



The Repeater

Next Club Meeting

Thursday February 7, 2019,
7:00 PM

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

Program: Flex Radio

Volume 2019, Issue 2

February 2019

John Laybourne W8WOM
 Scott Cummings NA7OM
 Mike Bach WB6FFC (541) 830-3346
 John Armstrong KF7UMK (541) 899-1917
 Tom McDermott N5EG (541) 734-4675
 Club Web Page:

w8wom@hotmail.com
kd7ehb@yahoo.com
eaglepoint.or@juno.com
john@kf7umk.com
n5eg@tapr.org
<http://w7dta.org>

President
 Vice President
 Treasurer
 Secretary
 Newsletter & Membership

President's Letter

Wow, here we in Feburary already, don't forget about valentines day guys! I hope every body was able to survive the high winds we had in January. I had 50 mile per hourr gusts at my place, and lost just an wire antenna support.

What a great program Edison Fong put on for us via skype in January, thanks Tom for setting up the skype stuff worked out great. Speaking of skype the planning board that plans the programs for the year is working on trying to secure other skype presentations for the club. Can't let much out of the bag quite yet, but we are looking at Bob Hiel, and Elecraft to name just a few. We will also have a few programs given by club members in the areas of:

(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

1.2019-01-03 RVARC Meeting Minutes
 Medford PD Community Room

The meeting was called to order by President John Laybourne, W8WOM at 7:08pm We had around 21 attendees, with at least one visitor, Jeff Louie, KJ7BQL. Welcome, Jeff!

We got right into the presentation, via skype, from Edison Fong, WB6IQN, currently at UC Santa Cruz teaching graduate classes in RF design. The subject was on his Dual- & Tri-band J-pole antennas, their history and design.

The DBJ-1 and DBJ-2 are Dual-band (144-148 MHz and 440-450 MHz) vertical and roll-up antennas. The TBJ-1 is the triband, vertical antenna for 2m / 1.25m(220 MHz) / 70cm. (Patent #9 608 336)

(Continued on page 2)

President's Letter

(Continued from page 1)

- Wsjtx demo
- Satellites
- SDR radios

I think there will be something to interest everyone. We have a large core of veteran hams that have been active in the hobby for a long time. But we also have a lot of new hams in our club, so I think with the diversity of programs we plan this year will keep the veterans around a little longer and the new hams coming back for more. I think this is going to be a GREAT and FUN year at the RVARC and am excited.

Don't forget the contest season is upon us, hope you were able to work some contests during January, The ARRL RTTY contest, the North American QSO Party CW and SSB contests, and of course Winter Field Day. February looks just as fun.

Can't wait to here all about the fun and maybe even see some pictures (to possibly be put in The Repeater club newsletter) of the setup that was used. A good resource that I use is WA7BNM contest calendar—it lists all the contests that are coming up for the year month-by-month, including VHF and UHF contests as well.

So if you are just starting and need a particular state for your WAS or just want to get your feet wet and see what contesting is all about this is a good place to start. Field Day will be among us soon enough.

Cant wait to see everyone at the next meeting !!!

73 and have fun
John w8wom

Secretary's Report

(Continued from page 1)

Some key points made were:

1. Just matching the antenna impedance (a low SWR) does not automatically mean good antenna performance.
2. Ground plane radials are not absolutely necessary for good performance of a vertical antenna.
3. Watch (design) that the elevation pattern of the antenna has a maximum near horizontal, for best terrestrial propagation.
4. A choke at the feedline is necessary for the safety of your rig's output if the SWR gets too high, but it is better to know your antenna-system characteristics and stay in-bounds, rather than unnecessarily waste RF heating your choke.

All three antennas have good performance, small size, and are low cost, so may be worth having for your portable needs.

The volume of information presented was too much to show here, so refer to these web links for the details:

A copy of the Feb. 2003 QST article on the DBJ-1 can be found at:
http://www.work-sat.com/Antennas_files/FONG-DBJ1.pdf

Articles from Feb. 2003 QST, March 2007 QST, March 2017 QST, Summer 2012 CQ VHF, Presentation slides and more can be found from the Durham FM Association at: <http://www.dfma.org/pdf/EdFong2017.pdf>

Also, you can look up 'Ed Fong' on Youtube for recordings similar to our presentation, like this:
http://www.youtube.com/watch?v=E_IBni6vvMc

Ed's antennas, various accessories and the CountyComm GP-5/SSB will also be the subject of a group-buy at the upcoming Feb-

(Continued on page 3)

Board Meeting

RVARC held a board meeting on January 8th, 2019. Started at 7:00 PM, went to about 8:30 PM.

Three board members and two guests were in attendance:

- John Laybourne (President),
- Scott Cummings (VP),
- John Armstrong (Secretary),
- Pat Cunningham (guest),
- Tom McDermott (guest).

Topics:

1. Details of the club group purchase from Edison Fong was discussed. The deadline, and how to handle payments was discussed. This was confirmed with Mike Bach (treasurer) after the meeting.
2. The rest of the meeting was taken up brainstorming potential programs for the rest of the year.
 - A total of 16 programs were discussed, many of them won't 'make' but hopefully 8 will.
 - John Laybourne has contacted several hams that offer Skype programs to secure commitments for various meeting dates.

Secretary's Report

(Continued from page 2)

ruary meeting. Don't miss this opportunity.

With the presentation completed at 8:10pm, the meeting took a break for coffee, snacks, and visiting.

Meeting resumed at 8:39pm with the treasurer's report. Treasurer Mike Bach, WB6FFC, reported a bank balance of \$4407.47, plus \$45 petty cash and \$10 paid dues for 2019 memberships, totaling \$4462.47

Old Business:

Scott, NA7OM, said Ellis' callsign K7MFR was available until July and Mike, WB6FFC, said he will pursue it.

Tom, N5EG, said W7DTA was renewed for Logbook of the World.

Pat, KD7MPA, and John, W8WOM, each had over 100 contacts at the FT8 roundup, Dec. 1-2, and noted that WV4P logged 693!

New Business:

There is the ARRL RTTY Roundup contest the weekend of Jan. 5-6, with FT8 now allowable using the new WSJT-X 2.0 program's contesting features, described in the 'Quick Start Guide to WSJT-X 2.0' at:
http://physics.princeton.edu/pulsar/k1jt/Quick_Start_WSJT-X_2.0.pdf
More info is also available at:
<http://www.arrl.org/rtty-roundup>

Pat, KD7MPA, announced that the Rogue HackLab is planning their 'Electronics and Old Technology Swap Meet' at the Armadillo Technical Institute, 106 N. Rose St., Phoenix, OR, but recent schedule conflicts have required finding a new date. So far, Feb. 23rd is looking likely. see <http://oguehacklab.org/pages/events> for updates.

(Continued on page 4)

RVARC Group Purchase

At the January presentation, Ed Fong offers a group purchase to the club.

A flyer was emailed to all club members and other through both the club email reflector and the club email list, so you should have received a copy. There is a copy of the order form in this newsletter (next page).

Fill out the form, and bring a check payable to RVARC to the February meeting. All sales will be finalized at that time.

Secretary's Report

All were happy to hear word that Dan Curtis, N6WN, is having improving health. Yea!

Don Bennett, KG7BP, asked for more VEC helpers. Contact him if you can volunteer.

The meeting was adjourned at 8:54pm

Electronics and Old Technology Swap Meet—Phoenix, Oregon, February 23rd

The Rogue Hack Lab will have an Electronics and Old Technology Swap Meet in collaboration with students and staff at Armadillo Technical Institute (ATI), and other schools, clubs, and organizations TBD. The event will take place on February 23, 2019 from 10am to 4pm. The address is: 106 N. Rose St, Phoenix, OR 97535

The plan is to bring out the contents of the Rogue Hack Lab's storage for members, teachers, students, and the general public to rummage and see what they might value or find interesting. It will also give us a great excuse to network and catch up with folks and create new connections with students.

Some items will have explicit price or suggested donation while other items will be on a "donate what it's worth to you" basis. The proceeds will go to supporting local school STEAM initiatives including ATI's goal of providing some light-duty manufacturing tools students can learn to use (CAD subscription, 3D printer, laser cutter, etc).

We'll also provide the classic Mutant Toys activity for kids of all ages. If your kids have toys they never play with and you're ready to get rid of the toys, please consider bringing those down to the event.

Additionally, we encourage individuals, clubs, and other organizations to join us by bringing your own items and either donating the proceeds, or for a \$10 donation have your own table and keep all the funds generated from those items. Disclaimer: we cannot be responsible for disposal fees associated with your items or hauling your items to the landfill. All items not sold or taken will need to be removed at the end of the event.

<https://www.meetup.com/Rogue-Hack-Lab/events/257376473/>

Rogue Valley Amateur Radio Club Group Purchase January 2019

- Make Check Payable to: Rogue Valley Amateur Radio Club
- Must bring filled-out form and check to the February 7, 2019 Club Meeting
- The group order closes at the Feb 7 2019 club meeting.

Name: _____

Call: _____

Address: _____

Phone Number: ____ (____) _____

Email (write legibly): _____

Order Form Item	Unit Price	Qty purchased	Total \$ Per Line
DBJ-1	\$30	_____	\$ _____
DBJ-2	\$30	_____	\$ _____
TBJ-1	\$60	_____	\$ _____
50ft RG8x coax	\$25	_____	\$ _____
6ft extension for DBJ-2	\$5	_____	\$ _____
BNC male to PL259 adapter	\$2	_____	\$ _____
GP60 SSB radio	\$60	_____	\$ _____

Total Remitted \$ _____

This Month's Programs

1. Flex Radio SDR

- **Program:** Michael Walker, VA3MW will present on Flex Radio.
 - SDR radio and the Flex implementation and how we leveraged it, filters, noise blankers, etc.
 - Designed for simple and easy station integration - not limited to just 1 RS232 port like all other radios.
 - Remoting of HF radio for either your friends to share or a more detailed station that is 100% remote.
 - Product overview of the models Flex has for sale and trade-in programs
- **Biography:** Michael Walker, VA3MW is a product manager for Flex Radio Systems in Austin, Texas.

2.

- **Program:**
- **Biography:**

Rickreall Swapmeet

The 39th annual Salem Hamfest will be held Saturday, February 16th, 2019 at 9:00 AM the Polk County fairgrounds, 520 S. Pacific Hwy West, Rickreall, OR.

There will be raffle prizes. Drawing at 1:30 PM.

Pre-registration is \$8.00, or \$10.00 at the door. Tables for selling equipment are various rates.

Rumor has it that Scott will be getting a table, and several folks from the club may be selling equipment.

Talk-in: 145.33/144.73 (PL 186.2).

For more information contact:

Chris Portal, W7CLP
(503) 779-6988 or email at
hamfair@w7sra.org

Puyallup Swapmeet

The 38th annual Mike and Key ARC Electronics show & swap meet will be held on March 9, 2019 at 9:00 AM in the Pavilion Exhibition Hall located at the Puyallup Fair and Events Center, 110 9th Avenue SW, Puyallup, WA 98371

Admission is \$10 (under 16 free with adult).

Two floors with 44,000 square feet of exhibition area (>300 tables).

Talk-in 146.82/22 (PL 103.5)

Radio gear * Computers * Club and information tables * Parts * Snack Bar * Free Parking * Consignment Area * Overnight SC/RV Camping Available * License Exams

For more information, contact:

Table Reservation Information: (253) 631-3756, ddmdink@gmail.com or n7wa@arrl.net

VE Exam Information: (425) 788 0452, ag7t@arrl.net

AD7AF Vintage Station and Hallicrafters SX-16 Restoration

Dick Lemke, moved from the Rogue Valley to Tucson about a year ago.

I am now living in Tucson, AZ but renewed my membership to stay in touch. I'm thinking you asked for vintage station photos for a new feature in the newsletter. If it helps, we still lived in Ashland when I bought a Hallicrafters SX-16 on ebay for \$200. I had it shipped to my friend, Geoff Morse, K7GA in Yuma because we were fairly certain we'd end up in AZ. The attached photo shows the rig up and running after a lot of electronic restoration work sitting on my vintage station

receiver for the next four years. I sold it when I went off to college.

The SX-16 was Hallicrafters top-of-the line receiver in 1938 and was succeeded by the SX-28. The beautiful nickel plated dial has never been equaled after that time. I'm guessing that the war time shortage of nickel and brass meant that the SX-28 had to settle for plastic dials. With an RF stage, two IF amplifier stages and a 465 kHz IF crystal filter the performance is pretty good even today. The audio output is provided by 6V6's in push-pull and Hi-Fi for the day. I added a



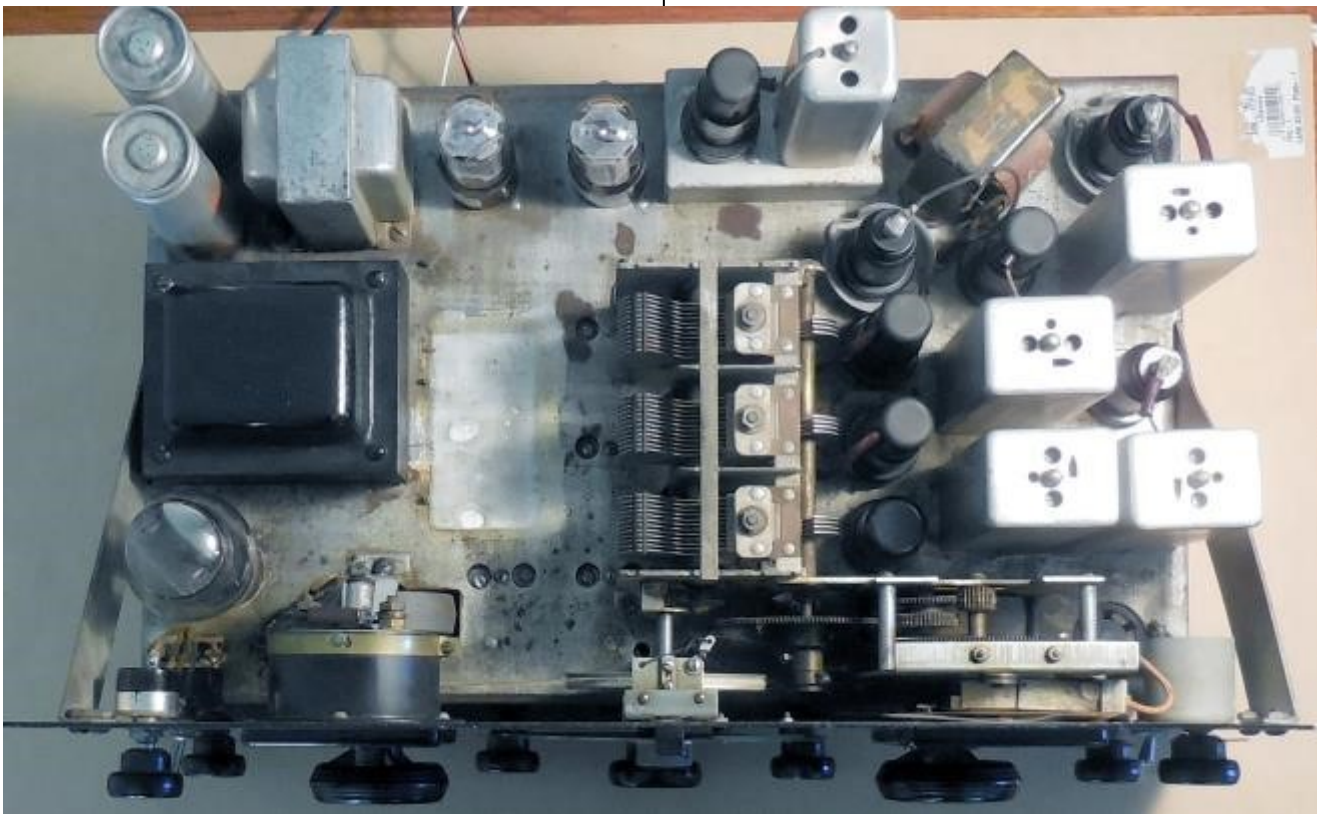
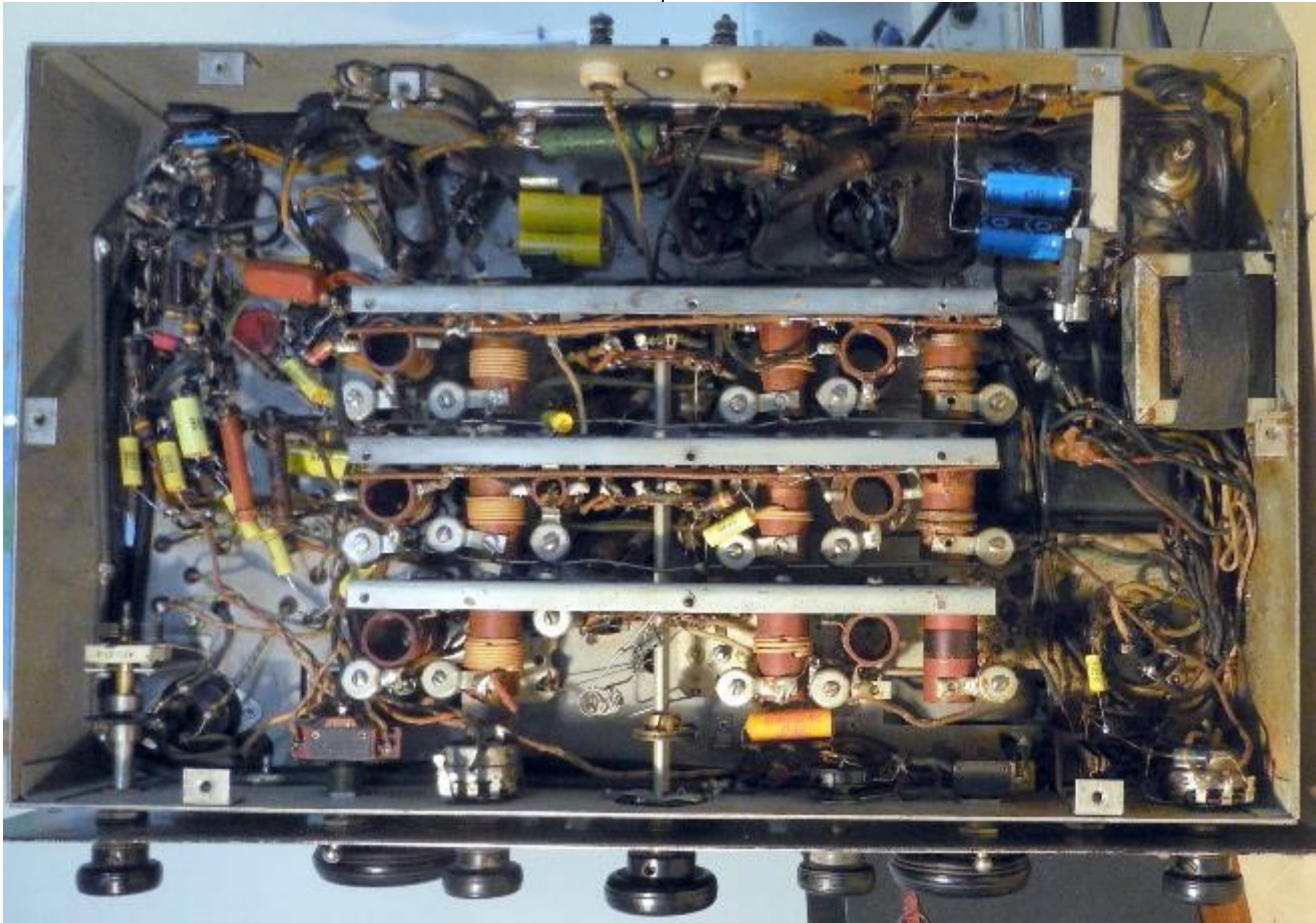
(to be) bench in the Tucson shack.

The story begins in 1954 right after I got my General, W6TDU in Menlo Park, CA. I bought an SX-16 for \$50 and it became my

phono input jack and could hear sounds on 78's and 45's that none of my friends could hear on their own phonographs. The current SX-16 will be great for working AM on the 75

(Continued on page 10)

AD7AF Vintage Station and SX-16 Restoration



AD7AF Vintage Station and SX-16 Restoration

(Continued from page 8)

meter band. Continuous coverage runs from 500 kHz (kilocycles) to 60 MHz (megacycles) in six bands. You can tune the old 5 meter band as well as the newer 6 meters.

The rig has no mode switch. If you want to copy CW, turn on the BFO. If you want to copy SSB, turn on the BFO and adjust the Pitch Control until you can understand the transmission. The IF has a "Broad - Sharp" switch on the front panel. Use Broad for high quality AM and Sharp for everything else. The crystal filter can be switched in and out. There's an AVC switch, a good S-meter, and separate AF, RF, and Tone controls. The bandspread dial is a spiral with the pilot light moving vertically to highlight the current position. The main tuning dial has a pointer that moves up and down to indicate the current band in use.

The plan is to build a partner transmitter with a period design. That means using Class-C and an 807 or two in the PA, perhaps later followed by an 813. The photo shows the rig listening to a 40 meter noon-time net. The headset is a 2,000 Ohm steel diaphragm Acme/Trimm model, true to the period. The speakers are by Collins on loan from K7GA until I can find a period Hallicrafters model. The key is newer, my original WWII surplus J-38 that I've kept all these years. I am having a great time bringing to life a rig that is a year older than I am and the same model that I bought when I was 14 years old.

I replaced all of the paper and electrolyte capacitors and several resistors. The tubes are now mostly NOS, new old stock. I'm not the first to make repairs. The original electrolytic filter capacitors did a lot of damage when they blew at some point. The tubes are the grid cap type, 6K7's for example, that preceded the 6SK7. One of the 6K7's had a note on it; it had last been replaced in 1943, so the rig saw war-time service.

73, Dick, AD7AF

February 2019

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

Events

Meetings

- **RVARC** Thursday, February 7th — 7:00 PM, Medford Police Department Community Room
- **Rogue Hack Lab** Thursday January 10th — 6:30 PM, Medford Library
- **CARE** Tuesday, February 12th — 6:30 PM — New Far East Restaurant
- **JCARES** Wednesday, February 20th — 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/>

2019 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

Dates 2019: Jan 26 Apr 27 Jul 27 Oct 26

(note these dates are tentative until confirmed by FD#5)

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

Dates 2019: Feb 15th May 17th Aug 16th Nov 15th

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 February 7, 2019, 7:00 PM

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

Program: Flex Radio