2022-03-07 Hamlet Net - Spotting Sites

Announcements:

- Test Session Info
    - Next VE session is Saturday, March 25th. It is a Patriot VE session, so there is no fee to take the test. The test location is the Clover Building at the Boulder County Fairgrounds in Longmont,

- There are now three options for LARC Saturday breakfasts: 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: Spotting Sites

- Spotting sites are web sites where amateurs can post reports of contacts with stations to share with others

    a. May also be called "spotting clusters" or "DX Clusters"

    b. For example, if I'm on 20 meters and make a voice contact with a station in South Africa, I can post a spot on one of these sites. If some of you are monitoring the spotting sites, you can see that there is apparently a propagation path from Colorado to South Africa, so you can jump on the spotted frequency and see if you can add them to your logbook as weLl!

- They can be helpful if you are in a contest and are looking for stations to contact, or are trying to get contacts for an award (like Worked All States or DX Century)

- Spotting information typically contains call signs of both stations, date and time, band, frequency, mode, and an optional comment

    a. Comment can indicate a station's participation in a contest or other activity

- In pre-Internet days, spotting nets were run over VHF packet radio

    a. In fact, the Kenwood TS-2000 HF/VHF/UHF radio has the capability to monitor a packet frequency for spotting information, show received information on its display, and can tune to a spotted frequency with a keypress

- Some clusters today can be accessed via telnet, but many are web-based

- Many spotting sites, both telnet and VHF packet, are linked together and exchange spotting information

- Spotting sites are integrated into many computer logging programs

    a. Logging programs can submit your logged contacts as spots automatically

    b. Logging program can display active spots, and some will tune your radio to the spot's frequency (if radio CAT control is supported)

- Some programs, such as WSJT-X, have functionality for automatically reporting heard stations to spotting sites

- Many CW spots are the result of stations running CW Skimmer software and publishing the stations they hear

    a. CW Skimmer can decode all CW signals in the passband that is presented to it - up to 700 signals can be simultaneously decoded

- Use of spotting networks is prohibited in many contests (or restricted to certain entry classes)

    a. Even if allowed, contests generally prohibit the use of information from the spotting network to complete missing information from a QSO (i.e. call sign, etc.)

    b. Contests also typically ban self-spotting - that is, spotting yourself on a site. Someone else must spot you instead.

- Spotting sites usually allow you to filter contacts by various criteria, such as spot and spotter locations, band, and mode

- They usually allow you to search for spots by call sign - this is useful if you are trying to find out where a DXpedition or special event station is operating

    a. This functionality is needed during large contests, where there may be thousands of spots per minute!

- Some allow you to set up alerts for certain call signs, etc.

    a. There's also a web site called HamAlert that monitors multiple sites for your desired call signs and then sends you notifications via push notifications to a Ham Alert app on your IOS or Android smartphone or tablet, SMS, or via a GET or POST to a URL.

- They can be useful to see which bands currently have the most activity - especially when you're sitting down to operate your radio, and you want to find out which band to use to get the highest probability of making a contact

- Since they show real time information, they also allow you to get in on brief propagation conditions such as meteor scatter or VHF ducting

- So-called reverse beacon sites can also be used to gauge band activity, as well as to see how far your signal is making it

    a. These sites, such as the Reverse Beacon Network, aggregate data from stations that are monitoring the airwaves and report on the stations they hear

    b. These reports usually include some sort of metric to show the strength of the received signal

    c. You can call CQ and see in real time which reverse beacon stations can hear you, and how well - for example, the reverse beacon network site shows the received signal-to-noise ratio

- There is even a tool you can access via APRS to both spot stations and retrieve spot lists called APRSPOT

    a. It supports SOT, POTA, and SiOTA (Silos on the Air)

- If a station has been spotted recently, there is no need for you to re-spot them
- Remember that all information on a spotting site is subject to errors - I've seen many times where a call sign was entered incorrectly, or a wrong frequency was shown
- Sometimes people will use the comment field as a sort of chat window - perhaps to complain about someone's bad operating practice. Don't do this!

Summary

- Spotting sites are tools - they are not the be-all, end-all of operating a radio, but they can be very useful in discovering current band conditions
- Learn to operate without the use of spotting sites by tuning around the dial looking for stations or putting out your own CQ!

    a. One thing I've observed at Field Day is someone will sit down at a radio, tune fairly quickly through the whole band, and not hearing anything, conclude the band is dead. If this happens, throw out a few CQs and give people a chance to find you!

Questions:

- **The question for the week is:** Have you ever used a DX spotting site or logging program that provides spotting information? If so, what have you used, and why?
- **In my case,** I've used WSPRnet.org for seeing how far my signal gets out, and hamspots.net for seeing which bands have the most spots on them for various digital modes.

  I haven't done a lot of HF lately, but I became aware of the dxheat.com site for the band activity heatmap

More Info:

- https://hamspots.net/
- https://dxheat.com/dxc/

- https://dxwatch.com/
- https://www.dxmaps.com/
- https://reversebeacon.net/
- http://dxsummit.fi/
- https://www.pskreporter.info/
- https://www.wsprnet.org/drupal/wsprnet/map
- https://www.dxzone.com/catalog/DX_Resources/Clusters/
- https://hamalert.org/about
- POTA: https://pota.app/#/
- SOTA: https://sotawatch.sota.org.uk/en/
- Spotting via APRS: https://apspot.radio/
- SOTA spotting via APRS: https://www.sotaspots.co.uk/
- CW Skimmer: https://www.dxatlas.com/CwSkimmer/
- SpotCollector from DX Labs: http://www.dxlabsuite.com/spotcollector/

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