

## 2023-06-13 Hamlet Net - Field Day - Points and Operating Techniques

### Announcements:

- Test Session Info
  - Next VE session is Saturday, June 24th in the Clover Building at the Boulder County Fairgrounds, and starts at 10am. It is an ARRL VEC exam session, so there will be a \$15 fee to take the test. For more info, see the Licensing/Testing page on the club web site, <https://w0eno.org/>, under the Education menu.
- Chuck is putting together a special event to celebrate the 105th anniversary of the Peak-to-Peak highway involving multiple area radio clubs on September 30th. They're currently looking for volunteers to work this special event. They will be operating HF SSB voice, CW, and FT8 stations from 8am to 4pm with three operators at each station. There is a signup link on the club web page at <https://w0eno.org/>, or contact him for more information!
- Field Day is coming up June 24th, and the club is starting to work on planning for this event. See the Club website for more information.
- Our sister club up in Nederland is looking for some help with events they are running. They have a weekly Monday night net with no predetermined agenda, so you can lead it however you want. They are also planning a Field Day site at Golden Gate State Park and are welcoming anyone who wants to participate. Finally, they are looking for operators for the Ned Gravel run on July 8th. They have signup links for all these events, so head over to their web site <https://w0ned.org/> for more information!
- You can start earning your 2023 membership or future renewal by acting as NCS for at least 5 nets this year. You can run either this Tuesday night net or the Thursday night net (or both). We have scripts available for both, so all you need is a good connection into the repeater, and somewhere to keep track of names and call signs as people check in. If you're going to be on the net anyway, why not save some dough at the same time! There are four free memberships available for 2023, so don't wait to get started!
- Chuck has set a goal for the Club of running at least one activity a month. This can be a hands-on construction activity, an operating activity like Field Day, a fox hunt, or a special event station. The goal is to get people together to have fun with amateur radio! We have multiple locations at our disposal, as well as lots of Club equipment, so if you have an idea for something you think others hams would like to do, please let us know, and if you're willing to run it, even better!
- The Club is also looking for presentation topics for 2023. If you have any ideas, or better yet, would like to present, please let Chuck know and we'll get you on the schedule!

- All club activities are open to anyone - members and non-members. ~~If you have questions, ask them on a net or~~ send email to [elmer@w0eno.org](mailto:elmer@w0eno.org)

**Presenter: Bryan, AF0W**

**Topic: Field Day - Points and Operating Techniques**

### **QSO Points**

- I mentioned last week that Field Day is an "operating event" and not a "contest," but many argue that the ARRL really blurs the lines between the two as points are awarded for contacts during Field Day, contributing to a "total score" for each Field Day submission
- This total score is determined by multiplying the total number of QSO points by the power multiplier and adding in any bonus points that were earned
  - a. Voice contacts earn 1 point, while CW and digital contacts earn 2 points
- One new rule for 2023 concerns digital contacts
  - a. Each contact must include direct initiation by both operators, either by local or remote control
  - b. Automation (such as that in WSJT-X for FT4 and FT8) may be used to complete the contact, but the initiation must be manual on both ends

### **Power Multiplier**

- The power multiplier is determined by the highest power output of any transmitter at the Field Day site
  - a. If all contacts are made using a power of 5W or less and if a power source other than commercial power or motor-driven generator are used (such as batteries, solar cells, etc.), the power multiplier is 5
  - b. If all contacts are made using a power of 5W or less, but the power source is from a commercial main or motor-driven generator, the power multiplier is 2
  - c. If any contacts are made using an output power up to 100W, then power multiplier is 2
  - d. If any contacts are made using an output power greater than 100W, the power multiplier is 1

- A new 2023 rule specifies that no more than 500W peak envelope power at the transmitter may be used for Class A, B, and C stations, and that class D, E, and F cannot exceed 100W PEP at transmitter output.

### **Bonus Points**

- Another way to boost your score is to perform activities that result in bonus points being added to your total score.
- Some examples of bonus activities are:
  - a. Operating from a public location
  - b. Making one Field Day QSO via satellite (this is the one exception to the "no repeater use" rule)
  - c. Copying the ARRL Field Day bulletin transmitted during Field Day via RF. This bulletin is sent multiple times during Field Day using CW, voice, and digital modes (RTTY, PSK31, and MFSK16)
  - d. Having a participant aged 18 or younger complete at least one QSO
- There are many other bonus opportunities, and some of these bonus points are only available to sites of a certain class, so be sure to read the rules
- One other change that was added during Covid is that members of a club may operate their own field day site separate from the club's site, but specify that their points should aggregate to the club's entry
  - a. If you operate outside of the official LARC site, you cannot use the club's W0ENO call sign, you use your own
  - b. When submitting a Field Day summary sheet, the second field on the form is titled "Club or Group name"
  - c. The ARRL includes the sum of all entries with the same info in this field
  - d. In the past, we've used "Longmont Amateur Radio Club" (all spelled out)

### **Operating Technique**

- Once you get all your equipment set up and sit down to operate, you have to make a choice as to how you are going to go about it.
- There are two broad methods of working a contest - "Calling CQ" or "Running" and "Search and Pounce" or "S&P"

## Calling CQ

- To call CQ, you simply find an available frequency, transmit your CQ, and then listen for stations to contact you
  - a. Ok, in practice, it's a bit more work than that, but those are the highlights
- First of all, finding an available frequency can actually be very difficult during a big contest
  - a. While the bands may appear dead the day before a contest, when something like Field Day comes around, they suddenly come alive and are packed!
  - b. If you have an HF radio with a waterfall or bandscope display, you can visually look for an unused frequency, but if you have an older radio, you have to tune it across the band to find an opening
  - c. Once you find a candidate frequency, wait a short period of time (say, 20 seconds) to make sure you're just not hearing half of a QSO
  - d. Then you should ask if that frequency is in use. A simple "AF0W, is this frequency in use?" is fine
  - e. Then wait 10 seconds to see if anyone responds. You can repeat this process once if you want to be sure, but in a busy contest environment, this may not be feasible.
  - f. At this point, go ahead and call CQ.
- The purpose of calling CQ is to get other operators to notice and respond to you. If you're not transmitting on the frequency, then they won't hear you.
  - a. Something I've seen many times at Field Day is that an operator will find a frequency, call CQ once, then listen for a minute or so, then call CQ again, listen again, then change to another frequency and start the process over again.
  - b. Remember that many operators do not have band scopes or waterfall displays, so the only way they're going to find you is by tuning across the band. If you wait a long time before repeating your CQ, they can tune right across your frequency!
- You want your CQ to be long enough and often enough that someone will find you!
- An example CQ for Field Day would be something like "CQ Field Day, CQ Field Day, CQ Field Day. This is AF0W, alpha-foxtrot-zero-whiskey, calling CQ Field Day."
- Wait a short period of time (3 seconds or so) to see if you get any response, but if all you hear is static, repeat your CQ.

- a. Some radios (such as the club's IC-7300) have a built-in voice recorder that you can use to record your CQ and play it back repeatedly.
- Note that this is a long CQ - if things are busy, you can just say "CQ Field Day AF0W" or "QRZ AF0W?"
- If another station hears you, they'll respond with their call sign
  - a. If you have difficulty making out the call, just ask them to repeat it. If you can only make out that his call sign ends with "foxtrot-delta," say something like "Can the station ending with foxtrot-delta come again?"
- If you can't make out any of the call sign, just call a quick CQ again, or announce "QRZ?" (queue-are-zed) which stands for "who is calling me?"
- At this point, you respond with their call sign and the contest exchange. For example, "K0ITP, 3A CO" (three-alpha, charlie-oscar)
- They then respond with their exchange. For example, "QSL, AF0W, 1B PA" (one-bravo papa-alpha)
- You then thank them and move on to your next contact - something like "QSL, 73 and good luck, QRZ Field Day AF0W"
  - a. Make sure to use your call sign when soliciting a new contact - don't just say "QRZ?" It's frustrating for people who have just "found" your frequency, and haven't heard your call sign yet.
- Don't try to work other stations that initially answered your CQ - they may have moved on, and it will just waste time. Just call "CQ" or "QRZ" again to get active listeners.
- After running a frequency, you may have someone pop up saying they're using the frequency. This can be because propagation conditions have changed, and they are now able to hear you.
  - a. Easiest thing to do is to just spin the VFO and find a new frequency. You'll probably not get far trying to argue with them.

### **Search and Pounce**

- When operating search and pounce, you are the one responding to CQs
  - If you suffer from mic fright, this may be a lower-stress method to try
- You may also need to operate S&P if you can't find an unused frequency for calling CQ yourself

- To find busy frequencies, use your waterfall display or tune across the band to find a QSO in progress
- One benefit of operating in S&P is that you can listen to multiple contacts to make sure you get the other station's call sign and exchange - this takes some of the pressure off you when you make contact with them
- When the station finishes a contact, they will generally call CQ, or may just say "QRZ?" That's your cue to send your call sign
- Give your call sign once using phonetics
- The calling station will pick a call sign out of the stations responding, and initiate a contact with them
- If they couldn't hear the entire call sign, they may ask for a station to repeat their call sign. If your call sign does not fit what they are asking for, do not respond - wait until they complete the QSO and call again.
- You will hear some stations respond without using phonetics. If the other operator seems to be responding to these stations, you can give this a try as well.
- The reason phonetics are used by default is to reduce the amount of time needed to make the contact. You just yell out your callsign and the other station either can't figure out if you said D or V (delta or victor), it will waste time as you try to correct him to repeat your call sign with phonetics.
- The calling station will then reply with your call sign and his exchange, and the QSO will proceed as details previously.

## Summary

- Looking at all the rules involved in Field Day may seem daunting at first, but as you read them, you'll find that many do not apply to your site class
- Field Day probably started with few, if any rules, but once you add scoring to any event, people are going to try to game the system to get more points, which leads to more rules
- If you want to run your own Field Day site, but are unsure of how to do so, please drop by the LARC Field Day site at the Boulder County fairgrounds and you'll be able to see how the process works (it's much easier than it sounds when you try to explain it!)
- You can also get on probably any repeater in the area and say you have a question about Field Day, and I'm sure you'll get a response!

## Questions:

- **The question for the week is:** What are your thoughts on contesting in amateur radio? Have you ever participated in one, or do you prefer other modes of operation?
- **In my case,** I'm a bit of an introvert, so I made my first HF contacts during contests. I liked that it was a short, expected exchange of information, so I wouldn't have to make small talk. Also, the quick nature of the contacts made it easier to get on the radio with a minimum of "mic fright." Nowadays, there are quick and easy digital modes such as FT8 that can serve that same purpose, but those weren't available back when I first got licensed (which was only 9 years ago)!

**More Info:**

- ARRL Field Day: <https://www.arrl.org/field-day>
- ARRL Field Day Bulletin Schedule:  
[http://www.arrl.org/files/file/Field-Day/2023/4\\_37-2023%20W1AW%20Sked.pdf](http://www.arrl.org/files/file/Field-Day/2023/4_37-2023%20W1AW%20Sked.pdf)
- LARC 2023 Field Day page: <https://w0eno.org/w0eno-2023-field-day/>
- If you have ideas for net topics or general meeting topics / presenters, please let us know! Tell us on a net, or send email to [k0itp@w0eno.org](mailto:k0itp@w0eno.org)

**Email to [elmer@w0eno.org](mailto:elmer@w0eno.org)**

1. K0DBL - Don - Mead
2. WA7EM - Ed - Erie
3. KF0MXH - Art - Longmont
4. KE0EE - Don - N Longmont

Net closed at 7:40pm