

# CLALLAM COUNTY AMATEUR RADIO CLUB



#### **BV Rambles:**

Well have you been on 10m lately? DX has been roaring. Even this weekend 10m has been in excellent shape.

This month meeting is nominations for club officers and one board member. Please give some thought to volunteering including committees. The club needs new ideas, which you can bring to the club.

Don't think you have the time to be an officer, how about helping on a committee? Not many extra meetings, done mostly by Email and telephone.

Think a roll-around nurse's medical cart might be the cat's meow for your home ham station. You know the kind, with a monitor mount that allows for height adjustments, has a keyboard shelf and another smaller shelf behind. When your finished for day or evening, disconnect the antenna and roll the cart out of the way. Interested, see George, W7TTY at the meeting.



Paul, W6IAM has submitted a great article on how to find noise sources (RFI) that should help those that are plagued by this type of problem.

Don't forget to mark your calendar for **December 13** for the club's Christmas Dinner Party at the Landing.

Congratulations to Chuck (N7HFL) and Marian McGilvra on their 60th wedding anniversary on October 12.

Lastly, a thank you for all the Veterans who served.

73, Cu Later

# Radio Frequency Interference and those convenient household gadgets

by Paul Honore W6IAM

For several months I've been experiencing a high noise level on 80 meters. The Washington State Emergency Net operates on 3985 kHz and the noise made it difficult to hear weak stations from Eastern Washington.

My station is powered by a deep cycle marine battery. With the equipment isolated from mains power, I assumed that the noise was coming from an external source, possibly from grow lights in a clandestine marijuana farm in a neighbor's basement. Grow lights are notorious for radiating RF over a broad spectrum of frequencies.

I tried switching off circuit breakers, one at a time, to eliminate household sources of interference. Nothing seemed to make any difference in the noise level, re-enforcing my opinion that the source must be coming from somewhere outside, WRONG. I'd forgotten what I'd learned from years of troubleshooting electronic circuits. Don't begin an analysis by eliminating circuits one at a time. Approach the problem from the opposite direction.

I stared all over again, this time shutting off ALL of the circuit breakers, The noise level dropped from S9 to S3 on my receiver. So, my neighbors were good guys after all and I was the bad guy. By switching on individual circuit breakers, I found multiple circuits that were generating noise on the 80 meter band. They were an MFJ power supply, a battery charger, two computers, video surveillance cameras, and a light dimmer switch.

Well and good, but with no connection to the mains power, how were these sources able to affect my receiver? The answer is deceptively simple. House wiring makes a great antenna for transmitting electrical noise. Poor filtering at the individual sources, allowed them to modulate the 60 Hz mains power and the relatively weak signals were picked up by my dipole antenna. I was able to eliminate noise from the power supply, the battery charger and the computers by applying snap-on toroid chokes to the line cords. The light dimmer noise was easily eliminated by

using the receiver's noise blanker. Unless light dimmers are well filtered and shielded, there is little that can be done to eliminate noise from them. Most use SCRs, Silicon Controlled Rectifiers, also called Diacs or Triacs, to switch power at a selected point along the slope of the AC sine wave. This produces a sharp voltage spike at a rate of either 60 or 120 Hz. The video surveillance cameras are another problem. They radiate video and sweep information directly from hundreds of feet of not very well shielded cable. For the time being, I simply turn them off when I'm operating on 80 meters.

Time was, when RFI meant that output from your transmitter interfered with your neighbor's television reception. Dominated by gadgets to ease our busy lives, today the problem is more likely to be the reverse. Your automated household is likely to add to your reception headaches. Most fluorescent light ballasts and some LEDs are noise generators. Before converting over to these efficient sources of lighting, it's worth investigating their RFI potential. The same can be said for switching mode power supplies, especially older ones. Nearly all computers and video monitors use switching mode power supplies, making them suspect. Mercury vapor security lights and plasma video monitors are notorious sources of broad-spectrum radiation. They not only modulate AC mains power but radiate RF directly.

The list grows with every new gadget that appears on the market. Be careful when introducing anything new into the mix. Your receiver might have the lowest noise floor and best dynamic range that money can buy, but its performance can be drastically reduced by that wallwart power supply to charge your cell phone.



#### A Ham Hijinks staff report

WASHINGTON, D.C. — NASA officials, in a surprise announcement today, named their first choice for a five-member crew that will head to Mars by 2025. To the astonishment of many, the man is an amateur radio operator.

The chosen ham, now a soon-to-be astronaut, is Bill Thompson from Cedar Rapids, Iowa.

Thompson, who is well known in the amateur radio community, is the net control station for the nightly "Midwest 80m Rag Chew Net." He can often be heard talking about his award-winning milk bottle collection and his fascination with color variations in rare African violets.

Officials at the space agency said a ham radio operator was a natural choice for the mission.

"Yeah, we needed a way to get the other astronauts into a deep sleep for the long journey," said NASA spokesperson Ned Berkinhopper.

### HamHijinks.com

Feedback, Comments or Article

submissions are appreciated to

CCARCQTC@Yahoo.com

Thank you for your

# CLALLAM COUNTY AMATEUR RADIO CLUB

#### **FROM OUR TREASURER:**

As of Oct 31,2014

Bank Saving 8003.91

Bank Checking 3724.41

Outstanding Cheques: 0.00

Total 10081.83

Thanks,

Ernie Griffith
W7EWG
CCARC Treasurer

## **CLUB OFFICERS For 2014**

President: Mike Rice, KD0NND

Vice President: Becky Winters, W7RJW

Secretary: Chuck Jones, N7BV

Treasurer: Ernie Griffith, W7EWG

Board Member: Bill McPhearson, W6JEQ

Board Member: Dennis Tilton, AD7TV

Board Member: George Hutchinson, W7TTY

#### **CCARC Committees**

**Activities Chair**: Nita Lyman KE7DRT

Education and Training: Chuck Jones N7BV Field Day Co-Chairs: AI Fisk KD7TFK, Vacant Health and Welfare: Becky Winters W7RJW Membership Chair: Becky Winters W7RJW

Net Coordinator: Mike Rice KF7VZZ

Program Co-Chairs: Janet Parris WA7JEP, Bill Carter W7WEC, Chuck Jones N7BV,

Becky Winters W7RJW

Public Relations Chair: Bill McPherson W6JEQ

**Publications (Newsletter)**: Chuck Jones N7BV, Jeramey Johnson KF7PMC, Mike Rice KF7VZZ **Technical Committee**: Ernie Griffith W7EWG, Mark Merrikin AE7IP, Doug Welcker, WB4KGY

#### **CLALLAM COUNTY AMATEUR RADIO CLUB**

#### October 2014 General Meeting Minutes

1904 – Meeting called to order by Mike, KF7VZZ. Pledge of Allegiance. Introductions all around.

1906 - Program by John, W6SU "CC&Rs and Antennas".

1941 – Break

2004 – Review of Repeater Status. See October's board minutes for details.

2007 - Saturday December 13 Christmas Party at Smugglers Landing in PA. The five dollar off set for members will be given.

Ernie briefed on insurances for towing the club's trailers.

Treasurer's report given and approved.

Announced the club is looking for missing manuals for GE Master II repeater

No raffle was held due to a lack of time.

Club will make an effort to centrally locate club files in one place.

2050 - It was announced next month will be nominations for club officers.

2053 - End of Meeting

Respectfully submitted, Chuck Jones N7BV



#### **CLALLAM COUNTY AMATEUR RADIO CLUB**

### CCARC Board Meeting Wednesday October 08, 2014

Repeater upgrades and status were discussed.

Bob,K6MBY reviewed a BOM (Bill of Materials) for the Stripped upgrade and installation of a repeater at Forks Police Department which will be linked via OPSCAN (fiber & microwave) to W7FEL at Stripped Peak. The basic costs for this will run \$4,000.

Also discussed was the fact that manuals for the equipment at Stripped Peak have evaporated and are being looked for. If you

A Brief discussion on using two Icom transceivers for the repeater at Forks has merit and will be looked into.

An interface test with the counties OPSCAN network will the run shortly.

Ernie advised we will need to put our trailers on the clubs insurance policy and written agreement slips will need to be sign for people towing them

A reminder that officer nominations is in November and elections at the December meeting.

Life memberships for outstanding members was discussed, if you feel someone should be considered please talk with one of the board members for nomination. Remember this is sustained contribution/s over years to the club.

Bring up to Nita KE7DRT about arraigning the Christmas Party.

Rix will remain the webmaster of the clubs site.

Respectfully submitted,

Chuck Jones N7BV Club Secretary



#### YL LUNCHEON

November 14th Chestnut Cottage 929 E. Front PA Time: 11:30 a.m.

# Find a wealth of information and links on the club website:

**OlyHam.net** 

#### 2014 YL Luncheons:

Reservations 11:30 2nd Friday of each month

November—Chestnut Cottage—929 E. Front PA

December - Cedars at Dungeness 1965 Woodcock. - Sequim

#### **Welcome New Members:**

Glen Muir WA6RQW
Jerry Holmes KJ7DH
Stephen Buer N7MKO
Bill Roberds KG7ODW

Description	Time/Date	Location	Contact
Clallam County ARES/RACES meeting	7 pm, first Tue of every month	Clallam County Courthouse EOC, 223 E. 4 <sup>th</sup> St., PA	Bill Carter, W7WEC 360-681-4375
Clallam County Amateur Radio Club general meeting	7 pm, second Wed of every month	Port Angeles Fire Station 5 <sup>th</sup> & Laurel Streets	Chuck Jones, N7BV 360-452-4672
Clallam County Amateur Radio Club social breakfast	8 am, first Sat of every month	Joshua's Restaurant Hwy. 101 & Del Guzzi Drive	Chuck Jones, N7BV 360-452-4672
CCARC Board Meeting	As Announced	Smugglers Landing 115 E. Railroad Ave	Dennis Tilton AD7TV
Clallam Country Amateur Radio Club YL social lunch	11:30 am 2nd Fri of every month	See Above Schedule	Chuck Jones, N7BV 360-452-4672

## HADDY BIRTHDAY!

Paula Johnson K7PAX Nov 15
Paul Honor'e W6IAM Nov 20
Gloria Becker KF7CHH Nov 29

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