designated for the dispatching and field traffic of Open Space District resources.

10) Marin County Communications Division (RADIO):

Talkgroup designed for contacting the Marin County Radio Shop.

11) Emergency Button Activations:

a) Emergency Button Activations are authorized when an emergency button equipped MMWD or Public Works USAR member Unit needs urgent or emergency assistance. It is not to be used for routine assistance requests. Field Units should expect an emergency response from other public safety units following an Emergency Button Activation.

b) Once the Emergency Button is activated, the radio system will automatically move the USAR unit to the FD EMR talkgroup and send a signal to all fire dispatch centers. MMWD users are also moved to the FD EMR talkgroup and a signal is center to Marin County Fire Dispatch at Woodacre. At that time, all users on or scanning the FD EMR talkgroup will receive an indication of an emergency activation. The use of the Emergency Button also gives the talkgroup the highest priority on the radio system, should there be no available radio channels at the time of activation. It also maintains that talkgroup as an active talkgroup for the duration of the emergency, rather than releasing the frequencies for other users.

c) If the activation is a valid emergency, the field unit will, if possible, immediately advise the dispatch center of the location and nature of the emergency, as well as the assistance required. If the field unit is unable to advise their dispatch center, the dispatch center will attempt to contact the field unit once. If they receive no response, the Incident Commander will be advised. If the dispatch center is unable to contact any unit at the scene, at least one law enforcement unit will be dispatched and a supervisor for the fire agency will be advised.

d) If the activation is accidental, the field unit will immediately advise their dispatch center that the activation is accidental. The field unit will then clear the activation.

e) Once the emergency has ended, the field unit will advise their dispatch center that the emergency has ended. The field unit will then clear the activation.

f) The radios cannot be turned off during an Emergency Activation and the activation must be cleared before turning off the radio. (See chapter 7, section 5 for more details.)

g) Field units must clear Emergency Activations before changing talkgroups. After resetting the emergency button, the field user will need to re-select their original talkgroup.

h) See Chapter 7, Section 5 for Dispatch responsibilities during Emergency Button Activations.

12) Other Agencies Talkgroups:

Field Units and Base Stations should not transmit on other agencies' assigned talkgroups without prior arrangement or agreement.

13) Monitoring Expectations:

Public Works Supervisors and Base Stations should monitor LG CLL and their local area command talkgroups when in service.

## CHAPTER 12 – SAR and USAR

Search and Rescue (SAR) and Urban Search and Rescue (USAR)

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- 1) SAR Talkgroups (SAR 1-3):  
Talkgroups designated for training and operational needs of MCSO SAR.
  
- 2) USAR 2 - 5 Talkgroups:  
Talkgroups designated for the training and operational needs of USAR.