



# The Repeater

## Next Club Meeting

Thursday,  
October 2, 2014, 7:00 PM

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

Program: Basics of DSP using  
Gnuradio. Building an SDR Re-  
ceiver

Volume 2014, Issue 10

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Todd Carney	K7TFC	(541) 951-5702
Allan Taylor	K7GT	(541) 855-2054
Lud Sibley	KB2EVN	(541) 855-5207
Carl Van Orden	W7BRO	(541) 326-5871
Tom McDermott	N5EG	(541) 734-4675
Joe Gunderson	AF7GN	(541) 941-7186
Club Web Page:		

<a href="mailto:k7tfc@arri.net">k7tfc@arri.net</a>	President & Webmaster
<a href="mailto:k7gt@charter.net">k7gt@charter.net</a>	Vice President
<a href="mailto:tubelore@jeffnet.org">tubelore@jeffnet.org</a>	Treasurer
<a href="mailto:carl@pacificwest.com">carl@pacificwest.com</a>	Secretary
<a href="mailto:n5eg@tapr.org">n5eg@tapr.org</a>	Newsletter & Membership
<a href="mailto:ham.instruction@mail.com">ham.instruction@mail.com</a>	Instructor
<a href="http://w7dta.org">http://w7dta.org</a>	

## President's Letter

### Not exactly heaven, but . . .

As I write this I'm upstate in Portland. I've been here for more than a week, so I've had a chance to window shop at some local radio-related suppliers. For component-level stuff, there's Fry's. It's a chain similar to BestBuy except it caters to both the consumer as well as the professional repair and amateur electronics markets. They carry the full NTE line and \*lots\* of other components and materials (including enclosures). Except for hollow-state projects, one could pretty much be supplied for serious work just from there. Medford is growing big enough that Fry's

*(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

There was nor formal business meeting in September due to the swap meet—thus there are no meeting minutes.

Rumor has it that a contingent from SOARC and RVARC will mount a county expedition for the California QSO Party October 4th and 5th. Those interested or curious might want to talk with Scott Cummings or Carl Van Orden at the club meeting on October 2nd.

## President's Report, Cont'd.

*(Continued from page 1)*

ought to open a store.

Focusing entirely at the component level is Oregon Electronics, a reincarnation of Norvac. They have a store in Eugene, too. The full NTE line can be found here, too, along with the best selection of connectors of all types one could imagine. They have a better selection of Arduino and other micro-controller-related items than Fry's, including a huge array of break-out boards for devices available only in surface mount. These include sensors of various sorts such as temp and humidity, gas ionization, ultrasonic range finding, multi-axis accelerometers, and WiFi connectivity. OE stands out by having their full inventory (i.e., what they actually have in stock) searchable online. There are enough goose chases in life already so this is great. <http://www.yelp.com/biz/oregon-electronics-beaverton>.

The most fun supplier up here is Surplus Gizmos. It's a warehouse-sized wonderland of almost anything having to do with electricity. Some is surplus and some is salvage. I'd say some was obtained by dumpster diving, but I don't have smoking-gun evidence for it. If you can't find something elsewhere in town, the chance is SG will have it. They had the RG-174 I was looking for! The guys at HRO (see below) sent me there. Much of what Surplus Gizmos has is also available from their online store. <http://www.surplusgizmos.com/>

Though useful for lots of ham-related paraphernalia, Ham Radio Outlet does not cater to the DIY or homebrew community. They do carry a good selection of the latest and greatest rigs; they're all set up along one wall and one of several antennas on the roof can be used for a test drive. They also have a good stock of MFJ accessories, a nice selection of antennas and antenna-related

## President's Report, Cont'd.

gear by several manufacturers, the full Heil line of mics and boom sets, and a decent stock of coax and ladder line. HRO is definitely the place to go for "plug n' play" or "turn-key" ham radio. The folks behind the counter are real Hams, and they're easy to deal with, too. <http://www.hamradio.com/locations.cfm?storeid=11>.

There are more suppliers up here that I've not visited yet. I'll give you a report on those on the club reflector. If you're going to be up this way, plan some time to check-out these suppliers. I'll leave it to as to whether or not to leave your wallet back at the hotel.

This month's program will be a tutorial on Digital Signal Processing, using Gnuradio to demonstrate the results, and to ultimately build an HF SSB/CW SDR receiver from the building blocks in the demo (without writing any code). This presentation was given at the recent ARRL/TAPR Digital Communications Conference in Austin.

73,

Todd K7TFC

**Once a Ham, Always a Ham  
Don Bennett, KG7BP**

Good news for hams whose licenses have been expired far beyond the two year grace period. Those licenses have long since been deleted from the FCC database. The FCC now offers partial credit for expired General, Advanced or Extra Amateur Radio licenses. Unfortunately your license will not be automatically renewed. However, previous license holders can take the current 35-question Technician exam (element 2) at a VE exam session to return to Amateur Radio. The FCC will issue a new call sign and a new license when the Technician exam is passed.

This is an exciting enhancement to the existing program wherein credit for pre-1987 Technician licensees qualifies the applicant for a General class license.

FCC Rule 97.505(a) offers partial credit to an examinee who has an expired General, Advanced, or Extra license. If an applicant held a General or Advanced license, and has proof, the FCC will afford credit for the General (Element 3) written exam only. If an applicant held an Extra license, and has proof, the FCC will afford credit for the General (Element 3) and Extra (Element 4) written exams. Please note that at VE exam sessions it is the applicant (not the VEs or coordinating VEC) who is responsible for supplying the evidence of holding valid expired license credit.

For complete details, please visit: <http://www.arrl.org/exam-element-credit>

Don Bennett, KG7BP

**ARRL Pacificon Convention. October  
10, 11, 12, Santa Clara, CA**

The ARRL Pacific Division and the Mt. Diablo Amateur Radio Club will host the PACIFICON 2014 Convention October 10-12, 2014 at:

Marriott Santa Clara Hotel  
2700 Mission College Blvd.  
Santa Clara, California

PACIFICON 2014 Events, Forum Topics, and Exhibits Include:

- Friday All-Day Antenna Seminar
- Friday Evening Special Public MDARC Meeting
- Saturday Morning Kickoff with Speaker Gordon West
- Outstanding Technical Forums
- Largest West Coast Vendor Show of Amateur Radio Gear
- Saturday Amateur Radio Law Seminar
- Saturday Swap Meet
- Ham License Exams
- Daily Radio Prize Drawings
- Transmitter Hunt
- QRP Program
- HFpack Activities
- Amateur Television (ATV/DATV)
- Saturday One-Day Technician License Class & License Test
- DXpeditions
- Contesting
- Gordon West HamInstructor.com Academy
- Get-on-the-Air W100AW/6 Special Events Station
- Many other forums and programs too numerous to list.

For more information contact:

<http://www.PACIFICON.org>  
info@pacificon.org  
(925) 945-8007

**Public Service on a Mountain Peak.  
Allan Taylor, K7GT**

Some years ago, when I was club president, I got a call from Tom Pelsor, NT6N, of Yreka. He was looking for radio amateurs to volunteer assistance with the Pine-to-Palms 100 mile endurance race. I had never heard of this event but was immediately interested in participating. Tom's request was made to the club at large, but no others volunteered. (The short notice was likely a major factor).

The race is held the second weekend in September and is between Williams and Ashland Oregon. The 100 mile course in-

the upper Applegate valley to Ashland. As it turned out, Mike was not available this year making an opportunity to try something different. Thus the story begins.

The support operation for the race is centered on having a relay point high in the Siskiyou mountains so that runner 'splits' and other important information can be made available from several aid stations along the race's route to the Ashland headquarters. The course peaks out (literally!) at Dutchman's Peak, elevation 7418'. In 2013 the aid



**View of Dutchman's Peak summit from near Jackson Gap.**

volves a total vertical gain of 20,000 feet! This race is not for the timid. I helped that year at the Pioneer Hall (in Lithia Park, Ashland) race headquarters. The next year I was in the mountains (Hanley Gap just below Squaw Peak) and the third year at Squaw Lakes. I had always been impressed with the work done by Mike Bach WB6FFC and compatriots in relaying information from deep in

station formerly at a road junction just below the peak was relocated to the road loop/parking lot at the peak. That year, the relay point was also relocated from Jackson Gap to be adjacent to the aid station. Radio propagation into the deep valleys of the Applegate was vastly improved. As the operation for radio support from the summit runs from 8AM Saturday to as late as 10AM Sunday, a

**Public Service on a Mountain Peak.  
Allan Taylor, K7GT**

second radio op was definitely needed. I invited Carl Van Orden W7BRO to join me and, fortunately, he accepted.

We took a day to reconnoiter the peak and see what would be required. Dutchman's Peak is the site of an old style cupola fire lookout. Below it is the 'ground house', so called, formerly used as a covert for the lookout personnel in adverse weather, storms, etc. It is quite dilapidated today but at least was available.

As you can see, the 'ground house' currently houses the forest service's repeaters. The picture above was taken during the event. Note the novel use of a trash can (more on this later!). We found the view stellar and decided then and there to try some HF operating as part of our time on the mountain. We needed a tent as a place to get some sleep. The only available flat space was behind the ground house and was to be shared with aid station people. Our tent was pitched in that flat and right against the dropoff to the north.

We arrived Friday (September 12) just before noon and began set-



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Allan Taylor, K7GT**

ting up. I swept out the ground house 'living room' (rat, mice, fly residue—nasty) and we set up the two tables. Due to the nasty things on the floor, the 5-second rule was suspended and replaced with a "don't even think about picking it up" rule. Carl set up one 2m vertical using aluminum tubing sections over the threaded rod shown in the above. I located the Ringo on a pushup pole merely leaning against the building. A third antenna was a 2-el quad again on a pushup pole and leaning against the building. A fourth antenna, an 11-element yagi, was located on a PVC mast I had been experimenting with. These unconventional ways of mounting antenna masts were due to the fact that I left my bases for the masts at home on the driveway... Thus old-fashioned ham ingenuity was used. A forest service trash can, full of something unknown, was used to provide a heavy base for the yagi. As it turned out, the 11-el yagi was way overkill. In some tests with Mike down in Eagle Point, the Ringo collinear gave 50 dB over and the yagi 80

dB over. I suspect Mike used some hyperbole in these signal reports. In any case, full quieting into Eagle Point.

An issue overhanging the entire event was



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Saturday morning. As we tried to sleep, we

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had to arrange to 'filter' the air through our sleeping bags or whatever to cut down the acrid smoke streaming across the peak. I likened it to sleeping downwind from a campfire. Fortunately for everyone concerned, the smoke changed direction and was pushed off to the southeast and was tolerable by midday.

Scott Cummings NA7OM had heard about our adventure and stopped by late Saturday



The race began at 6AM and the first radio op at an aid station checked in at about 8AM (Rob, WB7ROB, at Squaw Lakes). Craig, KF7IMJ, dropped off Laurie, KF7SOA, and then went to Seattle Bar for the first aid station. Laurie's principal role was inputting runner split data to a website accessed through a cell phone based hotspot. Carl and I fed her sheets of runner info plus dealt with issues that come up in supporting a race like this. Carl had set up an HF station in the ground house, which he graciously let me monopolize for a while. The HF antenna was compromised by the lack of suitable trees on the summit ridge. The 40m delta ended up being mostly on the north side of the ridge and barely peeking over the ridge. That, and the CME event, lead to compromised HF conditions. The following picture shows K7GT, the HF setup, and KF7SOA.

afternoon. He has a picture of K7GT with a mike (a rare event!). I was able to have some fun contacts; two were with fellows in San Jose—we apparently had a pipeline to the Bay area. Also worked some DX on 20m. Two EAs and an OK. Proof:



OK, so you can't read the printing on the card. It is an eQSL from EA5HM in Valencia, Spain.

The following picture is of the aid station crew setting up. The smoke miraculously lifted by Saturday afternoon/evening so that the racers were not at drastic health risk. The following picture, nearing sunset Saturday, shows the smoke cloud from the fires in northern California.

**Public Service on a Mountain Peak.  
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That picture is about the best view we had of the Klamath mountain country to the west and south.

Racers began coming through the Dutchman's Peak aid station just before sunset. They were being regaled by a 300W boombox aimed (fortunately) down the mountain to the south. It still made sleeping difficult (ask Carl!). Carl gave up on his sleep shift from mid-

night to 2AM. I took my shift from 3:30 to 6:30 AM. Fortunate for me was that the boombox shut down after the cutoff time for runners (2AM). After some trying times accounting for all runners from Squaw Lakes and Hanley Gap, our operation

shut down at 9AM Sunday. We survived the mountain, the smoke, the dusty washboard-ridden road, and had some fun doing it. The race people really appreciate what the radio support guys do. Running this race without radio support is just impossible.

I am planning to help in some way next year and I suspect Carl is also. I am not sure I

want another 48 hours with only 3 hours of sleep, though. Next time, if I am on the peak, I am going to have a better HF antenna.





# October 2014

Sun

Mon

Tue

Wed

Thu

Fri

Sat

			1	2 • <b>RVARC Club Meeting</b> • ARES Net.	3	4 • California QSO Party
5 • California QSO Party	6 • Oregon Railfan Net.	7	8	9 • ARES Net.	10 • ARRL Pacificon Convention	11 • ARRL Pacificon Convention
12 • ARRL Pacificon Convention	13 • Oregon Railfan Net.	14	15	16 • ARES Net.	17	18
19	20 • Oregon Railfan Net.	21	22	23 • ARES Net.	24	25
26	27 • Oregon Railfan Net.	28	29	30 • ARES Net.	31	

## Events

- Thursday October 2th - 7:00 PM RVARC Club Meeting, Red Cross Building
- Thursdays 7:30 PM - ARES Net. K7RVM repeater 147.000 (+) [ PL 123.0 ]
- Mondays at 8:00 PM. Oregon Railfan Net. K7FH King Mountain Repeater 146.940 (-) [ PL 136.5 ]. Also available on Echolink: Node #50239 or K7TVL-L
- Next Newsletter: November Issue. Deadline for input: October 23rd
- California QSO Party. <http://cqp.org>
- ARRL Pacificon Convention, Santa Clara, CA <http://www.PACIFICON.org>

## 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 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

## For Sale / Wanted

## 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:** Oct 25

**Contact:** Don Bennett, Email: [kg7bp@rfwarrior.com](mailto: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:** Nov 14

**Contact:** John Stubbe, K7VSU, email: [K7VSU@arrl.net](mailto: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, October 2, 2014, 7:00 PM**

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

**Program: Basics of DSP using Gnuradio**