



The Repeater

Next Club Meeting

Thursday April 5, 2018,
7:00 PM

New Red Cross Building,
1050 Crater Lake Ave, Medford.

Program: FT8 / WSJT-X

Volume 2018, Issue 4

April 2018

Allan Taylor	K7GT	(541) 855-2054	k7gt@arrl.net	President
John Laybourne	W8WOM		w8wom@hotmail.com	Vice President
Mike Bach	WB6FFC	(541) 830-3346	eaglepoint.or@juno.com	Treasurer
John Armstrong	KF7UMK	(541) 899-1917	john@kf7umk.com	Secretary
Tom McDermott	N5EG	(541) 734-4675	n5eg@tapr.org	Newsletter & Membership
Club Web Page:			http://w7dta.org	

RVARC is **moving our meeting location to the new Red Cross facility.**

1050 Crater Lake Ave. (east side), between Spring St. and E. McAndrews Rd. in Medford. About 6 blocks from our previous location.

President's Letter

The license was dated June 11, 1958, the callsign was WV6ALQ, signed by Mary Jane Morris, FCC Secretary. Yup, that was me in June 1958. It will be 60 years in a few months and I am waxing nostalgic about those days now.

My radio story:

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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

2018-03-01 March Rogue Valley Amateur Radio Club Minutes

The March meeting was held in a conference room east of our prior meeting room, as the sale of the Red Cross building to United Way is in progress.

President Allen Taylor, K7GT, called the meeting to order at 7pm. 29 attendees were present.

It was mentioned that future meetings may

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President's Letter, Continued.

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I was a 6th grader at North Albany school, a small school across the Willamette from Albany. Two grades each were combined at this school and our teacher would read stories to us over the lunch break. One story she read this particular fall was about two kids who were able to track down spies because they heard their transmissions and knew Morse code. Great stuff. It was, after all, the 50's. We moved to Livermore CA in December and as it happens a classmate's dad was Ralph W6ZHP, an engineer at the government lab there in town. He gave me the novice test in March. I made a radio from the ARRL Handbook, a 6AG7 oscillator, maybe 5 watts. My antenna was a Windom off-center fed with a single wire. My best DX (40 CW), besides the family TV set (3rd harmonic...), was up four blocks to Jensen street and the Strobels (K6PDE, P6PBT). I refuse to this day to have an off-center antenna of any sort in my world. My receiver was a doctored up BC-312N. Ralph had pity on me and we rebuilt the antenna to a low center-fed dipole and he loaned me the rig he had built up for his son Rodger WV6BYB. 5763 to 6146. The separate power supply was a real piece of electronic art. Full of voltage regulator tubes and a pair of 866As. Quite a sight to see as the rig was keyed. Rodger used his dad's DX100 / HQ129X with crystal control. He even had a tribander beam in the backyard so Rodger could work 15m CW (the 312 went only to 18 Mc.) My receiver came from Norris Dutcher's surplus emporium in downtown Livermore. I got down there a few times (it was too far to walk) and once was able to listen to 6 meter band during the real sunspot peak. 6 meters was alive with AM phone signals, heterodynes and all. Norris's antenna was mounted on a large diameter fiberglass mast (10-12") right up through the roof of the two-story room with a big 6m beam on it. Fancy pre-amps, etc... The mast/tower was rotated with a metal rod, armstrong method. Good stuff.

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Secretary's Report

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be held at a new Red Cross location at 1050 Crater Lake Avenue, across from Providence Hospital. The Suite # was still unknown.

Mike Bach said that the Scala-Kathrein cafeteria might be a viable location for the RVARC flea market, and that Science Works asked about whether we wanted to use their location for Field Day 2018.

Jerry Fulstone, K6KSI, said a GOTA station would be there at ScienceWorks in October for the BoyScouts.

Treasurer's Report: After paying a late arriving bill from last year's Field Day, the current bank balance is \$5090.04 with an additional \$75 in petty cash and \$110 in checks from CARE for dual-membership dues.

Darrell Barker, N7CZX, advised that the CARE club has a float in this year's Pear Blossom Parade, April 14. They will also have a truck with so many antennas that it will look like a porcupine.

There was a short break for coffee and visiting at 7:14pm, prior to the presentation.

At 7:32pm, Tom McDermott, N5EG, gave the presentation on signal cleanliness in transceivers, based on a talk given by Bob Wolbert, K6XX and Jim Brown, K9YC, at the 2013 NCCC (www.nccc.cc/pastmeetings/2013/11nov2013.html). The slides are available at k9yc.com/K6XXAmpTalk.pdf

More good info is also available at k9yc.com/publish.htm

A summary of the main points were:

- Local Osc Phase Noise Hurts both TX and RX quality.
- Key Clicks are generally due to fast rise/fall time on the modulator. 5-6 mSec rise/

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President's Letter, Continued.

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Passed the general January 2 1959 at FCC's Battery Street office. The old guys were sweating out the code, I nailed it and passed the written to trade the 'V' for an 'A'.

Dad changed jobs and we moved to west Medford (Winema Way). We skinned an incense cedar pole for one end of two dipoles, the other end was a 2X4 tacked to the gable. I used a short wire in the shack for an receive antenna and had brute force full QSK! I just turned down the RF gain every turn-over. I had only that BC-312N receiver so dad worked out with Herb W7MMI to build up a transmitter. 5763 - 6146 again. 40 and 20m coils. Crystal controlled. Rack-mounted. Power supply below with two beautiful GREEN and RED (1") lights. I had a Speed-X bug and a hand key mounted on a plexi-glas plate overlooking the tx. To change bands, I would turn off the B+, pull the plexi-glas plate back, swap out two coils, and get back on the air. The same ritual to change crystals. My best DX was VR2DK, at the time a call in Fiji. 40 CW, of course. Worked JAs and UA0s in the morning before school. I entered the CW SS contest in 1962. Back then it was two successive weekends and paper dupe sheets were required. If you have the old QST, look up K7JMJ. That was me. I had gladly shed the WA6 call although the JMJ wasn't really all that much better. Hams I knew locally were Allen K7HWX, Herb W7MMI, Carl W7CSM, Rick K7CZU, John K7JKZ. a kid named Don Mackenzie (have forgotten his call), Steve Flyte (forgot his call, later on was K7SF), Curt K7TKC. The RVARC club call was W7OEK and they met in one of the old surplus buildings out in White City. Their transmitter was the original Viking. I met Bud W7LNG when he worked at the Verl G Walker store. It was just around the corner from McLoughlin Junior High. My prized purchase there was a Bliley crystal for 7005.1 kc. I used it on both 40 and 20m. My Schwinn bike had a metal plate on the back with the RVARC club decal (same as what is

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Secretary's Report

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fall time setting is good to minimize key clicks.

- Usually, having ALC "on" is bad because slow attack = overshoot. Turn off ALC.
- Transceiver IMD can be helped by running at half maximum power. Also IMD at 13.8V power supply voltage is noticeably better than at 12.0V and IMD is best with a 50 Ohm load. Tune your antenna.
- Adjust power amp bias for best linearity. Slightly increase loading (then readjust tune) to improve linearity and reduce grid current
- Minimize power supply hum.
- On the audio side, don't overdrive the mic input (to minimize splatter), and "Don't Crowd Your Mic", also cut bass below 300 or 400 Hz.
- Be careful to not over compress. Adjust compression carefully, and monitor the audio quality.

There were many good spectrum analyzer slides illustrating these points with an ICOM 7600.

After questions, the meeting was adjourned at 8:25pm due to possible icy weather coming.

President's Letter, Continued.

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on the president's briefcase today!).

After these years I was off to BYU for my education. I sold all my ham gear. Changed from EE to Physics, dodged the draft somehow, did graduate work in physics, etc... I had the call W0OKF in Denver (grad school) and then W7LGE (Price UT), and finally K7GT in 1977, after waiting out the one-year period after getting the Extra, a great CW call. I was fortunate to keep it when we moved to CA in 1983. We moved back to the Rogue valley in 2004 after an early retirement (forced...).

I keep very busy with a multitude of radio doings. With all the new things to do it is increasingly hard to keep up. SDR, RBN, FT-8, PSK31, WSJT-X, station automation, contests, Field Day, field operating while backpacking, supporting backcountry races, rafting with a HF radio in a Pelican case, did I mention contests..... I am refreshing my programming skills (15 years stale) by learning Python and will proceed to C++, etc. The math behind SDR and DSP fascinates me. Antennas fascinate as well. (One cannot have too many antennas!)

I do hope this little personal narrative did not bore you but rather gives you cause to think about the path that lead you to this wonderful hobby.

Allan K7GT

ARRL Northwestern Division Scholarship

The ARRL Foundation has announced a new scholarship, the Joel R. Miller (W7PDX) and Martha C. Miller STEM Scholarship. Endowed through the generosity of Joel R. Miller, W7PDX, and Martha C. Miller, this scholarship is intended to supplement the educational expenses of an Amateur Radio operator pursuing higher education. The ARRL Foundation will administer the scholarship, which is \$1,000 annually to fund the costs of tuition, books, fees, and other educational expenses. The first scholarship from this endowment will be awarded in 2019.

Applicants must be a US citizen, without regard to gender, race, national origin, or handicap status, residing in the ARRL Northwestern Division (Alaska, Idaho, Montana, Oregon, and Washington). Those applying must be pursuing an associate's or higher degree in the fields of science, technology, engineering, or mathematics (STEM) at an accredited institution of higher education and have a 3.0 or higher grade point average at a high school or an accredited institution of higher education for the academic year immediately prior to the application period.

The ARRL Foundation Scholarship Committee will submit its nomination to the ARRL Foundation Board of Directors to approve by majority vote. The Board will disperse the scholarship funds to the winner's school of choice.

The Joel R. Miller (W7PDX) and Martha C. Miller STEM Scholarship will be endowed with a gift of \$25,000. Earnings on the endowment will fund the annual scholarship award.

Scholarship application opening Date for all scholarships, is October 1, 2018

ARRL Northwestern Division
Director: James D Pace, K7CEX
k7cex@arrl.org

Tri City Flea Market

The Tri City Washington local amateurs are holding an Electronic Flea Market / Tailgate on May 5th, 2018. at:

BETHLEHEM LUTHERAN CHURCH/
SCHOOL (PARKING LOT)
2505 W 27th AVE.
KENNEWICK. WA. 99337

If heading south on Hwy 395, turn left at 27th avenue. If on I-82 heading north or east take exit 113 for Kennewick. Head north approximately 1.8 miles and take a right at 27th Ave. After you get on 27th Ave. go east for 1 mile and you will see the church and school on the right.

Suggested Items: (Electronic, Electrical Type Items Only) Commercial, Amateur, and Citizen Band equipment, Bench and Portable Test equipment, Computers, Computer parts and Accessories, Cables and Wire, Power Supplies, Antennas, Radio Controlled, Robotics, and Quad Copters etc. Electronic Components, Microprocessors, etc., Equipment Carcasses, other types of Electronic or Electrical Equipment

Sellers/Vendors set-up starting at 7:00 AM. No fees for sellers or buyers. Bring your own Tables, Canopies, portable generators, or work out of the back of your truck, car, or van.

For more information contact:
Dan Durlinger KD7KJJ
kd7kjj@arrl.net

New Oregon Section Manager(SM)

ARRL Field Organization announced today, that only one candidate filed for the Oregon Section Manager position.

David Michael Kidd, KA7OZO is declared the new Section Manager for Oregon, beginning July 1, 2018. David takes over from retiring John Core, KX7YT.

Congratulations David and John, thank you for your service to the State of Oregon and the Northwestern Division

ARRL Northwestern Division
Director: James D Pace, K7CEX
k7cex@arrl.org

Central Point Repeater back on the air

Back on the air according to Allan:

KB7QMV Repeater
145.4100 MHz. (-)
144.8100 MHz. Input
Central Point
oaezt(100.0) (Open, 100.0 PL tone).

**Amateur Radio Volunteers Needed for
Boy Scout Jamboree On The Air— Oct 19-21, 2018 at ScienceWorks in Ashland**

If you are interested, please contact RVARC club member:

Kirk Austbo, KF7N
austbok@jeffnet.org
(541) 482-1808

Kirk is looking for Hams that would like to assist to come out and:

- Set up and operate.
- Educate Cub & Boy Scouts about some of capabilities and uses of HAM radio especially in an emergency.
- OTA-JOTI will be held October 19-21, 2018 around the world. In the Rogue Valley, it will be held at the ScienceWorks in Ashland.

This is a very rewarding activity and a terrific opportunity to invite younger folks into a our hobby.

OTA-JOTI is the largest Scouting event in the world with over 1 million Scouts participating across 150+ countries. Scouts and Guides across the world connect with each other during JOTA-JOTI using the airwaves and the internet.

This is something that not many Scout units participate in this area. So I wanted to change that, not just with my kids but all of the youth in the Big Pines District, which is the whole Rogue Valley.

Ideal Goal and Concept:

- We host a 3 day/2 night camp at the field of ScienceWorks.
- We have stations set up for youth to learn how to use Ham Radios, Internet to communicate with Scouts abroad, and other STEM related activities.
- We request that Troops and Packs bring a station of their own that is STEM related.
- Scouts can learn about Scouting around the World and where they fit into Interna-

tional Scouting

- Fees collected will be use to pay for portable toilets, any cost ScienceWorks would endure (Staff)
- The Scout's Leave No Trace methods will leave the field unharmed.

Things we have already in our favor:

- Both of the Amateur Radio clubs in our area are willing to participate.
- Interest from the Big Pines District.
- Great publicity for ScienceWorks
- The idea of kids having fun while learning This of course if the ideal event. if we need to start smaller and work up to it, then ok, but at least we're starting something.

Below are some links to help understand more about JOTA-JOTI and World Organization of Scouting Movement

<http://jotajoti.info/>
<https://www.scout.org/>
<https://www.scouting.org/joti.aspx>
<https://www.scoutlink.net/joti/about/>
<https://www.scouting.org/stem.aspx>

Thank you so much for your time!
I really hope we can work this out and make it an annual event for years to come.

Cody Taylor
Troop / Pack 112 of Ashland
541-404-1562

This Month's Programs

1. FT8

- **Program:** FT8 and WSJT-X. FT8 is a new digital mode that has become very popular very quickly. It is much faster than the older JT65 mode, operating on a 15 second cycle rather than a 1 minute cycle. It retains much of the flavor of JT65 (brief pre-canned exchanges and synchronous transmit / receive cycles). WSJT-X is the free program that implements both the DSP software and a nice windows interface. WSJT-X also implements quite other modes which are optimized for different applications, such as meteor scatter and very weak signals.
- **Biography:** John Laybourne, W8WOM. John is an active contester and DXer in the Rogue Valley, and is also currently active on new digital modes.

Programs Planned for 2018 (subject to change):

- **April:** FT8 & WSJT-X
- **May:** TBA
- **June:** TBA
- **September:** TBA
- **October:** TBA
- **November:** TBA
- **December:** TBA

April 2018

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

Events

Meetings

- **RVARC** Thursday, April 5th — 7:00 PM **NEW RED CROSS LOCATION.**
- **Rogue Hack Lab** Thursday April 12th — 6:30 PM , Medford Library
- **CARE** Tuesday, April 10th — 6:30 PM —New Far East Restaurant
- **JCARES** Wednesday, April 18th — 6:00 PM —Jackson County Sheriff's Office on Crater Lake Highway

Nets

- **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

Be sure to visit our club's Sell / Swap webpage for more items.

<http://w7dta.org/sellswap/>

2018 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 2018: Jun 30 Oct 27

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 2018: May 18 Aug 17 Nov 16

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.

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Thursday April 5, 2018, 7:00 PM

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Program: FT8 / WSJT-X