

# The Repeater

# **Next Club Meeting**

Thursday November 1, 2018, 7:00 PM

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

Program: LF and VLF History

### **Volume 2018, Issue 11**

November 2018

Allan Taylor
John Laybourne
Mike Bach
John Armstrong
Tom McDermott
Club Web Page:

K7GT W8WOM WB6FFC

T (541) 855-2054 VOM

WB6FFC (541) 830-3346 KF7UMK (541) 899-1917 N5EG (541) 734-4675 k7gt@arrl.net w8wom@hotmail.com eaglepoint.or@juno.com john@kf7umk.com n5eg@tapr.org

http://w7dta.org

President
Vice President
Treasurer
Secretary
Newsletter & Membership

#### President's Letter

Its all about people

I just got back from Pacificon 2018 and will be recapping the event. The big take-home is the people I met, old friends and new acquaintances. Thursday, not a Pacificon day, I spent hiking up the higher of the two Maguire Peaks in Sunol Regional Wilderness. Why would I do this? Why — a chance to hike with an old friend and do a SOTA activation! Don KQ6KV and I did SOTA summit ref W6/NC-516 and had a great time. Don is a first-timer. It was my fifth activation. The highlight was a Summit-to-Summit with local Matt KC7OOY on a peak somewhere in eastern Oregon. 20m wouldn't do it--it took 40m. We got back to his home in Fremont just in time to go out for Thai food. Yum!

(Continued on page 2)

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 Meeting Minutes, October 4, 2018

Meeting at new club location, Medford PD conference room, on S. Ivy St. near 10th Ave.

7:00 pm Meeting opened by club president Allen Taylor, K7GT with about 23 people in attendance.

Treasurers Report: Club bank balance is \$4416.36, and liability insurance needs renewal.

Tom, N5EG, made a motion for allocation of \$200 for ARRL club insurance renewal. There were many seconds, and the vote was a unanimous yes.

There was word of Dan Curtis' continued recovery from a recent stroke, the prognosis was good, and all wished him well.

(Continued on page 2)

#### President's Letter, Continued.

(Continued from page 1)

Friday is the highlight (at least for me). Highlight speakers were Tom Schiller N6BT, Steve Stearns K6OIK, Kristen K6WX, and Dean N6BV. Tom is always entertaining and manages to point out advantages of verticals whenever he can. Steve spoke on history of antenna and RF modeling in general. Kristen talked about getting the most out of simple antennas. And Dean talked about common mode chokes. I noted that Dean is now a victim of Parkinson's. Truly sorry to see.

Other speakers, new to me, included Ed Harriman AE6TY and Ted Algren KA6W. Ed talked about using a free Smith chart program simsmith which he has written. Ted talked about getting the most out of a full-wave loop (vertically mounted).

Some person-to-person highlights from the antenna seminar were meeting up with Bill Al6JZ for a chat over Indian food (HOT!) and a coincidental meeting with Brenda KC9EIO. She had seen my convention tag with my call and QTH. She introduced herself and asked if I perhaps knew her dad (SK) last name Lacy (I have forgotten his first name) and with the very similar call K7GTX. Chatting about old times during two successive 10-min breaks brought out that she had been in Glenda's (my wife K7GRT) high school class (Medford 1968). I am curious if any of the real old times might know Lacy K7GTX.

Friday dinner from Erik's Delicafe, an old favorite haunt. Good sandwiches.

The main convention seminars and meetings were Saturday. I bumped into old friends Dave KQ3D, a few members of LARK (the club in Livermore), and ... our local Joseph W3JVC. I saw no others from the Rogue Valley. I also made some new friends at the SOTA luncheon held Saturday in the Marriott's grill.

(Continued on page 4)

#### Secretary Report, Cont'd.

(Continued from page 1)

The club website, W7DTA, was back online after a brute-force password attack succeeded, likely by Ukrainian hackers. The webmaster Todd Carney, K7TFC, has implemented a login rate limiter to help prevent future abuse. The club offered a round of applause to Todd for his effort.

Next month, club elections will be held, so it's an opportunity for all to see their ideas for the future of the club become reality by running for the office of president, vice-president, treasurer, or secretary.

The first presentation, by Allen Taylor, K7GT, was on his SOTA operations this Summer. Summits On The Air gives hams a chance to get out to scenic mountain peaks, setup portable antennas and run battery-operated transceivers, in all kinds of weather. There is an awards system, with points given according to difficulty and season. You can be an 'activator' on a peak or a 'chaser' at the shack or out with a portable. Contacts are logged in the SOTA database so you can keep track of your contacts and points. It takes 4 contacts to activate a peak. There is a cell-phone app (SOTA Spotter) to allow you to log contacts in real-time to the sotawatch2 database. ( see www.sota.org.uk/Joining-In/SOTA-SMS-Format )

Some of the peaks Allen worked this year were:

- Upper Table Rock (W7O/CS-157)
- Mt. Ashland (W7O/CS-019)
- McDonald Peak (W7O/CS-030)
- Condrey Mountain (W6/NW-073).

An Elecraft KX3 was used on 40M, 30M, and 20M bands and, if I heard correctly, up to 150 contacts-per-hour rate could be had on 20M. Allen also mentioned that Summit-to-Summit (S2S) can be fun, with a little pre-

(Continued on page 3)

#### Secretary's Report, Cont'd.

(Continued from page 2)

arrangement to co-ordinate contact attempt times with the other 'summitors'.

(see www.sota.org.uk, www.sotamaps.org, www.sotawatch.org, and www.pnwsota.org for more info )

http://www.mbars.club/static/files/SO-

TA Talk M0NOM Mountains with Radios.p

has an overview of SOTA)

7:30 pm Break for snacks

8:00 pm Second presentation by Tom McDermott, N5EG, on uses for Arduinofamily devices in ham radio.

The Arduino family of 8-bit microprocessor boards have a (roughly) standardized I/O and mechanical layout, allowing for interchangeable plug-in adapter boards to be used. They use 5 volt DC power to the IC's and have a built-in voltage regulator to utilize 7 to 12 volt DC power sources. There is a GUI software development system (IDE) using a C/C++ language subset. That IDE has also been extended for many other microprocessor devices and many peripheral libraries have been developed for our easy use.

Tom was active with TAPR in developing a high-accuracy time-stamping peripheral board for the Mega2560-type Arduino. Using some Texas Instruments counter/timer ICs, they achieved a 55 picosecond time-resolution, this board can be used for testing drift of high-stability oscillators.

To illustrate what the ham can do with Arduinos, there was a demonstration of an antenna switching board using the Arduino Uno, a color LCD display with touchscreen, and a homebrew relay board. Those relays activated the RF-relays via AC or DC over a cable, so the Arduino controller could be near the computer, and the RF switchbox could be

where it needs to be. Also, Tom showed a stepper-motor driven star tracker platform for photography use. Using a stepper motor-driver peripheral board, an Uno was easily programmed to drive the stepper to make the camera-mount follow the earth's rotation and allow for star photos that didn't trail.

John, KF7UMK, mentioned that there are various new Arduino-compatible boards that are using 32-bit processors and, for some projects, those are also cost-effective.

9:00 pm Meeting Adjourned.

#### President's Letter, Cont'd.

(Continued from page 2)

Notably there K6EL (who I had worked from the mountain Thursday), Todd, KH2TJ, and Jamie N6JFD. Wayne N6KR was there (looking old and very much in need of a long vacation). Others were there whom I hope to work in the future.

The seminars I attended wereWA9PIE on Ham Radio Deluxe (didn't make me a convert, though), part of PY1AHD on the Alex loop (it conflicted time-wise and I only caught the end). Next hour was Ward Harriman AE6TY on his simsmith program. His was a great talk During that hour was N6KR on shrinking the linear amp (into the KPA1500!) but I missed it. Third hour was Bob Heil K9EID talking about his receive audio processor. Bob is always entertaining and recently gave a skype talk for the CARE group. Fourth hour was a talk by Steve Brightman on SDR. I missed it...can't do everything!

The first talk of the afternoon was AB6SO talking about successful SOTA chasing. A great talk. During this hour I missed a 20year survey of SDR by K7AGE and a 'how to fldigi' by K6KHB. Again, can't do 'em all. Second afternoon talks included Bob K9EID again, on his pineboard project, and an intro to DXing by K7VV. I spent the time roaming the exhibit hall. Third afternoon hour included two talks: one about the history of CW and another a study on actual FT8 usage in JA and W/K. I missed most of both to chat with Joseph W3JVC. People are more important than things. The final talk of the day was another round with Steve K6OIK. He spoke basically on Novel Antennas. I hope to get the link and post it. Ya gotta see these, guys. His talk began with an analysis of the changing 'K' curve for the length correction for a resonant 1/2 wave dipole. I bet you didn't know that that curve will be changing in the ARRL documention for the third time with the upcoming massive ARRL Handbook.

Dinner Saturday evening with K7GRT and our daughter at another Thai place, Palo Alto this time. Sunday church, a nice walk in the park, and a good long nap.

We returned Monday. Easy drive except for an accident blocking 680 for nearly an hour... It is good to be home.

I have URLs of some talks and the complete deal for the antenna seminar talks on a flash drive. If you have particular interest on anything mentioned above feel free to contact me for more information. I will have the Pacificon Forum schedule handout with me at the November meeting.

Make plans to attend the RVARC Holiday / Christmas party in December at a date to be arranged. The date will be determined by the membership at our November meeting.

Allan K7GT

#### **Election of Officers**

The club will elect officers at the November meeting. The positions are:

- President
- Vice President
- Secretary
- Treasurer

Nominations will be opened at the meeting, and elections will be held for each office. If you are interested please speak up at the meeting. You are welcome to nominate yourself!

#### About our new meeting location ...

The new meeting location at the Medford Police Department Community room in October went over with the attendees very well.

The room is large, and can easily hold 100+ people. The air conditioning had no trouble keeping up with our group. There was plenty of room for not only the talk but also for the Arduino demonstrations that were setup on a rolling cart.

It has coffee and food preparation areas, and nice modern restrooms right next to the room.

The overhead projector is a modern HD 1920 x 1080 unit, which makes projecting 16:9 aspect ratio slides work quite well.

Parking is easy—on the street, a lot across the street, and an open parking garage right next door.

#### **Holiday Party—December**

During the November meeting, there will be a discussion of the December meeting. In past years we have had a pot luck dinner.

During the November meeting we will discuss the location for the dinner, the best date and time, and other details.

#### **This Month's Programs**

#### 1. LF and VLF

- Program: Low Frequency and Very Low Frequency (LF and VLF) equipment and history. With the opening of the630 meter and 2200 meter amateur bands several years ago, hams have the chance to experiment with very different equipment and antennas. There is a long record of amateur and commercial LF radio equipment and Lud will present some of that history.
- **Biography:** Lud Sibley is former club treasurer and the Rogue Valley's resident historian on things vacuum tube, and related.

2.

- Program:
- Biography:

# Programs Planned for 2018 (subject to change):

• **December**: Holiday Party. Details TBD.

# November 2018

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

#### **Events**

#### <u>Meetings</u>

- RVARC Thursday, November 1st 7:00 PM, Medford Police Department Community Room
- Rogue Hack Lab Thursday November 8th 6:30 PM, Medford Library
- CARE Tuesday, November 13th 6:30 PM —New Far East Restaurant
- JCARES Wednesday, November 21st 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.

#### **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 2018 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

# <u>Medford—Phoenix, OR</u>

**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:** 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:** Nov 16

Contact: John Stubbe, K7VSU, email: <a href="mailto:jstubbe7@gmail.com">jstubbe7@gmail.com</a> Phone: (541) 218-2244

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

# **Next Club Meeting**

Thursday November 1, 2018, 7:00 PM

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

**Program: LF and VLF History**