

Loudoun Amateur Radio Group

Regular Meeting Notes October 17, 2020

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

- 8:00-8:45 The Google Meeting connection was active for informal discussions.
- Pledge of Allegiance
- President welcome and meeting overview.

Mike N4PDY presided over the meeting because the President had a work commitment.

- Jim N4FAF reported that the minutes from the September 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.
- Steve KN4HOZ presented the Treasurer's report.

The starting balance was \$8,356.43. There were deposits amounting \$40 during the month. Current club treasury balance: \$8,396.43.

- Elections for club officers and members of the Board of Directors will occur in January. There is a need to fill vacancies in club officer and Board member positions. Requirements for membership on the Board include five years as a member of LARG and an Amateur Extra class license. See section 3 of the club bylaws for additional requirements. Send an email message to leadership@k4lrg.org if you would like to be considered for the Board or an officer's position.
- Ed KK4WXD presented information about his operation using digital modes. Ed was licensed in 2014. He pointed out that early digital mode equipment was proprietary for radio manufacturers. His current radio for digital modes is a commercial product of an open sourced radio. The radio is marketed as ANAN-10. He found that interfacing the radio to digital mode software was difficult. The first effort was using Apple systems. A software package named heterodyne was used to control the radio while fldigi was used to implement the communication protocols. This combination did not work well since many cables and adapters were required between the computer and the radio.

Next an attempt to use Linux was tried. Most applications must be compiled from source because there is no standard for the various distributions.

Windows was the next choice. This was an improvement because applications are written to run after install with less configuration. A reduced number of cables is required, but getting the software packages to communicate between themselves required software packages to provide virtual connections.

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Finally, an implementation on a Raspberry Pi was tried. Support for virtual connections of audio streams is built into the operating system. A working system can be constructed for about \$100. Fewer connections required (either soft or hard), but still quite a few cables for the final rig.

- Rick N1RM reported that the current Technician class is half complete. All instruction has been done using virtual technology through the Internet. The instruction sessions have been captured as recordings. The sessions will not be publicly available, but future interested students might use the recordings to study for the exam. Some virtual testing is available through the Greater Los Angeles Amateur Radio Group. There are also limited testing options locally. Contact the education committee at education@k4lrg.org with questions related to future classes or testing opportunities.
- The Holiday party scheduled in December has been cancelled. A meeting of the members will be scheduled at the usual weekend to replace the party.
- Steve KS1G reported that the Smithsonian sponsored multiple balloon launches, each from a different part of the country. The balloons carry an APRS radio broadcasting on 2 meters. The balloon launched from Sterling Middle School was last seen headed out over the Atlantic.

A direct contact opportunity for the International Space Station has opened up for early February. Since the schedule for contacts is quite inflexible, factors such as the weather will affect the success of the project.

Sterling Middle School is working to integrate ham radio into their science curriculum. A request to allow adequate time to prepare instructional materials was given to the faculty in the event that they wish support from LARG.

- Ideas for presentations during the monthly club meetings should be sent via email to vicepresident@k4lrg.org.
- Mike reported that Bob Heil of Heil Sound will make a presentation at the November meeting.
- The meeting adjourned at 9:35 AM.
- Attendance

KT9N Chris

K4FWD Frank

N4PDY Mike

K0ZR Jeff

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KJ4NXG	Bob
N1RM	Rick
K9TRE	Tareck
W0MPM	John
KS1G	Steve
K4FW	Jim
W4PMP	Chris
KN4HOZ	Steve
KF4TJI	Denny
KF4TJJ	Carol
W4AU	John
N4TGA	Merc
KE4S	Dave
KG4UPR	Bryan
KK3WXD	Ed
K3WD	Bill
N4FAF	Jim