

CLALLAM COUNTY AMATEUR RADIO CLUB

QTC
AUGUST 10

DRT Shack,

Hello once again members!

As most of you know, I was in California last month, and I want to publicly say "Thank you Dennis AD7TV, for taking control of the meeting, and any other happenings that needed to be looked after while I was away!"

I'm know it went well, talking about how Field Day went, to which below I have his report on how we did. With our new trailer/tower, it was a learning experience for all of us. What a sight it was indeed, especially with the flag on top, flood lights gleaming on it, and a full moon to boot! The the Space Shuttle went over. What a week-end it was indeed. I'm sure the air-planes coming in thought it was a beautiful sight from the air, just as it was from 70 feet down!

Many hours went into preparing for it's safe use, and for that, we all owe George W7TTY, Al KD7TFK, Bob K6MBY, and yes, KE7DRT, for all the scrubbing, polishing, painting, building, wiring, and setting it up for the first time at Bob's K6MBY place, to where it certainly with stood some pretty good winds. So many thanks for all the technical work that went into helping make this gift one our Club can enjoy for many years to come. I would hope in any true emergency this may be used in it's present location, at Johan's KO6I, as it most likely won't get across the many bridges between PA and Sequim. Let's hope the scenario never arises, yet there are many now who know how it goes up safely, but just in case...wear that hard hat!

Below are the results Dennis AD7TV sent me from Field Day. It was a great, good weather week-end, and to all who came out, brought food, cooked up burgers, thank you.

I have the Guest Book that will add a few more points Dennis, so don't send the paper work in quite yet. We missed many who are usually there, but Summer vacation kept many away. Next year, we hope to see you there.

RESULTS:

PSK: 10

CW: 8 + 39 from second station* = 47

RTTY: 6

SSB: 42

W7FEL Total = 105

GOTA Station W7TTY

SSB Total = 42

I have not tabulated the bonus points.

73, Dennis
AD7TV

Thanks Dennis, for these results and for setting up the station you did to make many Hams happy being on PSK for the first time ever. Our Mayor was absolutely impressed with our set up, and for all who were there to meet him, he was happy to know are experienced Hams, in hobby and Emergency Services, and can always be counted on in times of need.

See you at the meeting on the 11Th.

73, from DRT's Shack KE7DRT

Get Your License Here!

Next class September 18th, 25th and October 2d with the Exam at 1300 on the 2day. 1900 at PA Fire Station 5th and Laurel



FYI: We are changing our training schedule to include actually teaching a chapter on the third Saturday.

Call Chuck, N7BV
360-452-4672
or
Tom, KE7XX
360-452-8228.

Thanks, Chuck, VE-L

CCARC QTC Newsletter

Just a little back round 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 (MSword, edit, clear, formatting) if you know how, before sending it to ccarcqtq. If you feel the creative urge to design a document—please open a design shop, but don't do it and then send it to us expecting to see your creative work transferred to the newsletter.

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,
Chuck, N7BV Bob K6MBY

Have an idea for a club program?
Pass them along to the members of the program committee: Bill Carter, Janet Paris, or Chuck Jones. Thanks.

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!

The more you submit the less we have to think of.

Thanks, the staff!

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.

Wanted Treasurer

As the saying goes. all good things must come to an end. David, KE7JEJ has informed us he will be moving on with his personal life. This leaves the club looking for his replacement.

The following is a list of the treasurer's duties:

Collect club dues.

Maintain up-to-date financial records.

Pay club bills.

Attend Club meetings, board meetings, and VE examination dates to collect club monies.

Present financial information at meetings as necessary and monthly to the newsletter.

Assist the board in preparing the yearly budget.

The treasurer is an officer of the club and would attend board meetings.

This is not a difficult task nor is it one that takes a great deal of peoples time. . It is your club folks, be a part of it. The club's alternative is to hire a bookkeeper should one of our 100+ members not step up to the task.

CONTACT ANY BOARD MEMBER.

CLALLAM COUNTY AMATEUR RADIO CLUB

July 14th, 2010

Meeting convened at 1900 with the pledge of allegiance.

Discussed field day participation. Dennis AD7TV apologized to Ernie the pizza provider for not thanking him in the previous issue of the QTC.

Al got a hand for his super toolbox at field day.

A very interesting video provided by Chuck N7BV called "VP8THU – South Sandwich 2002" was shown. It covered the Dxpedition to a rustic locale to the end of the world with low power and Chinstrap penguins.

Refreshment break

Swap meet: Various equipment from Jim WA7LDM was advertised.

A complete Kenwood TS-180 system is available for \$350. Call Dennis AD7TV

AL7KK has 200 feet of ½ inch hard line for \$47.

Business & Comments

Field Day white tents need a better glare reducing scheme than blankets hung from inside. Suggestions ranged from a custom plywood box with fans to Mylar solar blankets.

The main station tent was donated by Al W7ALP. Many thanks.

The U Tube video of the raising of the 70-foot tower by Rik WX7RIK was favorably commented on.

There was no club business.

Announcement was made of the luncheon with the Canadians in August. We will host.

In regards to the repeater status on Ellis Mountain; it is hung up on two points e.g. When a club member visits the site to do repairs etc. they require a company employee to be in attendance and we pay their full salary. They also will not allow us to work on our own equipment. Bob Sampson will inform them that we are licensed and can work on our own equipment. Chuck N7BV further explained the situation. This will need to be resolved before we proceed.

Meeting was adjourned at 2033.

Ellis Status

The Century Lease remains in the hands of the board for review. To the two points mentioned in the meeting notes above. Locally, Century has agreed that "if" a Century employee is going to the site for their own routine maintenance and we go at the same time, there will be no charge for the trip. So, we will schedule our trips to coincide with Century trips. Should we find it necessary to go to the site and a Century employee is task with accompanying us when they have no routine maintenance themselves, then we "may" be charged. Also that "licensed personnel" may be considered as licensed amateur radio operators.

The repeater that K7PP took down a year or so ago has been replaced and is in the new DNR building at Ellis. See <http://www.k7mmi.net/> for additional information.

TAPR/ARRL Digital Conference

".....the ARRL is putting on their annual Digital Conference in Portland, OR, September 24 thru 26. This is an unusual opportunity for those of us on the coast to connect with ham radio digital "heavy weights" from all over the country. Here is the link for your information: <http://www.tapr.org/dcc.html>". Topics include software defined radios, Digital voice such as Dstar, P25, WinDRM, digital satellite communications, APRS, DSP, HF digital modes and many more. This is the premier ARRL digital Conference, usually held in far off (for us) places like Chicago or Arizona, so having it in our back yard is very unusual.

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EME Conference

14 International EME Conference

August 12-14th in Dallas, Texas. This is the premier EME event of the year. Topics such as low noise amplifiers, software defined radios and EME, Big Dish EME, EME Propagation, Software

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DX2010 Pacific Northwest DX Convention

Vancouver, BC July 30, 31 & Aug 01, 2010

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Hamfest

08/14/2010 The Radio Club of Tacoma

Location: Spanaway, WA

Type: ARRL Hamfest

Sponsor: The Radio Club of Tacoma

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PACIFICON 2010 Is Coming Soon!

Ham Radio Convention Returns to the San Francisco Bay Area
October 15-17, 2010, San Ramon Marriott Hotel
San Ramon, California

For Event Schedules, Latest Updates and Ticket Sales go to:

www.PACIFICON.org

Call the Marriott Hotel Reservations Desk at 1-800-228-9290
before October 1, 2010, to ask for the special Pacificon rate of \$90/night.

PACIFICON 2010 Events Include:

** Friday All-Day Antenna Seminar ** Friday Legal Seminar ** Friday Evening Open MDARC Meeting
** Saturday Keynote Breakfast & Evening Banquet ** Outstanding Technical Forums ** Ham Equipment Exhibitors
** Great Swap Meet ** Daily Radio Prize Drawings ** ARRL Forum ** Transmitter Hunt ** ATV Activities
** HFpack Activities ** Ham License Exams ** Saturday All-Day Technician License Class ** Boy Scout JOTA

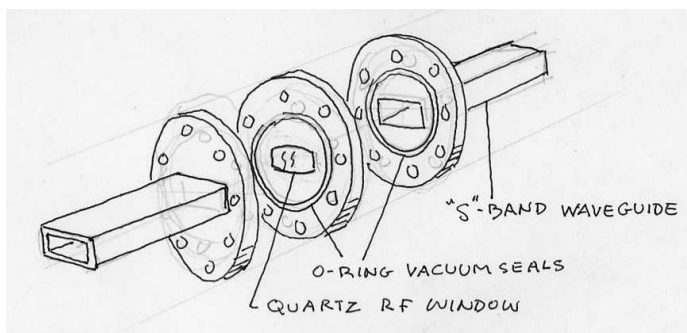
We encourage you to share this email with others who you think might be interested

The Linear Accelerator, a technician's view

Part-5 The vacuum system

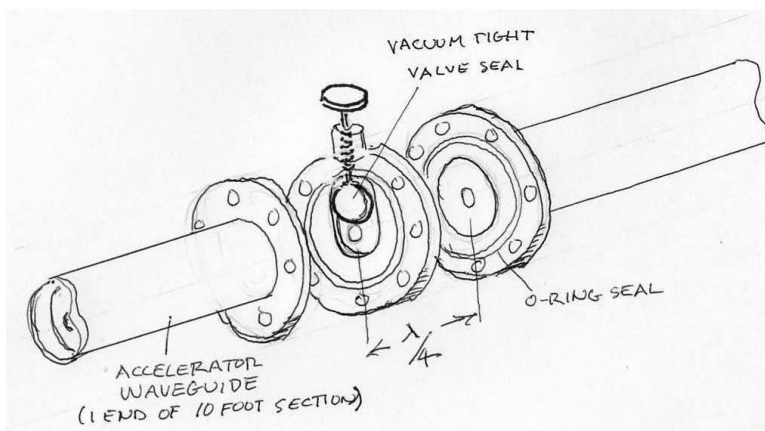
It was not practical or necessary to pump all parts of the accelerator to the same vacuum as the klystron tubes. Still, it was necessary to pump everything to precisely calibrated pressures and to monitor and automatically shut down the machine triggering system in the event of overpressure. This left us with several problems -- or as the boss liked to say -- *challenges*. One was to seal various systems from each other while letting RF pass without too much loss.

The first problem -- er -- *challenge*, was overcome with a quartz RF window mounted between wave guide connecting flanges, allowing for different atmospheric pressures on opposite sides of the window.



(Fig 5-1)

A second, somewhat more difficult challenge was to construct a vacuum tight shutoff valve that could be inserted between sections of the main RF wave guide without disturbing the phase of the traveling wave. The engineers came up with a design that was exactly a quarter wave thick with lapped flanges and o-ring seals that actually worked! I don't remember what the material for the vacuum seal was. It might have been Teflon but I'm not sure. In any event, it allowed us to remove parts of the machine for maintenance while the rest was under vacuum.

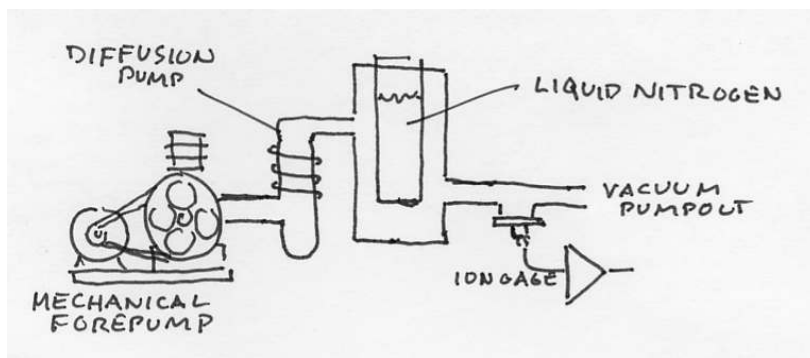


(Fig-5-2)

A third area of concern was to pump the various systems to the desired pressure and to monitor the vacuum to instantly shut down the high voltage trigger system in case of an overpressure. This last item was critical because excess atmospheric pressure in any part of the accelerator could cause electrical breakdown or excess radiation due to beam collision with air molecules --usually

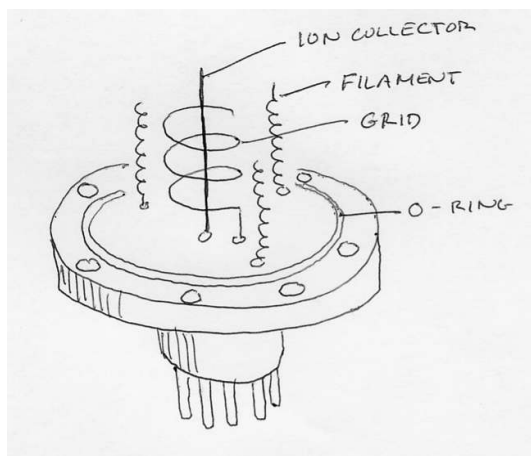
both, along with a lot of other unpleasant side effects.

Mechanical forepumps did the bulk of the work. These were supplemented with diffusion pumps and liquid nitrogen cold traps. The diffusion pump consisted of a heating element to vaporize oil molecules and other contaminants emitted by the fore pump. A liquid nitrogen cold trap then condensed the vapors, trapping them before they could enter the system being evacuated.



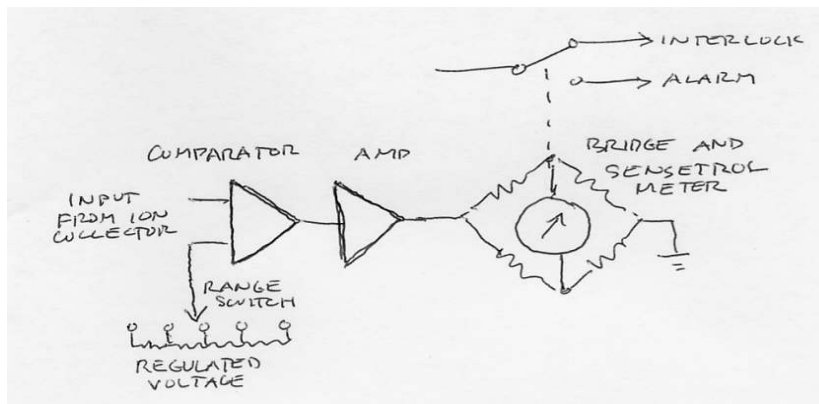
(Fig 5-3)

The vacuum was monitored with ion-gage amplifiers located at strategic places about the accelerator. A typical ion-gage was constructed on a standard wave guide flange. It consisted of three filaments surrounding a loosely spaced wire grid which, in turn, was wrapped around an ion collector wire. The filaments were arranged in a symmetrical pattern and wired in series. Electrons emitted by the filaments ionized any gas molecules in their vicinity. The positive ions were attracted to the negatively charged "ion collector". The electrons were then collected by the positively charged grid.



(Fig 5-4)

An Ion Gage Amplifier provided the regulated voltages to operate the gage and monitor its output. The ion gage output was compared to a reference voltage determined by a "range switch". It was then amplified and used in a bridge circuit to operate a sensetrol relay to interrupt the interlock to the main trigger generator.



(Fig 6-5)

A typical ion-gage amplifier was capable of accurately measuring vacuums as low as .0000000000000001 millimeters of mercury but were generally used in the .00000001 to .0000001 mm range.

So now we have the basic systems in place to operate the accelerator--the electron gun and cavity loaded accelerator wave guide, the High voltage power supply and pulser circuits, The Klystron amplifiers, and the vacuum pumping and monitoring system. In the final installment, I'll talk about the daily routine involved in the "care and feeding" of the monster.

Paul Honore' W6IAM

Rev-2, July 2010

50th Anniversary.....memories

On August 1, 1960, I was granted my first amateur radio license...KN7NIA. I was stationed on Okinawa at the Army Hospital as a medical corpsman, and it took me only 3 months more to get the 13 wpm code speed and technical knowledge to go up to a Conditional Class as K7NIA. I also had a temporary Okinawa license KR6MQ, but that was canceled when I returned home in 1962. My first HF voice contact was KC4USV (McMurdo Sound - Antarctica), and I received a wonderful QSL card with all white background and a penguin pictured on the front.

Lots of phone patches were run for the folks at the hospital and service people. I continued that after I got home and set up for HF, but by 1970, Cycle 20 turned out to be not nearly as hot as Cycle 19 and I went on to other things, but I always kept active on the air. I took my trusty Kenwood TS-430 onto my 38' Nauticat motorsailer and even around Vancouver Island in 1993. The rig went to Germany in 1995 and I operated as DL1JHM from the attic in our leased home with a 36" loop antenna. The TS 430 went into our motorhome when we were full-timers after I retired in 1998, but now the rig is in the Diamond Point firehouse, as Fire District #3 property. I didn't really get into VHF/UHF until I arrived in Sequim in 2001. Most of you know about my activities here.

So there's a little history about my 50 years as a ham. Now that August 1, 2010 has come and gone, I raise a glass to you all and encourage you to seek out the interesting activities ham radio has to offer, and enjoy!

Vy 73, John Moore K7NIA

Canadian Picnic

"Hey, Everyone...Our annual potluck picnic with our Canadian friends is Sunday, Aug. 15th. It will be held at the Holy Trinity Church on Chase and Lopez, Port Angeles. If you go into the Port Angeles Library parking lot, will end up behind the church. It will start around 12:00 or 12:30. See ya there!!"

Club Committees

Technical Co-Chairs: Bob Sampson, K6MBY
Steve Debiddle, W6MPD

Membership Chair: Becky Winters W7RJW

Activity Chair: Callie Kroll N7YMU

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

Field Day Co-Chairs: Dennis Tilton, AD7TV Al Fisk KD7TFK

PIO Chair: Becky Winters W7RJW

Net Coordinator: Becky Winters W7RJW

Health and Welfare: Chuck Jones N7BV, Rich Golding N7NCN

Web Site: Rik Scairpon, WX7RIK, David Hannon KE7TTT, Bob Sampson K6MBY, Al Popowski
W7ALP

ANTIQUA RADIO SWAP MEET

The Puget Sound Antique Radio Association will hold its 28th annual swap meet on Sunday, August 15, 2010 in the North Seattle/Shoreline area. This community event, the largest of its kind in the Northwest, attracts collectors from California to Canada. The public is encouraged to bring old radios of their own that they wish to sell. Sellers can tailgate or bring their own table. Admission is free there is no charge to buyers or sellers. A \$5.00 donation is recommended for sellers.

Information on radio restoration and repair services will also be available to aid collectors in returning their old sets to their original condition.

The Swap Meet will take place from 9:00 AM to 1:00 PM in the Shoreline Museum parking lot, North 175th and Linden Avenue North, just west of Aurora Avenue.

A large exhibit of antique radios and related items will be on display in the museum during the Swap Meet. This collection has been assembled and maintained by The Puget Sound Antique Radio Association, a non profit group dedicated to the preservation and appreciation of these vintage sets. Membership information will be available at the Swap Meet.

For more information, please visit our Web site at <http://www.eskimo.com/~hhagen/psara/index.html>

Thank you.

Norman L. Gilinsky, Vice President
Puget Sound Antique Radio Association

FOR SALE OR TRADE

PROGRAM FOR August 11th

"Micro-Lite Dxpedition to South Georgia VP8GEO".

Your Ad Could Go Here

Your Ad Could Go Here

Clallam County Amateur Radio Emergency Service (CCARES)

The Clallam County ARES is organized in two levels; as an affiliate of ARRL/ARES and as the recognized RACES organization by the Clallam County Division of Emergency Management. Membership in CCARES is open to all licensed Amateur Radio Operators that are residents of Clallam County, who first register with ARRL/ARES through the Emergency Coordinator. They are not required to attend training meetings and function as a second response unit in emergencies.

CCARES members in good standing may register in the RACES program with the Clallam County Division of Emergency Management (CCEM) and serve as a primary responder during emergencies. RACES members are the core of the organization and are expected to attend training meetings and participate in drills and other events.

FROM OUR TREASURER:

First Federal Savings & Loan of Port Angeles Balance: \$ 8,031.09
Outstanding Cheque: - 100.00
Checkbook Balance: \$ 7,931.09

Thanks,

David R. McCoy,
KE7JEJ
CC-ARC Treasurer

BIRTHDAYS:

Birthdays for August, 2010 and the first week
of September, 2010:

- Fontaine Jr., Claude (Ralph) AF7DX Aug-04
- Fisk, Albert KD7TFK Aug-12
- Judd, Nola E. KC7ZNW Aug-12
- Hicks, Casey KJ7XE Aug-14
- Hoffeld, Donald WA6JTW Aug-24
- Stroeher, Charles WA7EBH Aug-26
- Uhden, Roger K7RGR Aug-26
- Peterson, Richard KE7Z Aug-27
- Diemer, Alicia (Lee) L. KE7TTY Aug-28
- Scairpon, Rik WX7RIK Aug-28
- Cowen, Stan KI6HCW Sep-06

YL's Birthdays for the same period:

- Baguley, Mrs. Michael (KE7RFP) Aug-06
- Abbott, Wendy (Dan N7DWA) Aug-22
- Tilton, JoAnn (Dennis AD7TV) Aug-27

Happy Birthday!

**Please welcome the following
new members who joined the CC-ARC
recently!**

No new members this month

NEXT YL LUNCHEON
Tarcisios, Sequim
 August 13th

Time: 11:45 a.m.

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

2010 YL Luncheons:

2010 - CCARC Ladies Luncheon Schedule
 Reservations are made for 11:30 - 2nd Friday of each month

July - Toga's - 122 W. Lauridsen Blvd. - Port Angeles

August - Tarcisios - 609 W. Washington - Sequim

September - Sergios - 205 E. 8th - Port Angeles

October - Fortune Star - 145 E. Washington - 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, first Tue of every month	Clallam County Courthouse EOC, 223 E. 4 th St., PA	Dan Abbott N7DWA 360-582-3824
Clallam County Amateur Radio Club general meeting	7 pm, second Wed of every month	Olympic Hospital Linkletter Room, PA	Tom Newcomb KE7XX 360-452-8228
Clallam County Amateur Radio Club social breakfast	8 am, first Sat of every month	Joshua's Restaurant Hwy. 101 & Del Guzzi Dr.	Tom Newcomb KE7XX 360-452-8228
Clallam Country Amateur Radio Club YL social lunch	11:45 am 2d Fri of every month	Rotates - announced on Thursday night Net	

CLUB OFFICERS For 2010

President: Nita Lyman KE7DRT 360-461-4629 Nita_lyman@yahoo.com

Vice President: Dennis Tilton AD7TV 360-452-1217 3tiltons@wavecable.com

Secretary: Bill Carter W7WEC 360-6814375 w7wec@arrl.net

Treasurer: David McCoy KE7JEJ 360-457-8550 mccoy.d.r@olyphen.com

Board Member (Chairman): Johan Van Nimwegen KO6I 360-681-7300 jvn@olyphen.com

Board Member: Al Dawson W7YLV 360-457-0752 adawson@tfon.com

Board Member: Chuck Jones N7BV 360-452-4672 N7BV@yahoo.com