



CLALLAM COUNTY
AMATEUR RADIO
CLUB

QTC
MARCH 18

BV Rambles::

We thank all of the volunteers who helped make the Home Show a success.

KG7WMZ	Herm	K7WWP	Bill
KI7DWA	Steve	K7MAE	Mark
KI7RBS	Joe	W7TTY	George
KD7WBM	Bruce	KG7JWW	Joe
N7BV	Chuck		

Would like to personally thank Paula K7PAX; Bob K6MBY; and Bill W7WEC who help me with setting up my station for remote operations from the Home Show.

Are you familiar with Email Reflectors? Called groups on Yahoo. These reflectors are a great way to get information about various subjects including Ham Radio subjects, to include operations, software, hardware.

Two of the ones I belong to, CQ Contest and Towertalk last month had many interesting topics. Towertalk recently has had a thread on adding a third element to a certain 2el 40m beam, not only are there suggestions on how to do it; along with others on why it was a waste of time for little return on the effort. Another topic was what grease people are using for assembling antenna elements. Never knew there were so many different ones. Find some reflectors on Eham on left side at bottom of page.

There are other reflectors; like for the ICOM 7300 xceiver; Elecraft K3; all Yaesu transceivers; and software specific reflectors.

Our club focus will turn to Field Day next and then the Fireworks stand. Field Day is where newer hams can get a chance to operate with some excellent antennas and transceivers.

The Fireworks Sales is where we earn the bulk of our money to do things like Field Day; subsidize our Christmas dinner; purchase equipment needed for our repeaters and repairs of them.

Tks. 73, Chuck N7BV

Get Your License Here!

**Chuck N7BV
ARRL VE-L**

February Program

We need articles for the QTC newsletter. This is your newsletter.

Tell us how you became interested in Ham Radio. What did you do over the summer (just like school) huh!

Did you put up a new antenna, buy a new radio? Tell us about it.

Did you try a new mode again tell us about it.

The more you submit the less blank space we will have!

Thanks, the staff!

CCARC QTC Newsletter

Just a little background on the QTC.

We use ccarcqtq@yahoo.com as a repository for information for the newsletter. So if you have something for the QTC, please send it to the yahoo address. Do not sent it to one of the editors as they will just have to turn around and resend it to the yahoo address.

Please make sure the article or information is complete. As we rotate editing the newsletter you cannot be sure which editor will be piecing the newsletter together.

Please remove as much formatting from within whatever program you are using if you know how, before sending it to ccarcqtq. We do not edit, except to change fonts to a standard non-serif font (Arial which is easier to read than Times Roman). We will run a spell checker.

When first conceived the editors were given free license, it still is that way. It was understood they would endeavor to include everything submitted, within reason. For instance, off color jokes etc. are not going to be printed. Thanks,

Have an idea for a club program?
Pass them along to the members of the program committee.

Thanks.

2 METER NETS

CCARC :

Every Thursday 7:00 pm on the W7FEL Repeater.

ARES/RACES:

Every Tuesday except 1st Tuesday of the month at 7:00 pm on W7FEL Repeater.

W7FEL Repeater: 146.76 MHz, offset down 600 KHz. with a tone of 100 Hz.

W7RJW "Net" Working

Some local nets to listen in on/participate in. This is one good way to learn how we communicate on the airwaves as amateur (ham) radio operators. I spent a year just listening to a couple of these nets and how experienced operators talk to each other, before I even tried for my Technician license. It REALLY helped me a lot. I strongly recommend doing this on a regular basis. Enjoy!

Sunday:

LDS (Latter Day Saints) Emergency Net (you don't have to be a member to participate) 6pm on 146.760

Monday:

Elwha Emergency Net 5:30 pm On 146.760
WARA (West Coast Amateur Radio Association)
Club Net (Victoria, BC Canada) at 7pm on 146.840

Tuesday:

ARES (Amateur Radio Emergency Services) Net
7pm on 146.760 (except for the first Tuesday of the month, when ARES meets at the Clallam County Courthouse)

Wednesday:

WARA (West Coast Amateur Radio Association)
Emergency Net 7pm on 146.840 Simplex Net immediately following: on 146.580

Thursday:

CCARC (Clallam County Amateur Radio Club) Net 7pm 146.760

W7RJW Rebecca J. Winters
CCARES Net Control Coordinator

**What's new on Ham Nation?**

<http://twit.tv/hn>

Check out the new format.

Have a cup of coffee, relax and watch one.

FOR SALE or TRADE

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**Brain Teaser From January**

Kangwa, Rafael and Ferdinand plans for gun fighting.

They each get a gun and take turns shooting at each other until only one person is left.

History suggest:

Kangwa hits his shot 1/3 of the time, gets to shoot first.

Rafael, hits his shot 2/3 of the time, gets to shoot next if still living.

Ferdinand having perfect record at shooting(100% accuracy) shoots last , if alive.

The cycle repeats. If you are Kangwa, where should you shoot first for the highest chance of survival?

**Solution:**

He should shoot at the ground.

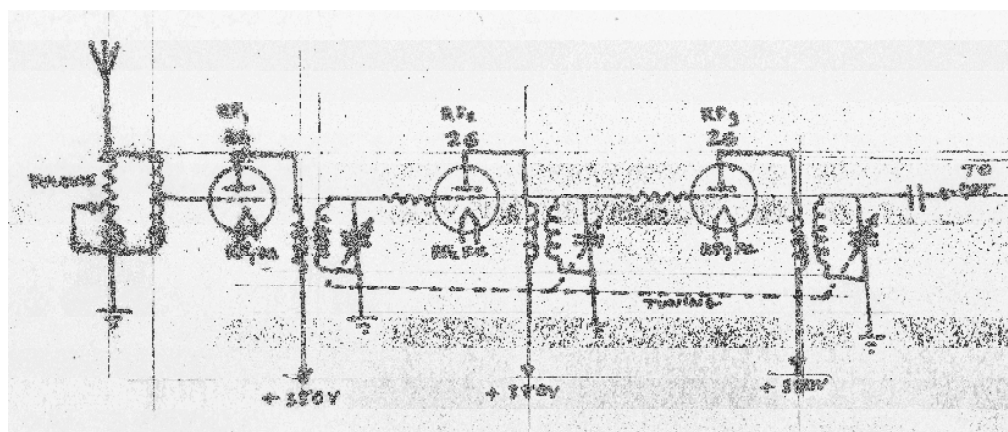
If Kangwa shoots the ground, it is Rafael's turn. Rafael would rather shoot at Ferdinand than Kangwa, because he is better. If Rafael kills Ferdinand, it is just Kangwa and Rafael left, giving Kangwa a fair chance of winning.

If Rafael does not kill Ferdinand, it is Ferdinand's turn. He would rather shoot at Rafael and will definitely kill him. Even though it is now Kangwa against Ferdinand, Kangwa has a better chance of winning than before.

## Restoring a Vintage Table Model Radio - Part-4

Paul Honore W6IAM

With the power supply and audio stages working properly, it was time to tackle the RF portion of the radio. If you were born after 1940 you probably won't be familiar with a TRF (Tuned Radio Frequency) circuit. What do I mean by tuned RF? Well, take a look at the schematic diagram for a moment. It shows three RF stages, each with a tuning circuit consisting of a coil and a variable condenser. To select a radio station, you have to adjust the resonance of each stage separately. TRF radios typically had a tuning knob for each condenser making it a chore to tune from one radio station to another. Atwater Kent took a different approach. They chose to mechanically gang the condensers together so that the listener only had to turn a single knob. Not as easy as it sounds.



In order to gang the tuning circuits together the coils and condensers had to be precisely matched. The coils had to have exactly the same inductance and the variable condensers had to track each other for every position of the tuning knob. The con-

densers in the Atwater Kent are the best I have ever seen. They are fabricated of heavy material with precision bearings and the plates are precisely spaced, obviously contributing to the high cost of the radio. Tracking is accomplished with phosphor bronze belts pinioned to brass drums. There is no way for them to become misaligned. It's a shame to leave such beautifully made components to be ravished by time and weather. They belong in a museum.

That being said, the tuning condensers had become frozen in place and immovable. This was one of the first things I discovered and I did the mechanical maintenance as part of the initial cleanup. No need to proceed with restoration if I couldn't get the tuning mechanism to work. I removed the condensers, careful not to disturb the position of the belt drums, cleaned them with kerosene then worked the bearings free with a liberal application of WD40. One condenser was so badly corroded that I had to take it completely apart to free the shaft and then re-assemble it plate by plate. At the same time, I checked the tuning coils for continuity then I re-installed the condensers and their drive belts.

One by one I plugged the RF tubes (26) in place, checked that the filaments lit and that plate voltage was present. My oscilloscope is capable of reading RF directly and it also contains a frequency counter. With only a clip lead for an antenna, individual signals were evident at different frequencies when the tuning condensers were rotated. Some of the signals were noise generated by florescent light ballasts but some of them appeared to be actual AM radio stations. I moved the 'scope probe to the loudspeaker terminals and found audio and noise waveforms that corresponded to the RF signals

I connected the loudspeaker and heard audio - real audio coming from a 90 year old radio! Tuning was smooth and selectivity surprisingly good. The restoration was complete - well almost complete. As Peter Falk as Lt. Colombo would say "Just one more thing." At the left end of the schematic, where the antenna is indicated, there's another Atwater Kent innovation. Volume control is accomplished by progressively shorting the signal from the antenna to ground with a potentiometer. It was intermittent and noisy when turned. I had to dismount the RF chassis from the cabinet and remove the control. It was apparently made for the purpose. The wire wound resistance element and brass wiper were badly corroded. I removed them from their Bakelite housing and cleaned them with fine sandpaper. Now it works smoothly. The restoration really is complete. Some final observations and comments yet to come.

73 Paul Honore W6IAM

### **Board Meeting 3-7-18**

Present: Chuck S. EBH, Mark MAE, Chuck N7VB, Joe RBS, Rosemary MZH, John JAB, Glenn RQW, Bill WWP.

Meeting opened at 1:00 p. m.

Minutes read and approved.

Vice President stated Port Angeles Fire Dept. renovation is finished. Can return at any time. Home show needs volunteers for the day and help with loading and unloading. Home show 9:30-4:00 p. m. Classes for next Ham Radio are filled. Will be held at the PUD.

Treasurer: Balance in checking \$6361. Bond \$1049.18. 73 members have not renewed. Sent e-mail, 10 to renew and 2 asked to be removed. Several lifetime members need way to track them. Received license to renew for resale needed for fireworks sales.

Chairman of the board passed out form for annual reoccurring obligations. Reference to jobs for board and elected members. To review and amend as needed. Suggested 3 ring binder for each job and add to as needed. Motion to purchase 3 thumb drives for treasurer and secretary to use for backup for Quickbooks. Approved. Treasurer to buy –suggestion to buy an SSD for treasurers computer. Tabled to later.

President: Committee chairs need to report at Ham Meeting what is going on in their committees. Web administrator is Bill P.

Glenn has fixed radios, one needed a new fan.

Field Day use 5 types of radios and several tents.

Need Balance sheet and income with expenses and budget review. Audits every year.

Discussed club insurance policy and liability rider for non-club owned vehicles. Should we put equipment policy on it?? Bill P to check on.

Loaning equipment discussion to promote the Club HF, possibly lend out radios. Glenn will be equipment lead.

Next meeting at Fire Department on TUESDAY April 3rd at 7:00 p. m.

Meeting adjourned at 3:20 p. m.

Respectfully submitted,

Rosemary Day Secretary KI7MZH



## General Meeting February 14, 2018

Meeting called to order by President Mark Ellington at 7:00 p. m. Pledge of Allegiance.

Secretary: Notes from January Meeting. On file at QTC.

Mark: Ideas for field day for tents.

Vice president: absent due to sickness.

No treasurer report: absent

Bill P. discussed membership committee, membership drive. Posting new membership roster on line.

Home show: Have booth for show on March 10 and 11. Need support and people to work at booth.

Chuck was sick. He is coordinating the booth set up. Nita sending card to Chuck. Dennis is much better.

Repeater: Herm brought back and is working on the problem.

Ares: Bruce discussed next Ham class and encouraged Technicians to upgrade to General. Fliers around town. OAT run in April (2<sup>nd</sup>) in Joyce area. In June 2-4 National guard coming, also NOD Marathon on same weekend. Needs volunteers for that also. Feb 24<sup>th</sup> digital class on Winlink at EOC.

The Forks repeater in police station attic with poor access. Want to move to Gunderson Mt. Joe Wright to coordinate effort for move there and see what are options for the move.

Bill Peterson had presentation on CC ARC membership system that he designed. An account for all active paid members. Details on website. Follow log in screen. Handout was available.

Bill also had presentation on Anderson Power Poles: 12 v connections. ARES and RACES use them.

Several sizes of amp ratings. 7 patents, from 1953 to 2008. Steel clip holds electrical contact. Low resistance, genderless, easy to connect, contacts wipe clean with insertion. Recommends connection using crimper. Discussed crimping vs. soldering. Disadvantages: genderless, easy to become disconnected unless tied, more expensive than other contacts. Examples for use: easy to swap radios, power supply, battery, cigarette lighter, work bench testing, in-line equipment.

Need Field Day sign-ups.

Adjourned at 8:25 P. M. 23 members present.

Respectfully Submitted, Rosemary KI7MZH, Secretary

## **CCARC Strays**

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The ARRL Contest Update for March 7, 2018

Today's Amateur gear containing microprocessors usually has provisions for upgrading the software via a computer link or memory card. DX Engineering has published a blog article on Firmware Upgrades <<https://dxengineering.wordpress.com/2018/03/01/understanding-firmware-upgrades/>> including the steps to take to make sure updates are trouble free. 73, Chuck N7BV

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Cosmic rays are bad--and they're getting worse. That's the conclusion of a new paper just published in the research journal Space Weather.

Space Weather News for March 5, 2018

<http://spaceweather.com>

<https://www.facebook.com/spaceweatherdotcom>

THE WORSENING COSMIC RAY SITUATION: Cosmic Rays are bad--and they're getting worse. That's the conclusion of a new paper just published in the research journal Space Weather. During the past decade, cosmic rays in the solar system have reached levels never before seen in the Space Age, and now, according to data from a cosmic ray telescope in orbit around the Moon, radiation levels are increasing even faster than previously predicted. Visit today's edition of Spaceweather.com (<http://spaceweather.com>) for more information about this phenomenon and how it affects us on Earth.

Remember, SpaceWeather.com is on Facebook (<https://www.facebook.com/spaceweatherdotcom>) !

<https://spaceweatherarchive.com/2018/03/05/the-worsening-cosmic-ray-situation/>

Above: This illustration by Simon Swordy (U. Chicago) shows showers of energetic particles peppering Earth caused by cosmic rays hitting the top of our atmosphere.

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QTC Newsletter Submissions

From Rick, AAØRD, Feb 25, 2018

New CHIRP Radio Drivers to be released soon

I have submitted two new radio drivers to the CHIRP development team, and expect them to be supported under the daily-build process anytime now. If you have either of these units you will soon be able to configure it using the modular CHIRP free software.

The first one is for the Baojie BJ-218 dual-band 128-channel UHF/VHF transceiver and its' aliases the Luiton LT-725UV, Hesenate BJ-218 and Zastone BJ-218.

The second one is the Radio Shack PRO-649 Programmable 200-channel scanner and it's aliases the Whistler WS1010, Radio Shack PRO-404 and GRE PSR-100. This driver only supports uploading, if used with the original USB connector. If by any chance someone has the USB connector that is supposed to allow download handshaking then I would love to borrow it long enough to update the driver.

If you have a radio that is software-programmable, but not yet supported by a CHIRP driver (check the website at https://chirp.danplanet.com/projects/chirp/wiki/Supported_Radios) and can loan it to me for a few days, then I can try to get a driver working. Contact Rick at AAØRD@yahoo.com.

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## CCARC Strays

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Have you looked at Bob Heil's info at:

<https://heilsound.com/heil-amateur-radio/support/dsp-settings/>

General methodology at the top, Elecraft at the bottom.

73, Chuck N6KW

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From *amateurradio.com* is an article which might make for [A Better Antenna for Dualband Handhelds](#) Paste below into your browser and read for yourself.

[http://www.amateurradio.com/a-better-antenna-for-dualband-handhelds/?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+amateurradiocom+%28AmateurRadio.com%29](http://www.amateurradio.com/a-better-antenna-for-dualband-handhelds/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+amateurradiocom+%28AmateurRadio.com%29)

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From *amateurradio.com* is a link to an educational series on YouTube to help you study for your exams. Paste below into your browser and read for yourself.

http://www.amateurradio.com/ham-college-37/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+amateurradiocom+%28AmateurRadio.com%29

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Looking for a radio carrying bag check this out.

[http://www.amateurradio.com/flair-for-your-radio-bag/?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+amateurradiocom+%28AmateurRadio.com%29](http://www.amateurradio.com/flair-for-your-radio-bag/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+amateurradiocom+%28AmateurRadio.com%29)

### [Yaesu FT-817 replacement details leaked](#)

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Yaesu FT-818 details leaked (FT-817nd replacement)

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In a huge disappointment for the DX community and the members of the 3Y0Z Bouvet Island team, the DXpedition's leaders announced at 2000 UTC today (February 3) that a decision had been made to abort the DXpedition and head back to Chile. Read more and watch the video.

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[Icom IC-7610 In Depth](#) It's the IC-7610 video you've been waiting for... Ray Novak, N9JA joins George, W5JDX and Tommy, N5ZNO of AmateurLogic.TV for an in depth look at the new IC-7610. Lots of detailed information about this great new transceiver plus comparisons with the IC-7600 and IC-7300.

THE WORSENING COSMIC RAY SITUATION:

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<http://spaceweather.com/archive.php?view=1&day=05&month=03&year=2018>

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Here is one view of the new ARRL petition to the FCC. At first I was not convinced this was good for amateur radio but after listen to this video I believe it could be a way of getting more people interested in the hobby.

[What? ARRL Petitions FCC to Expand Privileges of Technician-Class Amateur Radio Operators](#)

CCARC Standing Committees

VE Education and Training: Chuck Jones N7BV

Field Day Co-Chairs: Al Fisk KD7TFK, Sheldon Koehler N7XEI, Linda Montelius KG7WMS, Ray Montelius KG7WNB

Health and Welfare: Nita Lyman KE7DRT

Membership Chair: Sheldon Koehler N7XEI

Net Coordinator: Mike Rice KF7VZZ

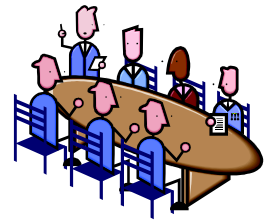
Program Co-Chairs: Bruce O'Rourke WA7CCC, Bill Peterson K7WWP, Tom Pysher K7YSH

Public Relations: Bill McPherson W6JEQ, Bruce Reiter KD7WBM, Herm Halbach KG7WMZ, Sheldon Koehler N7XEI, Bill Todd N7MFB

Publications (Newsletter): Chuck Jones N7BV, Herm Halbach KG7WMZ

Technical Committee Coordinator: Doug Welcker, WB4KGY, Bob Sampson K6MBY, Bill Peterson K7WWP, Merrill Terpstra KA7FAM

Web Site Administrators: Sheldon Koehler N7XEI, Mike Rice KF7VZZ



CCARC Special Committees

Hamfest Table: Mark Ellington K7MAE, Doug Welcker WB4KGY, Andrew Rowland KF7QYL

Trailer: Mark Ellington K7MAE, Charlie Brown WA4DFT, Andrew Rowland KF7QYL, Bruce O'Rourke WA7CCC, Glen Muir WA6RQW

Roster: Sheldon Koehler N7XEI, Chuck Jones N7BV

Fireworks: Nita Lyman KE7DRT, Ray Montelius KG7WNB, Bruce O'Rourke WA7CCC

NOTE: These committees need to be reevaluated and confirmed. It does no good to be on a committee and do nothing. Especially if you don't even come to meetings! If you want on a committee or off, please let it be known.

NEXT YL Luncheon

**Oak Table
292 W. Bell
Sequim**

April 13, 2018

*Find us on the web at
www.olyham.net
Check it out. Lots of
information about ham
radio in Clallam County!*

2017 - CCARC Ladies Luncheon Schedule

Reservations are made for 11:30 - 2nd Friday of each month

April - Oak Table - 292 W. Bell - Sequim
May - Downriggers - 115 E. Railroad Ave. - Port Angeles
June - Black Bear Diner - 1471 E. Washington - Sequim
July - Gordys Pasta and Pizza - 1123 E. First St. - Port Angeles
August - Mariners - 609 W. Washington - Sequim
September - Cafe Garden - 1506 East 1st St - Port Angeles
October - Paradise - 703 No. Sequim Ave - Sequim
November - Chestnut Cottage - 929 E. Front - Port Angeles
December - Cedars at Dungeness - 1965 Woodcock Rd. - Sequim

Description	Time/Date	Location	Contact
Clallam County ARES/RACES meeting	7 pm, 1st Tue of every month	Clallam County Courthouse EOC, 223 E. 4 th St., PA	Bruce Reiter KD7WBM 360-452-9851
Clallam County Amateur Radio Club general meeting	7 pm, 2d Wed of every month	Port Angeles Fire Station 5th and Laurel, PA	Chuck Jones N7BV 360-452-4672
Clallam County Amateur Radio Club social breakfast	8 am, 1st Sat of every month	Bi-Monthly Joshua's Restaurant, PA & Mariner Restaurant, Sequim	Chuck Jones N7BV 360-452-4672
Clallam Country Amateur Radio Club YL social lunch	11:45 am 2d Fri of every month	Rotates - announced on Thursday night Net (See QTC Newsletter)	

CC-ARC Welcomes new member/s:

Kenneth Jennings, Jr. KJ2U

CLUB OFFICERS For 2017

President: Mark Ellington K7DWE 360-460-4043 gossamer765@gmail.com

Vice President: Chuck Jones N7BV 360-775-8201 n7bv@yahoo.com

Secretary: Rosemary Day KI7MZH 360- rosemaryday2000@yahoo.com

Treasurer: Joe Edwards KI7RBS thesharpshark2011@gmail.com

Board Chair Person: Chuck Stroeher WA7EBH 360- cstroeher@wavecable.com

Board Member: Bill Peterson K7WWP billp@alaska.net

Board Member: John Lehto N4JAB ponyexpress@olypen.com