W7DTA
AMATEUR RADIO CLUB
Rogue Valley
SINCE 1936
MEDFORD, OREGON

The Repeater

Volume 2015, Issue 5 **May 2015**

President's Report

As I write, the temperatures around the valley are rising and thoughts of antennas, field operations, and such come immediately to mind. These likewise bring forth some related thoughts:

Safety First!

For antenna work, don't forget the basics: proper climbing gear, hard hats, ground help, etc.

Portable and field operations: don't forget fuses, fire extinguishers, etc. Wires and cables on the ground are a major trip hazard. Flagging on guy wires??!!

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 April 2, 2015

The meeting was called to order in the meeting room of the Red Cross building - Medford, OR .by Allan Taylor, K7GT at 1900 L. Members and guests present introduced themselves, and stated their most memorable QSO. Guests present included:

- Charles Kanavle, KG7VU
- John Caldwell, KF7PTH.

The introductory presentation was given by Tom McDermott, N5EG on "S-Units and Decibels".

New Business

Allan, K7GT mentioned that the Field Day site was in the Mail Tribune, as part of an article.

President's Report, Continued.

Consider making up a complete 'GO' kit. NiCads are notorious for being discharged when you need them, so have a radio that works from AAs.

Does your home station have an emergency power source of any kind? Honda makes a slick 2KW unit and have a good reputation. Larger stationary units can be fueled from propane.

7QP and Field Day!

Join the fun for 7QP Saturday, May 2nd. Phone, CW, and digital. The exchange is RS(T) and county abbreviation: 59 ORJAC on phone, or 599 ORJAC on CW & Digital. The abbreviations for other counties are on the 7QP website (see article in this newsletter for links to county abbreviations, 7QP rules, etc.).

Field Day is June 27 and 28.

Setup Friday June 26. We will be in the field adjacent to the Dodge Bridge Boat Ramp and Fire District #3 station. More info later!

73 Allan K7GT

Secretary's Report, Continued.

Scott Cummings, NA7OM spoke about the upcoming 7QP event. He will be operating at Agate Lake this year. He asked for the operation to be under the RVARC, in order to satisfy insurance requirements; a vote as taken, and passed. Scott also solicited additional operators for the event.

Treasurer's report

Lud Sibley, KB2EVN reported a balance of $3542.23 in the club treasury.

The meeting was put on hold at 2000 L for "eyeball QSOs" and coffee. The meeting was called back into session at 2015 L.

Presentation

Allan, K7GT gave us a excellent classroom study of GPS fundamentals.

The meeting was adjourned at 2100 L

Submitted by Carl VanOrden, W7BRO Secretary

Just a little Web Site Help Needed—WordPress

RVARC is looking for a little help with our webpage. Its generated using WordPress, and our master, Todd Carney will be leaving us this summer. If you can help the club by making occasional updates, we'd appreciate the help.

Most of the day-to-day stuff is being done by various club members (such as posting the newsletter, club roster, etc.) but once in awhile we need a bit more help than that.

If you can help, and would like to learn more about WordPress from Todd, please contact Todd Carney, K7TFC, at 541-951-5704 or k7tfc@arrl.net.

This Month's Programs

Basic Program — "USB How-To"

This will cover "How do I set up a USB Serial Port? How do I select the COM port? What do all the USB colors mean (white/black/blue/yellow)? What's a USB Type A vs. Type B? How do I setup a USB driver? How much power can I draw from a USB source? What is USB1, USB2, and USB3?".

Advanced Program — "Raspberry PI" John Armstrong will give us an update on some of his Raspberry PI based projects.

SOARC Swap Meet—May 19th—7:00 PM —Grants Pass, OR

Ham Radio Swap Night

Tuesday MAY 19th, 7:00 PM (Regular SOARC Meeting night and location).

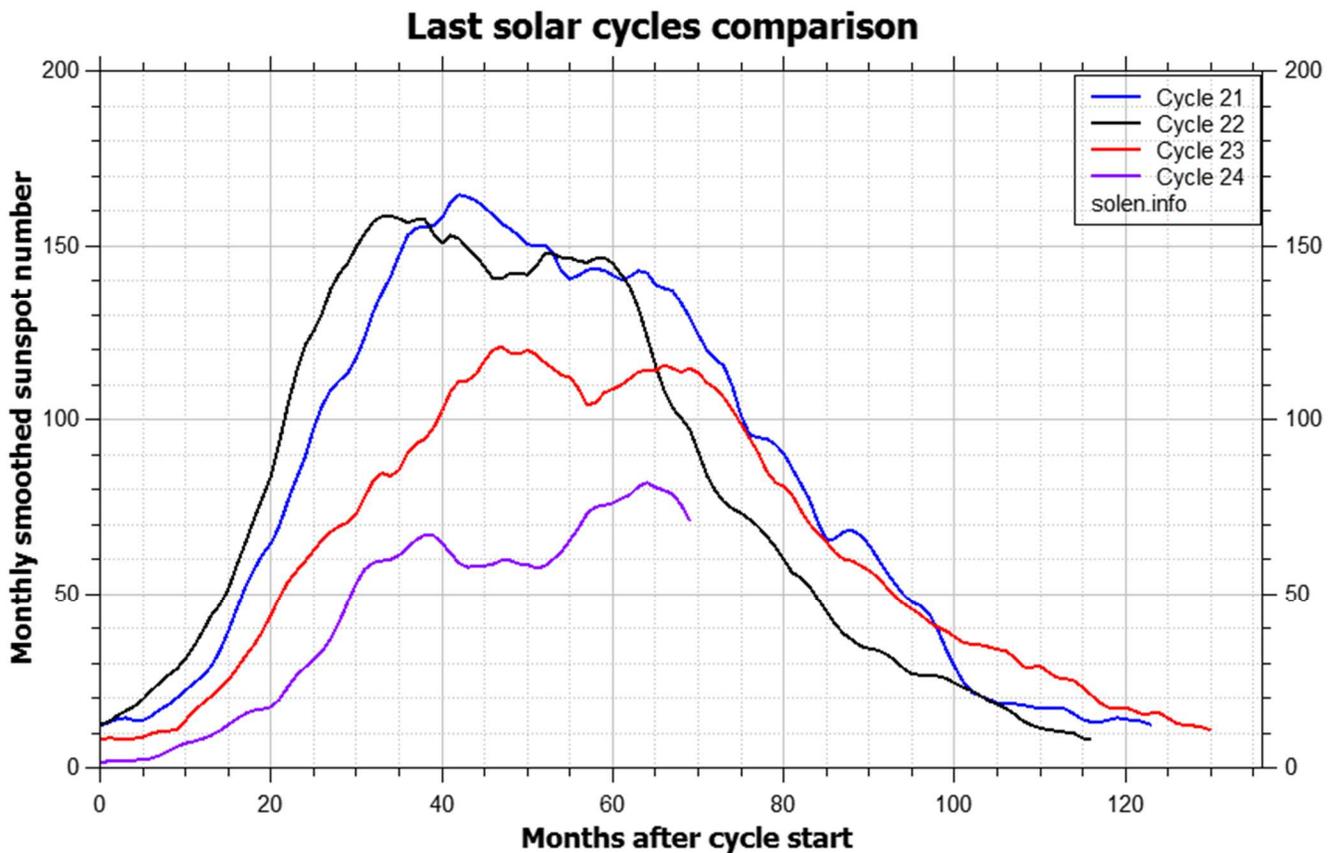Please, Come a bit early if you want to set up a swap table.

Fruitdale Grange
1440 Parkdale Drive
Grants Pass. 97527

Corner of Parkdale Dr. & Rogue River Hwy.
Across from Grover's Electric

Thank you, 73' Joe R. / W7Joe
President of SOARC
w7joe@yahoo.com

Solar Cycle 24: Recent Progress (or Lack Thereof)

The figure below from solen.info shows the current sunspot progress (or perhaps lack of progress) of solar cycle 24 compared to the three previous cycles, 21, 22, and 23. The long-term trend of decreasing solar activity is apparent from the chart. While we had some good conditions this winter, typically there is a lot of disruptive solar activity towards the tail end of the peak (or second peak). We've had those disruptions in the last month or so with severe X-ray events and Coronal Mass Ejections (CME's). X-Rays briefly ionize the D– and E– layers on the sun-facing side of the earth resulting is very high signal attenuation in the HF bands. CME's fill our ionosphere with charged particles arriving about 3 days after they leave the sun, resulting in increased polar cap absorption, changes to the MUF (sometimes up sometimes down) and increased geomagnetic activity.

Each year usually during the spring and fall, most of the state QSO parties are held. At one time most every state had it's own contest.

Large states such as California, Texas, and Florida have large turnouts and constant activity over the two days of the contest. They're large enough to have a dedicated weekend.

For some of the smaller states (like Oregon), the participation level was not too high and several states had their contests on the same weekend. This meant you could operate 3-4 state QSO parties at the same time, but it was a bit confusing!

A few years ago, several groups of states got together and assembled their individual parties into a regional QSO party. The New England QSO party (NEQP—first call area) and the 7th call area (7QP) QSO parties are the two most successful regional contests. This year the NEQP, 7QP, Indiana, and Delaware parties are on the same weekend—4 parties for the price of one.

With the possible exception of CQP most state QSO parties are friendly and laid-back events, with bands that are not too crowded. Casual operators are encouraged to jump in and make a few contacts, other operators will help you through the exchange and even a short chat. Many people get on just to collect rare counties or check antennas. QP participants have been good about answering QSL requests.

One of the goals of most QP organizers is to activate every county in the state (or region). One way this is accomplished is to have a special entry class called Mobile or Rover. These rover stations can operate from different counties, and they count as a new station in each different county. Some of the QSO parties allow a mobile to sit on a county line and hand out two QSO's and two multipliers to each caller. In fact there are

one or two places in the US where a mobile can sit in 4 counties at the same time and hand out 4 QSO's and 4 multipliers to each caller (not sure if there any on land in the 7th call area). Many of the mobiles will have carefully mapped-out routes that maximize the number of counties travelled during the contest, and almost certainly will activate a number of otherwise quiet locations.

These mobile stations normally consist of 2 people: a driver, and an operator. This allows the operator to operate both Phone and CW. Many times a mobile will announce the time he is expected to be in the next county. At the appointed time, several people (especially those hunting multipliers) will converge on frequency to work that mobile again. It's especially popular on CW. Route maps are sometimes posted by the mobiles ahead of the contest. 7QP has a list of mobile and county expeditions on the 'Planned Operations' section of the webpage (see below).

While the rules are different for each party, normally there are multiple entry categories for in-state (in-region) operators, and multiple categories for out-of-state operators. All of the parties use counties within the state as multipliers for the out-of-state operators. The in-state operators have quite different rules in the various parties regarding multipliers.

7QP is the one day each year where W7's work everybody, and are the sought-after stations by everyone.

All of the QSO parties use standardized abbreviations for counties, as otherwise it could be easy to miscopy which county you worked, even if you got the exchange 100% correct. It's important to have the list of standard names at hand when operating. The standard list for 7QP is located at: http://ws7n.net/7QP/new/7qp_abrv.pdf

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The 7QP rules are pretty straight-forward, but there are a 259 possible counties in eight states! In fact, some of the counties in the 7th call area have duplicate county names in other states (such as Jefferson county in Oregon, Montana, Idaho, and Washington), so there has to be some way to distinguish which county has actually been worked.

This is done by pre-pending the 2-letter state name to the 3-letter county name. For Jackson County, Oregon, the standard 5-letter abbreviation is ORJAC.

You can operate Phone-only, CW-only, Digital, or mixed (both phone and CW). Complete rules can be found at:
http://ws7n.net/7QP/new/Page.asp?content=rules

7QP Rules

7th Call Area QSO Party -- May 2-3, 2015 (UTC)   May 2 local time.

1300 UTC Saturday to 0700 UTC Sunday (6 AM to midnight PDT the first Saturday in May). 7th call area stations work everyone, others work 7th area stations only. Work stations once per band/mode. 7th area mobiles (and those participating in other concurrent QSO parties or contests) may be worked again as they enter new counties.

Entry categories:
- Single-op: high-power, low-power (<150W), QRP power (<5W); CW, Phone, Digital, Mixed.
- Multi-single (including assisted single op): High, Low and QRP.
- Multi-multi. No differentiated mode or power levels.
- 7th-area County Expedition: single-op, multi-single, multi-multi.
- Mobile: high-power, low-power, QRP; CW, Phone, Digital, Mixed: Single-op (while parked only), Multi-single, High, Low, QRP, CW, Phone, Digital, Mixed.

Awards: Certificates will be awarded to the top three finishers in each category within and outside the 7th call area, plus the top finisher in each state/province and 7th area county; a 25-QSO minimum applies. See the web site for a list of plaques to be awarded.

Exchange: 7th area stations send signal report plus 5-letter state/county code (e.g. ORDES; see list). County-line stations send multiple codes (state code needed only once, e.g. ORDES/JEF). Non-7th-area stations send signal report plus state/province/"DX" two-letter codes. Stations in other QSO parties send their appropriate exchange. The 13 "Provinces" are VE1-9, VO and VY0-2. County-line contacts may be logged with one entry showing all counties or with one QSO entry for each county.

Bands: 160, 80, 40, 20, 15, 10, 6 and 2m, simplex only. Suggested operating frequencies: 1815 and 40 kHz up on CW, except on 40m, where 7025-7035 is suggested; 1845, 3855, 7180, 14255, 21355 and 28455 on SSB. 3580+, 7035+, 14070+, 21070+ on PSK; 3585+, 7038+, 14075+, 21075+ on RTTY. Check 80m at 0500Z, 160m at 0530Z. All CW and Digital contacts must be in the CW/Data sub-bands.

Scoring: 2 points per SSB QSO, 3 points per CW or Digital QSO. County-line contacts count as multiple QSOs for both stations. 7th area stations multiply QSO points by states (50) plus provinces (13) plus other DXCC entities (maximum 10). Non-7th-area stations multiply QSO points by 7th area counties worked (259).

Logs: All logs must be received by May 17; logs containing more than 40 QSOs must be submitted electronically via email or floppy disk.

Send logs to 7qplogs@codxc.org -- include the station callsign in the email "Subject"

7QP. May 2nd, 2015, continued

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line. Cabrillo is preferred but any plain text format will be accepted. A web form is available for online Cabrillo log-file generation and submission. Be sure your entry includes name and address and/or email address, station callsign, entry category, location code(s) and operator callsigns. Send paper logs with a completed summary sheet to:

> 7th Call Area QSO Party, c/o CODXC,
> 61255 Ferguson Rd
> Bend, OR 97702.

Check to make sure your callsign appears on our web site's Received Logs page (normally within two days of receipt).

Other: All equipment and antennas must lie within a 1000-foot diameter circle. County-line operations must be within 500 feet of the county line. Any computer-to-computer mode is considered digital. The same station may be worked on each band on CW, Phone, and Digital. All contacts must be made without using repeaters, digipeaters, satellites, etc. Only one entry per callsign (can't do, e.g., mobile and expedition entries).

Help: On the web site at http://7qp.org are the complete rules; lists of county names and abbreviations: state/county maps; county sign-up sheet; summary sheet; state coordinators; logging-program info and configuration files; list of plaques and donors.

Thanks to the Central Oregon DX Club, N7LE — 7QP contest organizers.

ARRL Tech Portal

The ARRL has an interesting web page called the 'Tech Portal'. It provides a place to find information about different technical facets of our hobby, both for licensed and interested unlicensed folks.

The URL is: http://www.arrl.org/tech-portal

Radio Technology Topics
- Amateur Digital Networking and Protocols
- Antennas and Electronics
- Software-Defined Radio (SDR)
- Technical References and Web Resources

STEM Students & Educators
[ed. note: STEM = Science, Technology, Engineering, and Mathematics]

Radio Science
- Amateur Radio Satellites
- High-Altitude Ballooning
- Solar and Space, Radio Signal Propagation, and Geophysical Phenomena

Radio Frequency Interference (RFI)

ARRL Areas of Activity
- On the Air
- Regulatory and Advocacy
- Get Involved
- ARRL Store
- About ARRL
- News and Features

How Do I Get a Ham Radio License?

May 2015

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2 • 7QP QSO Party
3	4 • Women Hams Net	5	6	7 • **RVARC Club Meeting** • Women Hams Net • ARES Net.	8	9
10	11 • Women Hams Net	12	13	14 • Women Hams Net • ARES Net.	15	16
17	18 • Women Hams Net	19	20	21 • **RVARC June Newsletter Input Deadline** • Women Hams Net • ARES Net.	22	23
24	25 • Women Hams Net	26	27	28 • Women Hams Net • ARES Net.	29	30
31						

Events
- Saturday, May 2nd. 7QP—7th area QSO Party. See this newsletter for details.
- Thursday May 7th - 7:00 PM RVARC Meeting. Red Cross Building Medford.
- Tuesdays & Thursdays 7:00 PM—Women Hams Net K7RVM Repeater 147.000 (+) [PL 123.0]
- Thursdays 7:30 PM - ARES Net. K7RVM repeater 147.000 (+)   [PL 123.0]
- Next Newsletter: June Issue. Deadline for input: May 21st.

RVARC Membership	RVARC For Sale / Swap

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 1058 Linda Ave.
Ashland OR 97520

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

2015 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 2015 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 starts at 9:00 AM. Walk-ins welcome.
Location: Fire District 5 HQ.   5811 South Pacific Highway,   Phoenix, Oregon 97535
Dates 2015:   Jun 20   Oct 31
Contact: Don Bennett, Email: kg7bp@rfwarrior.com Phone: (541) 973-3625

Grants Pass
Time: Fridays Registration 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 2015:   May 15   Aug 21   Nov 20
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
May 7, 2015, 7:00 PM Red Cross Building,
60 Hawthorne St., Medford, OR Across from Hawthorne Park
Basic Program: USB How-to.
Advanced: Raspberry PI.