

San Francisco Fire Department

Division of Training

Training Bulletin 18-2



Portable Radio Training

June 2018

TRAINING GUIDE

PORTABLE RADIOS

SAN FRANCISCO FIRE DEPARTMENT



From Left to Right

Medic Radio APX 6000

Specialty Radio APX 7000XE

Command Radio APX 8000XE

Suppression Radio APX 6000XE

Training Bulletin

SFFD Portable Radios

On June 19, 2018 the SFFD will update all portable radios with a new “code plug.” (The code plug is the programming in the radio which identifies talk groups and their zone and channel.) In addition, new command portable radios will be issued to Battalion and Division Chiefs. There will be several changes with this update that will affect navigation and operation of the radio. ALL MEMBERS must review and become familiar with this training material to ensure the ability to properly use the portable radios after this update. Some of the major changes include:

- **New names based on function for both the zones and channels.**
 - The A zone is named FD OPS 1, B zone is named BART/MED, etc.
 - The A bank channels were named A1-A16. New names on the A bank are Control 1, Command 5, TAC 8, etc.
 - A4 has been named Dispatch 4. This channel will be dormant at this time but will be utilized as an outgoing dispatch channel in the future
- **Addition of the BART TAC Channels – B Bank – (BART/MED Zone)**
 - B1-6 are 3 PAIRED channels – BART Primary, BART Secondary, and BART Command – Each pair is permanently patched and does not require any activation at radio to be utilized
 - SFFD BART TAC Channels will be assigned by CAD instead of a Battalion Based TAC Channel. Example: a BART Box at 24th St. Station will not be assigned TAC 16, BART Primary will be assigned.
 - THE EMERGENCY BUTTON DOES NOT FUNCTION ON BART TAC CHANNELS
 - (Does not function on C-7 patch either, no operational change)
 - All other channels in B Bank do have Emergency Function
 - When Command Channels are requested for a BART incident, BART Command will be assigned regardless of which Division is requesting.
 - Initially, SFFD BART TAC Channels will not be available on apparatus
 - Installs for new Mobile Radios expected to commence in June 2018.
 - SFFD BART TAC Channels are different from the BART INTEROP ZONE. SFFD BART TAC Channels are for use in BART incidents within the city of San Francisco. BART INTEROP channels are for use by all Bay Area Agencies for multi-agency operations anywhere on the BART system.

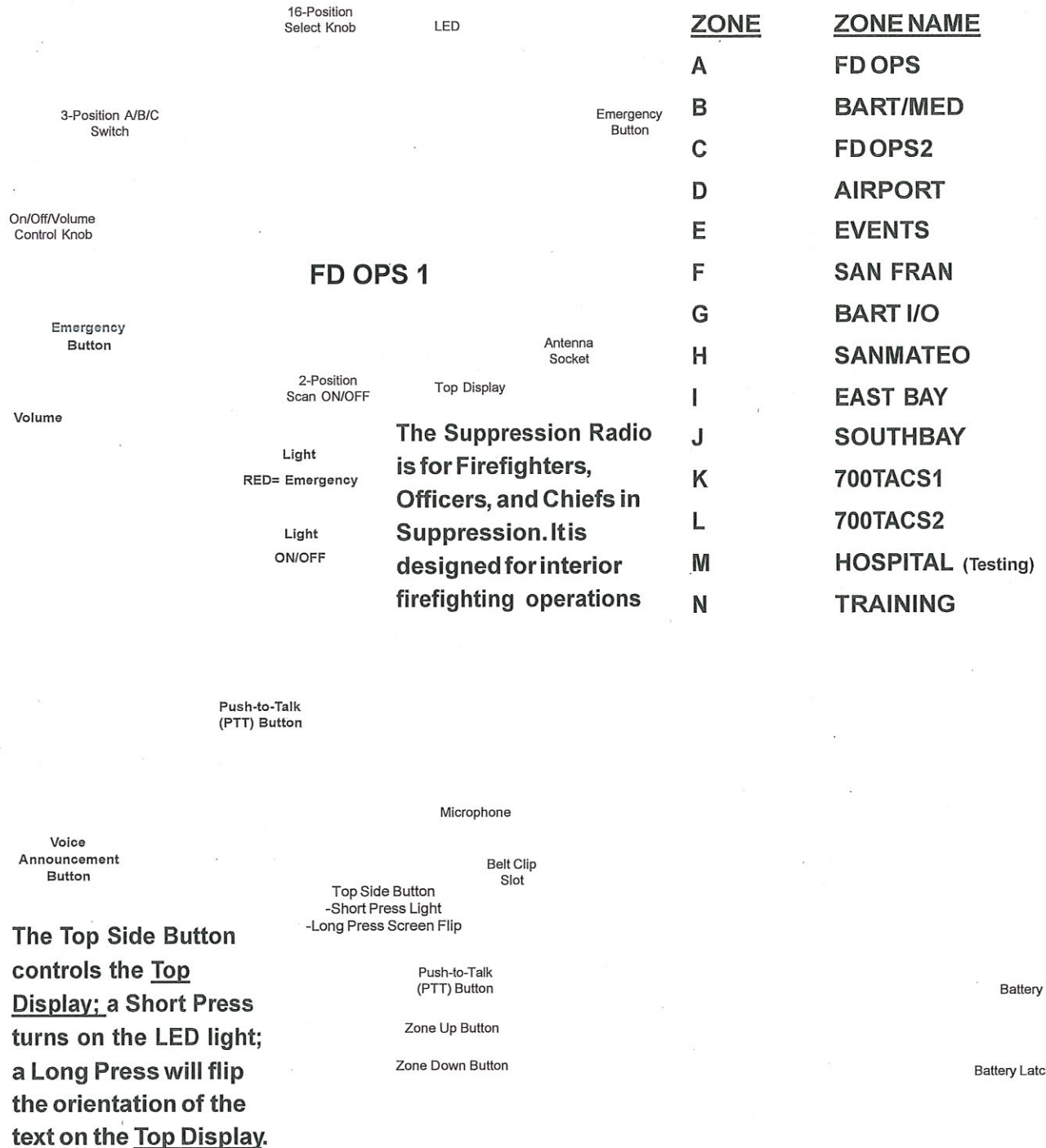
- **2 Back up systems for use in failure of the A Bank 800MHz System located in the C Bank (FD Ops 2 Zone)**
- **10 direct TAC channels, corresponding to Battalions in the C Bank (FD OPS 2 Zone, Ch 7-16)**
- **Addition of all SFO Talkgroups in the D Zone.**
 - Units will be able to directly use SFO talkgroups when responding to an SFO incident
 - Dispatch procedures will not change, a Battalion based TAC channel will be assigned for travel and units will receive directions from the staging manager on their assigned talkgroup
- **Addition of multiple Interop zones**
 - Interop zones are designed for response into neighboring counties for mutual aid
 - The zones are in place, but the talkgroups WILL NOT WORK at this time and are dormant
 - BART has an Interop zone designed for multi-agency incidents, Labeled BART I/O
 - SFFD BART TAC Channels are **NOT** in the BART I/O Zone
 - SFFD BART TAC Channels are in the B Zone, for use in San Francisco only
 - BART INTEROP Channels are in the BART I/O Zone, and are for use by all Bay area agencies, anywhere on the BART system, for multi-agency responses
- **Addition of a Hospital zone**
 - This zone is NOT ACTIVE at this time.
 - At the Digital Cutover in 2019, this zone will be activated and units will have separate talkgroups for EACH hospital in the system, allowing calls to different hospitals to happen simultaneously
 - Until the 2019 digital cutover, units WILL CONTINUE to notify hospitals on B13, and B14 for SFGH
- **Addition of a Training Zone**
 - In 2019, the system will be cut over to digital only
 - Many governments have reported difficulties at cutover due to the difference in the sound of digital
 - The training zone mirrors the FD Ops 1 Zone. It is intended to be used by companies during drills, thus allowing members to get accustomed to the difference in sound.
 - IN SERVICE operations CAN NOT be conducted on this zone.
 - The channels are labeled similar to the FD OPS 1 Zone. Each channel has a T at the beginning and the voice announcement states "Training" before announcing the channel. Ex. T-CTRL1, announced "Training Control 1"

- **Additional notes**

- Units may switch from direct to repeat in the C zone. The top side button which controls the light will function to switch between repeat and direct in the C zone ONLY
- The Emergency button will have NO OTHER function than emergency
- On June 12, Battalion chiefs will be issued new command radios that will include multiple VHF zones (Kenwood Channels)

SFFD

SUPPRESSION RADIO APX 6000XE



SFFD

MEDIC RADIO APX 6000

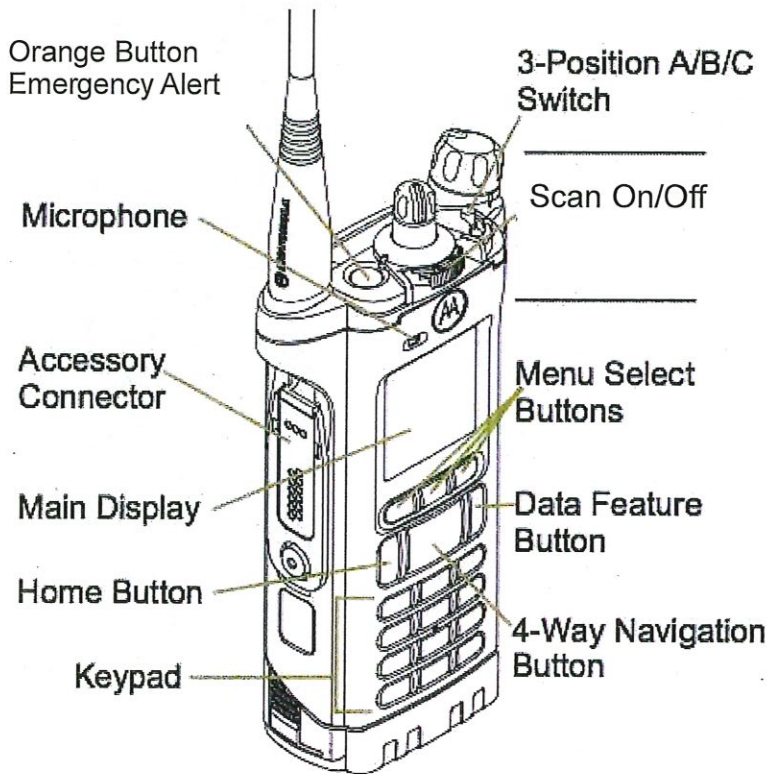
<u>ZONE</u>	<u>ZONE NAME</u>
A	FD OPS
B	BART/MED
C	FD OPS2
D	AIRPORT
E	EVENTS
F	SANFRAN
G	BART I/O
H	SANMATEO
I	EAST BAY
J	SOUTHBAY
K	700TACS1
L	700TACS2
M	HOSPITAL (NotActive)
N	TRAINING

FEATURES

The APX 6000 Model 3 is used on all Ambulances; it is distinguished by its Front Panel Display, Keypad and Black Color with Red Sides. It has all of the features and functions of the Suppression Radio with the added ability to page Hospitals. The Main Display can be used to assist in selecting Zones and Channels.

Hospital Paging

- Select a Talk-Group that allows paging (Ex. B13)
- Use the Menu Select Buttons to choose Page from the Main Display
- Use the 4 Way Navigation Button to select Hospital then Select Page



BUTTON	FUNCTION	BUTTON	FUNCTION
Top (Orange) Button	Emergency Button	3 Position A/B/C Switch	Zone/Bank Select
2-Position Concentric Switch	Scan On/Off	Menu Select Buttons	Select Menu from Display
Home Button	Return to Main Screen	Data Feature Button	Not Used
4-Way Navigation Button	Select Items on Main Display	Keypad	Used for paging

MEDIC RADIO

FRONT PANEL DISPLAY

The main difference between the Suppression Radio and the Ambulance Radio is the Front Panel Display. The Display is used to page Hospitals, present information and to assist in selection of Functions, Zones and Talk-groups.

Main Display

Displays context specific information that can be accessed using the Menu Select Buttons and the 4-way Navigation Button.

Note: when used to change Zones/Talk-groups you can return to the A bank by using the ABC switch.

SCREEN

Default
Zone Select
Page

DISPLAY

Zone; TG; ID
Zones
Hospital; Radio ID

MENU

Zone
Mute
Sel
Exit
Page

FUNCTION

Zone Select Access
Silences Radio
Selects Item
To Previous Screen
To Paging Screen

Home Button

Returns you to the default screen

Menu Select Buttons

Allow access to Menu Entries on the Main Display. Press the Button directly below the Menu Item for 1.5 seconds to access the feature. Menu items are context specific

4-way Navigation Button

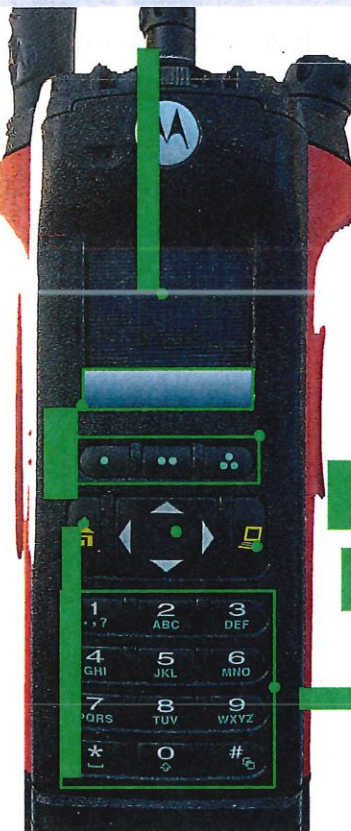
Use this button to scroll up, down, left or right. Press (1.5 seconds) and release to scroll from one entry to the next one. Press and hold (3 seconds) one of the button to have the radio toggle through the list automatically (release the button to stop).

Data Button

Disabled; used for programming radios

Keypad

Use these buttons to dial numbers for paging; local hospitals are pre-programmed into the radio.



Main Screen Lighting Indicators



ORANGE

Initiated an Emergency Alarm

Receives an Emergency Alarm

RED

Radio unable to connect to System

Out of Range

Radio in FailSoft Mode

Battery is low



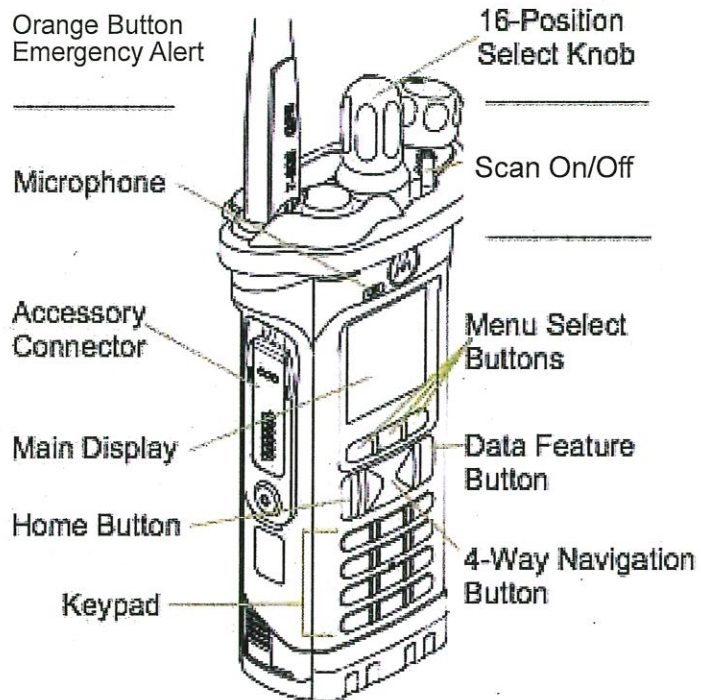
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COMMAND RADIO APX 8000XE

ZONE	NAME	ZONE	NAME
A	FD OPS 1	AA	SJS/SCC
B	BART/MED	AB	XCC
C	FD OPS 2	AC	OES/VTAC
D	AIRPORT	AD	SF HAM 1
E	EVENTS	AE	SF HAM 2
F	SAN FRAN	AF	CDF CMD
G	BART IO	AG	CDF L 1
H	SANMATEO	AH	CDF L 2
I	EAST BAY	AI	CDF TAC
J	SOUTHBAY	AJ	CDF T/FS
K	700 TACS1	AK	FS/NIFC
L	700 TACS2	AL	NIFC CMD
M	SFPD A	AM	BLM/AIR
N	SHERIFF	AN	AIR TAC
O	DPH	AO	SOCAL
P	DEM	AP	HOSPITAL
Q	DPT	AQ	VFIRE
R	HSA/ACC	AR	SM SOUTH
S	DPW	AS	SM CENT
T	RECP/LIB	AT	SM COAST
U	SCHOOLS	AU	SM NORTH
V	DT	AV	USCG
W	PUC/PORT	AW	SURF/OES
X	DBI/R.E.	AX	TRAINING
Y	CDF - CZU		
Z	CNT/XSC		

FEATURES

The APX 8000XE Model 3 is used by Command Officers in Suppression; it is distinguished by its Front Panel Display, Keypad and Green color. It has all of the features and functions of the Suppression Radio with the added ability to access VHF Channels (used for Coast Guard, San Mateo County and other mutual aide channels). It is programmed with many more Talk-groups and channels to assist with unified command.



BUTTON	FUNCTION	BUTTON	FUNCTION
Top (Orange) Button	Emergency Button	3 Position A/B/C Switch	Zone/Bank Select
2-Position Concentric Switch	Scan On/Off	Menu Select Buttons	Select Menu from Display
Home Button	Return to Main Screen	Data Feature Button	Not Used
4-Way Navigation Button	Select Items on Main Display	Keypad	Used for paging

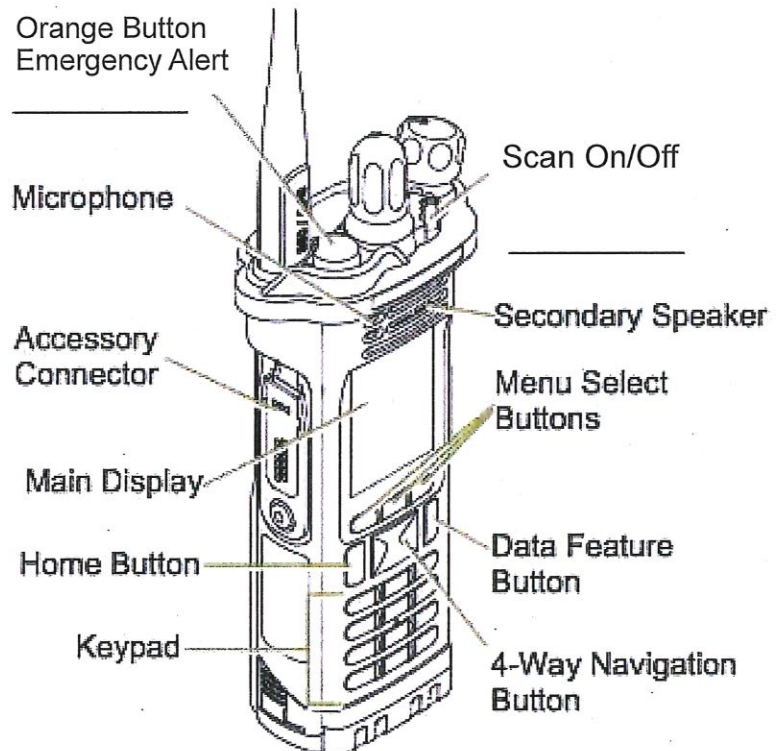
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SPECIALTY RADIO APX 7000XE

ZONE	NAME	ZONE	NAME
A	FD OPS 1	T	CDF CMD
B	BART/MED	U	CDF L 1
C	FD OPS 2	V	CDF L 2
D	AIRPORT	W	CDF TAC
E	EVENTS	X	CDF T/FS
F	SAN FRAN	Y	FS/NIFC
G	BART IO	Z	NIFC CMD
H	SANMATEO	AA	BLM/AIR
I	EAST BAY	AB	AIR TAC
J	SOUTHBAY	AC	SOCAL
K	700 TACS1	AD	HOSPITAL
L	700 TACS2	AE	VFIRE
M	CDF - CZU	AF	SM SOUTH
N	CNT/XSC	AG	SM CENT
O	SJS/SCC	AO	SM COAST
P	XCC	AP	SM NORTH
Q	OES/VTAC	AQ	USCG
R	SF HAM 1	AR	SURF/OES
S	SF HAM 2	AS	TRAINING

FEATURES

The APX 7000XE Model 3 is used by Specialty units in Suppression; it is distinguished by its Front Panel Display, Keypad and Green color. It has all of the features and functions of the Suppression Radio with the added ability to access VHF Channels (used for Coast Guard, San Mateo County and other mutual aide channels). It is deployed on the Surf and Cliff rescue units and some Engines on the border of San Mateo County



BUTTON	FUNCTION	BUTTON	FUNCTION
Top (Orange) Button	Emergency Button	3 Position A/B/C Switch	Zone/Bank Select
2-Position Concentric Switch	Scan On/Off	Menu Select Buttons	Select Menu from Display
Home Button	Return to Main Screen	Data Feature Button	Not Used
4-Way Navigation Button	Select Items on Main Display	Keypad	Used for paging

COMMAND & SPECIALTY RADIO

FRONT PANEL DISPLAY

The main difference between the Suppression Radio and the Command Radio is the Front Panel Display. The Display is used to page Hospitals, present information, create custom scan lists and to assist in selection of Functions, Zones and Talk-groups.

Main Display

Displays context specific information that can be accessed using the Menu Select Buttons and the 4-way Navigation Button.

Note: when used to change Zones/Talk-groups you can return to the A bank by using the ABC switch.

SCREEN

Default
Zone Select
Page
ScanL

DISPLAY

Zone; TG; ID
Zones
Hospital; Radio ID
Edit Scan

MENU

Zone
Mute
Sel
Exit
Page
Rcl

FUNCTION

Zone Select Access
Silences Radio
Selects Item
To Previous Screen
To Paging Screen
Cycles Scan List



Menu Select Buttons

Allow access to Menu Entries on the Main Display. Press the Button directly below the Menu Item for 1.5 seconds to access the feature. Menu items are context specific

4-way Navigation Button

Use this button to scroll up, down, left or right. Press (1.5seconds) and release to scroll from one entry to the next one. Press and hold (3 seconds) one of the button to have the radio toggle through the list automatically (release the button to stop).

Data Button

Disabled; used for programming radios

Keypad

Use these buttons to dial numbers for paging; local hospitals are pre-programmed into the radio.

Home Button

Returns you to the default screen

Main Screen

Lighting Indicators

ORANGE

RED

Initiated an Emergency Alarm

Battery is low

Receives an Emergency Alarm

Out of Range

Radio in FailSoft Mode

Radio unable to connect to System



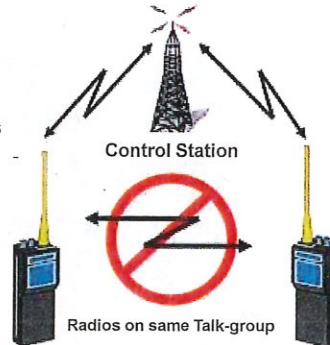
SFFD

OPERATIONS ZONES (A & C ZONES)

800MHz / Trunked

HOW TRUNKING WORKS

- ◆ Signal is transmitted to a control station.
- ◆ The control station chooses an available frequency and sends it to all receiving radios on same talk-group
- ◆ Works similar to a cell phone
- ◆ There is no portable to portable communication.
- ◆ All radio traffic is repeated



FD OPS1
ZONE A



SFFD OPERATIONS A-BANK

- A1, A2 and A3 are Control Talk-groups for information to and from Radio
- A4, when active, will be for Dispatch and is receive only
- A5 and A6 are for Command at major incidents and boxes
- A7-A16 are geographically assigned Tactical Talk-groups (TAC)

SFFD OPERATIONS C-BANK

- C1-C6 are back-up Radio Systems
- C1, C4 for Dispatch; C2, C5 for Control, C3, C6 for Command
- C7 through C16 are Tactical Direct Channels
- Each Direct Tactical Channel is associated with an A bank TAC with the same number, i.e. TAC 12 (A12) to TAC 12D (C12, Pronounced TAC 12 Direct)
- Emergency button does not work on direct channels!

FD OPS 1

A1-CTRL 1
A2-CTRL 2
A3-CTRL 3
A4-DSPTCH 4
A5-CMD 5
A6-CMD 6
A7-TAC 7
A8-TAC 8
A9-TAC 9
A10-TAC 10
A11-TAC 11
A12-TAC 12
A13-TAC 13
A14-TAC 14
A15-TAC 15
A16-TAC 16

FD OPS 2

C1-BU DISP
C2-BU CTRL
C3-BU CMD
C4-BU2 DISP
C5-BU2 CTRL
C6-BU2 CMD
C7-TAC 7D
C8-TAC 8D
C9-TAC 9D
C10-TAC 10D
C11-TAC 11D
C12-TAC 12D
C13-TAC 13D
C14-TAC 14D
C15-TAC 15D
C16-TAC 16D

SFFD

BART/MED ZONE (B ZONE)

ZONE B



- B1-PRI BLW (Underground)**
- B2-PRI ABV (Street Level)**
- B3-SEC BLW (Underground)**
- B4-SEC ABV (Street Level)**
- B5-CMD (Underground)**
- B6-CMD (Street Level)**
- B7-CAFIRE1 (Old C7)**
- B8-FD DIR1**
- B9-FD DIR2**
- B10-HOT**
- B11-MGS (Medical Group Sup.)**
- B12-Triage**
- B13-Treat (Treatment/Hosp)**
- B14-SFGH**
- B15-Transport**
- B16-Medical Dispatch**

New BART Communications Plan:

- Located on the B Bank of Suppression Radios
- Digital P25 Harris system connected to City's radio system using ISSI technology; always on and always patched
- The Emergency Button does not work on BART Talk-groups at this time
- Underground Talk-groups (B1, B3, B5) work on Platform and Mezzanine levels; Above-ground Talk-groups (B2, B4, B6) work on street level
- B1 is connected to B2 and is the Primary TAC during a fire incident; During Medical calls it is monitored by Radio and can be used as a Control Channel.
- B3 is connected to B4 and is Secondary TAC
- B5 is connected to B6 and is Command
- B7 is the old C7, CAFIRE1 and is for back-up
- B8 and B9 are Direct Channels (old C14 and C15).



New MEDICAL Communications Plan:

- Located on the B Bank of Suppression Radios, B10 through B16
- B10 is encrypted and allows direct communication to HOT for descriptions and medical conditions
- B11 is the Medical Group Supervisor Talk-group, used at major incidents
- B12 is for the Triage Group during a MCI
- B13 is an encrypted Talk-group used for field to Hospital communications; it also can be used for the Treatment Group at a large MCI
- B14 is for field to SFGH communications and is also encrypted
- B15 is the Transport Talk-group and is used by Radio for hospital destinations during an MCI
- B16 is used as today for Medical dispatching and posting location moves.

MCI Communications

- B11 through B16 Talk-groups are pre-designated to be used by the Medical Group at a MCI
- First arriving Companies shall start communications at a MCI by using the designated TAC
- The IC and MGS will use Medical Talk-groups as necessary
- B13 will be dual-use, during a MCI it can be used for the Treatment Group; day to day it is the Hospital Talk-group for Transport (Hospital Zone will replace soon)

B1-PRI BLW (Underground)
B2-PRI ABV (Street Level)
B3-SEC BLW (Underground)
B4-SEC ABV (Street Level)
B5-CMD (Underground)
B6-CMD (Street Level)
B7-CAFIRE1 (Old C7)
B8-FD DIR1
B9-FD DIR2
B10-HOT
B11-MGS (Medical Group Sup.)
B12-Triage
B13-Treat (Treatment/Hosp)
B14-SFGH
B15-Transport
B16-Medical Dispatch

SFFD

AIRPORT ZONE (D ZONE)

AIRPORT
D1-SFODSP
D2-SFO TAC
D3-SFO MED
D4-SFO ARFF
D5-FD 5
D6-FD 6
D7-FD 7
D8-SFO ICS
D9-SM RED
D10-SM MCI 1
D11-SM MCI 2
D12-SM SFGH
D13-SFO-FDM
D14-FD DIR1
D15-FD DIR2
D16-PS DIR

When responding to an incident at SFO members can listen to the radio traffic at the Airport anywhere in the City. After Asiana engineers programmed the City radio system to simulcast the Airports radio system into the City. The inverse is not true though; City Talk-groups do not work at the airport. **All operations at SFO will be on Talk-groups in the Airport Zone.**



SFO OPERATIONS D-BANK

- The SFO-Airport Talk-groups are located in the D bank; one zone down from C
- While on the C Bank press and hold the Zone Down Button
- The SFO Firefighters' radios have the exact same Zone but it is located on their A Bank. The City's Operations Zone is located on their D Bank
- D1 is the Control Channel for SFO
- D2 is the main TAC, most operations will be on this Talk-group
- D3 is for Medical operations
- D4 is set aside for ARFF operations
- D5, D6, and D7 are extra TACS
- D9-D12 are for San Mateo County Medical operations
- D13 is a FD Admin/EOC Talk-group
- D14-16 are direct channels (C14-16 Today, 16 is shared with Police)

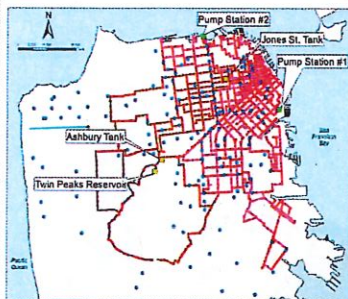


Zone Down Button

The Zone Down Button must be held down for 1.5 seconds before it will operate. The SFO Zone is located one Zone below the C Bank. To get back to the A bank just use the ABC switch to return.

SFFD

EVENT/ADMINISTRATION ZONE (E ZONE)



EVENT/ADMIN E-BANK

- The Event/Admin Talk-groups are located in the E Bank; two zones down from C
- While on the C Bank press and hold the Zone Down Button and go down two Zones
- Event 1, 2 and 3 (E1, 2, and 3) are on all City radios and allow interoperable communications
- Safety Event 4, 5, and 6 (E4, 5, and 6) are on all Public Safety Department radios and are used for Unified Command with SFPD
- These Talk-groups can be patched by Radio on an IC's orders to Operation Talk-groups
- E7 is un-programmed, E11 is the PDs A11 used for City wide Police communications
- E8-10 and E12 are used for FD Non-suppression communications
- E13 and 14 CAFIRE 1 and 2 are for Intracity interoperability; an IC can ask Radio to turn on the repeater located on Twin Peaks.
- E15 and 16 are Talk-groups for the City's Emergency Operations Center



Zone Down Button

The Zone Down Button must be held down for 1.5 seconds before it will operate. The Event/Admin Zone is located two below the C Bank. To get back to the A bank just use the ABC switch to return.

EVENTS

- E1-Event 1
- E2-Event 2
- E3-Event 3
- E4-Safety Event 1
- E5-Safety Event 2
- E6-Safety Event 3
- E7-Arson
- E8-Prevention
- E9-AWSS
- E10-Equipment
- E11-SFPD A11
- E12-Training
- E13-CAFIRE 1
- E14-CAFIRE 2
- E15-EOC 1
- E16-EOC2

SFFD

SAN FRANCISCO INTEROP (F ZONE)



Zone Down Button

The Zone Down Button must be held down for 1.5 seconds before it will operate. The SAN FRAN Zone is located three below the C Bank. To get back to the A bank just use the ABC switch to return.

SAN FRANCISCO INTEROP ZONE

- The San Francisco Interop Talk-groups are located in the F Bank; three zones down from C
- While on the C Bank press and hold the Zone Down Button and go down three Zones
- F1 is for mutual aid companies responding to the City to contact the Dispatch Center
- F2-F6 are used by mutual aid companies responding to the City for communications.
- These Talk-groups can be patched by Radio on an IC's orders to Operation Talk-groups
- F7-F9 are for operations at SFO
- F10 is CALAW9 which is on police radios throughout the state
- F11-F14 and F16 are the 8 TAC 90 Channels used for mutual aid throughout the state. Mutual aid companies from outside the Bay Area could use these channels
- F15 is not programmed
- The Emergency Button does not work on Interop Zones

SANFRAN
 F1-CALLING
 F2-INTEROP1
 F3-INTEROP2
 F4-INTEROP3
 F5-INTEROP4
 F6-INTEROP5
 F7-SFO INT1
 F8-SFO INT2
 F9-SFO INT3
 F10-CALAW9
 F11-8TAC91
 F12-8TAC92
 F13-8TAC93
 F14-8TAC94
 F15-UNPROG
 F16-8CALL90

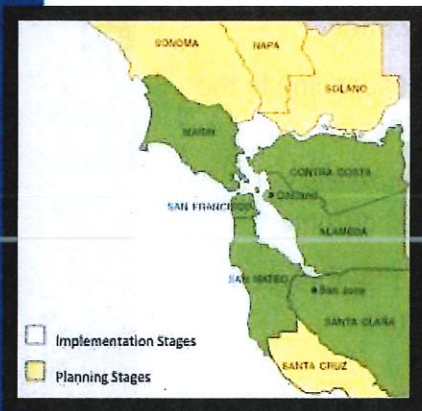


SFFD

INTEROPERABILITY ZONES (G-L ZONES)

BayRICS Overview

Bay Area Super UASI Region



- Announced by Mayors Newsom, Dellums, and Reed on September 11, 2007
- Collaboration with all 10 Bay Area Counties
- Multi-discipline participation, including
 - ✓ Law Enforcement
 - ✓ Fire
 - ✓ Emergency Services
 - ✓ Emergency Medical Services
 - ✓ Public Health
 - ✓ Transit Agencies
 - ✓ Critical Infrastructure Entities (Schools, Ports, Bridges)



Zone Down Button

SEARCH, The National Consortium for Justice Information and Statistics | www.search.org

13

INTEROP G BART I/O

H SAN MATEO
I EAST BAY
J SOUTH BAY

TALK-GROUPS

1. CALLING
2. INTEROP1
3. INTEROP2
4. INTEROP3
5. INTEROP4
6. INTEROP5

K 700 TACS1
L 700 TACS2

Interoperability Zones

- Designed for Bay Area Emergency Responders to have Radio Communications in other jurisdictions
- Can be Patched by regional Communications Centers to allow outside agencies to communicate with local Emergency Responders. Used in SF to talk to units coming into the City
- Was used during the Super Bowl to allow the FBI, Coast Guard ETC. to communicate with SFFD and SFPD
- When using the IC should make contact with the local Comm. Center on the Calling Talk-group and get assigned Interop
- 700 TACS are used in the North Bay and need to be turned on for use by calling the Comm. Center
- Still in different stages of roll-out
- **The Emergency Button does not work on Interop Zones**

The Zone Down Button must be held down for 1.5 seconds before it will operate. The Interoperability Zones start four zones below the C Bank. To get back to the A bank just use the ABC switch to return.

SFFD

HOSPITAL & TRAINING ZONES (M & N ZONES)

SFFD Hospital Zone

- Located as the second to last Bank on the radio; can use the Zone up Button to go two Banks up from the A Bank
- Consists of a separate Talk-group for each Hospital
- Not in operation yet but when adopted by the hospitals it will allow multiple consults at the same time

SFFD Training Zone

- Located as the last Bank (N) on the radio; easily accessed by using the Zone Up Button and going up one Bank from the A bank
- Mimics the Operations Bank but uses the City's digital radio system
- Designed to let Firefighters get used to using digital radios on the fire-ground
- Consists of 16 Talk-groups, mirroring the Ops Bank
- Can be used at Battalion and Live Fire Drills and by Recruits in the Tower

Hospital

M1-SFGH

M2-UC Miss By

M3-UC Parnas

M4-St. Luke's

M5-St. Francis

M6-CalPac CA

M7-CalPac Pac

M8-Davies

M9-Kaiser SF

M10-Kaiser Sth

M11-Seaton

M12-VA

M13-Sobering

M14-HOT

M15- Unprg

M16- Unprg

Training

N1-CTRL 1T

N2-CTRL 2T

N3-CTRL 3T

N4-DSPT 4T

N5-CMD 5T

N6-CMD6T

N7-TAC 7T

N8-TAC 8T

N9-TAC 9T

N10-TAC 10T

N11-TAC 11T

N12-TAC 12T

N13-TAC 13T

N14-TAC 14T

N15-TAC 15T

N16-TAC 16T

Zone Up Button

The Radio Zones are arranged in a circle; you can get to any Zone by using the Zone Up or the Zone Down Button.

The Zone Up Button must be held down for 1.5 seconds before it will operate. The Hospital Bank is one up while the Training bank is two up from the A Bank

To get back to the A bank just use the ABC switch to return.



**San Francisco Fire Department
Division of Training
Training Bulletins**

- 90-7 Roof Ventilation Utilizing the XL-98
- 91-5 Elevator Rescue
- 93-1 Civil Disturbance Operations
- 93-2 Safety Considerations, XL-98
- 93-3 MRI Systems Safety
- 95-3 Size Up
- 95-7 Garage Door Precautions and Forcible Entry
- 96-3 Confined Space Operating Guidelines
- 96-5 Occupational Safety
- 97-1 Instructional Methodology
- 97-4 Electrically Powered Vehicles
- 02-1 Bomb & Bomb Threat Procedures
- 04-2 Safe Haven for Newborns
- 05-1 Self-Reading Electronic Dosimeter
- 07-2 End-Tidal CO₂ Monitor Device
- 13-1 Incident Support Crew
- 18-1 Siemens LRV4 Safe Lifting Guide
- 18-2 Portable Radio Training