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Definition of Terms

- **Command Net:** City-wide net used to connect Fire Stations to the EOC. Also sometimes called the “EOC Net”
- **EOC Tactical Channel:** Used for longer, more detailed traffic originating at the EOC.
- **Section Net:** Neighborhood neighborhood, originating from each Fire Station.

Communication Channel Summary

Note: All AECS members should have these programmed into their radios.

Command Net

- Primary “EOC1” repeater: 146.79 (-) 88.5
- Secondary “EOC2” repeater: 146.835 (-) 88.5
- EOC Tactical “EOC CMD” repeater: 444.375 (+) 107.2
- AECS Primary simplex “AECS Simplex”: 147.420

Section Nets: Fire Station simplex

- AECS1: 146.460
- AECS2: 146.430
- AECS3: 146.445
- AECS4: 147.540
- AECS5: 146.565
- AECS6: 146.490
- AECS7: 147.550
- AECS8: 147.450 (NOTE: also the ARES fall-back/simplex channel)
- AECS10: 147.465
- AECS24: 147.435

Communication Channel Uses

EOC1

Note: to be used by AECS members only

- EOC Command Net
- AECS member activation, notification and check-in. Monitor and check-in on this repeater for call-up and assignment notification.
- Fire Station to EOC communication channel.
- AECS weekly Net (Mondays @ 18:45hours, with radio checks starting at 18:30)

EOC2

Note: to be used by local COPE DOC/ICP only if local Fire Station simplex not active

- To be used by local hams/COPE zones **ONLY** if their local Fire Station simplex Net has not been activated. Once a Fire Station simplex Net has been activated, local traffic should shift to the Fire Station simplex channel.

EOC CMD

Note: to be used by AECS members only

- Command / Tactical channel to be used for AECS communications when EOC1 is in active use managing disaster-based traffic.

AECS Activation and Assignment Process

1. AECS members should monitor the main AECS repeater (EOC1) for activation information and assignment. Net control for AECS Emergency Net will manage call-ins, availability and assignments.

2. AECS members will be assigned based a combination of a) required staffing at either the EOC or a Fire Station, b) personal availability, c) level of expertise and/or qualification
 - a. EOC
 - b. Fire Stations
 - c. City Department Operations Center (DOC)
3. Required AECS staffing levels and operator pool
 - a. **EOC:** Pool of 15-20 EOC-qualified AECS operators
 - i. One (1) per active radio for Net Control, plus (1) operator per active radio for message handling.
 - ii. Total = 4 operators per shift.
 - iii. Three shifts = 12 AECS operators with EOC qualification required.
 - iv. Assume 75% availability (out of town, etc): 15-20 AECS EOC qualified operators in pool.
 - b. **Fire Stations:** Pool of 15-25 Fire Station-qualified AECS operators
 - i. Assume 5-10 Fire Stations activated at any given time.
 - ii. Two operators per shift
 - iii. Total 10-20 AECS Operators needed
 - iv. Assume 75% availability (out of town, etc): 15-25 AECS Fire Station operators in pool.

AECS Radio Resources

AECS Operators are required to know how to operate the following radio equipment

EOC Equipment

- Yaesu FT-8800R dual-band ham radios
- Kenwood UHF and VHF commercial (public safety) radios
- Kenwood 220 MHz ham radio
- County ACS LBRICS low-band commercial (public safety) radio
- AECS Resource box

Fire Station Equipment

- Yaesu FT-8800R dual-band ham radio

AECS Resource Box Content

- This Operations Plan
- Check-in Log
- Station Resource Log
- Event Log
- Operating Manual
- Map of the Districts
- AECS Organization Chart
- Contact Phone Numbers

AECS Qualification Requirements

General AECS Qualification Requirements:

- Current enrollment in City of Santa Rosa FireCorps program
- Certifications of completed ICS 100, 200 and 700
- Participation in at least one Public Service event per year as either an Operator or as the Net Control operator.
- Participation in at least one of the AECS-recognized training events per year.
- Regular check-in to AECS Weekly Nets.

Additional Requirements for EOC Net Control

- Completion of County of Sonoma Level 1 certification
- Participation in at least one Public Service event per year as the Net Control operator.
- Participation as Net Control for at least one AECS Weekly Net per year.

AECS Training and Practice

Note: AECS calendar on srcity.org/AECS

- Weekly AECS Nets (Mondays @ 18:45 on “EOC1”, with radio checks @ 18:30)
- Quarterly AECS Activations
 - EOC
 - Fire Stations
- Training (details tbd)
 - Instruction in the use of the radios, including dual band operations of the 8800s.
 - Instruction in the Fire Department protocols(including forms), terminology, duties and their expectations (assistance from Fire Department).
 - Use of Pro Words.
 - Handling intruders onto the Net.
 - Message Handling.

AECS Message Handling Protocol

Within the EOC

- Accurately receive incoming messages from Fire Stations, etc
- Enter general messages into the City of Santa Rosa “Electronic EOC” message logging/handling system.
- As needed, translate “windshield survey” information into the City of Santa Rosa “Electronic EOC” message logging/handling system.

At a Fire Station

- Accurately receive incoming messages from the general public, COPE/DOC/ICPs
- Accurately receive and log fire department windshield surveys.
- Log incoming messages (paper).
- Accurately transmit to the EOC.

Operations

EOC

- Arrival and Check in
 - Check in with EOC greeter and sign log-sheet. If no EOC greeter, sign in on log sheet at the entrance to the EOC and proceed to the Radio Room (NW corner of the EOC - "M" room).
 - Locate and inventory EOC radio room equipment and resource boxes.
 - Verify power and antenna connections.
- Activation
 - Establish Net on "EOC1" repeater
 - Conduct Communications Check with all stations

Fire Station

- Arrival and Check in
 - Present AECS badge and Check In with Station staff (Station Captain preferred)
 - Locate radio and inventory AECS resource box.
 - Fill out arrival log.
 - Familiarize with layout of facility (restrooms, kitchen, etc)
 - Coordinate your time piece with station clock. Use local time 24 hour clock
- Activation
 - Verify power and antenna connections
 - Check into EOC Net Control on EOC1 repeater.
 - Activate Local Fire Station Simplex Net

Fire Station and AECS Radio Location

[Fire Station 1](#)

- 955 Sonoma Avenue, 95404
- AECS radio not installed yet

[Fire Station 2](#)

- 65 Stony Point Road, 95401
- AECS radio not installed yet

[Fire Station 3](#)

- 3311 Coffey Lane, 95403
- AECS radio located in apparatus bay (south wall)

[Fire Station 4](#)

- 1775 Yulupa Ave, 95405
- AECS radio located in workshop area (south-west end of building)

[Fire Station 5](#)

- 2201 Newgate Court, 95404
- AECS radio located in shop room, west corner of building

[Fire Station 6](#)

- 205 Calistoga Road, 95409
- AECS radio installed in apparatus bay (south wall)

[Fire Station 7](#)

- 6590 Stone Bridge Road, 95409
- AECS radio installed in workshop area (rear of Fire Station).

[Fire Station 8](#)

- 830 Burbank Avenue, 95407
- AECS radio installed in apparatus bay (south side of Fire Station)

[Fire Station 10 \(Headquarters\)](#)

- 2373 Circadian Way, 95407
- **AECS radio not installed yet**

[Fire Station 11](#)

- 550 Lewis Road, 95404
- AECS radio installed in workshop area (rear of Fire Station).

Fire Station 24 (Rincon Valley Fire District)

- 207 Todd Road, 95407
- AECS radio installed in office area (front of Fire Station).

Yaesu FT-8800 Quick Reference

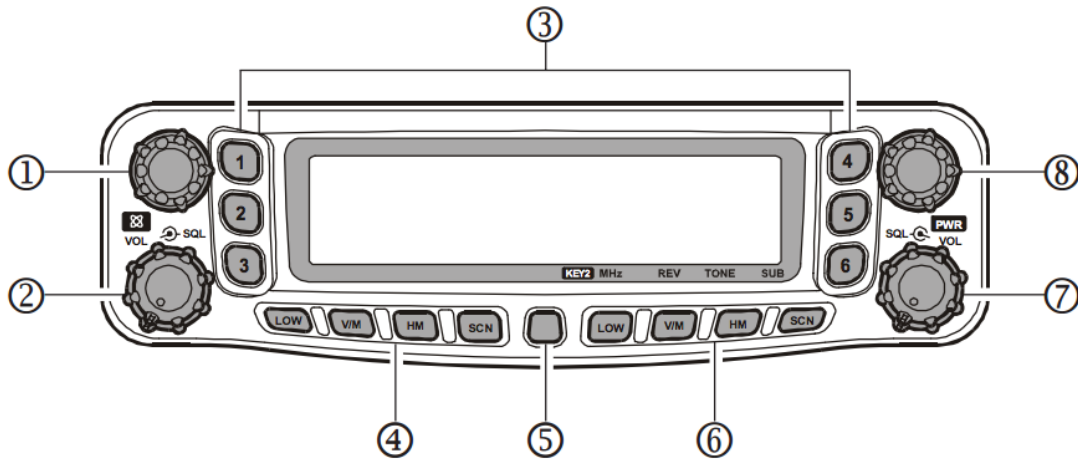
Recommended Configuration:

- Left channel: EOC 1
 - Primary repeater link to EOC
- Right channel: AECS X (or COPE X)
 - Where "X" equals YOUR local Fire Station number.
 - This is the local simplex channel for any local, non-affiliated hams who wish to contact our Fire Station.

Important Yaesu FT-8800 Front Panel Controls

- **Power:** via lower right volume knob (PUSH for ½ second)

- **Toggle operating band:** Upper Right or Upper Left knob (PUSH)
- **Volume:** Lower Right and Lower Left knobs
- **Squelch:** outer ring of the volume knobs
- **Toggle Channel Name/Frequency:** push “LOW” key for ½ second
- **Toggle OFF 1750 khz tone:** briefly push in the lower left volume button.



① “Left” **DIAL** knob

This 20-position detented rotary switch is the tuning dial for the “left” band. Press this knob momentarily to switch the “Main band” to be the “left” band.

When the “left” band is set to be the “Main band” in the VFO mode, press this knob to enable rapid tuning (in 1 MHz steps) using this knob.

Press and hold in this knob for 1/2 second to toggle the operating band on the “left” side as follows:

144 MHz → 250 MHz → 350 MHz → 430 MHz → 850 MHz → 144 MHz ……

② “Left” **VOL** ↔ **SQL** Knob

The inner **VOL** (Volume) control adjusts the speaker audio level from the “left” receiver. Clockwise rotation increases the audio level.

Press this knob momentarily to switch the Internet Connection feature “on” and “off.”

The outer **SQL** (Squelch) control is used to silence background noise on the “left” receiver. It should be advanced clockwise just to the point where the noise is silenced (and the “**BUSY**” indicator on the display turns off), so as to provide the best sensitivity to weak signals.

④ “Left” Side Keys

[LOW] Key

Press this key momentarily to select the transmitter power output level of the “*left*” band (“LOW,” “MID2,” “MID1,” or “HIGH”).

When the “*left*” band is set to the Memory mode or Home Channel, press and hold in this key for 1/2 second to switch the memory channel display between the “Frequency” format and “Alpha-numeric Tag” format.

[V/M] Key

Press this key momentarily to switch the frequency control for the “*left*” band between the VFO and Memory Systems.

When the “*left*” band is set to the VFO mode, press and hold in this for 1/2 second to activate the Smart Search Feature.

When the “*left*” band is set to the Memory mode, press and hold in this key for 1/2 second to activates the “Memory Bank” feature.

[HM] Key

Press this key momentarily to recall a favorite “Home” frequency memory.

Press and hold in this key for 1/2 second to activate Priority Channel Scanning.

[SCN] Key

Press this key momentarily to activate the Scanner on the “*left*” band.

When the “*left*” band is set to the Memory mode, press and hold in this key for 1/2 second to shift to the “Memory Tuning” feature.