



The Repeater

Next Club Meeting

Thursday,
March 6, 2014, 7:00 PM

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

Program: Online Elmers: Video
Resources for the Hungry Ham

Volume 2014, Issue 3

March 2014

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President's Letter

Crowd Sourcing

A complex and multivariied pursuit such as amateur radio offers much to a wide variety of interests. Last month's survey of club members revealed a notable interest in Ham radio as electronics among some, and more of an interest in Ham radio as communication.

Here's some numbers to back that up: 32% reported an interest in home-brewing and kit-building, 26% in radio theory, 21% in circuit design, and 18% in experimentation. I imag-

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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

RVARC - Minutes for February 6, 2014

The meeting was called to order by President Todd Carney, K7TFC at 1900PDT in the meeting room of the Red Cross building in Medford, OR. Guests included:

- Troy, KG7DNM
- Claire, KC7ARX
- Bill, N7EU.

Old Business — Todd informed the members that Van Sias, K7VS, is ready to sell the club's Drake TR-7 transceiver and accessories. Todd will pack the radio and take care of the shipping details. The transceiver and power supply will be sold together, and the accessories sold separately.

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President's Report, Cont'd.

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ine there's a lot of overlapping interests represented in those numbers.

Here's an idea. Those who want to participate can join in a group effort to design, build, and test drive a small, single-band, and low power transceiver. There's lots of designs available for such a rig, but that's not the point. The point is that those who wish can join in a group project that nevertheless offers lots of room for individual ingenuity. Tentatively, we could call it the "Rogue CS-20" (or whatever band we decide on).

The "CS" stands for "crowd sourced," a method of collaboration that blends individual motivations with community benefits.

Huh?

Well, it's not really as highfalutin as it sounds. It's very common among programmers, especially those who contribute to open-source projects as with GNU and Linux. Perhaps the most commonly-used crowd-sourced project is Wikipedia. It's written and edited by volunteers, and it encourages collaboration. Hams can do this, too.

A transceiver design is a natural for this kind of work. All radio designs (and pretty-much everything else) are created from a block diagram, and each block can be designed, built, and tested separately— as an individual effort.

Ultimately, each block would be integrated into the whole. Starting with a set of agree-upon requirements such as impedance matching between blocks, signal-gain distribution, and power loading. It's an iterative process, but then what emerges would be a new design with our fingerprints all over it.

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Secretary's Report, Cont'd.

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Todd announced that the survey created last month received 33 responses so far, and that the survey is still active. Initial review of the data from the survey responses reflects a very diverse group within the club. Because of that fact, it would be expected that participation by members would be according to their own interest. However, the formation of special interests groups are encouraged. The newsletter and the club website could be utilized to help coordinate and develop these subgroups.

New Business — Todd, K7TFC announced that a workshop will be held on February 18 at the Santos Center. Topics covered include programming HT radios and an overview of using the local repeater systems. It will go from 7-8:30 pm.

Joe, AF7GN announced the RF Exposure class held on February 16. This class will start at 1:30pm at the Smullin Center.

John, KF7UMK spoke about the upcoming launch of the KickSat project. John suggested this might be an opportunity for club members to get together and attempt to track some of these small transmitters.

Joe, AF7GN gave a brief update on the progress of the licensing classes. He also announced that he has an appointment with the Ashland school district on Thursday about the possibility of forming a Amateur Radio club for the students.

Dale, N7IXS announced a test session on February 22 at the firehouse in Talent.

The meeting was put on hold at 1925 PDT for "eyeball QSOs" and coffee. The meeting was called back into session at 2000 PDT.

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A Tall Tale
By Allan Taylor, K7GT

A Tall Tale
or

How to put up an 80m vertical in 3000 days or less

I began building up an antenna farm immediately after returning to the Rogue Valley in 2004. The pour for the tower was done in December with the tower itself going up in January 2005 (thanks to Mike, WB6FFC). I acquired the tower and the two big beams from friends in the Northern California Contest Club (NCCC) over the summer of 2004. Also along that time I picked up a used (as it turns out, very used) HyGain HyTower. It came from a W6 in Cupertino who shall be unnamed. There was plenty to do in those early years and it languished in the weeds outside of the shop for years. About four years later, I found a young man locally who needed work. I had him dig the holes for the base for it along with bases for a tubular tower and two smaller verticals. As I didn't want to completely commit the base insulators to being permanent in the concrete pour, I made a template from the T-base and put three 1.5" pipes in the pour with details to be worked out later.

Time passes.....

I had put up an inverted V for 80 and 160. At least I was on the air, but performance was not astounding. More time passes. Garden and yard work..... Finally, I decided to do the deed. I researched the amateur literature regarding optimal ground radial systems, deciding to put down about 72 seventy-foot radials. Yes, about a mile of wire. Carl, W7BRO, and I began putting down radials in early October 2013. We managed 14 one day but it wore both of us out. Before stopping for the day we pre-cut another 25 lengths of wire. I used 22 gauge (probably, not certain) motor rewinding wire

from my dad's stash. Then, I would put down two or three in a session as time was available.

The process went like this: put down a cord to 70 feet with a tent stake to hold it in place, slice a slot through the sod and rocks, put a ring terminal on one end after scraping off the enamel, mount on the radial plate, hand-feed the wire into the slot and pack it in with the loose dirt, repeat...In time, I could put a radial wire down in about 25 minutes. When I ran out of the 22 gauge wire, I used some copperweld wire scavanged from an old garden fence. It was much stiffer and almost unmanageable but I persevered. About then I researched sources for the remaining wire. I got some 18 gauge bare soft copper wire from somewhere on the internet. 1000 feet for about \$70. This was great wire to use for radials. The project was delayed in early December by the snow and cold weather.

Finally I finished the project about New Years Day. Then the install. We 'made' the base insulators attach to the three pipes in the concrete base by laborious drilling, cleaned up the by-now rusty tower portion of the antenna, did a first-cut install. Wow, is that tall. Wow, is that first joint loose. More measurements, more decisions. We found that this vertical had apparently been modified in that the central spike was several feet longer than specified. Shorten it, add length to the top so as to resonate at the bottom of the band (I am a CW guy, after all), several trials. Put on the 40m stub with some adapting. About this point we realized that this antenna didn't match the dimensions in the manual I downloaded for the model 18HT-S. (This one was known to be the earlier 18HT). No dimensions matched.

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A Tall Tale, Cont'd.

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No clamps could be found for the 15- and 10-meter stubs. So, in the end we got resonance at 3550 and 7120 kHz. With that choice of center spike, the 20m resonance is ruined, but a vertical on 20m isn't a necessity with a wide-spaced 3 el yagi on the tower. I gave it a good workout this past ARRL DX CW contest. Certainly not a beam, but managed 25 countries in the contest, including Vanuatu (YJ0) and Canary Island EA8).

Well, it is a tall tale. It looks great out there in the orchard. Clean and simple. Someday I may get clamps and add the 10 and 15m stubs, but not today.

Allan, K7GT

Secretary's Report, Cont'd.

(Continued from page 2)

Treasurer's report — Lud, KB2EVN, reported a balance of \$3460.97 in the club treasury.

Presentation — Bill Anderson, KU6Y, gave a very informative presentation on the D-STAR system. His talk included how D-STAR works, its development and utilization globally. Bill also gave a virtual tour of the Rogue Valley Manor station, including the various repeater systems. Bill says the RVM systems are coordinated with JCARES, but are also available to the general ham community to utilize. The RVM club expects to soon be a registration point for the region. There are also many resources for information on the D-Star system on the internet.

The meeting was adjourned at 2055 PDT.

Submitted by Carl VanOrden, W7BRO Secretary

Amateur Radio for Now and the Future
Joe Gunderson AF7GN, PIO

Breaking news for XYL's: Jackie Wobbe KC7WWJ is starting a 2 meter net for XYL's. She has been working hard on this project for over a year. For further information contact Jackie via Email: stormsmom@charter.net

We have a new Technician, Andy Roos KG7IRT, he is in the current class but just couldn't wait to get his license. Congratulations to Randy.

The RF exposure class was a bust, no one showed up, but we will try and hold this class in the future and ensure we get the word out and avoid a beautiful day to hold it.

Until next time - Remember the future is now! 73

RVARC Calendar

Joe, our PIO made a great suggestion—publish a monthly calendar of ham events in the RVARC newsletter.

You'll find it on the last page of this newsletter. If you have a ham-related event that you'd like to have listed in the calendar, send an email to the newsletter editor with all the necessary details (subject, time, date, place):

n5eg@tapr.org

VA Dom Needs Amateur Radio Operator

The VA Dom is looking for a radio amateur to operator their ham radio station. This station is very up to date and they have spent over \$20,000 to achieve that status. All antennas have been replaced or refurbished. New HF equipment with packet capability has been added. There is a weekly net check-in required from this station. The station is an excellent resource for emergency communications. It would probably involve at a minimum, to work the weekly net (possibly Wednesdays) and get training on the other equipment. At least a General class operator with some experience operating HF SSB. Contact Don Montgomery, WB7Q if interested. donm12@charter.net

President's Column, Continued.

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For the March mid-month Workshop, let's come up with a set of features we'd like and then work on a block diagram. If we do a little prep before the Workshop, we could even divvy up the blocks. When our crowd-sourced transceiver is ready, we can produce any number of them for our testing and use, and as a number of other clubs around the have done, offer the Rogue CS-20 as a kit.

If this idea interests you at all, let's do this. It'll be fun.

73's

Todd, K7TFC

ARRL DX CW contest 2014 at K7GT

This contest had been a target for preparations beginning early in 2013. The 80m vertical was up and the station console re-configured to be more useful in contest mode.

I invited three ops to share the fun: K7KO, W7GH, and N5EG. Steve, K7KO, was with me for the entire event, Rob W7GH dropped by for a few hours, Tom, N5EG couldn't make it this year (plumbing failure).

Steve and Rob worked on an improved WiFi link from the house while I operated. Steve took shifts to give me breaks (I have leg circulation issues and need to move about, etc.). He was challenged by the speed (circa 30 wpm) but did come up to the cause.

Two landmarks along the way: 1,000 QSOs and 1,000,000 points. 1000 Qs came mid-morning Sunday. 1 million points came about 3:00 PM, Sunday afternoon (the contest ended at 4:00 PM). Our results are given below:

160M	4 Mults	5 Qs
80M	25 Mults	54 Qs
40M	69 Mults	278 Qs
20M	69 Mults	313 Qs
15M	77 Mults	342 Qs
10M	47 Mults	209 Qs

Total: 291 Mults 1,202 Qs
 1,040,616 points

Peak rate: 144 Q's / hour (running JAs on 15m)

Most unique QSOs: DP0POL (Antarctica), YJ0OU (Vanuatu), A65CA (United Arab Emirates)

Equipment Used:

FT1000MP, Alpha 87A,
Force-12 C31XR tribander,
Force-12 Magnum 340 40m 3-el,
HyTower (80m),
160m low dipole (apex at 50'),
TR4W logging software,
LogiKey K3 keyer,
Bencher HexKey paddle,

I invite other ops to join me in the future. Here are my expectations. Be able to run JAs for an hour straight at 30 wpm, no code reader software. No coffee, no smoking. Agreeable company, of course!

Allan, K7GT

[Ed note: W/VE amateurs work as many DX stations in as many DXCC entities as possible on the 160, 80, 40, 20, 15, and 10 meter bands. DX stations work as many W/VE stations in as many of the 48 contiguous states and provinces as possible.

ARRL DX is unusual in that Alaska and Hawaii operate as DX countries rather than as US states.

Each new country worked on a band counts a multiplier].

RVARC Dues 2014

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 102 McDonough Rd.
Gold Hill, OR 97525-9626

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

2014 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 2014 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, 8:30 AM. Exam session starts at 9:00 AM. Walk-ins welcome.

Location: Fire District 5 HQ. 5811 South Pacific Highway, Phoenix, Oregon 97535

Dates 2014: Feb 22 Jun 21 Oct 25

Contact: Don Bennett, Email: kg7bp@rfwarrior.com Phone: (541) 973-3625

Grants Pass

Time: Fridays 6:00 PM. Exam session starts at 6:30 PM. Walk-ins welcome.

Location: Fruitdale Grange. 1440 Parkdale Dr., Grants Pass OR 97527-5288

Dates 2014: Feb 21 May 16 Aug 22 Nov 14

Contact: John Stubbe, K7VSU, email: K7VSU@arrl.net, Phone: (541) 218-2244

Roseburg, Bend, Redding, Brookings, Crescent City— no information received. Please see our club webpage, <http://w7dta.org> for updates as we receive schedules for these cities.

Next Club Meeting

Thursday, March 6, 2014, 7:00 PM

**Red Cross Building, 60 Hawthorne St., Medford, OR Across from Hawthorne Park
Program: Online Elmers: Video Resources for the Hungry Ham**

March 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 ARRL DX Phone
2 Lic. Class. ARRL DX Phone	3	4	5	6 RVARC Meet- ing. ARES Net.	7	8
9 Lic. Class.	10	11	12	13 ARES Net.	14	15
16 Lic. Class.	17	18	19 RVARC Work- shop	20 ARES Net.	21	22 RVARC Newsletter input due.
23 Lic. Class.	24	25	26	27 ARES Net.	28	29 CQ WPX Phone
30 Lic. Class. CQ WPX Phone	31					

Events

- Saturday / Sunday March 1,2 - ARRL International DX Contest, Phone
- Sundays 3:00 PM - Technician and General License Class - Smullin Center
- Tuesday March 6th - 7:00 PM RVARC Club Meeting, Red Cross Building
- Saturday / Sunday, March 29,30 - CQ WW WPX Contest, Phone
- Thursdays 7:30 PM - ARES Net. K7RVM repeater 147.000 (+) [PL 123.0]
- Wednesday March 19th - RVARC Workshop 7:00 PM. Location To Be Announced (club email reflector). Topic: The Rogue CS-xx: Designing a small, low-power transceiver.