
Aurora '17

Spring is here, which means it is time to get ready for **Aurora '17**! Our **34th** annual gathering will be held on **Saturday, April 22nd**, with activities starting at 9:00 AM. Jon, WØZQ, is lining up a great program for us, and I am looking forward to what should be a great conference. This announcement is being distributed primarily via the NLRS Reflector and website. Please pass the information along to others in your area, especially any new hams that might have an interest in VHF.

Deals for New Attendees and Families!

Anyone who has not previously attended an Aurora conference, will get a special registration rate - FREE! Just pre-register and check the box, or note it with your online registration. There is also a **FAMILY RATE** of \$7 for two or more from an immediate family.

Online Registration

Registration can be done in advance online or by mail. Follow the instructions below and save us some time at the conference.

To register online via PayPal:

- Open your PayPal account and go to "Send Money"
- Address your payment to w0uc(at)arrl.net
- In the Subject line, type: "Aurora <your callsign>"
- In the Message area, tell me what you're paying for. The schedule of payments is as follows:
 - Conference registration only: \$5.00 (Note: Registration is FREE for 1st time attendees, or \$7 total for immediate families.)
 - NLRS annual club dues only: \$5.50 (covers PayPal fees)
 - Registration and club dues combined: \$10.50

To register by mail, print out the registration sheet (found near this invite) and put it in the mail.

Door Prizes!

Courtesy of the ARRL and The RF Adapter Guy, we have four very nice door prizes that will be awarded during the afternoon session. You won't need to be present, but you do need to be registered to win! One of the door prizes each year is linked to the number of entries submitted for the ARRL VHF contests, so participate and send in a log!

Great Location!

Aurora '17 will again be located in White Bear Lake, just north of St. Paul. Thanks to Curt, KCØFQZ, we will again be using the facilities of **First Lutheran Church, 4000 Linden Street**. It is located on the east side of Highway 61, about 2 miles north of I-694. Please remember that we are guests here, and help us to leave everything as we found it, *inside and out!*

Antenna Gain Measurements

Weather permitting, we have the ability to test antennas on bands from 2 meters through 24 GHz. This is a great chance to see if your homebrew antenna is really as good as you think it is, or to check out the specs on a commercial antenna. Results from previous years can be found on the NLRS web page. If there is rain, or standing water, measuring will not take place.

We are also asking that you let us know what antennas you are bringing. Please note the following:

We cannot test 6m antennas... sorry. The test frequencies are: 144.2; 222.1; 432.1; 902.1; 1296.1; 2304.1; 3465.1; 5760.1; 10368.1. Frequencies other than these may not be available due to lack of sources or calibrated reference antennas (i.e., can't accurately test 146 or 446 as the reference antenna hasn't been calibrated there). In general, we do NOT do "tweaking" or adjustments; we measure.

As soon after 9AM as we can get started, we start with 2m on the VHF range and 2304MHz on the microwave range. We work our way UP the bands. (Sometimes we can run the two ranges at the same time: VHF (2m - 1296) and microwave (2304MHz to 10GHz). Sometimes we cannot.) Remember, you are expected to participate in the testing: getting the antenna on the test pole, holding it, taking it off, etc. Your help makes everything run faster and allows us to measure more antennas in the limited time we have available.

(This form will be used on the range for data collection and records)

FOR EACH ANTENNA YOU ARE BRINGING, please let us know by e-mail [wa2voi (at) mninter (dot) net]:

- Name:
- Call:
- Band:
- Type: (yagi, log, horn, dish (& feed type), misc (describe))
- Commercial / Homebrew:
- Previously tested:

(If there are a lot of antennas to be tested, we give preference to those that have not been tested before.)

ARRL Award Checking

Card checking for all ARRL awards DC to Light will be available at **Aurora '17**. Mike, WØVTT, is authorized as a card checker for VUCC and ARRL HF awards (DXCC including 160M) and has volunteered to check cards at the conference. Please contact Mike at mgcizek(at)gmail(dot)com with any questions. Donn, WA2VOI, is also often available to check cards at the monthly breakfast. In either case, be sure to have the current forms filled out, cards sorted, fees, and a stamped envelope to forward your application to ARRL.

51st Annual Central States VHF Conference

Many NLRs members travel to Central States each year. The 2017 Conference will in Albuquerque, NM, July 27-30. Central States is *the* major VHF gathering in North America; many NLRs members are very involved with the organization. We have hosted the 30th, 40th and 50th conferences. More information on the conference will be found at: www.csvhfs.org

Microwave Update

Microwave Update is the premier microwave conference in North America. NLRsers also attend, and have hosted, MUD. The 2017 version will be in Santa Clara, CA, October 26-29. Find more info at: www.MicrowaveUpdate.org

NLRS Reflector

The NLRS e-mail reflector reaches most active VHFers in the region. It is a great way to spread news quickly across the region. Traffic is generally light and will not overwhelm your In-box. If you prefer, you can also receive the same messages in a single daily email in digest form. If you are not subscribed, you may do so from this web page:

<http://mailman.qth.net/mailman/listinfo/nlrs>

Join, and keep up to date on the latest news around the region.

At **Aurora '17** we will again collect money to send to Scott at QTH.net to help him out with his expenses. He provides a wonderful service to us. If you appreciate the Reflector and can't make it to **Aurora '17**, send a contribution with your NLRS dues and we'll forward them.

NLRS Dues Due

NLRS annual dues of \$5 can be paid with your registration if you haven't paid them already. The annual dues are unrelated to the \$5 fee for **Aurora '17**, which goes to defray the expenses of putting on the conference (a rate unchanged in 34 years, I might add!). There is a spot on the registration form to indicate dues payment, and you can combine dues with your registration fee and I will split them out and pass them to the Treasurer.

Tentative Schedule for **Aurora '17**

0900 - 1200 Antenna range (WX permitting), eyeball QSOs & swapping
1200 - 1300 LUNCH BREAK (on your own)
1300 - 1730 Talks & NLRS meeting. Presentations to include:

- WØZQ Recent Changes in VHF Contest: Self Spot, Assistance, Distance Contesting
- W9FZ/KA9VVQ Eclipsomania: The 2017 Solar Eclipse and the 10GHZ & Up Contest
- WA2VOI Your First Microwave Band ... On The Cheap
- KØBBC ARRL News
- WØUC Use of Spotting and Other Tips in VHF+ Contesting
- KØCQ Microwave Signal Sources for RX Testing; Short Multiband LP Feed for Dishes; Low-Z Transmission Line; Millimeter Wave Filters

NLRS Business Meeting

Aurora '17 also serves as the annual business meeting for NLRS. The tentative agenda is listed below; if you know of other matters that should be considered, please contact Jon, WØZQ.

Call to Order

- Reading of the clubs preamble
- Reading of last year's meeting minutes

Treasurers, Committee, and Other Reports

- Treasurer's report
- Assistance to Silent Keys
- NLRS website and reflector
- Sunday night nets
- ARRL VUAC update

Old Business

New Business

- CSVHFS Conference
- Club News

Open business

- Club donations
- Other open business

Awards Presentation

- NLRS 2017 Rovermania Limited Rover Awards
- Wesslund Award presentation

Adjourn

NLRS Breakfasts

The popular NLRS breakfasts draw about 20 people each month. A schedule of breakfast dates for the remainder of the year is attached, usually the second Saturday of the month, except for June and September to avoid the VHF contests. Odd-numbered months are at the Old Country Buffet in Burnsville, even-numbered months at the Golden Corral in Maplewood. People generally gather around 8:15-8:45 AM and disperse around 10:00. All are welcome, whether you want to eat or not!

NLRS Club Dues

After the Aurora registration date, please send any dues directly to the NLRS Treasurer:

Janice Hoettels, KA9VVQ
7623 Teal Bay
Woodbury, MN 55125

VHF & Up Events

April 8	NLRS Breakfast – Golden Corral, Maplewood
April 17	144 Sprint
April 22	Aurora '17
April 25	222 Sprint
May 3	432 Sprint
May 6	902 & Up Sprint
May 6-7	SBMS 2GHz & Up Contest
May 13	NLRS Breakfast – Old Country Buffet, Burnsville
May 13	6M Sprint
May 19-21	Dayton Hamvention
June 3	NLRS breakfast - Golden Corral, Maplewood
June 10-12	ARRL June VHF QSO Party
June 24-25	ARRL Field Day
July 8	NLRS breakfast – Old Country Buffet, Burnsville
July 15-16	CQWW VHF Contest
July 27-30	Central States VHF Conference
Aug 5-6	222 MHz & Up Distance Contest & Rovermania!
Aug 12	NLRS breakfast - Golden Corral, Maplewood
Aug 19-20	ARRL 10GHz & Up Contest
Sept 2	NLRS breakfast - Old Country Buffet, Burnsville
Sept 9-11	ARRL September VHF QSO Party
Sept 9-10	Int'l EME Competition (2.3 GHz+)
Sept 16-17	ARRL 10GHz & Up Contest
Oct 7-8	EME Contest, 50-1296 (part 1)
Oct 14	NLRS breakfast - Golden Corral, Maplewood
Oct 26-29	Microwave Update
Nov 4-5	EME Contest, 50-1296 (part 2)
Nov 12	NLRS breakfast – Old Country Buffet, Burnsville
Dec 9	NLRS breakfast - Golden Corral, Maplewood