

San Mateo County Fire Service POLICIES AND STANDARDS MANUAL

Title: Frequency Assignment & Usage

Policy No. 1998-05

02/15/2013

Purpose: The purpose of this policy is to establish a standard procedure for the use of radio frequencies. This standard radio procedure will be used in the four geographical radio zones that currently exist: South, Central, North, and Central Coast.

Policy: It is the policy of the San Mateo County Fire Chiefs that all fire companies follow the procedures for radio frequency usage outlined in this policy.

Background: The close working relationships of the various San Mateo County Fire Agencies requires that the agencies communicate effectively with one another to enhance the safety of personnel and increase operational efficiency.

Procedures:

San Mateo County has numerous channels available for both operations and tactical assignments. These channels, including their definitions, use, and zones are defined below.

Display	Call Sign	Zone / Purpose	Type	Mobile Rx	Rx Tone	Mobile Tx	Tx Tone
CON 1A	Control 1	South Dispatch	Repeated	153.8900	114.8	159.0750	107.2
CM 11	Command 11	South Command	Repeated	154.3700	114.8	155.7450	162.2
TAC 15	N/A	South Tactical	Simplex	154.0400	118.8	154.0400	118.8
TAC 16	N/A	South Tactical	Simplex	154.0100	110.9	154.0100	110.9
TAC 17	N/A	South Tactical	Simplex	155.4000	141.3	155.4000	141.3
CON 2	Control 2	Central Dispatch	Repeated	153.7850	156.7	158.8500	156.7
CM 21	Command 21	Central Command	Repeated	153.9500	114.8	156.0450	114.8
TAC 25	N/A	Central Tactical	Simplex	156.0150	162.2	156.0150	162.2
TAC 26	N/A	Central Tactical	Simplex	154.1450	118.8	154.1450	118.8
TAC 27	N/A	Central Tactical	Simplex	153.8300	110.9	153.8300	110.9

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Display	Call Sign	Zone / Purpose	Type	Mobile	Rx	Mobile	Tx
				Rx	Tone	Tx	Tone
CON 3	Control 3	North Dispatch	Repeated	154.1000	114.8	160.0650	114.8
CM 31	Command 31	North Command	Repeated	151.0850	123.0	158.7900	123.0
TAC 35	N/A	North Tactical	Simplex	154.0100	118.8	154.0100	118.8
TAC 36	N/A	North Tactical	Simplex	154.0400	162.2	154.0400	162.2
TAC 37	N/A	North Tactical	Simplex	155.4000	107.2	155.4000	107.2
CON 1B	Control 1	Half Moon Bay Dispatch	Repeated	154.3400	114.8	159.0750	107.2
CON 1D	Control 1	La Honda Dispatch	Repeated	154.2350	114.8	159.0750	107.2
CON 1E	Control 1	Pigeon Pt. Dispatch	Repeated	151.0850	114.8	159.0750	107.2
CM 41	Command 41	South Coast Command	Repeated	155.8950	114.8	158.7600	162.2
TAC 45	N/A	South Coast Tactical	Simplex	153.8300	141.3	153.8300	141.3
TAC 46	N/A	South Coast Tactical	Simplex	154.4450	146.2	154.4450	146.2
TAC 47	N/A	South Coast Tactical	Simplex	156.0150	123.0	156.0150	123.0
CM 51	Command 51	Command	Repeated	151.4750	167.9	159.0150	167.9
CM 51Dir	N/A	Command Direct	Simplex	151.4750	167.9	151.4750	167.9
TAC 55	N/A	Stand by Tactical	Simplex	154.0550	103.5	154.0550	103.5
VFIRE 21	SM County	Multi-agency mutual aid	Simplex	154.2800	156.7	154.2800	156.7
VFIRE 22	N/A	Multi-agency mutual aid	Simplex	154.2650	156.7	154.2650	156.7
VFIRE 23	N/A	Multi-agency mutual aid	Simplex	154.2950	156.7	154.2950	156.7
VFIRE 24	N/A	Multi-agency mutual aid	Simplex	154.2725	156.7	154.2725	156.7
VFIRE 25	N/A	Multi-agency mutual aid	Simplex	154.2875	156.7	154.2875	156.7
VFIRE 26	N/A	Multi-agency mutual aid	Simplex	154.3025	156.7	154.3025	156.7
CALCORD	N/A	Multi-discipline coordination	Simplex	156.0750	csq	156.0750	156.7
CESR-TN	N/A	CA Travel Net	Simplex	153.7550	csq	153.7550	csq
VER##S	N/A	South County MST	Simplex	155.3250	D114N	155.3250	D114N
VER##C	N/A	Central County MST	Simplex	155.3250	D125N	155.3250	D125N
VER##N	N/A	North County MST	Simplex	155.3250	D152N		D152N
CZU L13	Felton	CAL Fire Coast side	Repeated	151.3700	167.9	159.2850	141.3
CZU L14	Felton	CAL Fire Bay side	Repeated	151.3700	167.9	159.2850	151.4
CDFCMD1	Felton	Cal Fire Command	Repeated	151.3550	103.5	159.3000	Multi
CDFCMD2	Felton	Cal Fire Command	Repeated	151.2650	103.5	159.3300	Multi
CDFCMD4	Felton	Cal Fire Command	Repeated	151.4000	103.5	159.3750	Multi
CDFTAC3	N/A	Cal Fire Tactical	Simplex	151.1750	192.8	151.1750	192.8
CDFTAC4	N/A	Cal Fire Tactical	Simplex	151.1900	192.8	151.1900	192.8
CDFTAC6	N/A	Cal Fire Tactical	Simplex	151.3250	192.8	151.3250	192.8

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Please reference the Greater Alarm Plan for minimum frequency requirements for all fire units.

*** Do not use channels outside their specified Zone / Purpose. Doing so will cause interference to a neighboring zone or County. This is imperative on strike teams.

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Channel definitions and usage:

Dispatch Channels

Each zone has one repeated Dispatch channel. Dispatch channels are utilized for dispatch, single unit responses, unit tracking, resource movement and deployment. Dispatch channels are not labeled in CAD.

A Dispatch channel will be used for selected freeway incidents (i.e. medical call, vehicle fire, trash fire, and public assist) involving the response of two fire engines, the primary response engine and the opposite direction response engine.

The Dispatch channel will be assigned for multi-unit responses when the Zone Command channel has reached its capacity.

Command Channels

Each zone has one repeated Command channel that is used for multi-unit responses and on-scene communications when no tactical has been assigned. A command channel is automatically assigned based on incident type and resource allocation. Once dispatched, all units on a multi-unit response shall respond on the assigned command channel. All radio traffic pertaining to the assignment should take place on the Command channel (e.g. a unit attaching themselves, etc.).

The Command channel shall be used for initial size-up, establishing IC, communications between PSC and the IC and communications between Staging and the IC. The IC shall announce "Units switch to the Tactical Channel upon arrival". Units arriving on scene after the first unit shall announce their arrival on the Tactical Channel (see below "Tactical Channels"). The Command Channel is not intended for tactical radio traffic.

Command channels are labeled CMxxxx in CAD. X's indicate the command channel number and dispatch sequence.

An additional Command channel (CM 51) is available in most bayside areas for use during large-scale or long term incidents. The channel may also be used for wide area administrative radio communications. CM 51's geographic coverage is expected to increase as it's infrastructure is expanded with additional funding. Once complete, CM 51 will provide coverage to most areas of the County.

Tactical Channels

Each zone has (non-repeated) simplex tactical channels that are utilized for on-scene incident (Fire Ground) communications. A Tactical channel is automatically assigned based on incident type and resource allocation. The IC may request a tactical channel if one has not been assigned or additional tactical channels as necessary.

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After IC has been established, units assigned to the incident shall switch to the tactical channel as they approach the incident (i.e. one block from incident) and announce their arrival on scene on the Tactical Channel. It is the responsibility of on-scene command personnel to monitor tactical radio traffic. PSC's reception coverage is limited due to the restriction of mobile/portable use only. Tactical channels are labeled TACxx in CAD. X's indicate the tactical channel number.

Greater Alarms and Staging

When units responding to an incident as part of a greater alarm arrive on scene they should check-in with the Staging Area Manager face-to-face. If none has been established the first unit arriving at the staging location shall establish staging and announce this to the IC on the Command Channel.

Channel Assignments

The most appropriate Command or Tactical channel is automatically assigned upon dispatch.

The Incident Commander should consider requesting additional Tactical Channels as the scale of event increases. The IC should ensure that sufficient command personnel are present and that all personnel assigned to ICS positions have an adequate supply of radios (a minimum of two radios) to support a change to the communications plan.

Whenever an incident starts as a single unit response and additional units are assigned/attached a Command Channel should be assigned/requested. An exception would be a single unit freeway response with an opposite engine (e.g. medical aid, vehicle fire, trash fire, etc.).

Other Channels:

VFIRE

VFIRE 21 is utilized for specific auto and mutual aid incidents with neighboring counties including, but not limited to, SFO responses and SFFD auto aid. It is also an alternate to XSMC Command Channels on San Mateo and Dumbarton Bridge responses.

VFIRE 22-26 are utilized for wildland assignments county wide and multi-resource assignments in the South Coast Area to facilitate potential communications with non-San Mateo County apparatus.

Standby Tactical Channel

Tac 55 is reserved for use county-wide as the Standby Tactical Channel.

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CALCORD

CALCORD shall be utilized for communication between air and ground resources such as a Helicopter Landing Zone (LZ).

Travel Channel

The Travel Channel (CESRS-TN) is limited to ground resources en route to/from an incident outside their home unit. This channel will not be used as a tactical net, nor will it be used for routine administrative traffic. The primary functions and uses of the Travel Channel (CESRS-TN) shall be defined as:

- a) Emergency vehicle to dispatch communications
- b) Emergency car-to-car communications
- c) Initial contact, recall and/or reassignment of personnel and equipment
- d) Contact channel during long distance travel by overhead, strike team, etc.

Units traveling out of county on assignments shall not use San Mateo County radio channels.

Other procedures:

Roll call

CAD monitors in BC vehicles display the status of resources assigned to an incident. As such, no roll call of responding apparatus is necessary unless the first-due BC's CAD monitor is out of service.

Verbiage

Radio discipline shall be exhibited at all times on emergency incidents. Face to face communication should be used when practical to limit fire ground radio traffic.

Clear text shall be used when operating on Fire Channels. Allowable exceptions are:

10-4, Code 2, Code 3, Priority 1, Priority 3

Field units calling Public Safety Communications will state the channel they are on followed by their identifier. Example:

"Control 1, Engine 7"

Field units calling another field unit will refer to the unit they are calling followed by their field identifier and then state the channel they are on. Example:

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"Engine 9, Battalion 3 on Command 11"

Field units operating on VFIRE 21 or other shared channels will refer to Public Safety Communications as "San Mateo County" then state the channel they are on. Example:

"San Mateo County, Engine 13 on VFIRE 21"

Personnel requiring contact with a specific person in a Company shall call the assignment that the individual occupies. Example:

"Operator 23, Engine 23"

Valid call signs include:

Engine	(for Captain)
Operator	(for Operator / Engineer)
Rider	(jump seat rider)
Tiller	(tiller operator)

BART Communications

Standard San Mateo County communications protocols shall be used during incidents at BART facilities or on BART tracks located above ground. BART Operation Control Center (OCC) may be contacted if necessary using the Red Emergency Phones located near the ticket booths.

For incidents underground refer to the "San Mateo County Fire Department Response to BART Emergencies" manual. All San Mateo County Fire Agencies with BART underground facilities have been provided 800 MHz portable radios. Radio antenna cable in the track-way relays 800 MHz radio transmissions throughout the underground.

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PERSONNEL ASSIGNMENT OR APPARATUS TYPE	ON AIR IDENTIFIER	CAD IDENTIFIER (San Bruno as the example)
Air Attack	"Air Attack 460"	N/A
Air Tanker	"Tanker 805"	N/A
AMR Ambulance	Unit Number (e.g. "262")	Unit Number (e.g. "262")
AMR Supervisor	Unit Number (e.g. "S11")	Unit Number (e.g. "AS11")
Battalion Chief / Duty	"Battalion 16"	BC16
Battalion Chief / EMS	"Med 16"	MED16
Battalion Chief / Extra staffing (not recommendable)	"Battalion 16A"	BC16A, BC16B BC16C
Battalion Chief / Extra staffing (recommendable)	"Battalion 116"	BC116
Battalion Chief / Special Ops	"Special Ops 16"	SO16
Boat	"Boat 51"	BOAT51
Breathing Support	"Breathing Support 51"	BS51
Bulldozer (e.g. CZU)	"Dozer 1741"	N/A
Bulldozer Transport (e.g. CZU)	"Dozer Transport 1741"	N/A
Chief / Assistant or Deputy	"Chief 16A"	CH16A
Communications / IDT	"Comm 16"	COM16
Hand Crew (e.g. Ben Lomond Hand Crew)	"Ben Lomond Crew 1"	N/A
Hazmat	"Hazmat 51"	HM51
Helicopter (e.g. SCU)	"Copter 106"	N/A
Mechanic	"Repair 16"	REP16
Fire Buffs	"Support 51"	SUP51
Fire Chief	"Chief 16"	CH16
Fire Marshal	"Prevention 16"	PR16
Deputy Fire Marshal Assistant Fire Marshal	"Prevention 16A"	PR16A, PR16B PR16C, PR16D

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Fire Inspectors / Investigators		
Quint	"Quint 51"	Q51
Rescue	"Rescue 51"	R51
Training	"Training 16"	TO16
Truck	"Truck 51"	T51
Type 1 Engine	"Engine 51"	E51
Type 1 Engine/Additional Staffing of reserve	"Engine 151"	E151
Type 1 Engine/Multiple staffed engines in one station	"Engine 251"	E251
Type 1 Engine/BLS	"Engine 51"	BE51
Type 3 Engine	"Engine 351"	E351
Type 4 Engine	"Patrol 51"	P51
Type 1 Urban Search and Rescue	"USAR 151"	USR151
Type 2 Urban Search and Rescue	"USAR 251"	USR251
Type 3 Urban Search and Rescue	"USAR 351"	USR351
Utility	"Utility 51"	U51
Water Tender	"Water Tender 51"	WT51

NOTE: "1" series apparatus use the number of the apparatus they are replacing, or use the number of the station they occupy when staffed as a temporary second resource.

Eg. E151 becomes E52 when E52 is out of service for mechanical reasons
T151 becomes T152 when it's put in service at Station 52 to supplement T51 during high call volume

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Frequency Assignment & Usage Policy References:

1. California Fire Scope (2004), *Field Operations Guide ICS 420-1*
2. City of Phoenix (2005), *Phoenix Fire Department Radio System Safety Project, Technical Team Requirements Definition #27 Final Draft.*
3. San Mateo County Fire Chiefs Association (2006), *San Mateo County Fire Service Policies & Standards*
4. San Mateo County Fire Chiefs Association (2006), *Greater Alarm & Mutual Aid Plans*