

Loudoun Amateur Radio Group

Regular Meeting Minutes April 19, 2025

Venue: Leesburg Lutheran Church

Meeting called to order at 8:30 AM.

- Pledge of allegiance.
- The following attendees introduced themselves as guests: Rob W3RJT, Mike KQ4VHX, Chris KG5WJW.
- Andy K1RA presented information about the application Meshtastic that implements a low-speed communication link using LoRA radios. The LoRA radios operate in the ISM band (902 – 928 MHz). Operation is low power (approximately 250 mw), so no license is required for operation. When operating in low power mode, the data transfer can use encryption. The Meshtastic protocol can also operate in ham mode which allows higher power operation. When operating in ham mode, encryption is disabled.

Encoding of the data is accomplished by varying the speed of a frequency sweep in a specific spectrum window. Meshtastic is basically a digital texting application. Small messages can be sent using best effort transmission. No confirmation of delivery is provided.

A new LoRA module is programmed using a PC and a USB cable. This places the Meshtastic application on the radio processor. Once the application is on the radio, the user interface is provided using an application on a smart phone using a Bluetooth connection. Message transit the meshed network when each node repeats the messages it receives.

The Meshtastic application is open source software. The LoRA hardware is closed source. Use of a bandpass filter is recommended because the ISM band is not managed. The RF front end of the LoRA modules does not have a well-filtered front end so the receiver is often desensitized by signals that are off the configured frequency slot.

The Northern VA area uses frequency slot 9. The rest of the country is generally configured using slot 20 which is the default of the radio configuration.

- Doug KM4GC talked about the Ride to End Alzheimers'. The event is a bike ride that will occur on May 3rd of this year.

On April 26 there will be a comms test and dry run. The comms plan will be distributed to volunteers. One backup communication method will be using a cell phone. Radios and cell phone contact lists should be configured with information from the comms plan.

On April 29 there will be an online presentation for SAG (Support And Gear) vehicles and Rest Stop operation.

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On May 2, SAG vehicles will be available for radio installation. Private vehicles are not allowed for SAG use. There will be a high current cigarette lighter type socket available to power a radio, but plenty of wire should be allowed to run from the socket to the driver's position.

On May 3 club support should be present at Morven Park in Leesburg not later than 0645.

- Planning has begun for the club Field Day event. The Western Loudoun Sheriff's station will be the site. A third station might be added if the participation supports it.
- It was noted that the skywarn training is now an on-line course.
- The club will stand up a new repeater at 224.0 MHz, negative offset, PL-tone 123. The radio is located at the Loudoun Hospital at Landsdown. It was noted that the site now includes repeaters for 900 MHz, 440 MHz and 2 meters. For details visit the website <https://wb6efw.com/>.
- Tareck K9TRE gave the treasurer report. Income was \$266.81 and expenses were \$14.50. The checking account balance was \$11,504.43.
- The meeting adjourned at 10:35. The next club meeting is scheduled for May 17.
- Attendance

WB6EFW	Scott
WA4KBM	Kevin
N4RAF	Steve
K3WD	Bill
KQ4VHX	Mike
W4PMP	Chris
KS1G	Steve
KM4GC	Doug
W3OW	Bruce
N3EV	Gene
K9TRE	Tareck
KE4S	Dave

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N7BRJ	Gary
N4PD	Paul
KG4UPR	Bryan
KQ4IBI	Ron
KG5WJW	Chris
WA4TXE	David
W3RJT	Rob
KQ4VHX	Mike
N4FAF	Jim