

2022-02-28 Hamlet Net - Logging

Announcements:

- Test Session Info
 - Next VE session is this Saturday, February 25th. It is an ARRL session, so \$15 fee to take test
- The Skyhub Link system has brought up a new repeater in Boulder covering Boulder, Broomfield, and Louisville. The system is on 447.175 MHz with a negative offset and a split tone configuration, with an incoming 103.5 Hz CTCSS tone and a 186.2 Hz outgoing tone.
- Three options for LARC Saturday breakfasts - have three options: Loveland at Grandpas at 7am, 8am Hidden Cafe in Longmont, 10am at Hidden Cafe in Longmont
- LARCFest is April 1 from 9am to 1pm at the Boulder County Fairgrounds in Longmont. For more information, see the club web site at: w0eno.org
- Special event planned for end of March / beginning of April for autism awareness. Chuck is planning to organize a club event with a special event call sign. For more info, send Chuck an email at k0itp@w0eno.org
- Field Day is coming up in June, and the club is starting to work on planning for this event.
- 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

- Club breakfast Saturday mornings at 8am at the Hidden Cafe in Longmont
 - Come meet other Club members and discuss amateur radio

Presenter: Bryan, AF0W

Topic: Logging

- When participating in a contest or an operating event like Parks on the Air or Summits on the Air, one thing that is very important is to have a record of your contacts
- Typically, you would record information such as the date and time, frequency or band, other stations' callsign, and the information exchanged (both what you sent them, and what they sent you).
- After the contest or event, this information is typically uploaded to the contest website where it is analyzed and compared against other submissions to verify that the event exchange information was correctly sent and received
- Pretty much every contest has rules specifying that the exchange information must be exchanged during the actual QSO - you can't get it from a spotting site, or exchange it via email or a phone call, for example.
- Some contests won't give you points for incorrect (or missing) contact information - some will actually penalize your score, so strive for 100% accuracy
- Recording your contacts is called "logging"
- Many hams also log non-contest QSOs as well
- These log entries may also include things such as information about the other ham (job, family, hobbies), equipment used (such as radio and antenna), power output, and mode used

Paper Logging

- The "old school" method of logging consists of writing contact info down on paper
- The ARRL sells pre-printed log books in a large and small size, but you can download and print log pages from the Internet, or create your own
- You can even just record your QSO info in a spiral notebook
- The form of the data is not important - but the information is
- Paper logging does have some drawbacks - one major one is that if the contest requires electronic log submissions, you must type in all the information at some point

Computer Logging

- This limitation and a few others are addressed by using computer-based logging applications
- There are many to choose from, and they run on just about any device - computer, tablet, or phone
- Some benefits of electronic logging include:
 - a. Automatically populating fields with the date and time
 - b. Ability to interface to your radio via CAT control to automatically fill in information such as band, frequency and mode
 - c. Warning you if you have already contacted this station (sometimes called "dupe checking") - most contests do not award points for multiple contacts to the same station, so taking time to work that station again will not help your score
 - d. Keeping track of various goals during the contest - such as how many counties you've contacted in a State QSO party, or how many unique states or grid squares you've communicated with
 - e. Showing real-time statistics for things like QSO rate (number of contacts per hour), contest multipliers, and overall contest score
 - f. Interfacing to spotting sites to show you frequencies being used by other stations - although note that some contests or categories prohibit the use of spotting sites
 - g. Automatic QSO serial number tracking (some contests include a serial number as part of the exchange)
 - h. Easy preparation of electronic log file for submission to contest or tracking sites such as the ARRL's Logbook of the World, eQSL, and QRZ.com
 - i. Morse code generation and voice keyer functionality
 - j. Multiple logging computers can be networked together to consolidate logging, statistics, dupe checking, etc.
- Not every application supports all of these features
- There are a couple of broad categories of logging applications
 - a. The first are general logging programs. They are designed around non-contest operation and is meant to be used to log your everyday QSOs

- b. Another group are contest logging applications. As the name implies, these are geared toward contesting, and include additional functionality in that area.
- Some of these are generic for all contests, while some are contest-specific
- For example, one widely-used general contest logging program is N1MM Logger Plus (november-1-mike-mike)
 - a. It is free, Windows-only, and uses configuration files to support the requirements of different contests
 - b. While it has an extensive list of features, this also makes it somewhat intimidating for new users
- On the other hand, N3FJP (november-3-foxtrot-juliet-papa) has large set of logging applications - each one customized to log for a particular contest
 - a. This is the software that is being used at LARC events such as Field Day, Winter Field Day, and the Radio in the Park event
 - b. They also have a version set up to perform general logging
 - c. Most of his applications require a registration fee, but there are some that are free, such as the one for ARRL Kids Day, the ARRL Rookie and School Club Roundups, and Jamboree on the Air
 - d. The registration fees for the rest of the logging applications are \$8.99 each, or you can register for all of them for \$60
 - e. You can try out all the programs for free - I believe they are just limited by the number of contacts you can log without registration
 - f. If you are planning to operate a station at the LARC Field Day site, you can download the software and get a feel for how it works prior to the event
 - g. The web site is: <https://www.n3fjp.com/> (november-3-foxtrot-juliet-papa)
- There are many other options as well - some of which even support multiple platforms (like Windows, Mac and Linux)
- There are a few web-based systems, but these obviously require a working Internet connection - good for home use, but not so much for SOTA!
- There are also tablet- and phone-based applications - these might work fine for general QSO logging, but I would think they'd be cumbersome to operate in a fast-paced contest environment.

- In fact, there are so many options that it becomes difficult to choose one!
- You will likely wind up trying a few before you find one that you are comfortable with

ADIF Files

- With all these different logging applications and destinations such as Logbook of the World and contest web sites, how do you get your log data from one to the other?
- A commonly-used method is to exchange log information between applications using something called ADIF (alpha-delta-india-foxtrot) - which stands for Amateur Data Interchange Format
- This is a text file format that was initially developed by two hams back in 1996.
- It specifies the format for storing many types of log data including things like Parks on the Air references, grid square, propagation type, and QSO upload status
 - a. There are 166 QSO-related fields defined, as well as provisions for application-specific and user-defined fields
- The ability to import and export ADIF records is something you should look for in your logging application if you expect to transfer QSOs between applications
- One recommendation I heard at a recent ARRL conference was to have one location that contains all your logs, regardless of the activity where they were generated
 - a. By using ADIF export files, you can consolidate your WSJT-X FT8 logs with your N1MM+ contest logs into your N3FJP general log, which you can then upload to Logbook of the World

Cabrillo

- There is also another QSO-exchange format called Cabrillo that was developed to allow the exchange of contest logs
- It is used by many contests to support electronic log submission and automate the log checking process

Summary

- Don't forget, you can always fall back to paper logging - your spiral notebook will never crash or run out of battery charge!
- Whatever application you use, be sure to have multiple back ups of your log data in case you suffer a computer crash!

Questions:

- **The question for the week is:** If you log any contacts, what method do you use (paper, computer, etc.) and how has it worked out for you?
- **In my case,** I've probably got three logs going.
 - a. The first is the one built into the WSJT-X software that logs my FT-8 contacts.
 - b. The second is the N1MM+ software that I use during contests.
 - c. The third is a paper notebook.
 - d. I suppose a fourth is used during contests where I jot down details of stations I want to try to contact on a big desk calendar we got from our insurance agent. I'll log frequencies and call signs that I want to return to. Once I actually make the contact, I enter it into either my paper notebook or N1MM+.
 - e. I occasionally sync the WSJT-X and N1MM logs with eQSL and LoTW.

More Info:

- ADIF Specification: <https://www.adif.org/>
- Cabrillo Specification: <https://wwrof.org/cabrillo/>
- Cabrillo Log Format Tutorial: <http://www.arrl.org/cabrillo-format-tutorial>
- N3FJP Logging Application: <https://www.n3fjp.com/>
- N1MM+ (contest logging application): <https://n1mmwp.hamdocs.com/>
- WSJT-X Digital Mode Software: <https://wsjt.sourceforge.io/wsjitx.html>
- DXLog.net: <http://www.dxlog.net/>
- HAMRS (logging - Mac/Windows/Linux/Android/iOS): <https://hamrs.app/>
- RUMLogNG (logging - Mac only): <https://dl2rum.de/rumsoft/RUMLog.html>
- Log4OM 2 (web-based logging): <https://www.log4om.com/>
- Second Op "slideerule": <https://www.ebay.com/itm/295469398805>

Notes:

- 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

Email to elmer@w0eno.org

1. K0ITP - Chuck Firestone - Uses QRZ online. Export up to LoTW. ~191 contacts.
2. WA7EM - Ed - Erie - Uses Log4OM - free, does everything, including CAT control, color-codes callsigns for new band, new band for country, etc. Use paper for PoTA. For nostalgia, uses N6RJ second op. Way back, wrote DB for his Commodore 64 to record logs and track awards.
3. KV0N - Raman - Lafayette - Used QRZ mostly, and uses HAMRS on laptop for logging while doing PoTA or random ragchews.
4. N0ZFY - Bob - Broomfield - Don't do much DXing, and not much of a contester. Just during Field Day and WFD with N3FJP. Logged one dupe on Winter Field Day, but was also doing some paper logging, so may have slipped in there. Built a really good spreadsheet log, but kept forgetting to run it and log contacts.
5. AF0W - Bryan - El Paso via Echolink -
6. W0DRZ - Chris - Lyons - Started using Log4OM, then upload to multiple online services like eQSL and HAMQTH. Like Log4OM because he does a lot of mobile operating, and was having difficulty recording locations.
7. WY7AA - RJ - Wyoming (ridge between Cheyenne and Laramie at 7500 ft) - N3FJP since he got started. Very simple to use. Lot of operating while roving, so no Internet. Uses ACLOg for all his contesting and digital satellite, then goes to LoTW from there.
8. KM6SJA - Steve - Longmont - Have been using paper, but installed HAMMRs this week as he's running a Mac. Seems to work pretty well. Uses templates for different contests, etc.
9. KF0FEC - Will - Boulder - Switched to UHF on mobile (VHF was set to low power, so that may have been why he couldn't get in originally). Doesn't do any logging.

Closed net at 7:55pm

Have talked about running Field Day stations with an operator and a logger (two individuals) to share the load - As Bob mentioned, it is easy to get wrapped up in operating, and forget to log. Bob added that we have headphone splitters for Field Day to support operating and logging

Some applications, such as WSJT-X, can be configured to directly communicate to logging applications via logging API (application programming interfaces)

On w0eno.org under Club History -> Presentations, 2022 Mar – Jack Roland, KE0VH, SkyHub Link System – [Website \(video\)](https://skyhublink.com/) <https://skyhublink.com/>