March 2024

The Airscoop

K8PL

From the Editor

It looks like spring is coming to the UP as we move into March. This is also the time to start preparing for storm season. There will be a Auxcom training in Escanaba on April 13, 14 at the Quality Inn and Suites. Prerequisites include IS 100.b, IS 200.b, IS 700.s, and IS 800.b. These can be completed online at train.org/mi-train.

Spring is also a time to perform any antenna maintenance or install that new antenna to reach those long distance stations. Please remember to keep safety in mind anytime you are working on antennas or equipment.

I am including some skywarn online training links
https://www.meted.ucar.edu/training_module.php?id=817
https://www.meted.ucar.edu/training_module.php?id=816
https://www.weather.gov/jetstream/
https://www.weather.gov/media/owlie/SGJune6-11.pdf

There is a virtual spotter training on Monday April 22 from 6pm to 7:30 pm using the following link:
https://attendee.gotowebinar.com/register/3592023561049

Solar Eclipse One Month Away

03/08/2024

A total solar eclipse that will be seen across North America will occur on Monday, April 8th. It will be the last of its kind in the US for the next 20 years.

Hams across North America are asked to participate in a study about how the ionosphere functions by getting on the air to help scientists in a series of ionospheric experiments.

Ham Radio Science Citizen Investigation (HamSCI) has presentations for hams interested in participating on Wednesday, March 27 at 8;00 PM (Eastern) - 5:00 PM (Pacific)*, and that same day at 10:00 PM (Eastern) - 7:00 PM (Pacific)*. Both 30-minute presentations will held on Zoom and they will feature HamSCI's Festivals of Eclipse Ionospheric Science (FoEIS). The presenters will take your questions during the presentations.

Here is the link to the presentations.
The program will start by covering HamSCI's basis and purpose, and quickly move into why they are conducting experiments, how hams and shortwave listeners (SWLS) can participate, and what they hope to learn from the event. Along the way, they will discuss why the science behind the event is important to users of the high-frequency radio spectrum - including amateur radio operators!

Learn about the HamSCI's eclipse-focused operating events:

- Solar Eclipse QSO Party (SEQP)

- Gladstone Signal Spotting Challenge (GSSC)
- Medium Wave Recording Event
- Time Delay of Arrival (TDOA) Event
- Grape 1 Doppler Receiver Project

Maritime Mobile Planned
During the solar eclipse, John Landrigan, KA4RXP, will be operating in the SEQP as a maritime mobile off the coast of Mazatlán, Mexico, at the beginning of the total solar eclipse as it transits the Maritime provinces of Canada. Look for KA4RXP/MM around 14.265 MHz.

If you have any ideas for articles or information you want published in the newsletter please send your feedback and comments to me at ronald.j.harsh@gmail.com

Secretary Report

MINUTES of the DELTA COUNTY AMATEUR RADIO SOCIETY
Located in Escanaba, Michigan
February 19th, 2024
Monthly Meetings held at State Wide Realty
or
The Ham Shack at the Telegraph Office, Fairgrounds
President N8DP Dave Vice-President NJ9V Paul Newsletter Editor-Treasurer N0OUR Jim
Secretary KD8SDE Maureen

The meeting was called to order by N8DP at 7PM sharp.
N8DP noted our Hamfest WILL be held at Rapid River once again. The location is perfect and we have extra rooms for meetings, a kitchen to use, and a large room for Vendor tables. K8WLT reported he has positive responses from DX Engineering, MFJ, Commet, and Buckmasters, wide coverage Call Sign Books. Roger Webster Electronics/Communications will be sure to be there. Walt will also handle the Table Reservations. ARRL has also been contacted, early enough so we will be well represented on the Hamfest Calendar online.
DX gave us 2 $50.00 coupons to be available in July. ARRL also gave some Gift Certificates too.
Thanks so much for handling so much, Dave and Walt!
The HRI200 has been received. The paperwork has begun. It probably won't be at the Clubhouse. There is a question about ports. N8DP will handle Repeaters to Repeaters. It has FM & C4FM, digital capabilities. Yasu can only be used. It is an American link!! A 5 digit Registration Code is necessary and can be a personal digital mode. Check out Googles WiresX Directory.
Also America Link. They have very much to offer!
On April 13th and 14th, Auxcom Training & Qualification to take place.
It appears we will not be holding Field Day this year.
In Old Business, we need the light on the outside of the shack (porch) repaired. Anyone?
Regarding Generators: The big one is good. The Generax has been started this month, as usual, but is running rough. We think the wrong gas may have been added to it's tank. IT ONLY SHOULD BE

RUN ON PREMIUM! Kd8sde mentioned a SIGN saying "USE ONLY PREMIUM GAS" SHOULD BE ATTACHED TO AREA WHERE FUEL IS ADDED. Mark has the Yamaha and does Start it up now and then.

Bob motioned to adjourn with Walt seconding the motion. The motion carried.
Hams present included: N0OUR, N8UPR, WA8LE, K8WLT, NS8V, K2PM, N8XOD, N8DP, KD8SDE, KE8YER, W9SGD, K9VFS, N8XAH.
Respectfully submitted by KD8SDE Maureen, Secretary 73.

2024 ARRL Field Day Theme: Be Radio Active

03/15/2024

The theme for 2024 ARRL Field Day is "Be Radio Active." The event will run on June 22 - 23, and it will be one-part contest, one-part emergency communications exercise, and one-part open house -- and a great time. The theme encourages radio amateurs to take advantage of the peak of Solar Cycle 25, which we are nearing. Activity this year is likely to be extremely high thanks to favorable solar conditions. The upper HF bands, such as 15 and 10 meters, should benefit most from the Cycle's peak.

There are resources available already for clubs and individuals to make their Field Day plans. ARRL will publish more information and tools so that hams can make the most of the event as it draws near. Amateurs interested in learning more are invited to join the Field Day Facebook group to connect with others who are planning for the big weekend.
Find links to all of the resources on the ARRL Field Day web page at www.arrl.org/field-day.

Get On the Air April 8 for the Solar Eclipse QSO Party

Contribute to ionospheric research while having fun on HF.

McKenzie Denton, KO4GLN

An extraordinary celestial event is set to occur over North America on Monday, April 8, 2024, where the sun and moon will align in a total solar eclipse! This date marks the next Solar Eclipse QSO Party (SEQP) for hams interested in HF operating or contributing to studies of the ionosphere (or both). Sponsored by Ham Radio Science Citizen Investigation (HamSCI, **https://hamsci.org**), the SEQP invites amateur radio operators to participate in an ionospheric research initiative, transforming routine radio exchanges into valuable scientific data. Operators of all experience levels, with stations small and large, are invited to make contacts on a variety of modes and bands during the SEQP. The contact data will help researchers unravel the mysteries of our planet's upper atmosphere and its interactions with the sun.

An Opportunity to Contribute to Radio Science

The 2024 SEQP is an event that no serious amateur radio enthusiast should miss because it's the last total solar eclipse visible from the contiguous United States until 2044. This event is a unique blend of scientific pursuits and radiosport. Amateur radio operators will have a chance to experience the changes to radio wave propagation when the moon's shadow temporarily reduces the amount of solar radiation reaching the ionosphere during the eclipse. This initiative is not just about radio contacts; it's also about building a vast repository of data relative to the time of the eclipse passing overhead, such as who contacted whom and when, where they were located, and on which bands their contacts occurred. Networks, such as the Reverse Beacon Network, PSKReporter, and WSPRnet, along with individual logs, will yield invaluable insights into the ionosphere's behavior to researchers. This event could be a transformative moment for amateur radio enthusiasts and scientific discoveries.

Paul Christy, NØGN, operated during the 2017 SEQP using solar power from the Rockford Lake State Recreation Area in Beatrice, Nebraska. [Denise Christy, KEØMVM, photo]

Amateur radio operators will submit logs that contain details such as frequency, mode, contact times, and signal reports to the HamSCI team after the SEQP. This information will be combined into a comprehensive database for preliminary analysis, which ensures completeness and consistency and identifies any anomalies. Then physicists, engineers, and other scientists collaborate to analyze this data pool rigorously. The focus is to observe the ionosphere's reaction to the solar eclipse by identifying shifts in signal propagation. Integrating the data with other sources, such as the Reverse Beacon Network, PSKReporter, WSPRnet, and other (non-amateur) data sources, can achieve a more detailed understanding of the ionosphere. The findings will be shared at conferences, published in scientific journals, and made available to the public, thus advancing global knowledge about the ionosphere and its impact on radio communications.

HamSCI's Recognition of Hams' Contributions to Science

As the solar eclipse nears, it's essential to acknowledge the valuable contributions of amateur radio op-

Denise Christy, KEØMVM, pictured at the campsite she shared with her husband, Paul Christy, NØGN, at the Rockford Lake State Recreation Area in Beatrice, Nebraska, during the 2017 SEQP. [Paul Christy, NØGN, photo]

erators in scientific exploration. Amateur radio has played a crucial role in advancing scientific knowledge for years, offering vital communication support and accurate data from the early days of radio. The upcoming eclipse is more than just a fascinating celestial event; it's a testament to the significance of amateur radio in scientific research. HamSCI's involvement highlights the importance of the data collected by amateur radio, validating its role in the scientific community.

As HamSCI continues to integrate and validate these contributions, it calls all amateur radio operators to be part of this momentous occasion. Operating in this event signifies more than personal achievement; it represents a collective effort in scientific discovery, where each contribution is a valuable piece of a much larger puzzle. Step into this event ready to contribute to a legacy that HamSCI and the scientific community deeply value with a sense of pride and purpose.

The HamSCI community is led by The University of Scranton Department of Physics and Engineering Amateur Radio Club, W3USR, in collaboration with Case Western Reserve University Amateur Radio Club, W8EDU, The University of Alabama, the New Jersey Institute of Technology Center for Solar-Terrestrial Research Amateur Radio Club, K2MFF, the MIT Haystack Observatory, Tucson Amateur Packet Radio in Arizona, additional collaborating universities and institutions, and volunteer members of the amateur radio and citizen science communities. We are grateful for the financial support of the United States National Science Foundation, NASA, and Amateur Radio Digital Communications. If you have questions regarding the SEQP or to learn more about HamSCI's many other eclipse-related events, please visit **https://hamsci.org/eclipse**.

Operate in the SEQP

Date and Time:
- April 8, 2024
- 1400 to 2400 UTC (may operate all 10 hours)

Station Requirements:
- Remote operation allowed with conditions
- Portable operation from a fixed location is encouraged (no mobiles or rovers)

Bands and Modes for Two-Way QSOs:
- Bands: 160, 80, 40, 20, 15, 10, and 6 meters
- Modes: CW, SSB, and digital (all types)

Exchange for Two-Way QSOs:
- Include signal report and 4-character grid square

Transmitting Digital Modes:
- Recommend *N1MM+* software with *WSJT* for FT8
- Configure software with station location into a 4-character grid square
- Enable PSKReporter to send received signal data

Scoring:
- Based on QSO points, multipliers, and bonus points (see rules, **https://hamsci.org/seqp-rules**)
- Duplicate contacts allowed after 10 minutes
- Cabrillo-formatted logs preferred, though ADIF logs, such as from *WSJT*, will be accepted

FAQs and complete contest rules can be found at **https://hamsci.org/contest-info**.

McKenzie Denton, KO4GLN, is a fervent science enthusiast and pre-med student at Old Dominion University. She is President of the ODU Amateur Radio Club. McKenzie was first licensed in 2020 and is now an Amateur Extra-class operator and Volunteer Examiner. Her profound passion for science has steered McKenzie to be a key member of the HamSCI team. She is active in the amateur radio community and involved with the Williamsburg Area Amateur Radio Club (WAARC) and the Potomac Valley Radio Club (PVRC). McKenzie is the ARRL Virginia Section Youth Coordinator, dedicating her efforts to inspiring young enthusiasts. She can be reached at **mckenziedenton15@gmail.com**.

For updates to this article, see the *QST* Feedback page at www.arrl.org/feedback.

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Treasurers Report

Website

I encourage you to check out our website www.k8pl.org for updated information. You can also check out our facebook page https://www.facebook.com/groups/dcars.k8pl for updates on current events. I will be working to develop a google chat account where people can post information and chat with other members.

Coming Events

DCARS Calendar

DCARS Calendar_d3936b24

Swap Meets

For Sale

Baofeng UV-S9 Plus
Comes in Original Box with Radio, Antenna, And Charger. In great shape, Comes Pre-Programmed!!

Asking $25.00

Baofeng UV-5R5

Comes in Original Box with Radio,Antenna, and Charger. In Great shape, Comes Pre-Programmed!!

Asking $25.00

Please Contact Pat Pierron KD8KKN at

patkd8kkn@gmail.com or call 906-428-4600