

Field Day Orientation

What you need to know to get on the air.

Saratoga Amateur Radio Association

June 24, 2023

AE6PM, W6WS, NU6P

Updated June 7th by W6WS and KM6ZWR

What is Field Day?

- Annual ARRL operating event – held since 1933!
- Over 40,000 participants in U.S. and Canada
- Over 1,000 clubs and other organizations participate
- Emphasizes emergency preparedness and operations
- Oftentimes a club social event as well
- An operating event, ***not*** just a contest
- Always held on the 4th weekend of June (e.g., June 24th-25th, 2023)

Objectives

- ☐ Can be an individual effort, with a friend, or part of a club
- ☐ Can be at your home or in the field
- ☐ Prepare for the event in the prior 24 hours (e.g., begin on Friday at 11 AM Pacific)
- ☐ Contact as many stations as possible over the 24 - hour period (11 AM Saturday to 11 AM Sunday) under emergency/field conditions
- ☐ Demonstrate to the public, elected officials, and officials of “served agencies” our ability to provide public service
- ☐ Have fun

Field Day is an annual amateur radio communications event designed to exercise our emergency communication capability.

However, it can also be great fun *simply listening* to all of the traffic coming in from many far-off locations!

Each contact with another station requires exchanging **call signs and three other pieces of information:**

- (1) the number of simultaneous transmitters,
- (2) the Class.
- (3) the ARRL Section where you are operating.

Field day in 2023 is Sat-Sun June 24-25 from 1800 UTC Saturday (1100 PDT) to 2059 UTC Sunday (1400 PDT).

You are free to operate any frequency and any mode within the constraints of your class of license.

It's good to keep a log of who you talked to, so as not to repeat yourself.

Contact any station once per band per mode.

You do ***not*** need to report the results to the ARRL or anyone else, but many choose to do so.

Basic Preparation/Operation

If operating **HF**, tune around and listen for a few minutes and you will know what to do.

If you don't hear anything, you're on the wrong band/mode or your antenna has fallen down. Ha!

If on voice and no one answers you, you are probably on the wrong SSB sideband. The convention is LSB on 160 thru 40 meters.

VHF/UHF is a little less intuitive. Mainly due to the lack of intense activity and channelization.

Start by monitoring one of the National Calling Frequencies.

No repeaters allowed, it's all simplex.

Share the frequency.

Antenna Polarization

Antenna polarization for VHF/UHF **SSB** is usually **horizontal**.

Antenna polarization for VHF/UHF **FM** is usually **vertical**.

Note: Using an improved quality antenna and higher elevation will greatly improve your performance!

ARRL Sections

SCV – Santa Clara Valley (that's us)

SF – San Francisco

EB – East Bay

SV – Sacramento Valley

SJV – San Joaquin Valley

(There is a link on the Reference slide to all sections)

Class Definitions

Class A: Club/non-club portable (group of 3 or more)

Class A – Battery*

Class B: One or two person portable

Class B – Battery*

Class C: Mobile

Class D: Home stations

Class E: Home stations – Emergency power only

Class F: Emergency Operation Centers (EOCs)

*Output power of 5 watts or less and a power source other than commercial mains or motor-driven generator.

Just using your HT would be B-Battery.

Mobile rig in the car would be C.

VHF/UHF Operation Example

If you are on a VHF or UHF frequency using your HT, your contact might go like this:

[me] CQ Field Day, this is AE6PM.

[you] AE6PM this is KE6QDI.

[me] KE6QDI, please copy 1ESCV, one Echo Santa Clara Valley.

[you] Roger, one Echo Sierra Charlie Victor. Please copy 1DSF, one Delta San Francisco.

[me] Roger, one Delta Sierra Foxtrot. QSL.

[me] This is AE6PM.

Rigid ITU phonetics are not required but are desired.
No prowords, just efficient, quick communication.

You might be asked for your Maidenhead Grid Square. Look yourself up on QRZ.com to find yours, or see References slide for a link. Jack's home is CM97ag

HF Operation

A contact on HF (or VHF/UHF SSB) proceeds in much the same way.

The CQ might become CQ, CQ, CQ Field Day in hopes someone will tune across your frequency.

Contacts tend to be terse and quick – listen for a while. Contact any station once per band per mode (voice, CW and digital).

If someone says you are a “Dupe” – don't be offended. It simply means you've already worked him on that band/mode.

VHF/UHF National *Simplex* Calling Frequencies

52.525 MHz

146.52 MHz (2 meter)

223.500 MHz

446.000 MHz (70 cm)

Also try 146.550, 146.655, 146.415, 146.460, 146.505
and 146.550 MHz

HF Frequencies

160, 80, 40, 20, 15 and 10 meters.

Also, all bands 50 MHz and above.

Technician Class licensees can also operate voice on
28.300 to 28.500 MHz and CW/digital on 28.000 to
28.300.

Logging

Keep a log of your contacts for your personal use or so that you or your group has the necessary information to submit to the ARRL:

Call Used and Exchange Sent (one time entry)

Frequency

Mode

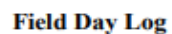
Date

Time (UTC)

Station Worked

Exchange Received

(See References for a link to a logging form)



page _____ of _____
Exchange Sent _____

[illegible]

Scoring

Based on power and mode:

1 point per phone QSO (>150 watts)

2 points per phone QSO (>5 watts to 150 watts)

5 points per QRP phone QSO (5 watts or less)

Multiply by 2 for CW and digital QSO (e.g., a QRP CW QSO is 10 points)

Many bonus points are available. See the ARRL rules

Language Lesson

CQ - Looking for a contact.

QSO (or Q) - A contact.

QSL - Acknowledges receipt.

QRZ – Please try again.

73 – Best regards (pronounced seven three)

References

1. Field Day rules: <http://www.arrl.org/field-day>
2. ARRL Sections: <http://www.arrl.org/section-abbreviations>
3. Field Day Log Page:
<http://www.arrl.org/files/file/Field-Day/2019/2019%20FD%20Log%20Sheet.pdf>
4. Grid square locator:
http://www.levinecentral.com/ham/grid_square.php

Windows users try ctrl+click to follow the link.

(Where W6WS goes... K6MI)



KT-36XA + 40/80m dipoles



K6MI VHF/UHF Station



Jack's Portable Antenna



A screenshot of the Google Maps app interface. At the top, there's a search bar with 'Silicon Valley Vista Point' entered. Below the search bar is a large, vibrant landscape photograph of the vista point, showing rolling green hills and a clear blue sky. Underneath the photo, the location name 'Silicon Valley Vista Point' is prominently displayed in bold black text. Below the name is a 4.7-star rating with 161 reviews. A red banner with white text states 'Temporarily closed'. The interface shows two tabs: 'Overview' (selected) and 'Reviews'. Under 'Overview', there are five circular icons: a blue circle with a white location pin for 'Directions', a red circle with a white bookmark for 'Saved', a blue circle with a white location pin and a magnifying glass for 'Nearby', a blue circle with a white smartphone icon for 'Send to phone', and a blue circle with a white share icon for 'Share'. Below these icons, a red heart icon indicates the location is 'Saved in Favorites'. At the bottom, there are two buttons: 'Add note' and 'View list'. The address '2001-20039 Skyline Blvd, Redwood City, CA 94062' is listed at the very bottom.

The screenshot shows a Google Maps interface. At the top, there's a search bar and a navigation bar with icons for Restaurants, Hotels, Things to do, Transit, Parking, Pharmacies, and ATMs. The map itself is a satellite view of a hilly area. A red pin marks 'Silicon Valley Vista Point' on a road labeled 'Clouds Rest Rd'. A green pin marks the 'Ridge Trailhead' nearby. Several trails are shown as dashed green lines, including 'Ridge Trail', 'Charquin Trail', 'Alder Spring Trail', 'Clouds Rest Trail', and 'Meadow Trail'. A road labeled 'Skyline Blvd' runs diagonally across the bottom right. The bottom of the screen shows the Google logo, map data copyright information (©2023), and links to Terms, Privacy, and Send feedback. A scale bar indicates 200 feet.