CLALLAM COUNTY AMATEUR RADIO CLUB

QTC

APRIL 2006

THE PRESIDENTS LOG

Happy Spring Everyone:

We are seeing a bit more daily sunshine, the days are longer and the baseball season has started! My Oh My!

We have two new CCARC Life Members, both very deserving of the honor. Mary Tate, AC7IY and Tom Newcomb, KE7XX were nominated and unanimously elected in March. I believe I can speak for all when I offer sincere thanks to both of you for all your help and contributions over the years. The club would not be as effective without your efforts.

Recently I was contacted by a local ham who is getting out of the hobby and wished to donate his collection of QST magazines to the club as reference materials for all members. I now have in my possession a complete set of QSTs beginning Jan 1996 through March 2006.

Field Day will be here before we know it and plans will be discussed over the next three months. This year I hope to have a greater ARES / RACES presence than has been shown in past years. My intention is to display the "hobby" side of Amateur Radio as well as the public service that we provide in times of emergency. I have contacted the new Clallam County Director of Emergency Management and the ARES / RACES Steering Committee regarding my suggestions for preparation. Hopefully we can make this year's Field Day more meaningful to the general public.

Speaking of Field Day, 2006 T-shirts and pins are now available. Shirt sizes are Small, Medium, Large, XLarge, 2XLarge, 3XLarge, $12.95 each and the pins are $5.00 each. Last year ARRL ran out of some shirt sizes, and I don't want that to happen to any of our members. I am putting together an order starting immediately which I will charge to my credit card. Payment will be collected at delivery. Please contact me either on the air or at k7ina@aol.com to order.

Remember Amateur Radio is a contact sport.

See you on the air.

73, Russ, K7INA

Get Your License Here!

Your club has scheduled another Technician Class for May 6, 13 and 20 in the Training Room at Port Angeles Fire Department. The classes will run from 9 AM to 5 PM on the first two days and a review will be conducted on the morning of the third day with tests at 1 PM.

If you know of anyone interested in taking this class please have them contact **Tom Newcomb, KE7XX, at 452-8228.**

We encourage the students to pick up a text book as soon as possible. These books are available from Tom Newcomb at a cost of $19.95.
If there is enough interest we will have another General Class in June.

Clallam County ARES/RACES

Clallam County ARES/RACES is actively looking for new members and would like you to consider joining our emergency communications group.

This year we have planned quarterly field exercises. The Department of Emergency Management will be conducting an exercise May 23-25. This will be a multi-agency, multi-jurisdictional exercise hosted by the United States Department of Transportation Region 10.

Training will be conducted at each general meeting the second Tuesday of each month. Bill Carter, W7WEC will do a briefing on packet radio. This month the topics are Chapter 1 from the ARRL Emergency Communications Handbook will be reviewed. Additionally the Revised Chapter 3 of our local Operations Manual "Communications Plan" will be presented.

All RACES members will be required to pass the FEMA training IS-700 and IS-100 by the end of the year. This has been mandated by Homeland Security and is available on-line at http://training.fema.gov/EMIWeb/is/.

Richard Edes WA6CUE EC Clallam County

Note: Richard is stepping down as the ARES EC and RACES RO effective April 4th. Chuck Jones, N7BV has been appointed by the ARRL to replace him.

See www. Hello-Radio.org for information on the new ARRL 2006 public relation and marketing campaign based on the word "HELLO."

RIP

May 24, 1844—January 27, 2006

Effective January 27, 2006 **Western Union** has discontinued all Telegram and Commercial Messaging services.

PROGRAM FOR THE APRIL 12th MEETING

Please join us for an Automatic Position Reporting System (APRS) presentation by Bill Carter, W7WEC.

Thanks: AC7RK N7BV W7WEC

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.

MEMORIES OF 6W8 LAND

Submitted by Chuck Jones, N7BV

In the spring of 1974, I arrived in Dakar, Senegal for a tour of duty with the U. S. Embassy along with my wife and two daughters. Faced with a wait of several months for a house to be found and made ready for occupancy (yes, you got it; don't plan ahead for housing), I proceeded to gear up for my first ham radio operation since my Navy days on Midway Island in the mid 60's. In this endeavor, I sought out the Old Man of Senegal - Jock, 6W8DY and joined the 6W8 radio club. Jock was a French Canadian Catholic Friar teaching at a secondary school in Dakar. To most English speaking Hams, Jock was "Mr. Senegal", and for those on the low bands (40M/80M), practically the only chance for a 6W8 contact. As there was no reciprocal licensing, nor was Amateur Radio common in this West African country, getting a license wasn't a sure thing. With Jock's tutoring (and a State Department French class), I interviewed with the authorities and submitted my application for a Senegalese Ham license.

In the mean time, we moved into our house and started making it a home. The house was a four bedroom split level with – are you ready for this - separate access to the lower level second wife's quarters. Not having a second wife, and knowing it wasn't going to happen soon (I'm a realist), part of the second wife's quarters became my ham station. I convinced my first wife her sewing room would be best off upstairs!

When the call came regarding my license, I rushed downtown to the PTT (Post Telegraph & Telephone) headquarters building and raced up to whatever floor the license office was on (remember, this was some 30 years and 60 pounds ago)! The official congratulated me and handed my license (it looked like a two page passport) to me - 6W8FP. I looked over the document, which was written entirely in French. It was actually a commercial license limiting transmissions to the amateur bands but I noticed radiotelegraphy was crossed out. In my best French I said "but sir I want to do zee radiotelegraphy". The official simply said I had to pass a test – no sweat, where and when. He picked up a display rock from his desk and started to tap out Morse code on his desk, Whoa – this isn't going to work – I don't know key clicks. So I asked if I could send code to him, no problem, he handed me the rock. I began taping out the text from the license. After one page (about 30 words) he stopped me and said a new license would be ready for me to pickup the next day – yea! Oh, almost forgot – his copy was 100%!

I began operating, keeping in touch with some of my friends back in New Jersey and soon we had a small group that met daily around 2000 GMT on 14295. One day I was complaining I was tired of being hassled every time I got on the air by people looking for a 6W8 contact. One of my friends suggested I take up contesting – which would allow more contacts and maybe make 6W8 not so rare (today I'm not sure of his logic, but it sounded reasonable then). Well, I looked up the next contest, read the rules – CQ WW SSB so I prepared 25 copies of the log sheets, mounted CQ magazine's zone map on the wall. I carefully explained to my 'first' wife what I was going to do – stay up from Friday midnight to Sunday midnight contacting people on my radio – would she mind bringing me food and drink…. Huh?!

And so was born my love of contesting – by Saturday afternoon I was running out of log sheets. 'First' wife, please go down to the Embassy and make more copies - about 30 more - and copies of this country/zone list which apparently I'm supposed to keep track of also.

There is much more to tell about my three-year stay in Senegal, the friends I made, antennas I tried, the local radio club meetings (in French) and other things associated with being a ham in a foreign country. Those will have to wait for another time however!

Repeater Report

By Casey Hicks KJ7XE

PERFORMANCE

I have not received any complaints of degraded performance in the past number of months. Russ K7INA and I noticed that the newly installed fan tray is doing very well towards keeping the in-cabinet temperature down to safe levels, this is particularly important during continuous conversations lasting for hours at a time. However there are some trouble spots that I would like to cover:

About two months ago there were a couple occasions where the repeater locked up in a transmit state and required a DTMF over-the-air reset. Both the repeater controller manufacturer and I are at a loss as to why this is happening. The problem occurs very infrequently (once or twice a year) so it is difficult to troubleshoot.

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Continued - Repeater

I still have a few things I plan to try out to see if the problem goes away, particularly additional RFI suppression and slight modification of a few interface circuits between the controller and radio transceiver.

If you are listening to the repeater and notice that the transmitter is locked on continually and there is no courtesy tone after anyone unkeys, please notify either me, Russ K7INA, or Roger K7RGR by phone as soon as possible so one of us can enter the proper code to reset the repeater.

This last summer I noticed a slight amount of extra hiss, clicking, and popping in the transmit audio that is more than normal, which could possibly indicate that some components in the transmitter may be wearing out (it's over 25 years old and is past it's life expectancy). However, I checked recently and the noise is no longer present. I am continually seeking spare GE Mastr II station parts to keep on hand in the event there is a failure.

There is an issue with the repeater's receiver performance during high winds at the site. It appears that when the repeater is receiving a weak signal, it is being intermittently cut out with additional noise, which can cripple communications during heavy weather. After some tests at the site, I determined that this is most likely being caused by a damaged antenna nearby our antenna on the tower, or our antenna itself is defective. Troubleshooting this problem will require climbing the tower and shaking various antennas on the tower while a weak signal is being received by the repeater. This coming summer a tower work party will need be arranged to tackle this one. I am noticing that there are quite a few folks using the Carlsborg East End remote receiver (77 Hz CTCSS tone) and are having a hard time being heard by the repeater. This is because the Carlsborg site is what's known as a 'low site' and is not intended to cover the entire east end of the county - it's there to cover areas that would otherwise be noisy or dead spots when using the main Striped Peak receiver (100 Hz CTCSS tone). It should be general practice for east end users to primarily use the Striped Peak receiver, and switch to the Carlsborg remote receiver only if you know that it covers your area better than Striped (such as Bob KI7ZC's location up Lost Mountain road). Striped Peak is at a 'high site' and has line-of-sight coverage to a good portion of the central and east ends of the county. The remote receiver should also be thought of as a redundant receiver in the event the main Striped receiver were to fail.

Continued Page 7—Lower Right

FOR SALE OR TRADE

Heathkit SB200 with two new 572s runs 400+ PEP output on most bands with 75 watts drive. Modified to operate on 160 meters as well as 80-10 meters. VHF parasitic mods from Rich Measures added. HV diodes replaced but original power supply capacitors. $250.00 or best offer

Contact Bob Sampson 582-9116 or email at-k6mby@olypen.com

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ICOM IC-211, 2 Meter SSB, FM, CW, 10 Watt Digital Synthesized Transceiver. Excellent condition with manual $100.00

Contact Jim Cloud 457-9299

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Kenwood TS-830S transceiver, SP-230 speaker and AT-230 antenna tuner for sale. Package price is $500, negotiable. All cosmetically great and in good working order.

Contact John Moore 681-2425 or email at k7nia@hotmail.com

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Wanted for a local Handi-Ham.
100 Watt antenna tuner with built in SWR bridge and meter.

Contact Johan Van Nimwegen, KO6I@olypen.com

PCB Design Services

Printed Circuit Board design services by Paul, WB8BVK. Turn those breadboards and prototypes into printed circuit boards. Thru-hole and surface mount, single and multi-layer (up to 16 layers) capabilities. Give me your schematics and specifications and get back Gerber and drill pattern files ready for the foundry.

Got an idea for a circuit that requires a microprocessor/microcontroller but don't have the knowledge or capabilities to design it in? Give Paul , WB8BVK a call or email. 683-6072, pbenedum@earthlink.net

COMING EVENTS

May: The first running of the 7th Call Area QSO Party (7QP) has been scheduled for the first weekend of May. Building on the success of other regional QSO parties, the founders believe that the eight states of the 7th Call Area will offer a fun and challenging operating event. The mystique of the "wild west" will be included as the theme of the event. See www.7QP.org for details as things unfold.

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SEA-PAC 2006 - June 16-18, 2006 in Seaside, Oregon! Seaside Convention Center. Registration and Entry Fees - $8 for pre-registration, $10 at the door. See http://seapac.org/ for details and online registration.

Vashion-Maury Island Radio Club offers combined 2 meter /70 cm Antennas for Sale.

Do you need a sturdy, well-performing external antenna for 2-meters and 70-cm? The Vashon-Maury Island Radio Club W7VMI builds and sells dual-band J-pole antennas as a fund-raising activity. These are constructed from a design (http://www.fwarc.org/Ant%20articles/J%20Pole%20Antenna.htm) made available by the Federal Way Radio Club and originally published by Arrow Antennas. They work! Most of our new club members and new licensees get one as a base antenna and we use them on our comm trailer.

The antenna is usable over the entire bands and each one is checked with an SWR analyzer to be sure it works. There are two versions - one with a one-piece 2-meter element (57-1/2" long) and one with the 2-meter element in two pieces that can be unscrewed for easier packing. The solid 2-meter element version is best for base station use. The resonant frequency can be adjusted by loosening the mounting nuts and turning the elements. The antennas are made from solid aluminum rod and stainless steel nuts. They are very sturdy - we build them in a member's machine shop so the threading and drilling are professional quality.

Continued on last page

Q Signals by Bruce Thompson W7DNA

Having been away from active amateur radio for rather a long time I have found the re-learning curve to be moderately steep. Much has happened in ham radio since I was last on the air. With this thought in mind I decided that if I am not to appear the total lid it behooves me to get up to speed with my operating skills, not the least of which would be my cw and phone jargon. Nothing says lid like a person fumbling for the correct and appropriate Q signal. This scenario must be avoided at all costs! We all know the easy ones, QTH, QRM, QSL, QRT, etc. However, fearing that I might stumble even on these I decided to do a Google search for the complete list, which I found, and make a deposit in my memory bank. It is amazing just how many Q signals that there are! I am sure that most of the signals on the list were conceived during the early days of marine radio telegraph, and hardly any of those would be appropriate on today's amateur radio bands. (QLB = send a life boat.) However, there were quite a few Q signals which I had forgotten that will be most useful on the amateur bands and I will include them here, to wit:

QBO = Don't sit next to ---------- at club meetings.
QBS = Its getting deep in here. or: QBS = Clean the bird ---- off your antenna so you can hear me.
QDR = Do you have a receiver? (this is a response to QRL)
QET = Someone from another planet is calling you.
QLF = Are you sending with your left foot?
QRG = Am I transmitting in or near an amateur band, if so, which one?
QWC = I have to go to the bathroom. And finally,
QZZ = Is that a 60 Hz. hum, or are you snoring?

I hope my fellow amateurs will find these lesser known Q signals as helpful as I know I will. **73 de Bruce W7DNA**

Say "hello" to your microphone!

The microphone - the device you talk into to modulate your radio - is defined by *Miriam Webster* as "An instrument whereby sound waves are caused to generate or modulate an electric current for the purpose of transmitting or recording speech or music." Notice the distinction between the words "generate" and "modulate." They imply different mechanisms for converting mechanical energy to electrical energy. In fact, there are a great many differences between individual microphones - differences such as sensitivity, frequency response, output impedance, pickup pattern and so forth. You can build a microphone out of just about anything that will conduct electricity. Drive two nails horizontally into a piece of wood, for instance, and connect them to an audio amplifier. Lay a third nail across the other two and you have a crude microphone. It will respond (rather poorly) to variations in contact resistance induced by changes in air pressure as you speak.

Carbon microphone

In 1876, when Alexander Graham Bell spoke the immortal words, *"Watson, come here, I need you,"* into his first working telephone, the device he used to convert sound waves into electrical energy was a container of loosely packed carbon granules - a kind of voice modulated variable resistor. Direct current passed through the granules was modulated by changes in air pressure. Although capable of delivering a high output, the ***carbon microphone*** had a narrow frequency response - in the order of 100 to 5,000 Hz, was inherently noisy, and it gradually lost sensitivity as the granules became polarized by the applied current and tended to stick together into a coherent mass. Despite its many drawbacks the carbon microphone was used in military field transmitters and aircraft radios into the 1950s.

Following WW-II, thousands of surplus carbon microphones became available and were used by Amateurs the world over. If you are interested in "vintage radio," chances are you'll run across a carbon microphone sooner or later. It can be adapted for use with modern equipment by adding an external power supply and impedance matching transformer but there are better and cheaper ways of modulating your transmitter.

Dynamic microphone

A different approach to converting sound waves to electrical energy is the ***dynamic microphone*** - a coil of wire attached to a flexible diaphragm and suspended between the poles of a magnet. Sound pressure on the diaphragm moves the coil through the magnetic field, inducing an electric current in the coil. Think of it as a loudspeaker in reverse. Rugged and inexpensive, the dynamic microphone yields a high output with a cardioid or uni-directional pickup pattern. Output impedance is high - in the order of 20,000 ohms. "Professional" versions yield a reasonably flat frequency response of approximately 50 to 15,000 Hz and incorporate a transformer to match a balanced line of 50 - 600 ohms. Dynamic microphones are available in every style and price range and most can be used to modulate a radio with clean, realistic voice quality.

Velocity (ribbon) microphone

Radio broadcasters and recording studios have long favored the ***velocity*** or ***ribbon*** microphone***.*** It is a variation of the dynamic microphone consisting of an aluminum ribbon suspended between magnet poles and directly modulated by sound pressure. Although weak in output and extremely sensitive to shock, the velocity microphone yields a rich, warm high-fidelity sound. It is equally sensitive in the front and back directions with a figure eight or bi-directional pickup pattern. A precision instrument with a very flat frequency response of 20-20,000 Hz or better, and designed to feed a balanced line of 50-600 ohms, the velocity microphone can make a very fine desk mic for a base station if filtering is used to limit its response to voice frequencies.

If you can find a used one in good condition it will be worth every bit you are likely to overpay for it. Take care not to overload the ribbon by blowing or speaking too loudly into it. Maintain a distance of at least two feet from the microphone and speak past, rather than directly into it. A derailed ribbon can be very expensive to replace.

Condenser microphone

The ***condenser microphone*** is basically a variable condenser where one plate is fixed and the other is a movable diaphragm.

Continued next page.

Microphone—Continued

The condenser is a low output, high impedance device requiring a d.c. "polarizing" voltage and very short leads to a high gain nuvistor or transistor preamplifier. Frequency response is essentially infinite and the pickup pattern is omni-directional. Condenser microphones designed for laboratory use and commercial music recording can run into many hundreds of dollars. The preamplifier is contained within the microphone housing and designed to drive a low impedance balanced line. Direct current to the condenser and preamplifier is usually provided by a remote "phantom" power supply and fed to the microphone through the shielded audio cable.

The ***electret condenser*** microphone is an inexpensive variation commonly used in most modern hand-held radios and headset mics. The dielectric used for the condenser is made from Carnouba wax which will hold an electric field charge indefinitely. No power supply is required and the microphone can be made very tiny.

Some important considerations

Any of these microphone types can be used with Amateur equipment but each will require some degree of "tinkering" to match the input impedance, audio level, and frequency response needed to modulate your radio properly. Unless you have access to an oscilloscope to monitor the waveform, it won't be easy to determine modulation level and distortion.

If in doubt, it's best to stick with the original equipment supplied with your radio. Your microphone isn't likely to fail but if it does, try to obtain a replacement that will directly interchange with the original. That way you shouldn't need to make any adjustments.

To avoid distortion and "breath pops," talk past the microphone rather than directly into it. If your radio is hand held, hold the mic to one side of your mouth. Speak slowly in a normal tone of voice. Enunciate clearly and use ITU phonetics to spell out difficult words. This is especially important in emergency communications where crisp, clean speech is critical. Remember: "WHAT I THOUGHT I HEARD IS NOT NECESSARILY WHAT YOU MEANT TO SAY!"

Paul Honore W6IAM

(***Great article Paul....Ed)***

OPERATING SKILL OPPORTUNITY OFFERED BY KO6I

Everything you ever wanted to know about setting up and operating an amateur base or mobile station. This setting will be ideal for beginners or old timers who want to refresh their skills. My new shop is located just north of the Grey Wolf Elementary school on the east side of the street at 288 Carlsborb Rd. Turn in at the New Lighthouse sign and be careful of the 20 MPH speed limit in the school zone.

Bring your questions as we will have experienced Elmers to help. I am just beginning to put my new station together and as such you will be able to see first hand how a base station is designed and set-up. We will also cover mobile installations and have a fully equipped test bench for demonstrations and trouble shooting as well as a technical reference library.

If there is interest we will plan to build electronic projects as part of the program. Our first gathering is on Saturday April 22nd 11am. If you want more information please call Johan KO6I at (360) 809-0777 or Chuck N7BV at 452-4672.

Continued—Repeater

ONGOING PROJECTS

The project to bring repeater coverage to the west end is still in progress. I placed a 440 MHz repeater on the air at North Point last fall for test purposes, which is linked to our Striped Peak repeater. Initial tests show that North Point is not an optimum site and does not provide adequate coverage to the west end. There is also a multipath issue with the link signal coming to and from Striped Peak. The North Point site was chosen for the test because it is a site powered by commercial power and has free rent for the duration of the test.

It was decided by the CCARC board last year that $2500 shall be set aside to build a linked west-end 440 MHz repeater using CCARC-owned equipment, and that the Ellis Lookout DNR site will be the location where it will be permanently installed. I will be working with Roger and Russ in the coming months on getting the frequency coordination process started for a permanent 440 MHz repeater pair (the one I am using now is a test frequency offering no interference protection), and informing our co-channel repeater owners (Federal Way ARC) of the proposal, which we're required to do as per the co-channel agreement. I have not acquired any equipment as of yet,

Continued Page 8—Lower Right

CLALLAM COUNTY AMATEUR RADIO CLUB
Minutes of the General Meeting 3/8/06

The meeting was called to order at 6:58 PM by President Russ Fish, K7INA.

Introductions were made around the room.

The program was then presented, given by Larry Morris of the Clallam County PUD. He shared information on our power source, power lines, distribution of power in the county, and electrical safety.

Russ announced that the Board of Directors of the Clallam County Amateur Radio Club has authorized Life Membership for Mary Tate, AC7IY and Tom Newcomb, KE7XX.

It was also announced that the club has started publishing a newsletter again. It is titled "QTC" which means "I have traffic." It can be downloaded from olyham.com. Chuck Jones, N7BV, is temporary editor. (A volunteer is needed to become the editor.) We are reminded that this is the members' newsletter, and we are asked to contribute items for the newsletter. The deadline for submitting items is the last day of the month.

Further announcements:

Since the minutes and treasurer's report will be published in the newsletter, corrections and/or acceptance will be asked for at the next general meeting.

The Lincoln Park 10K Marathon Run will be held this Saturday. Frequency to be used is 147.52 simplex, and possibly the 146.76 repeater. Also, on Saturday 4/8/06, there will be running at Robin Hill Park.

The Mike and Key Club Fleamarket will be held at Puyallup this weekend.

The XYL luncheon is this Friday at 11:30, at Mama's Restaurant on Lincoln St.

The next club meeting will be Wednesday, 4/12/06.

The new Club Directory is ready to be proofed.

Roger Steelman, W7GRS, said he has a satellite dish to give away.

Tom Newcomb thanked Russ and the club Board for the honor bestowed on him.

The meeting closed at 8:10 PM (There were 35 members and guests in attendance.)

Minutes by Rich Golding N7NCN

FROM OUR TREASURER:

The bank balance as of 3/20 was $4591.15

VOC Frank Doherty ARRL VE

CLUB OFFICERS For 2006

President: Russ Fish K7INA 360-452-9195
k7ina@aol.com

Vice President: Roger Uhden K7RGR 360-681-7450
k7rgr@olypen.com

Secretary: Rich Golding N7NCN 360-683-9309
n7ncn@myfam.com

Treasurer: Frank Doherty KJ7SK 360-681-0691
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Board Member: Roger Steelman W7GRS 360-681-3534
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Board Member: Chuck Jones N7BV 360-4524672
n7bv@yahoo.com

Board Member: Tom Newcomb 360-452-8228
ke7xx@arrl.net

QTC Editors: Nita Lyman, KE7DRT, Chuck Jones, N7BV, Bob Sampson, K6MBY
Please send submissions to the QTC via **CCARCQTC@YAHOO.COM**

Continued—Repeater

but plan to work with Chuck WA7EBH to get it all purchased by the end of this summer. I also plan to utilize the assistance of Steve N6DPP, a new member to the Club and also a professional in the land mobile radio industry with a myriad of experience.

For those who would like to try using the west end test repeater as it sits now, the frequency is 441.425, +5 MHz offset, 103.5 Hz CTCSS tone. The repeater can be heard in most of the county, but is weak in many areas.
More to come next month, so please stay tuned, and PLEASE remember to ID yourself when kerchunking the repeater (even I am guilty of this)!

YL LUNCHEON

The April 14th luncheon will be in Sequim at the Cedar Creek Cuisine at 665 N. 5th Avenue.

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!**

Continued from page 5 ——Antennas

We use anti-oxidation compound on every nut and thread, too. We like this design because the coax connector is mounted vertically, which tends to keep the connection drier. Both versions of the antenna cost the same - $30, including tax.

We can make arrangements for a group buy or ship them individually. You won't be disappointed!

73, Ward Silver N0AX W7VMI President n0ax@arrl.net

Description	Time/Date	Location	Contact
Clallam County ARES/RACES meeting	7 pm, first Tue of every month	Clallam County Courthouse EOC, 223 E. 4th St., PA	Richard Edes WA6CUE 360-582-0932
Clallam County Amateur Radio Club general meeting	7 pm, second Wed of every month	Port Angeles Fire Station 5th & Laurel Streets, 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	

APRIL BIRTHDAYS:

Hal Berry (Life Member) KL7HAY, April 12th
Al Dawson W7YLV, April 13th
Rich Golding N7NCN, April 16th
Carl Uhden KG6EI, April 25th

Happy Birthday!

NET CHECK IN HONOR ROLL: Stations that have checked in more than half of the Thursday night net check ins (in alphabetical order)...they are...drum roll please....

N7BV, Chuck; WB8BVK, Paul; KE7BVZ, Jerry; W7DNA, Bruce; KE7DRT, Nita; AE7EA, Steve; KG6EI, Carl; KE7ENQ, Steve; KE7EZS, Leah; W6FEH, Bob; N7GAM, Gail; N7HFL, Chuck; W6IAM, Paul; K7IDX, Bruce; AC7IY, Mary; K7KEA, Elizabeth; WA7LDM, Jim; W7LG, Gil; KC7LTW, Donald; K5MTW, Don; N7MXE, Bliss; WA7NBF, Neil; N7NCN, Rich; K7NIA, John; KC7NMN, Bess; K7QCK, Jim; K7RGR, Roger; KJ7SK, Frank; K3SWH, Jerry; KD7TFL, Jerry; AC7TZ, Howard; K7VQF, Ray; W7WEC, Bill; KE7XX, Tom; KI7ZC, Bob; KC7ZQA, Shirley

Submitted by Russ K7INA

Seen at the Puyallup Hamfest

Steve Flatt AE7EA, Chuck Jones N7BV, Bob Kennedy AC7RK, Bruce Thompson W7DNA, Chuck McGilvra N7HFL, Bob Sampson K6MBY The Vashion Island Club 144/440 J Pole antenna was selling like hotcakes. There was everything from screws to 4-1000 amplifiers. Lots of vintage transceivers, telegraph keys, and WWII military equipment (been a long time since I had seen an ARC-5).