



CLALLAM COUNTY
AMATEUR RADIO

QTC
FEBRUARY 20

BV RAMBLES:

Well it is month two of the new year, new decade and haven't heard of anything happening on getting new people into ham radio.

Have you had anyone over to show them your station and what you do with ham radio? Have you chased a Ham license plate and invited them to the club?

Many people have dedicated much time to advancing the hobby of ham radio both individually and through the club. Tom Newcomb KE7XX who few of you knew, he used to own KAPI radio station which he sold to some out of state people who started up the FM country station and a pop station. They then left town leaving Tom to resell these to KONP. Tom was the VE-L for training for the FCC exams and testing for many, many years, plus holding most officer positions with in the Club at one time or another.

George, W7TTY got involved in the club and saw the need to improve Field Day, had connections and connected up with a friend in California to acquire the club tower. He didn't stop there, taking over training club members by developing a training program and instructing annually for the tower. George has also been President of the CCARC.

Bob Sampson K6MBY joined the club some 20 years ago , he too saw the need to put his expertise in repeaters to use for the club. Bob served two terms as vice President and has been heavily involved in FD.

Dennis AD7TV, has led the club on technical items for Field Day building/testing/installing the HF tri-band filters and stubs for 20/15/10m. Dennis has served two terms as President and served on the board twice.

Bob K6MBY and Chuck N7BV purchased the present Tri-band antenna used at Field Day from one of the clubs SK's. Chuck, and two other past members of the CCARC refurbished the antenna.

If you are a member of the Club and ARES you should be willing to help the Club move forward on club goals. In my option, pinning your participation at the Fireworks sales to payment to ARES is unbecoming!

73, Chuck N7BV

AMATEUR RADIO LICENSE CLASS

Next class session in the April 2020 timeframe.

Still Looking for a Home

**Chuck Jones N7BV
ARRL VE-L**

**General Meeting
Program
02/12/20**

Dennis AD7TV and Chuck N7BV

**STUBS, WHAT THEY ARE AND
WHAT THEY ARE USED FOR**

**TREASURER'S
REPORT**

CCARC QTC Newsletter

Just a little background on the QTC.

We use ccarcqtcc@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 ccarcqtcc. 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.

Board Meeting 2-5-2020

Present: Cori VZZ, Jeannine WVD, Ross WVG, Joe RBS, Rosemary MZH, Dennis TV, David IMN

Meeting opened at 7:20 P. M. Minutes approved as published in the QTC.

Treasurer's Report: \$2243, Savings \$10,052. will have tally of members next week.

Field Day: events in newspaper, banner? Better organized scavenger hunt. Need to set up Field Day committee, need volunteers,

Dennis gave Ross the old trailer keys so the new ones can be put on the trailer. Will save the old locks.

Request to place our club in the Mike and Key catalog.

We have surplus Club radio equipment that could be loaned to a new General to set up a station. Dennis has IC 735 transceiver. Would include a time limit for use, and sign out sheet. ARES has been doing this for awhile with 2 meter handhelds.

Fireworks: Discussed how Fire Marshall will approve opening to sell, since we are scheduled to open on a Sunday. Ask TNT.

Joe Edwards has vacuum tubes if someone wants some. Contact him for more info.

A website called Mr. Carlson's lab, has videos on how to build radio equipment.

Need to bring up having a Flea Market at Field Day next meeting.

Joe went over budget expenses, will add a few to the list then review again.

Board voted to give ARES \$500.00 for their help at last years Fireworks stand. Will present at the next Ham Club meeting for approval. This will be an annual decision by the board, and with approval of the Club will encompass either a \$500.00 donation or 15% of net profit. Will review again each year.

Meeting adjourned at 8:55 P.M.

Respectfully submitted,
Rosemary Day KI7MZH
Secretary

CCARC Ham Meeting 1-8-20

Meeting opened at 7:12 by President Ross Tyler. Pledge of Allegiance

Minutes approved as published in the QTC. Checking account \$2243, Savings \$10,062.

Net Coordinator: Jeannine, new coordinator said updated short roster with approximately 35 names were sent to the Net Control Operators along with 2020 Net Control Operators schedule.

Repeaters: Discussion from Ron Cameron. DNR is receptive to suggested process using Ham Club as operator. Sheriff's department to seek funding to get going.

VEL: no dates set for New Year-sometime in April.

Health and Welfare: Rob Wilson had stroke, at Avamere in Sequim.

Website: Updated officers and Saturday breakfasts.

ARES: Lockdown practice at college on January 14th requested use of repeater that day. February 29th, Frosty Moss exercise marathon. Acct. from ARES for funds.

Fireworks: Will need persons for Saturday and Sunday setup. Security for nights. Sign up sheets coming soon.

SWR Presentation by Dennis Tilton:

From the book "Reflections" by Maxwell W2DU. A properly tuned antenna tuner isolates the mismatched antenna/feed-line system from the transmitter. The antenna tuner does not tune the antenna. It does two things:

1. It transforms the unmatched antenna/feed-line impedance to a non-reactive 50 Ohm value.

2 It creates an RF mirror that re-reflects the SWR back up the line and ultimately out the antenna. In this way, the transmitter only sees a normal non-reactive 50 Ohm impedance but the unmatched antenna/feed-line characteristics are unchanged.

Fact or Fiction:

Low SWR not proof of good quality antenna

Reflected power does not represent lost power

In a lossless line, no power is lost due to reflections

Majority of AM Broadcast towers are not resonant at operating frequencies

A matched system has no reflections. Signal loss is a result of resistive line loss. Tune for maximum current. Mirror termination for reflective wave, re-reflected at input end of line. Causes addition in phase to source wave to derive to total forward power which is the sum of source and reflected power.

As SWR goes up losses increase due to resistive line loss.

Common mode current is due to antenna imbalance, causing the RF to come back down the outside of the coax. Use a common current choke to block CMC. Twin lead system has much lower loss.

A T-tuner with front end balun to reduce common mode current on twin lead line. Coax feed point choke baluns can have high loss in high SWR situations.

Conclusion:

1. Reflected is not lost power except for attenuation over matched line attenuation.
2. An effort to reduce an SWR of 2:1 on any coax is wasted effort from standpoint of increased power transfer.
3. Low SWR is not proof of good quality system.
4. Adjust tuner for maximum line current creates a perfect mirror termination for the reflected wave, causing it to be totally re-reflected on arrival at the input end back to the load end.
5. A high mismatch SWR does not cause the line to radiate but common current does.

References: Reflections by M Walter Maxwell W2DU

Standing Wave Ratio-What Does It Really Mean? By Joel Hallas W2ZR QST March 2015

Don't Blow up Your Balun by R. Dean Straw N6BV QST June 2015

Thank You Dennis for the presentation.

Club requests for presentations: If you would like to make a presentation, please contact the Secretary. We need presentations.

24 members 1 guest.

Adjourned at 8:45 p.m.

Respectfully submitted,
Rosemary Day KI7MZH Secretary

=====STRAY=====

ARRL online Groups

From: Dave AA6YQ <aa6yq@ambersoft.com>

Date: Tue, 11 Feb 2020 07:54:39 PST

The ARRL now has 7 online groups open to ARRL members and non-members. The rules of engagement in these forums are the same as those used here in the DXLab Discussion Group for the past 19 years: "all questions are welcome, no matter how many times they've been asked and answered". If you are interested in the topics covered by these groups, please join and help propagate the online culture we've developed here:

ARRL-Antenna-Law-and-Policy - <<https://groups.arrl.org/g/ARRL-Antenna-Law-and-Policy>>

ARRL-Awards - <<https://groups.arrl.org/g/ARRL-Awards>>

ARRL-Contesting - <<https://groups.arrl.org/g/ARRL-Contesting>>

ARRL-IARU - <<https://groups.arrl.org/g/ARRL-IARU>>

ARRL-LOTW - <<https://groups.arrl.org/g/ARRL-LoTW>>

ARRL-New-Hams - <<https://groups.arrl.org/g/ARRL-New-Hams>>

ARRL-Regulatory-Affairs - <<https://groups.arrl.org/g/ARRL-Regulatory-Affairs>>

And there will be more to come!

73 Dave, AA6YQ

=====STRAY=====

-----Original Message-----

From: Michael Dinkelman <mwdink@gmail.com>

Sent: Wednesday, January 29, 2020 7:41 AM

To: mwdink@gmail.com

Subject: Mike & Key ARC Swap Meet - March 7, Puyallup, WA

Hello Sir or Madam

Please find attached a copy of the 2020 Flyer for the Mike & Key Electronics Show and Swap Meet. This will be our 39th year and this event remains one of the largest Hamfests in the Pacific Northwest. This is an ARRL sanctioned event.

If you could remind your members of this event in your email list or newsletter, thank you. We appreciate it. If you would like to link to our Swap Meet page (below), feel free to do so.

We do have tables still available if anybody is looking to sell items.

People can also download their own copy of the flyer from:

<http://www.mikeandkey.org/docs/fleamarket/flyer2020.pdf>

Other info, like maps and lodging are available at:

<http://www.mikeandkey.org/fleainfo.php>

Questions can be referred to n7wa@arrl.net.

Again, thank you very much and hope to see you and your members on March 7th in Puyallup.

Michael, N7WA

Event Publicity

Greetings Fellow Club Members,

The Clallam County Emergency Management Division has been sorting itself out over the Winter and the reorganization has been very successful. Anne, KJ7KLA, has been working with the ARES Advisory Board to establish direction and priority for the ARES Program in the County. Becca Yucha has come onboard on the CERT side, but we'll get her into a radio class soonest!

The Emergency Operations Center at the Courthouse has seen some work, thanks to Rick, AA0RD, who programmed the Dual Bands and HF rigs and to Herm, W7HRM, who separated the PACTOR/Packet digital systems into two separate entities by utilizing one of the Kenwood 710GA radios for the packet radio. The CEMNET radio system with State is now operational, thanks to the work of Bill, W7WEC. We made good clean contacts with State on Frequency 2.

Steve, N1SB, and Bob, K6MBY, have been establishing Packet nodes or gateways to alleviate what appears to be a shortage of sites for us to get our digital messages out to the world. Some of us met to discuss the issue and we hope to see more individual sites become available in the coming months.

Glenn, KI7FXE, and Mark, K7NEW, have been working to make the radio systems at American Red Cross, Carlsborg more functional, to include mobile units. Carole, KI7TLS, has been writing operational procedures for the radio equipment there.

We received our initial load of radio equipment for the ARES Trailer in December and several members have stepped forward to facilitate the planning, acquisition and programming that goes into such a project. Our thanks to the Emergency Management Division for making it happen.

Steve, KB7ZDD, and Elizabeth, KF7PMB have taken on the task of organizing the Amateur Radio response to the Frosty Moss Run. We provide communications support to a lot of the trail runs where cell coverage is limited or nonexistent. If you haven't enjoyed the marvelous weather of the Joyce/West environs and operated in unforgiving terrain with a fellow ham, give this one a try. Great fun and Lorrie always feed us all and provides SWAG! Steve can be reached at ssinghose@wccg.net.

Keep checking the ARES website at Clallamares.org for updates to calendars, activities, etc. Rik, WX7RIK, maintains our site. If you are interested in becoming a member of ARES, contact me at brewkatrit@q.com or by phone at 503 939-3161.

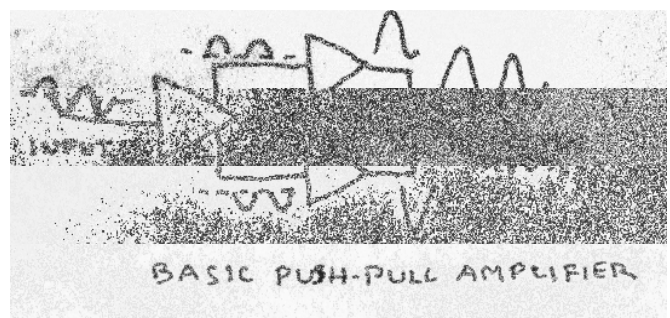
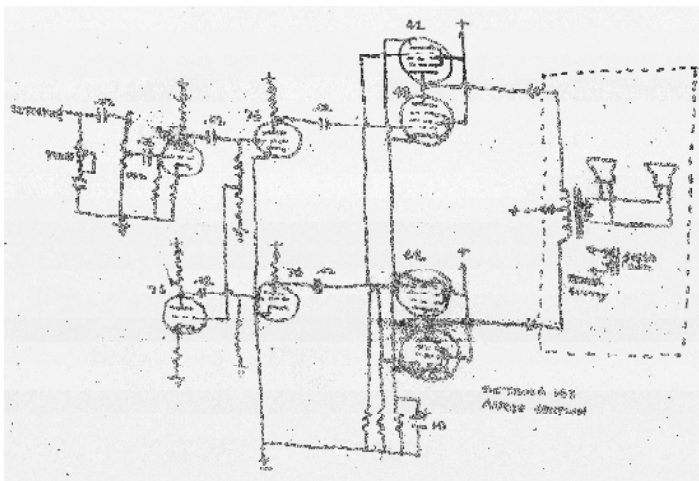
If you haven't been on a Net is a while, come up on Striped on Tuesday for ARES and Thursday for the Club. Both are at 1900. Looking forward to hearing you.

73 to all. Bruce, KD7WBM

Detrola Console Radio Restoration - Part 3 Paul Honore W6IAM

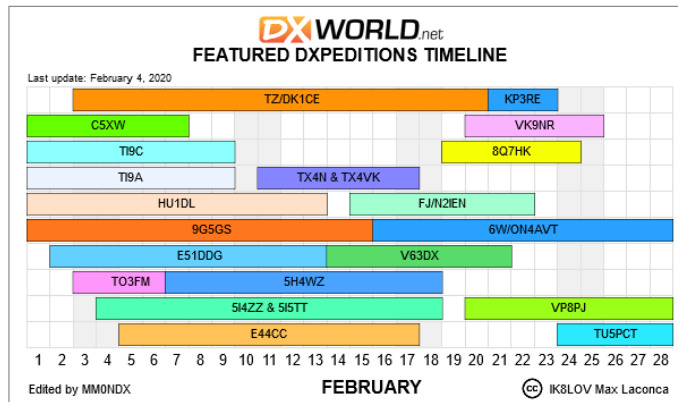
Now that the power supply is no longer smoking up the house, the fun begins. The radio is far too complex to take a shotgun approach to servicing. It's best to tackle individual circuit elements one at a time. Prior to WW-II, my parents owned a Sparks Whithington console radio of much simpler design that served admirably for many years. A built in 78rpm record changer, one loudspeaker and a simple class B amplifier were more than enough to satisfy the needs of the family. Detrola chose to market a radio with an eight tube amplifier driving two twelve inch loudspeakers. This seemed overkill for a radio destined to grace an average sized 1930s living room. I thought it best to generate a circuit diagram to see what I was getting into before powering up the audio section. If you're not familiar with push-pull amplifiers, they reduce the power handling requirement of the tubes or transistors by channeling the positive half of the applied waveform to one output driver and the negative side of the waveform to another driver then combining the outputs to provide an amplified signal twice the amplitude possible for a single driver. (see the accompanying diagram).

Unraveling the rats nest of wiring revealed triode preamplifier and phase inverter tubes with tone and volume controls at the input, two triode driver tubes and a push-pull power amplifier using pentode tubes in parallel. I have included the diagram that I traced of the audio section for reference. In the Detrola an output transformer is connected directly to the driver tube plates. +470V plate voltage is fed through a center tap of the transformer primary winding. The audio output is fed to the speakers by an impedance matching transformer. One speaker has a permanent magnet field and the other a dynamic field coil that serves as a filter choke for the high voltage power supply. Except for lowered efficiency expected from 80+ year old vacuum tubes, the audio section performs satisfactorily when driven by a sine wave of 200 to 12000 cycles. With the audio section behaving itself, it's time to investigate the RF and IF circuits. If all goes well, I'll have the results next month.



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The following DXpedition monthly chart is FREE to download from DXworld.net an online DX news service.



Fleamarket SALE:

Your items could have gone here!!



CCARC Standing Committees

- Field Day:** Sheldon Koehler N7XEI
- Health and Welfare:** Nita Lyman KE7DRT
- Membership Chair:** Joe Edwards KI7RBS
- Net Coordinator:** Jeannine C Tyler K17WVD
- Public Relations:** Jeannine C Tyler K17WVD
- Publications (Newsletter):** Chuck Jones N7BV,
- Technical Committee Coordinator:** Doug Welcker, WB4KGY, Bob Sampson K6MBY, Bill Peterson K7WWP
- VE Education and Training:** Chuck Jones N7BV
- Web Site Administrator:** Bill Peterson K7WWP

CCARC Special Committees

Roster: Joe Edwards KI7RBS

NEXT YL Luncheon

February 14 1130L
Dynasty Restaurant
380 E. Washington St.
Sequim

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

2020 - CCARC Ladies Luncheon Schedule

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

March - Fiesta Jalisco - 636 E. Front St. - Port Angeles
 April - Oak Table - 292 W. Bell - Sequim
 May - Downriggers - 115 E. Railroad Ave. - Port Angeles
 June - Black Bear Diner - 1471 E. Washington - Sequim
 July - Gordy's 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	
Clallam County Amateur Radio Club general meeting	7 pm, 2d Wed of every month	Port Angeles Fire Station 5th and Laurel, PA	
Clallam County Amateur Radio Club social breakfast	1st Sat of every month Priscillas @8:00 am Mariners @ 8:30 am	Bi-Monthly Joshua's Restaurant, PA & Mariner Restaurant, Sequim	
Clallam Country Amateur Radio Club YL social lunch	11:30 am 2d Fri of every month	Rotates - announced on Thursday night Net (See QTC Newsletter)	

[CC-ARC Welcomes new member/s:](#)

NFI

CLUB OFFICERS For 2020

President: Ross Tyler KI7WVG

Vice President: Jeramey Johnson, KF7PMC

Secretary: Rosemary Day KI7MZH 360-457-6895 rosemaryday2000@yahoo.com

Treasurer: Joe Edwards KI7RBS : 360-912-5596 ki7rbs@gmail.com

Board Chair Person: Cori Rice KF7VZZ 360-912-2395 kf7vzz@gmail.com

Board Member: Jeannine C Tyler (360) 460-4236 weblairs@olyphen.com

Board Member: Dennis Tilton AD7TV