

Loudoun Amateur Radio Group

Regular Meeting Notes August 15, 2020

Venue: Due to the ongoing national health crisis, the meeting was held virtually using Google Meeting.

- 8:00-8:30 The Google Meeting connection was active for informal discussions.
- Pledge of Allegiance
- President welcome and meeting overview.

Doug K4AIU presented an overview of the meeting. Jim WA6TQA was recognized as a visitor to the meeting.

- Jim N4FAF reported that the minutes from the July meeting can be accessed via the club web site. A message is distributed using the club email reflector to allow club members to indicate their attendance of the virtual meeting. Reply directly to the message to register your attendance.

The club records are being checked. A PDF file is distributed via the email reflector. Please review it and report any errors to secretary@k4lrg.org.

- Steve KN4HOZ presented the Treasurer's report.

There was no financial activity during the past month
Current club treasury balance: \$7,938.92

- Joe KD4HAX presented information about HackRF and other Software Defined Radio (SDR) devices. SDRs are generally listening devices that allow monitoring of RF signals on a large range of frequencies. Search the Internet for List_Of_Software-defined_radios for a list of devices that can be attached to a PC platform using a USB connection. The PC runs one or more programs to process the stream of data from the SDR to produce audio or decoded digital data. Programs are available to demodulate AM, FM and SSB signals on HF, VHF and UHF frequencies.

HACK RF One is an open sourced hardware platform. The firmware to manage the hardware is also open sourced. There are second sourced devices available that are based on the open source design. This design was originally funded by DARPA in 2014. See the web site greatscottgadgets.com for details.

A version of the Debian Linux distribution has been constructed specifically for SDR applications. It is distributed with the applications installed. It is named Dragonos. Enter dragonos in a search engine to find it. There are several other open source applications to analyze RF signals using the SDR radio devices.

- Steve KS1G reported that Sterling Middle School has been chosen as a backup location for a contact with the International Space Station. Unlike the previous contact

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facilitated by the club, this contact will likely be a Telebridge contact rather than a direct contact. This is required because the orbit of the space station will not pass over the school with a high enough angle during a school day during the next year.

There is an opportunity to participate in a balloon launch in coordination with the Udvar Hazy center. The balloon will carry a transmitter that reports speed, barometric pressure, altitude, etc. The telemetry will be reported on VHF frequencies. Additional details can be found by searching for WB8ELK or WSPR balloon on the Internet.

- Ideas for presentations during the monthly club meetings should be sent via email to vicepresident@k4lrg.org.
- The meeting adjourned at 9:55 AM.
- Attendance

KU4FT	Chris
K0ZR	Jeff
K4AIU	Doug
N2FID	Paul
KJ4NXG	Bob
W4PMP	Chris
KI2H	Harry
N1RM	Rick
KN4ZZI	Bob
KS1G	Steve
AB3KC	Collins
KN4HOZ	Steve
KM4GC	Doug
KF4TJI	Denny
KF4TJJ	Carol
KD4BK	Barry
KE4S	Dave

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AD7FW	Roy
N4TGA	Merc
KT9N	Chris
N1ESD	Steve
N4PDY	Mike
N4FAF	Jim
WA6TQA	Jim