



OARC e-Magazine

www.OgdenArc.org

DECEMBER 2013

Next Club Meeting/Activity

3rd Saturday 21 December 2013

Topic: OARC Family Christmas Dinner Party



Larry Griffin AD7GL President



Gil Leonard NG7IL Vice President



Gary Hudman KB7FMS Secretary



John Shupe K7DJO Treasurer



Pete Heisig WB6WGS Program Director



Jason Miles KE7IET Activity Director



Val Campbell K7HCP Webmaster/NL Editor

PREVIOUS CLUB MEETINGS

High Speed Multi Media (HSMM)

A Broadband Ham Network

By Mike Groves KD7MG

Date: 3rd Saturday, 16 November 2013 Time: 09:00 am

Location: Riverdale Fire Station

NEXT CLUB MEETING

OARC Family Christmas Dinner Party

Date: 3rd Saturday, 21 December 2013 Time: 6:00 pm Location: Golden Corral

10th & Washington Blvd, Ogden, Utah

DOOR PRIZES: 3 Grand Door Prizes this year!

[Paid-up members only, sign-up/renew membership at meeting]

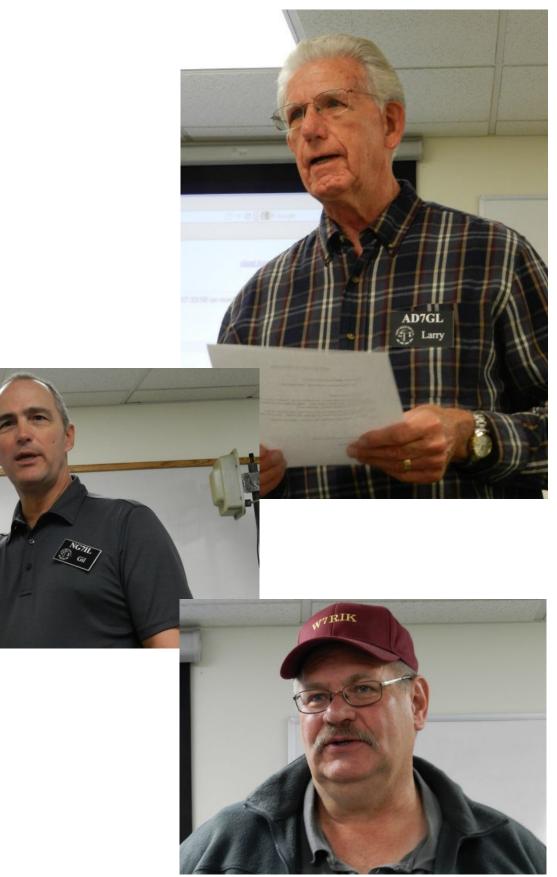
OARC COMING EVENTS

OARC Family Christmas Dinner Party

Next meeting/event (see above)

CLUB MEETING PICS

16 November meeting ... Photos by K7DJO



Mike Groves KD7MG presented ... High Speed Multi Media (HSMM)



High Speed Multimedia Mesh Dig Network

"HSMM-MESH[™] is a high speed, self discovering, self configuring, fault tolerant, wireless computer network that can run for days from a fully charged car battery, or indefinitely with the addition of a modest solar array or other supplemental power source. The focus is on emergency communications." See:

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ater/Microwave Repeater on a Juter?



PREVIOUS CLUB MEETING

Mike Groves KD7MG presented ... High Speed Multi Media (HSMM)

Mesh Network

Broadband-Hamnet[™] (formerly called HSMM-Mesh[™]) is a high speed, self discovering, self configuring, fault tolerant, wireless computer network that can run for days from a fully charged car battery, or indefinitely with the addition of a modest solar array or other supplemental power source.

In its current form it is built using the Linksys WRT54G/GL/GS wireless routers and operates on channels 1-6 of the 2.4GHz ISM band, which overlaps with the upper portion of the 13cm amateur radio band. Other platforms and bands are in development at this time. Next will be Ubiquiti equipment with others supported as development resources permit.

Broadband-Hamnet[™] is currently being designed, developed and deployed as an amateur radio broadband communications system. It originated in Austin, Texas but has spread all across the USA and many other countries around the world.

Editors Note: I just read a fiction mystery e-novel about a cyber attack on this country's power grid and how it affected the residents of NYC during a hard winter period. An industrious young tech savvy resident used his smart cell phone to create a MESH Network that was instrumental in helping them survive the ordeal. It's a very good read. I recommend it and you can get it from Amazon.com.

Title/Author: CyberStorm by Matthew Mather.

73, Val Campbell K7HCP

QST's and QRM from LARRY'S SHACK







Larry Griffin AD7GL President

QST'S AND QRM FROM LARRY'S SHACK

Like many of you, I look forward to enjoying QST magazine as it arrives each month. The issues are always "chock full" of things I need to know and some items I don't fully understand. (I am very grateful for several friends that fit the description of "Smart Hams"). The December issue contained a nugget of information that was particularly enlightening to me. I knew that there was a difference in the effectiveness of the operating modes available to radio amateurs as I use several of them. However, I had not seen a comparison. Roughly, this is what the QST article conveyed.

Where The CW mode is 0 dB:

JT65 is +25dB

PSK31 is +9dB

CW is 0dB-----

RTTY is -4dB

FM is -14dB

SSB is -17dB

AM is -27dB

I just felt the QST comparison put the whole concept in perspective for me.

Continued...

QST'S AND QRM From Larry's Shack

Continued ...

Fresh from the OARC Club Board Meeting: Many fun events coming up on the OARC Club Calendar. Please make notes of the dates on your calendar.

May 2nd and 3rd 2014. Giant State wide ARES/ARRL Hamfest to be held at Roy High School. OARC will be hosting several functions. We would love your help. More to follow.

May 9th and 10th 2014. Golden Spike Commemorative Special Event Station at the Golden Spike National Monument. We will be looking for operators.

February 15th 2014. OARC Meeting. Get to know your Fellow Ham and their Toys Social meeting. A fun and informative social event.

January 25th 2014. OARC ONE DAY Technician Class and License Session. If you know someone that would like to become a ham or if you can help, please contact our Club Vice President Gilbert Leonard, NG7IL at 801 430 8208.

January 18th 2014. OARC Meeting. Raspberry PI computers and their Ham Radio uses. Stan Sjol, WOKP and Jason Miles, KE7IET will be outlining the basics and uses of these neat little inexpensive computers. If you have a Raspberry PI project or have used one, please bring it with you.

December 21st 2013. 6:00 PM at the Golden Corral Restaurant at 10th and Washington Blvd. in Ogden. OARC Family Christmas Dinner. THREE GRAND PRIZES FOR OARC MEMBERS! I look forward to seeing you there and enjoying the spirit of the season with you and your family.

In closing I would like to thank all of you for your wonderful support and for the joy of knowing you over the past years.

I truly hope for a Merry Christmas and a Prosperous New Year for you and your family.

Thanks for listening,

Larry, AD7GL

OARC MEMBERSHIP DRIVE

<u>To all previous members who may have missed coming out to our club</u> <u>meetings and activities recently or who may have forgotten to renew their</u> <u>membership...</u>

A short note from the OARC President:

Fellow Ham Operator,

You have been missed. We haven't enjoyed the pleasure of your attendance or participation at any of our meeting and functions as of late. We have had many great meetings and activities since we last saw you. They would be even better if you were there. Please consider joining us again. We are having our annual Family Christmas Dinner on Saturday, December 21st at 6:00 PM. The dinner will be at the Golden Corral on Washington Boulevard. We would like it if you and your family could join us. I look forward to seeing you at your earliest opportunity.

Thanks for thinking of us.

73, Larry Griffin, AD7GL - President - Ogden Amateur Radio Club

A short note from the OARC Treasurer:

Hello,

For your convenience... attached to this email is an application for new or renewal memberships. If you would like to sign up at this time pleased print out the attached form... provide your information and enclose a check or money order... and mail it to the following address:

Ogden ARC, P.O. Box 3353, Ogden, UT 84409. I'll take care of the rest. Please note there is also space available on the form to order a new name badge for you and/or a family member. Alternatively, I can process applications and/or renewals at the next meeting or activity. Respectfully,

John R. Shupe, K7DJO – Treasurer - Ogden Amateur Radio Club

OARC MEMBERSHIP DRIVE

WE NEED YOUR SUPPORT

If you missed attending the OARC Steak Fry, elections and membership enrollment activity in August ... don't forget to signup/renew your OARC membership now which runs August to August. Consider signing up your spouse as well.

SUPPORT YOUR RADIO CLUB

NOTICES

(Repeat)

Next Licensing Class ...

Technician-Class Licensing Session (one day crash course)

Saturday 25 January 2014: 8:00 AM to 3:00 PM

(Special VE Test Session to follow @ 3 PM)

The class will use the KB6NU No-Nonsense Technician-Class

License Study Guide which can be found at

www.KB6NU.com/tech-manual

More information follows ...

CLUB NEWS

(Repeat)

Amateur Radio Technician License Class January 25, 2014

The Ogden Amateur Radio Club will be holding a one day Technician licensing class beginning at 8:00 am January 25, 2014. This will be a one day cram style class lasting until about 3:00pm. Students are expected to prepare before class. Preparation instructions are below. There is no cost for this class. Testing for licensing will follow immediately after class and is \$14.00.

Location:

Weber County Sheriffs training room.

721 W. 12th Street, Ogden Utah

8:00 am to 3:00 pm

Students should prepare for this class by:

Reading the "KB6NU No Nonsense Technician Study Guide" before class begins. A copy can be downloaded for no charge here. <u>Study Guide</u>
Read the Part 97 rules, found here. <u>Part 97 Rules</u>
Take a practice test, found here. <u>Practice Test</u>
Print a copy of the ARRL Band Plan, found here. <u>ARRL Band Plan</u>
Familiarize yourself with the Utah VHF Society Band Plan and Utah Repeater list, found here. <u>Utah VHF/UHF Band Plan</u> Repeater List
Testing will begin at 3:00 pm. Those wishing to test will need the following:

Two forms of ID, one must be a photo ID Federal Registration Number (FRN), or a social security number. FRN available here. . FRN Number

\$14.00 test fee; cash preferred, checks ok, no credit cards.

Those wishing to upgrade must have any CSCE's or original unexpired license.

Contact Gil Leonard NG7IL with any questions and to save your spot. ng7il@arrl.net

CLUB NEWS continued ...

(Repeat)

Links

Ogden Amateur Radio Club

http://www.ogdenarc.org/

Study Guide

http://www.kb6nu.com/wp-content/uploads/2010/06/2010_Tech_Study_Guide.pdf

Part 97 Rules

http://www.ecfr.gov/cgi-bin/text-idx? c=ecfr&SID=336ab7469b61ecbfa15086dbf1bf2c59&rgn=div5&view=text&node=47:5. 0.1.1.6&idno=47#47:5.0.1.1.6.1.157.1

Practice Test

http://aa9pw.com/radio/

ARRL Band Plan

http://www.arrl.org/files/file/Regulatory/Band%20Chart/Hambands_color.pdf

Utah VHF/UHF Band Plan

http://utahvhfs.org/bandplan1.html

Repeater List

http://utahvhfs.org/rptr.html

FRN Number

https://apps.fcc.gov/coresWeb/publicHome.do

CLUB NEWS



Field Day 2013

The results of the 2013 ARRL Field Day have been posted. Less-than-ideal conditions this past June likely accounted for a slight drop in participation from 2012. Nonetheless, there were more than 2500 entries, and more than 35,500 people participated.

ARRL Field Day is the most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June of each year, more than 35,000 radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.

The team at W3AO (Potomac Valley Radio Club/Columbia Amateur Radio Association) claimed top honors this year, running class 29A(!) to compile a score of 33,724 points. But small club efforts remain the most popular entries. Class 2A Field Day operations accounted for the greatest number of entries — 440 — by class.

By the way, all that activity resulted in more than 1.2 million contacts! Using the results database, you can find your club or group's score and compare with others. Time to get ready for the next Field Day. It will take place June 28-29, 2014.

CLUB NEWS

Field Day 2013 Results - Utah Section

| # | Call | Score | Category | QSOs | Participants | Club |
|----|--------|--------|----------|-------|--------------|--------------------|
| 1 | K7UM | 11,122 | 6A | 3,589 | 35 | Utah DX Assn |
| 2 | W7SP | 4,646 | 3A | 1,197 | 98 | Utah ARC |
| 3 | W7IVM | 3,054 | 5A | 679 | 70 | |
| 4 | N5LZ | 2,980 | 1E | 283 | 1 | |
| 5 | W7DRC | 2,605 | 3AB | 312 | 24 | Dixie ARC |
| 6 | K7UB | 2,434 | 3A | 643 | 25 | Golden Spike ARC |
| 7 | W7QL | 2,324 | 1F | 600 | 4 | |
| 8 | W7SU | 1,874 | 2A | 431 | 29 | Ogden ARC |
| 9 | WR7AAA | 1,865 | 2AB | 147 | 13 | Rainbow Canyon ARC |
| 10 | K7EA | 1,678 | 1E | 382 | 1 | |
| 11 | WX7G | 1,620 | 1C | 380 | 1 | |
| 12 | W7BAR | 1,476 | 5A | 130 | 40 | Borderline ARC |
| 13 | KB7EEG | 956 | 1E | 399 | 1 | |
| 14 | K7NS | 870 | 1B1B | 67 | 1 | |
| 15 | K7JEO | 664 | 1B1 | 207 | 1 | |
| 16 | KB6UNC | 638 | 1D | 319 | 1 | |
| 17 | W7JEX | 610 | 1B1B | 51 | 1 | |
| 18 | K7RFW | 598 | 1E | 87 | 1 | |
| 19 | AC7QJ | 445 | 1B1B | 39 | 1 | |
| 20 | KD7HHW | 394 | 1D | 83 | 4 | |
| 21 | K7JSC | 292 | 1E | 21 | 1 | |
| 22 | WA7BME | 264 | 1D | 54 | 1 | |

REPEATER NEWS

Mount Ogden Repeater Site

Submitted by Scott Willis KD7EKO

This is the 4th of several pictures in a series at Mt Ogden repeater site during a recent visit to the site to do necessary repairs.





Scott Willis KD7EKO



Mike Fullmer KZ7O

Scott Willis KD7EKO and Mike Fullmer KZ7O are the OARC repeater engineers that keep our club repeaters at Mt Ogden and Little Mountain operational.

Repeater Status Update

The last update on the repeaters was in the late summer time frame, when it was still possible to get up on Mt Ogden. Thankfully the repeaters on Mt Ogden seem to be in good working order, because it is a little hard to get up there now. I suspect the next trip up there will not be till next summer, when the snow melts next year. Having repeater problems on Mt Ogden in the winter is not good. Helicopter rides are hard to come by.

We did have to do a repeater repair late summer at Mt Ogden. The transmitter on 146.90 died. We swapped it out with the 146.82 repeater (reprogrammed it) and went about repairing the dead radio. It was repaired, not replaced. The problem was a faulty design problem with the PA or transmitter portion of the repeater. It appears that the transmitter is a little weak on the design side and with lots of use, one of the components got so hot it melted the solder holding it down and the connection came apart. This was repaired by moving this part to a new location and installing a heatsink on the part to help it to stay cool. Hopefully it will be good for now on. It is now at Little Mt as 146.82. (The technical description is that there is a current sense resistor in the collector lead of the final PA transistor. It is placed there to monitor the amount of current the final transistor draws. If the transistor fails, there would be a direct short across the power supply. The nature of the resister is that it gets warm. It is nothing more than a short length of manganin wire, or what we call a current shunt. Well, this unsoldered itself from the board when it got good and hot from transmitting for a while. A bad design in my opinion. The resister is now heatsunk onto the main chassis of the repeater to keep it cool. it should last a lot longer).

The Little Mt repeaters are all running good. We are hoping to install new antenna's in the near future there. There is a single dual band antenna being used at the moment for both repeaters (146.82 and 448.575). We are working on acquiring some single band antenna's which will give the antenna's some increased gain. There is no time frame for this, just sometime in the next month or two. As long as the snow is not too deep we can still get to the site. The repeater controller at Little Mt still is not quite up to par, but it functions for the basic things. It is supposed to give the time and date and similar things, but it has problems interpreting longer series of programming codes. You can still get it to tell you the temperature by doing a 201 for outside and 200 for inside the shack. It still has the autopatch, which works most of the time. But it functions for all main repeater controls, which is the important part.

By the way, the VHF Society has updated their web site and shows the 146.82 and 146.90 repeaters in their correct location. Several people had noticed this problem after they swapped locations this past summer.

That is it for the latest update. Mike Fullmer, KZ7O

Join OARC

Renew your membership now!

Membership in the Ogden Amateur Radio Club is open to anyone interested in Amateur Radio. You do not need an amateur license to join us. You do not need to join the club to participate with us. Dues are used to operate the club, field day activities, and repeater equipment maintenance.

Joining is easy. Come to a club meeting or fill out an application form from the club website (click "Join" from the left side main menu). Instructions for mailing on the form.

DUES: Dues are \$15.00 per person and runs September - August. (Ham + spouse = \$25.)

Consider the OARC Family plan for \$25.

NOTE: New Hams >>> Membership in OARC is complimentary for remainder of 1st year licensed.

Club Badges

OARC Club badges are still available for all club members and non-members.

The cost is \$8.00 each. You can order the badge with either a "PIN" clip or a "MAGNETIC" clip. Badge includes your Call Sign in large letters and your First Name in a somewhat smaller font in white lettering on a pitch black background. See example below.



Place your order along with \$8.00 in advance for each badge ordered and specify Pin or Magnet style fastener, Call Sign and First Name. Contact webmaster or any club officer via email or see them at the next club meeting. For additional information see club website left side menu and click "Join".

OARC web site <u>www.ogdenarc.org</u> "Club Officers" page, and "Join" page.

Club Swapmeet

"SALE" or "WANTED" ITEMS NEEDED

OARC's O-bay (On-Line Swap-Meet) items needed for the web site...

Visit <u>http://www.ogdenarc.org/</u> then click on **Obay-Swap.**

ARRL Section Message

Section: Utah Division: Rocky Mountain

It has been a great summer, I hope you were involved with the many public service events that took place during the summer. As Fall approaches many clubs are have many neat events and activities, please support your local club.:

20 Sep Ogden/Davis County ARC Swap Meet in Bountiful City Park (8:00-10:00 AM)

12 October Bridgerland ARC Swaptoberfest 7:00 Set--up Doors Open 8:00 AM -- 12:00 PM Cache County Fair Grounds Pavilion 450 West 500 South Logan, UT

Please note this was changed from the previous announced date to 9 November)

The annual Utah ARES/RACES Conference will be held on Saturday, November 9th, 2013, 8:00 am to 4:00 pm. This will be held at the Davis Conference Center 1651 North 700 West Layton. This is same as last year's location. You do need to pre-register for the conference. In order to do this you will 3need to utilize the U-Train system which is found at https://www.utah.train.org. Once at the website, the first thing you need to do is set up an account in U-Train as a new user (if you have not already done so previously). Once your U-Train account registration is completed you will then proceed to log in and then either do a course search for the keyword(s) ARES or RACES or on the right side of the home page key in the actual course number, which is 1011069 for the ARES/RACES Conference. Once you have the course listed on the screen, click on that to bring you to the registration/information page and click on the registration tab to register. The system will indicate that your request has been submitted and has to be approved. U-Train notifies the State Training Staff and they will acknowledge by email that you are signed up for the ARES/RACES Conference. Directions: Get off of I-15 onto Exit 331 UT 232/Hill Field Road. Going East on Hill Field Road, you will go by Layton Hills Mall. Shortly after the mall, you will turn left (north) on Heritage Park Blvd. The Conference Center will be on your left. You can also find a map on www.davisconferencecenter.com.

This last June the Rocky Mountain Division Convention was held at Estes Park, Colorado, one of our Utah Amateurs was recognized for his accomplishments in Amateur Radio. Brett Mills, WX7Y, was awarded the Rocky Mountain Division Outstanding Ham of the. My congratulations to Brett who is very deserving of this honor. The Division Convention at Estes Park Colorado was a great. I would like to express my appreciation to the HamCon 2013 Colorado Committee for their efforts to put on a very wonderful event. If you were not able to attend this year make plans to attend the 2014 Rocky Mountain Division Convention which will be held Laramie, Wyoming. (I will post more details as I find them)

I will be happy to post any info about your local club or events in your area on this site if you let me know about them in time to post them. Thanks for all the work you, our hams in the Utah Section, are doing to promote amateur Radio and please don't hesitate to contact me if you have any concerns or ideas that I can help you with.

73 Mel Parkes, NM7P Utah Section Manager







Linked Ham Radio Repeater System Instrumental in Hiker Rescue

A hiker in distress in Nevada is thankful that he had his hand-held transceiver along when he found himself stranded in the hills near Henderson. Western Intertie Network (<u>WIN</u>) System member Jim Frederick, KF6QBW, in Arizona reports he was monitoring the system November 3 around midday when he heard, "Mayday, Mayday. Hiker in distress!" from his WIN System repeater.

"I grabbed a charged battery for my VX-5, and the call came over the radio again," Frederick said. He responded, and the hiker on the other end, Nathan Rischling, KDØHFM, of Nellis Air Force Base in Nevada, told him he'd misread the elevation on his topographical map, had ended up on a very steep and rough area, had hurt his hand on a cactus, and could find no safe way out of his situation. He had a GPS, however, and was able to provide Frederick with his precise coordinates. Rischling said he had a day's worth of food and water but needed help getting off the mountain, as he would not get back to his starting point before sundown and, he didn't think his GPS battery would last out the trip.

"KDØHFM stated that he did not take a conventional trail and was using a topographical map and GPS for guidance," Frederick explained.

Frederick said he knew from experience that a call to the Las Vegas search and rescue would expedite the process, so he put out a call on the WIN System for any Las Vegas station that could make the call. James Freeman, KG7EWP, promptly came back, and Frederick handed off the emergency traffic. Freeman called 911 and spoke with search and rescue, and stood by until the situation was resolved. Within 15 minutes a rescue helicopter was on the way.

Frederick kept his ear to the radio until the event was resolved, in case someone needed more information from him, and a few hours later, he overheard Rischling thank KG7EWP for helping "and everyone else on the WIN System for standing by."

The WIN System is a series of 90 linked, or inter-tied, repeaters -- most on UHF (70 centimeters) -- that cover a substantial portion of California, 16 other states, and four countries around the world. It is owned and operated by Shorty Stouffer, K6JSI. KF6QBW is an affiliated repeater station with the WIN System.

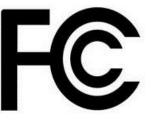
"Without Shorty, K6JSI (my Elmer), and the WIN System and its members, I would not have known what to do, let alone been able to help, as I was just a link in this chain of events," Frederick said. -- Thanks to Chuck Baer, W4ROA; Jim Frederick, KF6QBW; Shorty Stouffer, K6JSI, and Sean Kutzko, KX9X







FCC Fines CB'er for Operating Illegal Transmitter With Amplifier



Helping to alleviate concerns that it rarely polices the Citizens Radio Service (CB), the FCC has fined an Alaska CBer \$500 for "willfully and repeatedly" operating a non-certificated CB transmitter with an RF linear amplifier which, the Commission said, violated federal law and its rules and "voided his authority to operate his CB station." In a *Forfeiture Order* released October 30, the FCC noted that the CB operator, Glenn S. Yamada, of Kenai, Alaska, did not deny the violations but stated that he "did not intend to violate" the Communications Act of 1934 or FCC rules.

Yamada also told the FCC that he was unable to pay the initial forfeiture of \$12,500, imposed in a July 18, 2012, *Notice of Apparent Liability for Forfeiture (NAL)*. The Commission said its agents had identified Yamada as the source of a signal that the Commission's High Frequency Direction Finding Center "observed interfering with safety of life operations on the frequency of 21.965 MHz [sic]" in January and February 2012. The FCC said that based on financial documents Yamada provided, it found "sufficient basis" to reduce the fine to \$500, and it gave Yamada 30 days to pay or have his case turned over to the US Department of Justice for enforcement of the forfeiture.

As required by the *NAL*, Yamada informed the FCC in writing in August 2012 that he was still engaged in CB operations, using a certified transmitter that was not attached to a linear amplifier.

GUEST ARTICLE

Special event stations educate, entertain

By Dan Romanchik, KB6NU

I like special event stations. I enjoy operating them and making contact with them. Whenever I operate WA2HOM, our club station at the Ann Arbor (MI) Hands-On Museum, one of the first things I do is to search for special event stations.

One of the reasons I enjoy operating special event stations is that it's educational. For example, on November 17, I worked W4D in Mayaguez, Puerto Rico. They were commemorating the 520th anniversary of the discovery by Europeans of the island of Puerto Rico. As a result, I learned that on November 19, 1493 Christopher Columbus landed on the island, naming it San Juan Bautista in honor of Saint John the Baptist, a name that was later changed to Puerto Rico (rich port).

Working special event stations is also entertaining. Most times when you work a special event station, you can tell that they're having a good time. One time, I worked W4B, operating from the Kentucky Bourbon Festival. Now, those guys were really having a great time!

How do you find special event stations?

One way to find special event stations is to just tune around. Most special event stations will be operating at least a 20m phone station, so take a look at that band first. Also, consult the special event stations listings in QST or on the ARRL website (<u>http://www.arrl.org/special-event-stations</u>). KE2YK also has a special events page (<u>http://ke2yk.wordpress.com/special-event-station-events/</u>). *Editors note: OgdenArc.org website maintains a link to monthly Special Events and Contests. See website left side menu.*

In addition to working special event stations, you should consider organizing and operating one of your own. For the past two years, several members of our Rotary Club who are also amateur radio operators have operated W8P on the third weekend in February, which commemorates the founding of the Rotary Club and helps spread the word about the End Polio Now campaign (<u>http://www.endpolio.org/</u>). It was not only fun to do this, but I think that we helped raise awareness about polio around the world.

Whatever your reason for holding a special event, you'll want to be somewhat knowledgeable about your topic. For example, if you decide to set up a special event station at the local Rutabaga Festival, you might want to know how long they've been having the festival, how many pounds of rutabagas are produced by local farms and around the U.S., and maybe even find a couple of rutabaga recipes that you could send out to stations that work you.

FEATURE ARTICLE

Waxing & Waning with Amateur Radio



While reading the November 2013 QST I learned something new that had never occurred to me before regarding HF propagation and the 11 year sun-spot-cycles. But first some background information.

Most of us have heard about the sun-spots that occur on the surface of our sun and how their presence effects radio propaga-

tion here on earth, especially in the HF band of frequencies, sometimes referred to as the shortwave bands. The more sun-spots, the better earthly signal propagation. This is called 'Skip' because signal transmissions in the shortwave band of frequencies tend to bounce off the earths layer of ions, the ionosphere, back to earth sometimes bouncing multiple times and therefore skipping or reaching clear around to the far side of the earth.

The number of sun-spots vary over time, waxing and waning with periods of plentiful sun-spots to periods with no sun-spots at all. The periods of few or no sun-spots on the surface of the sun presents a very poor period of HF signal pro-rogation here on earth, while at other times numerous sun-spots creates exciting times on the shortwave bands with wonderful DX opportunities.

There appears to be a continuously repeating cycle to the waxing and waning of the number of sun-spots on the surface of the sun. The ever repeating cycle lasts 11 years from max to max, or min to min. When I was first licensed in the late 50's, (I know that seems like a long time ago), I didn't realize at the time how fortunate I was that we were at the peak of a cycle. I just assumed that things were going to be like I first experienced ham radio on the HF bands for as long as I cared to send my CQ's and exchange my QSL cards from around the globe. But then things slowly changed and confirming a precious DX QSO from the other side of the earth became a lot more challenging, at least until the cycle picked up.

Continued ...

Later I learned over time that not all 11 year sun-spot cycles were the same. The peak of some of the 11 year cycles would be higher than previous cycles, yet other 11 year cycles were not so good, even at their max. What do you mean ... after waiting years for the next cycle peak to occur and then maybe only to find it disappointing, therefore left hoping that the next decade would bring better results. It leaves one wondering why all 11 year cycles peaks are not the same.

Well now to the new information from the November 2013 QST.

It appears that the 11 year sun-spot cycles are themselves part of an even greater repeating cycle called the 'Gleissberg Cycle' named after astronomer Wolfgang Gleissberg. Whereas the 11 year cycles as a whole wax and wane within the Gleissberg cycles which has a period of approximately 87 years.

So as I figure it, about every 8 ... "11 year cycle" periods (88 years) we will be back to the way I remember how it was back when I sent my first CQ.

So lets see... 1958 + 87 = 2045. I will only be 101 years old by then. But I can wait. It will be worth it, I'm sure.

73, Val Campbell K7HCP

ANNOUNCEMENTS

Next Club Meeting:

3rd Saturday of each Month

The Ogden Amateur Radio Club meetings are usually held on the **3rd Saturday** of each month.

Meeting/Activity:

See notices above

Talk-in: -146.90 (pl 123.0)

Check OARC web site for details

www.ogdenarc.org

Please invite a friend to join you. You do not have to be a member of the club to participate in our club meetings or activities. We invite all to join us.

If anyone is interested in doing a presentation on something or just have something unique to show at the meetings. - Please get a hold of any of the officers and let us know.

Next Weber Co VE Test Session:

1st Wednesday Feb, Jun & Oct

Exam sessions are held in Ogden every few months, *usually* the first Wednesday in February, June, and October.

Time: 06:00 PM Walk-ins allowed

Location: Permanent location

Weber County Sheriff Office Training Room 712 W 12th Street Ogden Utah

Contact: VE Liaison:

Rick Morrison W7RIK (Liaison) morrisonri@msn.com (801-791-9364)

Jason Miles KE7IET (IT)

Cost: \$ 14.00

Two forms of **ID**, one of which must be a **picture ID**.

For "Upgrades" bring current **license** and a **copy** of current license, and any **CSCE**'s

Most **calculators** allowed. Calculator memories must be cleared before use.

Club Web Site

Be sure to visit our club web site.

www.OgdenARC.org

Club membership is open to anyone interested in Amateur Radio. You do not need an amateur license to join us. Dues are used to operate the club, field day activities, and repeater equipment maintenance.

Club Call Sign

Listen to the club repeaters for this very familiar CW ID. You do know Morse Code don't you?

W7SU

ARRL Field Day is held on the last full weekend of June every year.

Location may vary each year so watch this notice for details as time draws near.

See you there.

| OARC REPEATERS | | | | |
|----------------|-----------|-------|----------------|--|
| FREQ | CLUB | TONE | LOCATION | |
| | | | | |
| 146.900- | OARC | 123.0 | Mt Ogden | |
| | "Talk-in" | | | |
| 448.600- | OARC | 123.0 | Mt Ogden | |
| | | | | |
| 146.820- | OARC | 123.0 | Little Mtn | |
| | | | (w/auto patch) | |
| 448.575- | OARC | 100.0 | Little Mtn | |
| | | | (w/auto patch) | |

OTHER AREA REPEATERS

| FREQ | CLUB | TONE | LOCATION |
|----------|---------------|-------|-----------------|
| | | | |
| 146.620- | UARC | none | Farnsworth Pk |
| 147.120+ | UARC | 100.0 | Farnsworth Pk |
| 449.100- | UARC | 146.2 | Farnsworth Pk |
| 449.500- | UARC | 100.0 | Farnsworth Pk |
| ATV | UARC | Ch-58 | Farnsworth Pk |
| | | | |
| 147.040+ | DCARC | 123.0 | Antelope Isl |
| 447.200- | DCARC | 127.3 | Antelope Isl |
| 449.925- | DCARC | 100.0 | No Salt Lake |
| | | | |
| 145.290- | GSARC | 123.0 | Brigham City |
| 145.430- | GSARC | 123.0 | Brigham City |
| 147.220+ | GSARC | 123.0 | Brigham City |
| 448.300- | GSARC | 123.0 | Brigham City |
| | | | |
| 146.640- | BARC | none | Logan |
| 146.720- | BARC | 103.5 | Mt Logan |
| 147.260+ | BARC | 103.5 | Promontory Pt |
| 449.625- | BARC | 103.5 | Mt Logan |
| | | | |
| 145.250- | WSU | 123.0 | * coming soon |
| 449.250- | WSU | 123.0 | * coming soon |
| 145.490- | K7HEN | 123.0 | Promontory Pt |
| 101170 | | 120.0 | - romontory It |
| 146.920- | N7TOP | 123.0 | Promontory Pt |
| 449.775- | N7TOP | 123.0 | Promontory Pt |
| | | | |
| 448.825- | IRLP/ Echo | 123.0 | Clearfield City |
| 449.950- | IRLP | 123.0 | Clearfield City |
| 449.425- | IRLP | 100.0 | Nelson Peak |
| 147.360+ | Summit | 100.0 | Lewis Peak |

AREA CLUB MEETINGS & WEB SITES

| CLUB | WEB SITE | DATE/TIME | LOCATION |
|-------------|--------------------|-----------------------------------|---|
| OgdenARC | ogdenarc.org | 3 rd Saturday 09:00 am | Check OARC web site |
| WC ARES | ogdenarc.org/ | 2 nd Thursday 06:30 pm | Weber Co. Library |
| | join.html#ares | | Ogden Utah |
| WC Sheriff | | 1 st Saturday 10:00 am | Weber Co. Sheriff Complex |
| Comm-O | | | West 12 th Street Ogden Utah |
| Barc | barconline.org | 2 nd Saturday 10:00 am | Cache Co. Sheriffs Complex |
| | | | 200 North 1400 West Logan Ut |
| CSERG | dcarc.net | Last Wednesday 8:30pm | Clearfield City Hall |
| | /ares.htm/ | | Clearfield Utah |
| DCarc | dcarc.net | 2 nd Saturday 10:00 am | Davis Co. Sheriff Complex |
| | | | Farmington Utah |
| NU Ares | home.comcast.net/ | 3 rd Wednesday 7:00 pm | Cache Co. Sheriff Office |
| | ~noutares/ | | Logan Utah |
| Uarc | xmission.com | 1 st Thursday 7:30 pm | UofU EMC Bldg Room 101 |
| | /~uarc/ | | Salt Lake City Utah |
| GSarc | Ubetarc.org | Check Website | Check Website |
| | | | |
| Utah DX | udxa.org | 3 rd Wednesday | check web page for details |
| Association | | check web page for details | Salt Lake City area |
| UvhfS | ussc.com | Each Tuesday 8:00 pm | Weekly 2 meter net |
| | /~uvhfs/ | (refer to web site) | (no eye ball meetings) |
| WDArc | westdesertarc.org/ | 1 st Tuesday 7:00 pm | Tooele County Courthouse Tooele Utah |
| WsuArc | arcweber.edu | 3 rd Thursday 5:30 pm | WSU Blding #4 Room ? |
| | | | Ogden Utah |

LOCAL AREA NETS

| DATE | CLUB | FREQ |
|------------------------|-------------------------|---|
| Daily @ 12:30 PM mt | Utah Beehive net HF | 7.272 Mhz HF LSB |
| Daily @ 07:30 PM mt | Utah Code net HF | 3.570 Mhz HF CW |
| Daily @ 02:00 UTC | Utah Farm net HF | 3.937 Mhz HF LSB |
| Sunday @ 8:45 AM | Ogden Old Timers HF net | 7.193 Mhz HF LSB |
| Sunday @ 7:30 PM | GS ARC | 145.430 - 123.0 (training net) |
| Sunday @ 8:30 PM | SATERN Net | 145.900 - 123.0 |
| Sunday @ 9:00 PM | Morgan Co Net | 147.060 = simplex |
| Sunday @ 9:00 PM | UARC Info net | 146.620- no PL tone required |
| Monday @ 9:00 PM | 2-meter SSB net | 144.250 Mhz 2-meter USB |
| Tuesday @ 8:00 PM | Weber ARES | 448.600 - 123.0 |
| Tuesday @ 8:00 PM | VHF Society Swap | 147.120 + 100.0 |
| Tuesday @ 9:00 PM | Bridgerland ARC | 147.260 + 103.5 |
| Wednesday @ 8:00 PM | GS ARC | 145.290-, 145.430-, 448.300- (all 123.0) |
| Wednesday @ 8:30 PM | CSERG | 145.770 simplex |
| Wednesday @ 9:00 PM | No. Utah 10m HF net | 28.313 Mhz HF USB |
| Wednesday @ 9:00 PM | 6-meter SSB net | 50.125 Mhz 6-meter USB |
| Thursday @ 6:30 PM | Davis Co Elmers Net | 147.040 + 123.0 New Hams |
| Thursday @ 8:00 PM | Weber State ARC | 146.820 - 123.0 (coming soon) |
| Thursday @ 8:00PM | State RACES VHF/IRLP | 145.490 - 123.0, 146.680 - 123.0 3 rd Thursday - even months only |
| Thursday @ 8:30 PM | Davis ARES | 147.420 = simplex |
| Thursday @ 9:00PM | Wasatch Back Net | 147.360 + 100.0 |
| Saturday @ 8:00AM mst | RACES State HF | 3.920 Mhz HF LSB |
| Saturday @ 11:00AM mst | QCWA net HF | 3 rd Saturday – odd months only 7.272 Mhz HF LSB |

OARC OFFICERS

President: Larry Griffin AD7GL

Vice Pres: Gil Leonard NG7IL

Secretary: Gary Hudman WB7FMS

Treasurer: John Shupe K7DJO

Program Director:

Pete Heisig WB6WGS

Activity Director: Jason Miles KE7IET

"WATTS NEWS" e-Magazine

NL Editor: Val Campbell K7HCP

OTHER CLUB APPOINTMENTS

Webmaster: Val Campbell K7HCP

Equipment Manager: Val Campbell K7HCP

Historian/Librarian: Kent Gardner WA7AHY

Photographer: John Shupe K7DJO

QSL Manager: John Shupe K7DJO

Repeater Engineers: Mike Fullmer KZ7O Scott Willis KD7EKO

VE Liaison: Richard Morrison W7RIK Jason Miles KE7IET (IT)

Advisors: Stan Sjol WOKP Mike Fullmer KZ7O Kent Gardner WA7AHY Kim Owen KO7U Dave Woodcock WY7P

Club Call Sign Trustee: Larry Griffin AD7GL



www.OgdenArc.org