



The Repeater

Next Club Meeting

Thursday November 2, 2017,
7:00 PM

Red Cross Building,
60 Hawthorne St., Medford, OR
Across from Hawthorne Park

Program: Amateur Radio in Cuba
and Samoa

Volume 2017, Issue 11

November 2017

Scott Cummings	NA7OM	kd7ehb@yahoo.com	President
Mike Bach	WB6FFC (541) 830-3346	eaglepoint.or@juno.com	Vice President
Bob Deuel	K2GLO (541) 482-8752	k2glo@ikasystems.com	Treasurer
Allan Taylor	K7GT (541) 855-2054	k7gt@arri.net	Secretary
Tom McDermott	N5EG (541) 734-4675	n5eg@tapr.org	Newsletter & Membership
Club Web Page:		http://w7dta.org	

Club Notes

With the election of club officers behind us, it is now time to focus on 2018. Allan Taylor returns as President.

Dick Lemke will be giving the November program on Amateur Radio in Cuba and Samoa. Should be interesting and a good travelogue.

The ARRL Sweepstakes CW and Phone contests are in November. 20m, 40m, and even 80m will be very high density, wall to wall extremely loud stations with long exchanges. On Sundays the bands thin out and the big guns are actively soliciting (begging for) contacts from anyone, including casual or non-participants in the contest. A great opportunity to add new sections or states to your totals.

The Repeater is the official newsletter of the Rogue Valley Amateur Radio Club, Inc. It is published 10 times a year—once per month excluding July and August.

Secretary's Report

The RVARC October meeting was brought to order at 7:00 PM by President Scott Cummings. He had four items of interest for the club:

1) Announcement of the California QSO Party this coming weekend. The club will be entering the Small club version of the club competition for the highest aggregate score. All are urged to join in the fun, use some sort of logging program, submit a Cabrillo file to the contest, and report back to Tom N5EG. Some are planning small-scale QRP field operations to nearby Siskiyou county.

2) Scott proposed the club pursue the call of recently deceased club member Ellis Feinstein for the club's call. That call is K7MFR and suits our location based in the Rogue valley. This motion was dutifully approved by the membership. Mike Bach had already been in touch with the family and will now proceed with the paper path with the FCC.

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Secretary's Report, Continued

(Continued from page 1)

3) New club officers! Scott presented a teaser solicitation for nominations. None were made. Selection of officers was temporarily tabled until later in the meeting. (see below!)

4) Various payments are due now or soon to be due. These are the annual club insurance, anticipated to be about \$200, and a donation to the Red Cross to maintain access to their building for our meetings. Both were voted on and accepted by the membership. Scott noted that the Red Cross folks are anxious for our club to assist in renovating and updating the radio room in their building.

Bob Deuel gave the current club account balance as \$4727.88.

Visitors and newly-present members:

- Ed Johnson, KI7PQB
- Mark Roberts, AI6EV
- Amy Haptonstall, AG7GP
- Dan Ferris (has a call, did not catch it)
- Matt Hinds, KI7ONN

Finally, the agenda returned to new officers. The slate of officers solicited by the search committee (N5EG!) were presented with option for nominations from the floor. Joseph Clarke flinched and was temporarily nominated for an office, but declined as he is acting president of the CARES club. Ultimately the slate of officers was presented and voted upon:

- Secretary: John Armstrong, KF7UMK
- Treasurer: Mike Bach, WB6FFC
- Vice President: John Laybourne, W8WOM
- President: Allan Taylor, K7GT

The new officers will assume their role in January 2018

The presentation for the evening was given

Secretary's Report, Continued.

by Scott Cummings, NA7OM on the American woodpecker.

Many were surprised (but not all) that one of the two Over The Horizon radar systems was formerly sited in Oregon and northern California. Transmit site: Christmas Valley, OR and receive site: Modoc County, CA. The very expensive system was in service for only a few months before being decommissioned. Scott had a lot of great photographs of the facilities and antennas.

After the presentation, the meeting was formally closed at approximately 9PM

Allan Taylor, Secretary RVARC

This Month's Programs

1. Amateur Radio in Cuba and Samoa

- **Program:** - "Briefing: Amateur Radio in Cuba and Samoa Trip Prep."? We were in Cuba in May and I spent half a day with CO2KL, Roberto Ibarra in Havana who is Secretary for the Cuban DX Club. Getting a Samoan license ahead of time is an adventure.
- **Biography:** Dick Lemke, AD7AF like to travel, and is primarily a CW operator. He has operated an amateur radio station from a number of locations around the world.

Programs Planned for 2017 (subject to change):

- **December:** TBA

VHF / UHF / Microwave Software Defined Radio

A new generation of Software Defined Radios are being produced for VHF, UHF, and Microwave bands. These are usually based on advanced silicon devices from Analog Devices or Lime Micro, and have very wide operating frequency ranges. I recently acquired an Ettus (now National Instruments) USRP B205mini radio. The radio is the size of a credit card, the case increases the dimensions slightly (and provides heat-sinking for the big silicon devices). It connects to the host computer using USB3, the host provides all digital I/O and the power needed to run the radio.

The radio is capable of operating half-duplex and full-duplex from 70 MHz to 6 GHz. Ettus supplies a full set of drivers for gnuradio (which is what I have been using) and a stand alone set of C-drivers which allows incorporating the radio into your own software projects without needing the gnuradio framework.

It is surprising that more hams are not looking at SDR radios for operation on the higher frequencies. The low cost, small size, and enormous frequency range make building a multi band amateur system far simpler than when constructed out of a collection of many different radios, transverters, and other parts. John Petrich, W7FU has assembled a complete portable SSB/CW/FM radio based on his SDR. His webpage provides simple instructions on assembling the parts, and he has produced a couple of youtube videos demonstrating the equipment.

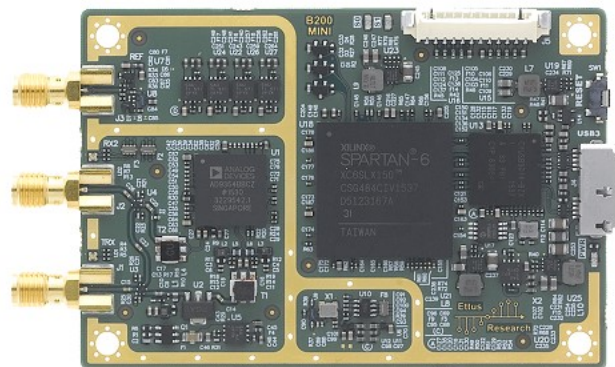
<http://www.w7fu.com> and
<https://www.youtube.com/channel/UCSNq0n1gAX19sjAz7z7U3dq>

So far I have built a demo of a linear transponder repeater (one that is different from an FM repeater in that it will amplify and frequency-translate any type of modulation). Linear transponders have been most commonly used on amateur satellites. It successfully repeats FM and DSTAR signals with the transponder, it is also capable of repeating

SSB and CW signals (not tested). It was straightforward to build an FM-only repeater with some minor changes in the flowgraph. Also wrote a 2.4 GHz high-speed spectrum monitor which displays Wifi signals well using variable-persistence display software.

I have been working on demodulating DSTAR, and have successfully recovered the bits in the DSTAR message, but so far have not been successful in re-transmitting DSTAR data that has been altered by the SDR radio. AMSAT is working on a Phase 4 ground station based on SDR transceivers (see AMSAT youtube videos). Fertile grounds for experimentation.

The photographs show a B205mini circuit board and the case.



November 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2 • RVARC Club Meeting	3	4 • ARRL CW Sweepstakes
5 • ARRL CW Sweepstakes	6	7	8	9 • Rogue Hack Lab • ARES Net	10	11
12	13	14 • Cascade ARE Meeting	15 • JCARES Meeting	16 • ARES Net	17	18 • ARRL Phone Sweepstakes
19 • ARRL Phone Sweepstakes	20	21	22	23 • ARES Net	24	25
26	27	28	29	30		

Events

- The club meeting is Thursday, November 2nd.
- Thursday November 9th — 6:30 PM Rogue Hack Lab, Medford Library
- Tuesday, November 14th — 6:30 PM Cascade ARE Meeting—New Far East Restaurant
- Wednesday, November 15h — 6:00 PM JCARES Meeting. Location: TBD
- Thursdays 7:30 PM - ARES Net. **K7JAX Mt. Baldy Repeater 146.840 (-) [PL 123.0]**
- Next Newsletter: December Issue.
- ARRL Sweepstakes, CW Saturday November 4, 1:00 PM PST to Sunday 7:00 PM
- ARRL Sweepstakes, Phone Saturday November 18, 1:00 PM PST to Sunday 7:00 PM

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 1058 Linda Ave.
Ashland OR 97520

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

For Sale / Wanted

Check out the RVARC club SellSwap webpage. You can post for-sale items, wanted items, browse for-sale and wanted items.

The page is moderated and has been active in the last month with some items being sold in less than 24 hours. Did you miss a bargain ?

<http://w7dta.org/sellswap>

2017 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 2017 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

Dates 2017: Oct 28

Contact: Don Bennett, Email: kg7bp@rfwarrior.com 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

Dates 2017: Nov 19

Contact: John Stubbe, K7VSU, email: jstubbe7@gmail.com Phone: (541) 218-2244

Roseburg, Bend, Redding, Brookings, Crescent City — Please see our club webpage, <http://w7dta.org> for updates as we receive schedules for these cities.

Next Club Meeting

Thursday October 5, 2017, 7:00 PM

**Red Cross Building, 60 Hawthorne St., Medford, OR
Across from Hawthorne Park**

Program: American Woodpecker