

Loudoun Amateur Radio Group

Regular Meeting Minutes September 16, 2023

Venue: Leesburg Lutheran Church

Meeting called to order at 8:35 AM.

- Pledge of Allegiance
- Kevin WA4KBM presented material related to operation and utilizing the Automatic Packet Reporting System (APRS). APRS was developed by Bob Bruninga WB4APR. Development started in 1982 and has been continuously enhanced. Bob became a silent key in 2022.

APRS is built on the AX.25 protocol for transferring data. The AX.25 protocol is based on the X.25 protocol that is used in telecommunications applications. APRS is often used by all amateur radio operators to report their position, status and activities. Position reporting is a valuable tool during disaster relief and public safety operations.

The packet may also contain weather data, various types of telemetry and short messages. Packets are best effort delivery. If a transmission by a remote station transmits its data, the data must be received by a gateway node before it will enter the APRS system. There is no error correction or confirmation of delivery of the packets.

The central processing station of APRS data is known as APRS-IS (APRS Internet Service). IGates are stations that receive APRS data and communicate to the APRS-IS. Digipeaters can also be used to receive and rebroadcast station packets without entering them in the APRS system. A digipeater can be used for reliable operation in uneven terrain or to otherwise extend packet signal coverage. A Terminal Node Controller (TNC) is used to transfer data from the data source to a radio for transmission.

DireWolf is a software TNC. It can be built from source to run on Windows, Mac OSX or various versions of Linux including Raspberry Pi. A soundcard daughter board is available for Raspberry Pi to provide the interface to convert the message data to sound for transmission by the radio.

Some URLs are **aprs.fi**, **findu.com** and **aprsdirect.com**.

- Our club has been approached by a DC club to transfer organization of event support for the bike ride to end Alzheimer's disease. The event is in Loudoun County. The DC radio club does not attract many participants from their membership because of the travel time to the event location. Negotiations are ongoing. The next event will be in May, 2024.
- Kurt KI4FWB is organizing club support for the Lovettsville Oktoberfest event during the weekend of September 23. A page on the signup genius web site has been established

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to track the club volunteers. Positions include riding the shuttle buses and walking the grounds. The club will also setup a tent that will include an active radio station.

- It was noted that Steve N4RAF has volunteered to organize the club Field Day activity next year.
- Kevin WA4KBM is building a linked dipole to be used in an inverted vee configuration. The antenna uses Anderson Power Poles for the link connections. Bruce W3OW reported that he has a folded dipole antenna that has a nearly flat SWR across all amateur bands.
- Chris W0PMP encouraged increased participation in the club on-air nets. Chris runs the 6m net on Wednesday evening and often runs the 2m net on Sunday evening. He also suggested that the club should implement a method for use by members to request specific help related to various aspects of our hobby.
- The club checking account balance was reported to be \$10,606.11.
- The next club meeting is scheduled for October 21.
- The meeting adjourned at 10:05 AM.

- Attendance

WA4KBM	Kevin
N4RAF	Steve
W4PMP	Chris
K4FWD	Frank
AD7FW	Roy
K3WD	Bill
KI4FWB	Kurt
K9TRE	Tareck
KE4S	Dave
K4FW	Jim
W0MPM	John
W3OW	Bruce
WA4TXE	David

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K4HCO	Jeremiah
KQ4IBI	Ron
N4FAF	Jim