

Field Day VHF for Everyone

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K0XI

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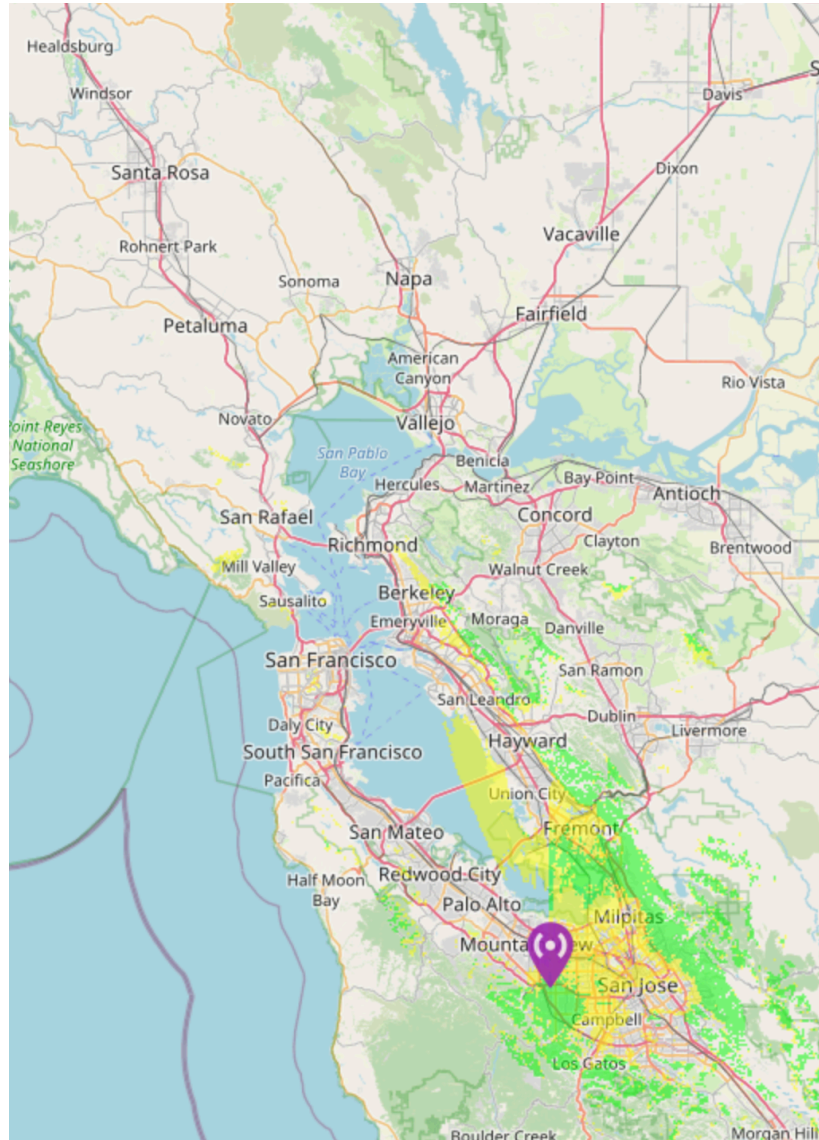
Step 1

An HT and a logbook

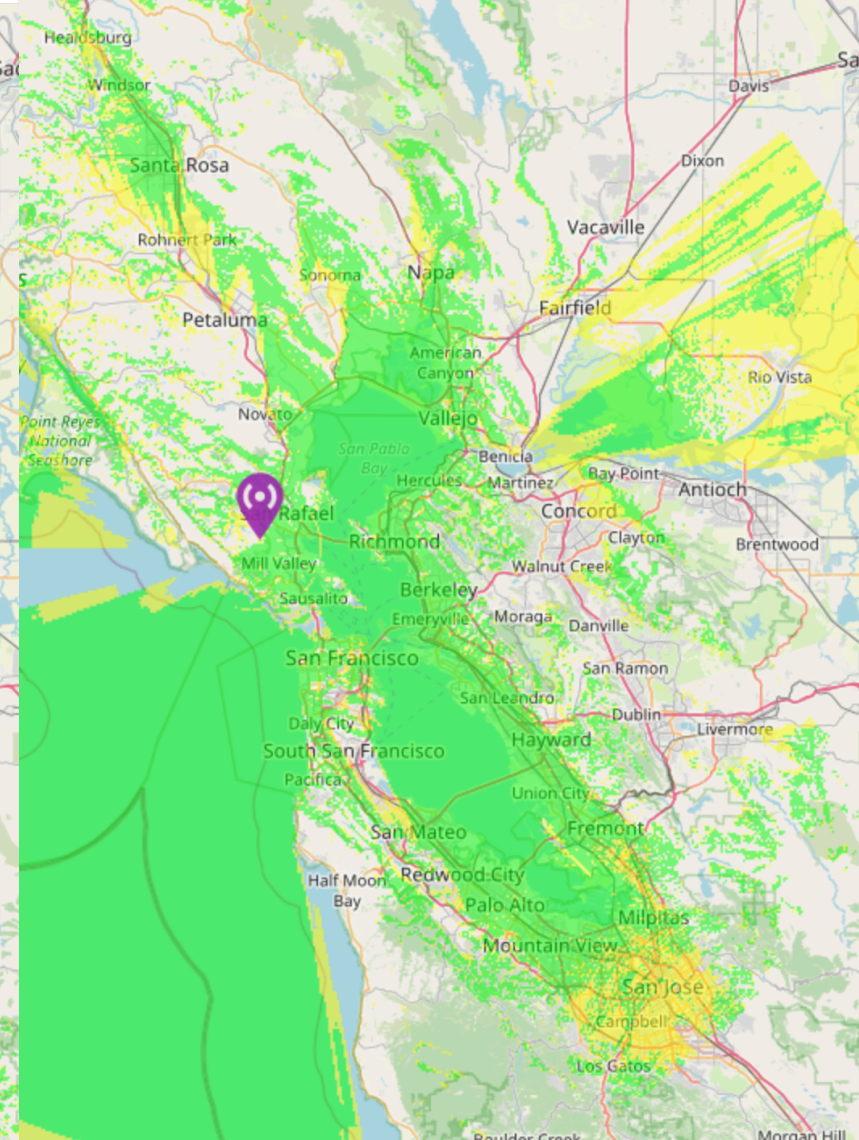
- VHF FM is the easiest mode of all
- Any HT will work
- Paper and pencil can still log QSOs
- Location really matters

146.520 FM
446.000 FM

De Anza College



Mt Tamalpais



Step 2

Add some bands

- Lots of current or recent HT models can do 6m or 1.25m
- Get a radio through eBay
- Replace the battery
- Antennas are less valuable than location

52.525 FM
223.500 FM



View from Mt Diablo



Step 3

Add some modes

- USB is the way (just not on 220)
- Very little CW
- Many HF rigs do 6m already
- Digital on 6m/2m is starting
- Simple roll-up J-poles work fine



50.130 USB
144.200 USB
432.100 USB



Step 4

Talk through a satellite

- For FM, full duplex is easier, but half works
- Use Arrow, Elk, or home brew yagi for 2m/70cm
- SSB Satellites are a real challenge
- Check out AMSAT.org
- Great apps available
- Only 1 FM QSO



Diana Eng KC2UHB in NYC

Transponder/Repeater active	Telemetry/Beacon only			No signal	Conflicting reports		ISS Crew (Voice)		Active
Name	Apr 1	Mar 31	Mar 30	Mar 29	Mar 28	Mar 27			
AISAT-1		1		1	1				1
CubeBel-1	1	1	1	1	1	1			1
CUTE-1	1	1	1	1	1	1			1
LilacSat-2		1	111	1	1	2			1
FS-3		1	2	11	1	1222			
[A]_AO-7						1			
[B]_AO-7	1	1	2	1 1 11	2 1 2	11 1 1			1
AO-92_U/v						1			
AO-95_L/v					1				
AO-95_U/v	1	1 1 121	1 1 2 1	2 1111	1 12 11121	12 1 21			
NO-103	2	1		1	1	11			
[B]_UO-11		21	2	11	2 1	1			1
LO-19	1	1	1	1	11	1			1
AO-27	1	221	112 1212	11 2 1 1 1	112 11	1 3 11			
FO-29	1	1	1	1	1	241			
XW-2A	1	122 21 1	3 111	111 21	1111	111 11			
XW-2B					11				
XW-2C	1			1 1	1	1			
XW-2D	1	1 1 2	12 1 1	111 1	311 1	1 2 3			
XW-2E				1					
XW-2F	1	1 1112	2111	2 111211	311 11	3 2 1			
CAS-2T				1					
NO-44					1				1
RS-44	221	411 1122	1 22 3 1	21 2 1	111211	1 2 12123 11			
CAS-4A	2	1 23 1 1	2 1	1 2 1 1	1111	112111			
CAS-4B	2 1	2 3211 1	1211 1	1 12 1	1112	111 1			
SO-50	111	11 1 11	11121	11 12 111	1 3132	11 244 221			
HO-68	1								
AO-73	1	1 1	1111		2	1 1 2			
IO-86	11111	1	11212112	1121 111	112111111	1			
EO-88	1 1 11	1	1 1 1 1	21	1 1121 1	2 21			
JO-97	1	11	1	11	1	1 2			
FO-99	1	1	1	1		1			
UVSQ-SAT		1			1				
Delfi-C3	1				1				
ISS-FM	11 11	1 1	111	1 1121	112	1 11			
NO-84_Digi	1		1	11	1 11 11	1 2			13
XI-IV				1					1
PO-101[FM]	1	12 22 11	111 21 1 12	11 111	2 1	2 4 21			
QO-100_NB	11	11 1 1 2	1	2		1			
NO-84_PSK					1	1			
ISS-DATA	14342	5231	524 941211	1323545411	1223244325	2121425 1 11411			
ISS-DATV	1	1	21						

Number of satellites:

- 8 FM
- 18 SSB
- 9 Digital

VHF Contesting Tidbits

Where

1. Geography and altitude rule the day
2. Go QRP

When

3. 100 QSOs is a **really** good FD
4. The first few hours and last few hours of FD are busy
 - A. Midnight to 7am is empty
 - B. Mealtime is low traffic

How

5. Rotate through the bands when where you are gets slow
6. When you make a contact, ask if they have other bands
7. Don't worry about the time it takes to explain to someone what FD is. The longer you talk, the more likely it is that someone else will hear and chime in.

Reference Links

There are THOUSANDS of online references

Articles and Resources

- <https://makezine.com/2010/10/26/diana-engs-yagi-antenna-project-in/>
- <https://www.ve2dbe.com/english1.html> (free account)
- <https://www.amsat.org/status/>

Masts

- Bag LSB6500 - <https://on-stage.com/products/view/35540/471823>
- Tripod LS-SS7770 - <https://on-stage.com/products/view/10740>
- Push up mast - <https://www.k1cra.com/mobile/Product.aspx?ProductCode=MAST21B>

Antennas

- <http://www.wa5vjb.com/references.html>
- <http://www.arrowantennas.com/arrowii/146-437.html>
- <https://elkantennas.com/product/dual-band-2m440l5-log-periodic-antenna/>
- https://www.diamondantenna.net/Product_Catalog/base_station.html
- <https://cometantenna.com/amateur-radio/base-antennas/multi-band-hfvhfuhf-2/>