



Umpqua Valley Radio Club

WATT'S UP

July 2016

Watt's Up Staff: Editor, email distribution -LaDon KA7AAR

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Newsletter for the Umpqua Valley

Amateur Radio Club

P.O. Box 925 Roseburg, OR 97470

Club Officers

President

Dennis Riggs WA7RIG

1st Vice President Hutch, KE7JFQ

2nd Vice President Rick, W7DFV

Secretary Russ, W7DUR

Treasurer Jim Stuntz KF7FIB

Member-at-Large

Lynn W7HDU

Lee K7AZW

Club Call Signs UVARC Club Net Info

146.900 (-) PL 100.HZ

Wednesday at 1900 hours

HF Club Net

HF Net Wednesday at 1930 hours at 28.445 MHZ (This is an open Net)

KC7UAV

KC7TLY

ARES Nets

Douglas County ARES District 5 Ares District 5 Ares 3964 KHz Sundays at 5:30 PM

146.900 repeater PL 100.

Mondays at 7 PM

President's Message

As the leader of the last meeting I am offering this as the president's message for Watts up.

At the July meeting I sat in for Dennis Riggs. Several topics came up that rate a mention in this column.

We will be doing the J Pole class that Christine Masters (AE7OK) is going to be putting on in September. If you were not at the July meeting you need to let Jim Stuntz know. We can then arrange to have enough PL 259 connectors for the project. PLEASE LET US KNOW RIGHT AWAY if you haven't already done so. This will also allow to make sure there is enough coax etc. This should be a interesting hands on demonstration. It is always a good thing to have that portable antenna that works great and is easy to store and have available.

We have the planning done for the August meeting. We will have the annual potluck at Lee Stumpe's K7AZW house, 287 Bailey Dr Roseburg in the Green District off of Happy Rd. Please remember to bring a dish for the potluck and your own table service along with whatever you would like to drink. I for one am sure looking forward to some social time with all of the club members. Please don't forget that we will have UMPQUA ICE CREAM for desert which is being brought to the social by TOM ADAIR KE7KQP. This will be one of the last times we will get to see Tom in person as he is relocating to his home stomping grounds in TEXAS. He is planning on talking to all of us on HF with some huge Beams and repeaters that are in that area. Tom we will miss you and your enthusiasm and commitment to say nothing of Lucky Dog.

We spent some time talking about putting on HAM class's in the coming year. I am not sure that we came to a firm conclusion. It is proposed that we will do the Tech classes however we might also put on the class where you take both the Tech and General test at the end. It takes a lot of work and also a lot of support for those putting on the class. If you can you should make yourself available to help. Maybe you could study on just a single segment and take on being a instructor for that segment. We need to show as much support as we can to new people and to those who are spending all that time and effort supporting that cause.

Jerry Eiphert AE7ER was at the meeting and shared about the upcoming work that will be done on the Lane 69 repeater on Lane Mountain. They will be putting a Propane tank and a 8 KW generator up to be used in emergencies when the power drops. We will be able to start that unit and stop it from remote location which means less trips to the top of the hill in the Snowcat or 4 wheel drive. There might also be an arrangement that can be made to get the power bill paid, however that is up in the air. Jerry also shared that before it is all done we might end up with a repeater on Roman Nose making the link to the coast a reality and much easier than it is now.

It was good to see such a large turnout on a mid summer night when so many are out on vacation. It was a honor to sit in for Dennis. Remember like we talked about at the meeting? Ham of the Year is coming up and each member needs to take a few minutes and fill out the nomination form and mail it in. Take the time and effort to recognize those who have done so much for our club and Ham Radio. We are in their debt. Also consider running for office in our club. We need to have new blood on the board so the club does not just get into a rut. It is your turn you can do it just step up!!!

Hutch KE7JFQ

An Article by Gordon West (WB6NOA) on new Battery Technology in CQ magazine

July 2016

Ultra—Light-Weight, Long-Runtime Batteries

While Lithium Iron Phosphate (LiFeP04) battery technology for motor starting applications has been around for a few years, a Southern California company called Bioenno Power now uses it to manufacture portable lightweight battery packs specifically for amateur radio applications . Kevin Zanjani, KI6DHQ, with Bioenno Power, has been making the ham radio club rounds, as well as conventions, demonstrating the advantages of Lithium Iron Phosphate battery systems, specifically for ham radio ham portable and/or emergency portable or emergency backup battery operations. "Our Lithium Iron Phosphate batteries are inherently safer than Lithium Ion. Lithium Iron Phosphate batteries will not explode, will not give off gas, and offer 2,000 charge cycles versus 300 charge cycles for the sealed lead acid batteries," states Zanjani. The Bioenno Power deep cycle LiFeP04 batteries are rated at true capacity, allowing the user to extract more than 90% of the actual rating listed on battery.

Other manufacturers may rate their battery capacity as "lead-acid equivalent," intended solely for short bursts of current to start a motorcycle engine. The deep cycle Bioenno Power batteries provide a much larger number of cells to achieve the capacity required to power ham radio equipment and other electronics. We tested this extraordinary lightweight battery, rated at 12 volts at 15 amp hours. It easily ran a 1~0-watt

HF transceiver for many hours. For the Elecraft KX3, either a 6 amp-hour or 9 amp-hour Bioenno Power battery will work very well. "I did some testing using my 100-watt Elecraft and the 12 volt/12 amp-hour battery, and did a fair amount of transmitting for over four hours," comments Tracy Lenocker, WA6ERA. "The voltage held up fine on transmit. I also tested the deep-cycle Bioenno batteries with an MFJ voltage conditioner but the conditioner was not needed. I plan to purchase some of Bioenno's superultra capacitors to build something like the MFJ unit. Ultra-lightweight, these batteries weigh only a quarter as much as the lead-acid type of battery. Best of all, this new technology is perfect for hiking and operating portable in the national parks and everywhere

The Lithium Iron Phosphate technology can also take a fast recharge of up to half the battery capacity ampere rating. This technology is also TSA approved, allowing you to place two batteries in carry-on luggage, totaling up to 160 watt-hours. Each 12-volt Lithium Iron Phosphate unit from Bioenno Power also includes the company's proprietary protection circuit module (PCM), encapsulated within the battery pack (Photo B) . This module guards against short circuits, over-voltage, and over-current charge or discharge. This module works so well that, with my experimenting with the Bioenno Power portable solar panel, the panel intentionally tripped the circuit. An unconnected solar panel normally puts out between 18 and 20 volts, until loaded down by a connected battery. The PCM instantly took the batteries out of circuit, sensing too high voltage on the input. As soon as I switched over to the optional solar controller, all was well. For 100-watt high frequency ham radio applications, the 12-volt/112 Ah or 12-volt/15 Ah works great, and Bioenno bundles an AC to DC charger with these packages. If you want to stay on the mountaintop all day with 100 watts, bring along the Bioenno folding flexible solar panel, and go with the 12-volt/20 Ah battery and the regulator. The nominal individual cell voltage is 3.2 volts DC, but it is charged at 3.65 volts DC per cell, or 14.6 volts DC for the entire pack. The pack will rest around 13.2 volts DC. We yakked on HF for several hours before we needed a recharge. For those exploring freezing weather, this technology operates at temperatures down to 14° F, great for ice-fishing applications in winter. Finally, we are assured these batteries won't catch fire , like what we saw in the news from overseas products with the reported fake UL listing sticker! To see all of the other neat products from this ham radio friendly company, go to www.BioennoPower.com

UVARC August 2016 CLUB CALENDAR POSTED ON THE CLUB WEBSITE