San Francisco Fire Department

Division of Training

Training Bulletin 21-2

Digital Radio System

September 2021

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Changes to Radio Features and Best Practices

In simplest terms, the CCSF Radio system is changing from an Analog system to a Digital system. The functions of the knobs, switches, and buttons will not change. Some of the radio practices have changed.

SCBA

While using a SCBA mask, for best transmissions, place the Microphone <u>against</u> the vent on the SCBA mask. <u>Do not</u> place the microphone against your neck, this will not produce quality transmissions. While holding the microphone against the SCBA mask vent, speak in a loud, clear, and controlled voice.

Radio Transmissions

Units will no longer be able to step on each other's radio traffic. The trunked radio system will only allow 1 radio to broadcast at a time. If you attempt to transmit while another radio is transmitting, you will hear a short BONK indicating that the system is busy. Wait for that transmission to end and then make your transmission. Do not repeatedly press the Push to Talk (PTT) button.

Emergency Button

Activating the emergency button will give your radio transmit priority over all other radios. Should you have **Emergency Traffic** or a **Mayday,** and radio traffic is busy, use the Emergency Button to give your radio priority and then make your transmission. Ref G.O. 09 A-59

The emergency button now requires a 2-second press to activate. This will help reduce accidental activations. The activated radio will now announce that the emergency button has been pressed and the light will flash on the microphone. To reset the emergency, press and hold the emergency button for 2 seconds.

New Features

The ID (alias) of the broadcasting radio shows on all other radio screens. This feature will also work while using direct channels.

Emergency activations will now work in direct mode.

Zone name voice announcements and more channel voice announcements have been added.

Zone Changes

Zone "A" - FD OPS 1 is now labeled FD OPS.

Zone "B" - BART/MED – BART channels unchanged.
        GENERAL is now labeled SFGH BASE (use for base contact).
        MED CONTROL is now labeled CMED (function unchanged).
        HOT is now labeled   EMS TAC1
        TRIAGE is now labeled   EMS TAC2
        HOSPITAL is now labeled EMS TAC3

Zone "C" - FD OPS is now labeled FD B/U 1.
        Primary Back up Channels and direct Tactical channels TAC 7D-TAC 16D.

Zone "D" - Is now labeled FD B/U 2.
        Secondary Back up Channels and direct Tactical channels TAC 7D-TAC 16D.
        Although listed in 2 different zones, the Direct Tactical channels TAC 7D-TAC 16D
        are the same and will work in either zone.

Zone "E" - Is now labeled EVT/ADM.
        EVENT 1-3 City-wide event channels. All city radios have these channels.
        EVENT 4-6 Public Safety only. FD, PD, and Sheriff. EVENT 6 is encrypted.
        ARSON -- (4710 to 4710) and (4710 to Field units) Encrypted and recorded.
        BOE – (BOE to BOE) and (BOE to Field units).
        AWSS 1 – Primary FD to Water Department channel.
        AWSS 2-3 – Secondary FD to Water Department channels.

Zone "F" - AIRPORT—No changes to AIRPORT Zone.

Legacy Zones A, B, C, and Legacy AIRPORT have been left on the radio. These Legacy zones will be removed after all equipment has been upgraded to the digital system.

Training Zone

The Training Zone is available for all Battalions and Companies. Battalion Chiefs and individual companies are encouraged to use the Training Zone for any drills they may be conducting. Companies do not need to notify Radio that you will be using the Training Zone. The Training Zone is not monitored.

Radio Backup Procedures

In the event of a primary radio system failure, the SFFD has 3 separate Backup radio systems available. During a radio system failure, the number of City-wide dispatch channels available is reduced to four. The direct tactical channels (C7-C16) will always be available but have a limited range. The radio backup systems have not changed but the names of the systems have been updated and the backup zones have been reorganized. The 3 backup systems are:

1. (B/U 700mhz)
2. (B/U MTA)
3. (B/U 8TACS)

In the initial stages of a radio failure, it is difficult to determine which radio system will function best. Therefore, companies should use separate radios to monitor the 3 backup radio systems. Monitor the dispatch channel in each system of BU DISP, BU2 DISP, and 8TAC91. Follow directions from dispatchers and set radios to assigned dispatch channels. Companies shall also monitor the normal dispatch channels, listen for station announcements, and monitor station emails.

B/U 700mhz	ZONE	Channel	Also Known As
For Dispatch:	FD B/U 1	BU DISP	C1
For Response:	FD B/U 1	BU CTRL	C2
Major Incidents:	FD B/U 1	BU CMD	C3
For Medics:	FD B/U 1	BU MED	C4

B/U MTA	ZONE	Channel	Also Known As
For Dispatch:	FD B/U 2	BU2 DISP	D1
For Response:	FD B/U 2	BU2 CTRL	D2
Major Incidents:	FD B/U 2	BU2 CMD	D3
For Medics:	FD B/U 2	BU2 MED	D4

B/U 8TACS	ZONE	Channel	Also Known As
For Dispatch:	FD B/U 1	8TAC91	C5
For Response:	FD B/U 1	8TAC92	C6

Direct Tactical Channels with 1st assigned Battalion Chief

	ZONE	Channel	Also Known As
Direct Tactical	FD B/U 1	TAC 7D-16D	C7-16
	FD B/U 2	TAC 7D-16D	D7-16

Direct Channels are not monitored by dispatch

Complete Radio Failure
- Battalion Chiefs to Return to Quarters and establish communications with Division (Branch).
- All In-service ambulances respond to the Battalion Station nearest their current POST.

Hospital Paging
The HOSPITAL channel no longer functions and will be removed.
Use the new HOSPITAL Zone to page individual hospitals.
- A) Select the HOSPITAL Zone using 1 of 3 methods.
     1. Use the side Zone up/down buttons.
     2. Use the Zone Button on the front screen, scroll to HOSPITAL Zone and select.
     3. NEW: Press and hold the HOME button on the Key Pad, this will set the radio to the HOSPITAL Zone, on the SFGH channel. Then select the proper hospital channel.
- B) Press PAGE.
- C) Select the hospital from the page list.
- D) Press the "Push to Talk Button".
- E) Wait for a reply and then give your report.

Fire Department
Division of Training
Training Bulletin Index