

Disaster Communications



Marcussen Emergency
Response Training

Family and Neighborhood Basic, FRS 1 and FRS 2

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North Fair Oaks - Area 45 Coordinator



Marcussen Emergency
Response Training

United States Army Range Master

Electronics Engineering Degree from DeVry University in 1962

Emergency radio communications (1962-Present)

Black Berry REACT Board Member/Current President (1980-Present)

MPFPD Emergency Communications (1986-Present)

City of San Mateo, NEST Instructor (1991-1999)

Certified CERT Instructor/Program Manager (1991-Present)

SSMC Disaster Preparedness Instructor (1991-Present)

SMC CARD, Director/Instructor (1993-1997)

SCARES, ex-Board, ex-Treasurer (1993-1998)

FBC Board, Treasurer, President (2002-2018)

MPFPD CERT Instructor (2002-Present)

ARES Emergency Coordinator for MPFPD (2003-Present)

Atherton, East Palo Alto, Menlo Park, North Fair Oaks

ADAPT Member/Current Board Member (2018-Present)

FOBA Board (2013-Present)

“Keeping in Touch”



Housekeeping

- Put your microphone on mute
- If you need to take a break, just step away
- If you have a question or comment, type it into the chat function
- Questions – taken at the end

Methods of “Communicating”

- Voice
- Phone
- Radio

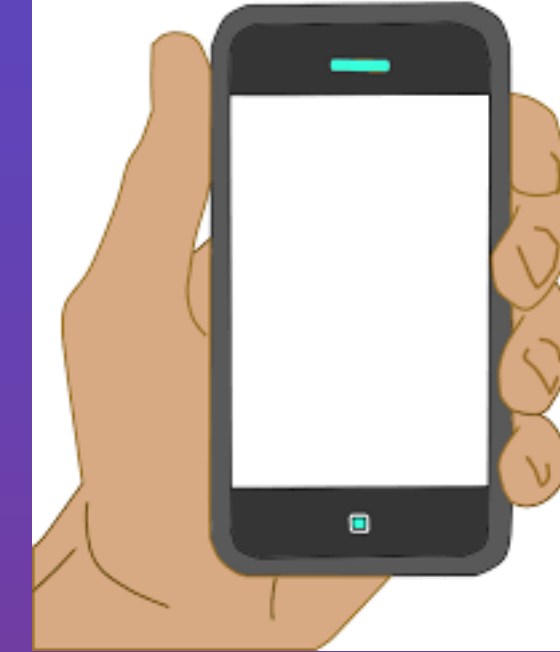


VOICE

- * Check yourself
- * Check your family
- * Check your immediate neighbors

YELLING is acceptable

PHONE



- * If/when possible, make your Out-of-Area status call
- * Your best bet is on a land line...
- * Texting may also work, even if voice does not
- * **Don't forget to have extra battery AND an automobile charger for cell phone**

RADIO



- * Citizen Band
- * Family Radio Service
- * General Mobile Radio Service
- * Multi-Use Radio Service
- * Amateur Radio

Citizen Band

Also known as CB, good buddy



Pro: **No** License required

More range than FRS (for mobile mount radios)
(5 miles for mobile; 3 miles for hand-held)

More frequencies than FRS (40-channels)

Con: Can have interference from out-of-area stations

Limited range for hand held radios

Requires batteries

Family Radio Service

Commonly referred to as FRS

Pro: **No** license required
Simple to operate

Con: Limited in range, low power ($\frac{1}{2}$ or 2 Watt)
Limited frequencies available (14-channels)
May be overloaded in a disaster
Requires batteries



General Mobile Radio Service

Commonly known as GMRS



Pro: Simple to operate

More range than FRS

Some channels will talk to FRS

Repeaters to greatly extend range

Up to 5 Watts on some hand-helds

Con: Commercial **License required** (\$35.00)

Limited frequencies available (8-channels)

Requires batteries

Mili-Use Radio Service

Commonly known as MURS

Pro: Simple to operate

More range than FRS

Simple VHF (Very High Frequency)

Up to 5 Watts on some hand-helds

Con: No license required

Limited frequencies available (5-channels)

Requires batteries



Amateur Radio

Commonly called HAM Radio

I am not allowed to tell you what HAM stands for



Pro: Almost unlimited frequencies
High Power, up to 1500 watts
Established system for
emergency communications (ARES est:
1972)

Repeaters to greatly extend range
Some have around the world range

Con: Test for **License required** (~\$35.00)
Requires batteries or **backup power**



NOW WHAT???

Here are some suggestions for a next step:

- * Take time to contemplate how involved to get into communications
- * Check your garage for that old CB radio gathering dust
- * Purchase a pair of FRS radio—good to use today with family
- * Purchase a GMRS license (www.fcc.gov)
 - * Sign up for a “CRAM/EXAM” to obtain your amateur radio license
- * Sign up now for FRS Radio 101, 102, and 103 along with
- * Ham Radio 001, 101, **102**, 201, and 202—it will give you a goal
 - * Copy the next slide for equipment suggestions

EQUIPMENT SUGGESTIONS

Nothing below is endorse. It is suggested from experience.

CB Radio: There are several good brands. Cobra, Uniden, Midland

FRS: Suggested is Midland 50 or **Motorola T-465**

GMRS: ICOM mobile F-221

Amateur Radio: Yaesu FT-60/65 hand-held/FT-8900 mobile

Antenna for mobile: Diamond dual band magnetic mount or X-50 for home

Power Supply for mobil at home: PowerWerx 30 Amp

Scanner: Bearcat BC 125AT

Battery: Too many options. Do you own research. (Amazon or Batteries-R-Us)

Check out complete list of suggestions at the ADAPT website

THANK YOU

WE ARE HERE TO ASSIST

u time and attention. Questions, comments, other ideas or additional suggestions are a

For amateur radio licensing information:
<https://sbcares.org/testing-training/>

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