A meeting of Twin State Radio Club was held via Zoom on Saturday July 8, 2023. The meeting opened at 9:05 AM.

Officers present: Nicole DeShone, AC1HQ - President

Dave McGaw, N1HAC - Vice President Dave Colter, WA1ZCN - Treasurer Alan Bradford, AE1H - License Trustee Scott McCoy, N1SDM - Secretary

Other attendees: Ed Barney, AB1XQ

Dave Bridgeham, N1AHF

Rob Evans, N1BE

Alasdair Dunlap-Smith, W1UC

Eric Hansen, KB1VUN
Carmine Iannace, K1VL
Kim Kimura, KE1LF
Anita Kemmerer, AB1QB
Fred Kemmerer, AB1OC
Alex Smith, W1FET
Dalton Williams, KJ5BVD
Bill Stearns, KC1ROJ

As the meeting started a quorum of voting members was present. Motions can be voted on.

President's Report

Members and attendees were introduced. Attendees were asked to relate a memorial experience about radio and adverse weather.

Vice President's Report

Today's presentation is radio direction finding for use in fox hunting and RFI.

Possible future presentations:

- August SOTA and POTA?
- Morse code in the media, how it's presented. Update.
- Extreme bands.
- Tubes (valves) Dave N1HAC.
- Internet SDRs.
- OTA's parks, summits, islands, etc.
- Alternative energy.
- Grounding Ray WA1ORT.
- Radio & power lines.
- Complying w/ FCC regulations on RF exposure.
- Setup of a radio station for the first time.
- Basics on antenna, radio, regulation, and operating practice.
- Satellite communications.
- Fox hunting.

- Contesting.
- Beginning, intermediate, advanced modes.
- Lunar & solar eclipse events, contests by HamSCI.
- Direction finding Spring.
- RFI. Common mode chokes.
- Solar eclipse preparation.
- Radio in the media.

The Vice President is soliciting presentation suggestions and presenters. Get in touch with Dave N1HAC either by email or the repeater.

Treasurer's Report

Dave WA1ZCN reported:

- Checking \$ 5,247.11.
- Savings \$ 37,640.42.
- Bonds −\$ 10,000.00.

\$93.00 for the digipeater work came out of checking.

A motion was made by Bill KC1ROJ, seconded by Rob N1BE to accept the Treasurer's report. *The motion passed unanimously.*

Secretary's Report

The June 10, 2023 minutes were reviewed and amended.

A motion was made by Rob N1BE, seconded by Alan AE1H to accept the minutes as amended. *The motion passed unanimously*.

Trailer Report

Alan AE1H reported on the issue with the tower trailer hitch becoming disconnected on Field Day. Repair and maintenance of the tower trailer are necessary. The trailer hitch arm should be lengthened. The springs need replacement. The frame needs repair. The tower portion of the trailer can be removed for this.

Both trailers were used at Field Day with no issues.

Ed AB1XQ reported that the hatch in the communication trailer for placement of an air conditioner is in place.

Repeater Committee

Dave N1HAC reported that work on the repeater system to get it ready for the Prouty is in progress.

The 220 radio is up and functional.

Echolink is coming through.

2M on Moose Mt. is for the most time reasonable but still has some sensitivity issues. There are control resets. Loose connections to the power supply have been an issue is the past, may be so

again. Travel to site today or tomorrow for work. Battery back up power is not sufficient, the batteries may be too old. There is a lot of connection wiring, rewiring is possible but not in the near future.

440 radio is working. There was a mouse nest on the controller. The MASTR 2 board has been cleaned, the ic's removed from their sockets and cleaned.

The Corinth repeater is transmitting but deaf.

Dave WA1ZCN reported that the 147.345 repeater will be placed at the Rodgers site in Bradford for the Prouty. This may become a permanent site. The repeater has been rack remounted and the power supply modified. It is man portable now. Coordination is needed.

Positioning the 145.25 portable repeater in Tunbridge, VT is possible for the Prouty.

APRS is in place in Bath, NH. Steve W1HS and Adam KC1GDW built the electronics, Dave WA1ZCN built the structure. Partially installed, more reinforcement is needed. There are anchoring issues on site. There is no APRS on Moose Mt. (yet).

Education Committee

Ray WA1ORT is in poor health. A co-chair for the committee to step in and help out with the VE tested is solicited. A new testing site is needed, La Salette is closing in October. Ed AB1XQ reported that no one showed up for either of the two VE sessions on Field Day. VE files and forms have been returned to Ray WA1ORT, including the new General exam materials. Next session is August 19th, location TBD. May still be able to do at La Salette or the Shaker Museum. Want to keep in the upper valley.

Old Business

Dave N1HAC reminded the attendees about the HamSCI eclipse festivals. 1st is for the annular eclipse in October. Watching for changes in radio propagation. QSO party, WWV and AM broadcast monitoring is planned. Next is the total eclipse in April 2024 which will result in considerable radio propagation changes. WSPR and FT8 contacts will be made. Interested parties should go to https://hamsci.org/eclipse for more information.

Dave WA1ZCN reported full staffing for the Prouty.

As stated a replacement site for the Strafford repeater is needed. Registration of this site is needed.

The ARRL posters were used at Field Day. Consensus is that these are very professional looking. The damaged posters have been given to the section.

Nicole AC1HQ reported that there is interest in the club manning a booth on Vermont Day at the Big E on September 23rd. At least an opportunity to display the club banner.

New Business

JOTA is still a possibility. A new coordinator will probably be needed due to Ray WA1ORT being ill. Dave WA1ZCN stated that the JOTA program needs restructuring. The Girl Scouts have a similar event, details are unknown. There has been no interest from them in the past.

Dave N1HAC reported that the Saturday date of NEARFest in October conflicts with the HamSCI annular eclipse event.

Fred AB1OC asked that all questions regarding the ARRL be directed to him. He agreed to a possible presentation in August.

With no further business to address a motion to adjourn called for. So moved by Scott N1SDM, seconded by Rob N1BE. *The motion passed unanimously*.

The meeting concluded at 10:04 AM.

Fred AB1OC spoke afterwards about two ARRL issues. First is that the ARRL plans to raise dues. Not popular. A survey on this was done, the results at https://www.arrl.org/dues-survey. Membership is required to view. The reason for this is increased costs. ARRL lost a million dollars last year and is predicted to lose two million this year. Second is the redo of the ARRL strategic plan with focus on how to fight to the losing aging out battle. There was discussion on this, specifically on how to attract younger people to Ham radio.

The presentation followed. The following links were submitted on the subject during that:

https://nediv.arrl.org/rfi-troubleshooting-guide/

http://homingin.com/THRDFSinfo.html

https://byonics.com/mf

https://handi-finder.com/

https://rdfproducts.com/

https://www.polarisrdf.com/2023/03/17/5-ways-radio-direction-finding-rdf-drones-are-revolutionizing-search-and-rescue-operations/

https://www.amazon.com/Transmitter-Hunting-Direction-Finding-Simplified/dp/0830627014

Minutes respectfully submitted by Scott N1SDM.