K7MFR AMATEUR RADIO CLUB
Rogue Valley
SINCE 1936
MEDFORD, OREGON

The Repeater

Volume 2020, Issue 1   **January 2020**

Club Notes

I hope everyone has a wonderful holiday planned with family and loved ones. Let us know at the next club meeting if you received any Ham Radio related presents.

The club is always in need of speakers and topics for programs. Please don't be shy, just contact the club newsletter editor, N5EG, and let him know of your interest.

The office of club president is vacant because no one would agree to run. Scott will act as President when he is in town.

John Armstrong will present on SDR on the Raspberry Pi 4, which can be very inexpensive.

Secretary's Report

The December meeting was the club's annual pot-luck dinner, no business was transacted so there are no meeting minutes.

FCC Adopts NPRM Deleting 3.3 GHz (9 cm) Amateur Band.

The Federal Communications Commission has adopted a Notice of Proposed Rulemaking (NPRM WT Docket 19-348). It will now receive comments on its plan to remove "existing non-federal secondary radiolocation and amateur allocations" in the 3.3 – 3.55 GHz band and relocate incumbent non-federal operations. The FCC said it's seeking comment on appropriate "transition mechanisms" to make that happen. ARRL has indicated that it will file comments in opposition to the proposal. The amateur 9-centimeter allocation is 3.3 – 3.5 GHz.

In much of the world, 3.3 GHz is not available to Amateur Radio operators. As a result, commercial manufacturers provide 3.4 GHz high speed data linking and access equipment to those markets. That equipment is (currently) lawfully allowed to be used by Amateur Radio operators in the USA.

Several AREDN networks around the USA are currently utilizing 3.4 GHz equipment to provide linking of nodes. These nodes usually provide user access on 2.497 GHz. Linking nodes on a different band than the user access channel really helps avoid channel congestion problems (especially when there are a lot of nodes and services reachable).

In addition there is an amateur weak signal segment in this band, and the band is also authorized for Satellite communications. AM-SAT (the Amateur Satellite Corporation) has indicated it will file comments in opposition to the NPRM.

How existing users of the band would be compensated or transitioned to other frequencies will likely be the subject of comments to the FCC.

Over-The-Horizon RADAR causing 40 meter interference.

The ARRL has noted that Over-The-Horizon (OTH) radar systems in China, Russia, and Iran are currently operating in the 40-meter Amateur Radio Band.

According to the International Amateur Radio Union Monitoring Service the Iranian OTH radar was centered on 7000 kHz using amplitude modulation on pulse (AMOP) at 81 sweeps per second. Recordings of military transmissions are available on the SIGIDWIKI signal identification site.

The South African Amateur Radio League (SARL) News reported this week that radio amateurs in Europe and South America have reported major interference from Russian OTH radar stations on several parts of 40 meters — with 12 kHz-wide signals. The radar transmissions have been heard on 7064, 7109, 7170, and 7190 kHz.

Several European IARU member-societies have already sent complaints to their respective telecommunications regulators.

These OTH RADARs are much different than the old 'Russian Woodpecker' which was a pulse-based system using extraordinarily high power. The newer systems appear to be using chirp-based emission and digital signal processing. These radars are far less susceptible to degradation by Amateur CW and Digital operation on the same frequency.

ARRL Northwestern Division Hamfair & Events Calendar
January 2020 through May 2020

Note: this calendar is available at: http://www.n7cfo.com/amradio/hf/hf.htm

- February 15, 2020. Salem Hamfair & Computer/Electronics Swapmeet. Rickreall, OR at the Polk County Fairgrounds. This is an ARRL sanctioned event. http://www.w7sra.com .   Flyer in PDF. (247K)

- March 7, 2020. Mike & Key 39th Electronics Show & Fleamarket. Puyallup fairgrounds exhibition hall, Puyallup, WA. This is an ARRL sanctioned event.   http://www.mikeandkey.org/index.php   Flyer in PDF. (488K)

- March 21, 2020.   (Tentative Date) MicroHams Digital Conference. Redmond, WA. https://www.microhams.com.

- April 18, 2020. Yakima Hamfest. Selah Community Center, Selah, Washington.   http://yakimaamateurradioclub.com/yakima-hamfest/

- April 25 & 26, 2020. Communications Academy. South Seattle Community College, Seattle, WA.   http://commacademy.org/

- May 3, 2020. Maple Ridge Swapmeet. Pitt Meadows, BC. https://secure.eton.ca/rac/events/upcoming.php

- May 9, 2020. Stanwood Camano Amateur Radio Club Flea Market and Hamfest, Stanwood Middle School, Stanwood, WA. http://www.scarcwa.org/ham_fest.shtm Contact: Fred Laun, w7pig@arrl.net

- May 16 & 17, 2020. River Radio Campout. Pateros WA. Sponsored by the Okanogan County Amateur Radio Club. Free "dry" camping along the Methow River at Pateros.   Always the weekend prior to Memorial Day Weekend.   w7orc1@gmail.com . http://www.w7orc.com/ . Contact Mike W7MCM, skippermike53@gmail.com . (509)689-3164.

The Oregon Section webpage http://arrloregon.org seems have gone stale, and appears to be many months or more out of date.

This Month's Program

1.   Using the GQRX Linux SDR display program on the Raspberry Pi 4.   Are we there yet?

Program: John will discuss the installation of GQRX on the Raspberry PI 4 computer. GQRX is an SDR interface program that will allow your RPI4 to control, process signals, listen, and display information from various different Software Defined Radios (SDRs). There will also be a demonstration using an RTL dongle as the receiver.

GQRX is an AM, FM and Single Side Band (SSB) software defined receiver implemented using GNU Radio and the Qt4 GUI toolkit. As a result it supports the Ettus USRP devices as well as OSMO SDR compatible radios (quite a few).

- **Biography**: John Armstrong, KF7UMK is club secretary. He was instrumental in bringing HSMM / AREDN to the Rogue Valley, and enjoys computers and ham radio.

January 2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 • 2M SSB Net	2 • **RVARC Club Meeting** • ARES Net	3	4
5 • CP ERC Net	6 • CARE Net	7 • 2M SSB Net	8 • 2M SSB Net	9 • **Rogue Hack Lab** • ARES Net	10	11
12 • CP ERC Net	13 • CARE Net	14 • **CARE Meeting** • 2M SSB Net	15 • **JC-ARES Meeting** • 2M SSB Net	16 • ARES Net	17	18
19 • CP ERC Net	20 • CARE Net	21 • 2M SSB Net	22 • 2M SSB Net	23 • ARES Net	24	25
26 • CP ERC Net	27 • CARE Net	28 • 2M SSB Net	29 • 2M SSB Net	30 • ARES Net	31	

Events

Meetings

- **RVARC** Thursday, January 2nd — 7:00 PM, Medford Police Department Community Room.
- **Rogue Hack Lab** Thursday January 9th — 6:30 PM, Medford Library.
- **CARE** Tuesday, January 14th — 6:30 PM, New Far East Restaurant, Medford.
- **JC-ARES** Wednesday, January 15th — 6:00 PM, Jackson County Search & Rescue, 620 Antelope Rd., White City

Nets

- **JC-ARES** Thursdays 7:30 PM - K7JAX Mt. Baldy Repeater 146.840 (-)   [PL 123.0]
- **CARE** Mondays 7:00 PM—. KB7SKB Jacksonville Repeater 147.100 (-) [PL 136.5], open, directed net, visitors welcome
- **2 Meter SSB** Tuesdays 7:00PM and Wednesdays 10:00 AM—144.200 USB
- **Central Point Emergency Radio Communications** Sundays 8:30 PM—— KB7QMV Medford Repeater 145.410 (-) [PL none]. Move to simplex net on 147.585 MHz when finished. Directed net.
- **Siskiyou County ARC** Thursdays 7:00 PM—Net K6SIS Repeater 146.79 (-) [PL 100.0]

RVARC Membership

RVARC membership dues run from January 1 through December 31. Please bring cash or a check payable to RVARC to a club meeting, or mail (checks only) to:

> RVARC Membership
> c/o 1940 Stevens Rd.
> Eagle Point OR 97524-6523

Regular Member:	$20.00
Senior Member (62 and over):	$15.00
Family Member:	$20.00
Student Member:	$10.00

For Sale / Wanted

WANTED:

I am looking for a working <u>Drake L4B Amplifier with power supply</u>.

(I have a set of Drake twins (T4XC / R4C) and want to complete the set.)

Thanks.

Mike Bach, WB6FFC
eaglepoint.or@juno.com
(541) 830-3346

2020 Amateur Radio Examinations

In the Rogue Valley, amateur radio exams are provided by the RVARC and the SOARC. New exam participants need to provide identification, while upgrading amateurs need to **provide a copy of their current license** as well as show identification. The exam fee for 2019 remains $15.00. All license candidates must provide a picture ID. Upgrading amateurs must also provide a photocopy of their current license to send in with their application. To search for other exam locations, see:
> http://www.arrl.org/arrlvec/examsearch.phtml or our club webpage: http://w7dta.org

Medford—Phoenix, OR
Time: Saturdays, Registration 8:30 AM. Exam session at 9:00 AM. Walk-ins welcome.
Location: Fire District 5 HQ. 5811 South Pacific Highway, Phoenix, Oregon 97535
<u>**Dates 2020:**</u>   Dates to be announced
Contact: Don Bennett, Email: kg7bp@arrl.net Phone: (541) 973-3625

Grants Pass
Time: Fridays Registration 6:00 PM. Exam session at 6:30 PM. Walk-ins welcome.
Location: Fruitdale Grange. 1440 Parkdale Dr., Grants Pass OR 97527-5288
<u>**Dates 2020:**</u>   Dates to be announced
Contact: John Stubbe, K7VSU, email: jstubbe7@gmail.com Phone: (541) 218-2244

Roseburg, Bend, Redding, Brookings, Crescent City — Please see our club webpage, http://k7mfr.org for updates as we receive schedules for these cities.

Next Club Meeting
Thursday Jan 2, 2020, 7:00 PM

Medford Police Department Community Room
219 S. Ivy St., Medford, OR

Program: GQRX on Raspberry Pi 4