

Minutes of the Twin State Radio Club Meeting Held 14 November 2020 - Amended

A meeting of Twin State Radio Club was held via Zoom on Saturday, November 14, 2020. The meeting opened at 9:04 AM.

Officers present: President, Vice President, Treasurer, Secretary and Trustee.

Old Business

President's Report:

Attendees, new and current, were introduced. Members were asked again to think on future club projects and direction. A 5 year planning meeting and round table discussion is scheduled for January.

Vice President's Report:

Presentation today is a HamSCI presentation by Ben Witvliet PE58 on NVIS through Dave N1HAC.

Suggested future presentations

- AllStar by a new Extra.
- Ray WA1ORT on grounding.
- Dave N1HAC on propagation including sporadic E and the effects of lighting, there are slides to present. Also multiband antennas (and during the annual forum), OCF, large loops.
- JT65, moon bounce propagation, FT8, WHISPR. Joe Taylor – developer of low bandwidth low noise modes (2 parts?).
- Training on club radios: in person activity, a workshop, leading up to field days.
- Surface mount assembly & soldering.

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

Treasurer's Report:

- Checking – \$ 1,443.11.
- Savings – \$ 49,408.43.

A motion was called for to accept the Treasurer's Report. So moved by Dave N1HAC, seconded by Clyde KA1BSZ. ***The motion passed unanimously.***

Secretary's Report:

Scott KC1LDI detailed the amendments to the submitted the October 10, 2020 minutes.

A motion was called for to accept the minutes as submitted. So moved by Clyde KA1BSZ, seconded by Bill AA1DE. ***The motion passed unanimously.***

Movement on inventory was reported.

Trailer Report: Alan AE1H, Ed AB1XQ, Dave WA1ZCN

Progress by Dave WA1ZCN. Wiring done last weekend. Final wiring diagram done with Alan AE1H. Crimp connectors were ordered and are in, will try to complete. Ed AB1XQ is working on cabinets; specifically over the front workbench. This is the last significant piece and with the carpet installation will complete the effort on the trailer. Chair mounts are ready for installation. There was discussion on what chairs to use.

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Repeater Committee: Dave N1HAC, Dave WA1ZCN

Dave N1HAC reported that Moose Mtn. 2 meter is nominal. 440 is too. The portable repeater on Strafford needs to go on the bench. There is still a key up issue, due possibly to RF or controller logic. There will be a build of the permanent repeater, a MASTR II or III. Have the controller for that. Also plan to replace the controller on Moose Mtn. someday. The current controller lost some programming: 3 commands. Debugging was done to recover. On the last visit to the Moose Mtn. site the backup batteries were checked. Echolink is working. A wiring connector upgrade was attempted.

Don KB1VP will speak to Dave N1HAC about the CVFMA antennas and repeater on Moose Mtn.

Dave WA1ZCN reported that there is now a rack shelf in place on Strafford for a link radio. The radio to use needs to be determined, may buy. The backup batteries are in place (heavy), they need to charge. The 40 A Samlex power supply for the permanent repeater has arrived, it may be installed tomorrow. The solar panels have been mounted. Plan is to connect a diode isolated solar charge controller, need one that is RF quiet. Panels will need to be positioned. A determination of the solar budget is needed. Can the repeater run on solar?

Education committee: Ray WA1ORT

There were two successful VE sessions last month. There was one upgrade to General at the first. There were two new Technicians, one upgrade to General and another to Extra at the second. New VE Jay KB1RZA was welcomed. The next session is planned for January (9th) after the meeting at 1:00 PM.

The CVFMA is planning a session at the Charlestown firehouse on December 19th.

Ray is working with the Scouts who are interested in a the tech in a day course. He will contact Dave WA1ZCN about slides. They will need the course broken up into four 2 or 1½ hour sessions. They hope to do before Winter Field Day. No plan now to take the trailer down to the American Legion in January, perhaps in the spring. COVID dependent; changing every week.

Events in the works:

- Sled Dog Race 2021. Group wants to expand the number of operators to cover.
- Winter Field Day. Not planning to use the support trailer, it is not insulated.
- Inventory. Ongoing progress.

New Business

Dave WA1ZCN detailed the items he wishes to purchase. First is the solar charge controller needed for Strafford. A large controller, which would cost several hundred dollars, is not needed. He has priced the 20 A Renogy Rover Elite unit for \$94.03. Next is a First Aid kit for the support trailer, a commercial unit, for \$24.94. Last are chairs for the support trailer. He has priced padded folding chairs in packs of 4 from Amazon. Six chairs are needed so would need 2 packs. A weight capacity of 480 lbs is wanted. Dave N1HAC will check another source.

A budget needs to be put together. Biggest items are insurance. Alan AE1H can supply rolling stock data. Hope to have by next meeting.

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A motion was made to allocate up to \$100.00 for the solar charge controller. So moved by Ed KC1FWS, seconded by Alan AE1H. ***The motion passed unanimously.***

A motion was made to allocate up to \$30.00 for the support trailer First Aid kit. So moved by Alan AE1H, seconded by Clyde KA1BSZ. ***The motion passed unanimously.***

A motion was made to allocate up to \$200.00 for the support trailer chairs. So moved by Alan AE1H, seconded by Ed KC1FWS. ***The motion passed unanimously.***

Don KB1VP made a proposal for the club to sponsor a Pico balloon launch. The balloon would have a light APRS payload and circumnavigate to world at 12,000 to 30,000 feet altitude. The season for launch is best now. There was discussion on this. The club has APRS equipment. WSPR on 20 meters at 200 mW using a long light antenna would send positioning data if a GPS chip was installed. Launch in the spring. The club would sponsor construction / purchase a controller board and the purchase of hydrogen lifting gas.

Research and a budget are needed. This can be done by a subcommittee of those interested on the reflector. Don KB1VP will do a presentation and/or an overview next month.

Alan AE1H suggested using helium as the lifting gas. He stated that hydrogen is difficult to ship and expensive. Dave N1HAC stated that the hydrogen for lifting gas need not be pure. Alan AE1H suggested use of welding gas.

Dave WA1ZCN suggested that all Winlink capable members take advantage of a Red Cross exercise this weekend testing Winlink; seeing how well it works. He suggested the setup of a Winlink go box station using a club modem. There was discussion on Winlink and other protocols. Dave WA1ZCN will post about.

There was discussion regarding ARES. Interested members should go to the NHARES website.

There was discussion regarding ARES/RACES. There is a training net through Winlink on Wednesdays. Interested members should contact Ed AI1R, fldigi is being using as well. Clyde KA1BSZ brought up past issues with RACES in Vermont.

Ed AB1XQ stated that Winter Field Day rules accommodate individual contributions to totals. It is not an ARRL event. The event is on the last full weekend of January (the 30th and 31st next year).

A motion to adjourn was made by Clyde KA1BSZ, seconded by Dan AD1HD. ***The motion passed unanimously.***

The meeting concluded at 10:27 AM. Presentation followed.

Minutes respectfully submitted by Scott KC1LDI.