CLALLAM COUNTY AMATEUR RADIO CLUB

QTC

JUNE 08

BV Rambles:

Well we are almost half way through the year and Field Day looms large on the horizon.

Newcomers may not know how Field Day works, so here is a run down (in no particular order and not inclusive):

Everyone gets to operate during the operation period – used to be called a contest but we are not supposed to use that word anymore – however the listings by the ARRL still reflect how many contacts are made and are in rank order. I guess if you come in last place you are supposed to pretend it is first place – but I digress.

All Amateur Radio operators within Clallam County are invited to participate – so if you know of a non-member who looks misty-eyed when you mention you are going to Field Day – invite him or her to join us.

Here in Clallam County Ernie, "All About Pizza", W7WEG provides us with pizza on Friday evening. Besides the best tasting pizza going, Ernie has a divide to conquer with Burt about pizzas with pineapples!

Saturday lunch through Sunday breakfast is provided and paid for by the club. This is where some of those club membership dollars go – about a quarter of them.

Club members volunteer to bring personal equipment, tents, antennas, antenna masts, and generators to use. This year if the creek doesn't rise too high we will have a SSB tent, a CW tent, Digital (maybe with SSB) and VHF operations. We will set up eight to twelve antennas for these operations.

Other members volunteer to buy, cook and serve food to the hungry contest operators – whoops I mean hungry operators.

Other members prefer to participate by just helping put up the tents, antennas etc. and just as importantly tear down at the end.

ARES members will support the effort by manning the repeater for Talk-in, manning an information table, give tours of the Incident Command Vehicle and the site.

Others prefer to just drop by and visit.

Still others will stop by to find fault, but each to his own.

We have been hit by some last minute glitches which will need to be ironed out. More at the meeting this Wednesday.

There will be an educational class Saturday June 28th at 1330 (1pm) which will detail each antenna type used at Field Day, why they were chosen and other information about them.

Please come out and support your club.

Again thank you for the time and space..

Chuck, N7BV

Get Your License Here!

The next scheduled Technician, and a necessary General Class sessions will be held September 13/20/27 .

There will be an all level Exam session the afternoon of 27 September.

We are going to explore the possibility of a July/August exam only session.

Contact: Chuck Jones, 452-4672 or
Tom Newcomb 452-8228

EXTRA EXTRA READ ALL ABOUT IT

The Extra class (Element 4) was released December 1, 2007 and will become effective July 1, 2008.

The current Extra Pool will be valid until June 30, 2008.

Electronics Fundamentals class

Don't forget -- Saturday, June 14th is the last class in the Electronic Fundamental series. We'll be covering Units 15 through 21 and final exam (Just kidding!)

Paul Honore' W6IAM

Answer!

For last month's resistor quiz. The resistance between point A and B is one hundred divided by three. The quickest way to see the solution is to redraw the circuit.

73, Bill Carter, W7WEC

PROGRAM FOR 11 June

Antennas 101 by Ward Silver, the Author of Ham Radio Fo Dummies!

See Page 3

We need articles for the QTC newsletter. This is after all 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 the better our newsletter will be.

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.

FROM Janet Parris, WA7JEP CCARC Public Information Officer. As sent to the media.

Clallam County Amateur Radio Club to Host Renowned Amateur Radio Expert and Author, Ward Silver, at Presentation 6-11-08, 7 pm. Port Angeles, WA , June 11, 2008: Ward Silver, amateur radio expert and author of several books on Ham Radio, will be making a presentation to the Clallam County Amateur Radio Club Wednesday, June 11, 2008, at 7 pm at the Port Angeles Fire Station on Laurel and 5th Street . The subject of his presentation will be "Antennas 101". The meeting is open to anyone interested in the Ham Radio hobby and is free of charge.

Mr. Silver got his first Amateur Radio license in 1972 when he was in high school. This led directly to a career in Electrical Engineering. After 20 years of engineering, in 2000, he started a second career as a teacher and writer. He wrote Ham Radio for Dummies in 2004, now in its third printing and one of the most widely-read books about ham radio ever. His latest Dummies book, Circuitbuilding for Dummies - Do It Yourself, was released in February of this year. A compilation of his electronic how-to columns from QST, "Hands-On Radio", was published by the ARRL in April. At last count, he has published thirteen titles.

Competitive operating really gets his ham radio juices flowing, whether individually or in teams, and he's been fortunate to operate from world-class stations on several continents, including HC8N in the Galapagos Islands and as part of the US team for the 2006 World Radiosport Team Championships. He finally got to go on a Real Radio expedition in 2005 as part of the K7C team's adventure to Kure Atoll west of Midway and managed not to wreck the boat, even though he was permitted to pilot it more than his experience at sea warranted.

While living on Vashon Island, near Seattle WA , he worked closely with community leaders and the Vashon-Maury Island Radio Club (W7VMI -www.w7vmi.org) to provide effective emergency communications. Working together, the fire district, CERT, and radio club members have created one of the best local communications systems in the state of Washington . The club is active in recruiting and training new hams, performing public service, and having a good time on the air, too!

This year, he received the humbling and unexpected honor of being selected as the Dayton Hamvention's "Amateur of the Year" for 2008. He has also received the second Bill Orr Technical Writing Award (2003) from the ARRL and has a couple of QST cover plaques for most-popular article, as well. He continues to pursue a variety of writing and editing projects with the ARRL, such as the training manuals for all three license classes and the ARRL Contest Update - a bi-weekly newsletter (www.arrl.org/contests/rate-sheet) read by nearly 17,000 subscribers.

He has been very gratified to be recognized as having made a contribution to this amazing hobby and service and says that he owes a lot to the friends and readers that have encouraged him to continue to write and provided him with ideas, corrections, and guidance.

73, Janet WA7JEP

TO: All WWA Section Affilated Clubs

Thanks to all who took the time to update your club information on the ARRL club website. I have taken the data from the ARRL site and updated our Section club information.

Take a look and verify that the information is correct. I will ask K7CEX to place this summary on the Section website when he returns.

My plan is to next update our WWA Section summary in late January 2009 after most annual elections have been completed and you have had time to make your annual report (update the club information on ARRL site).

Please make sure you pass along to any new officers the requirement to make this annual report to the ARRL. If the new officers don't know of this requirement it tends to fall to the wayside. Remember that after two years of non-reporting, ARRL will designate your club as "Inactive" and drop you from the affiliated club site.

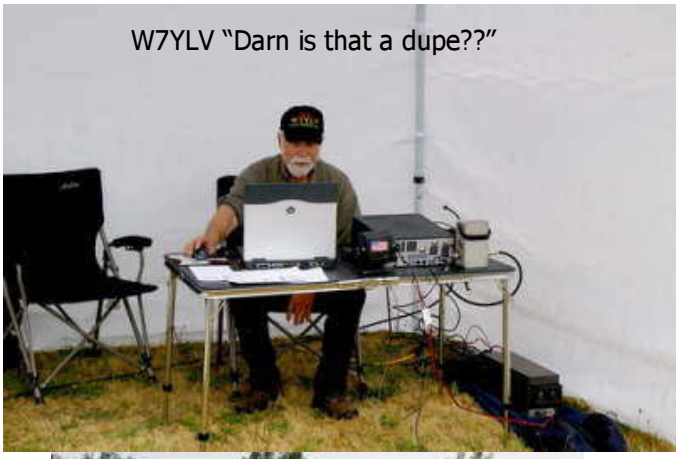
There are several clubs who have in the past made the decision to become a Special Service Club (SSC). For those interested in making the application or renewal, the ARRL site makes it pretty easy.
http://www.arrl.org/FandES/field/club/forms/fsd7/index.html
I encourage you all to take a look at this 'special club' designation, as many of you are already meeting the requirements.

For those of you who are not aware, Jim - K7CEX has created a first draft of a "Speakers Listing" and placed it on our section website.
http://www.arrl.org/sections/?sect=WWA
If you are looking for programs for club meetings its a good place to start. If you would like to added to this list, or if you know of other speakers to add to this listing, please take the time to send me or Jim an email with the information to add to the speakers listing. It would be benefit to us all to build this resource.

One last thing. I am in need of additional help. There are 41 clubs in our section, within the six districts. It would be ideal if we had at least one person in each of the six districts to take on the job of Assistant Affiliated Club Coordinator. If you know of someone or you yourself may be interested please let me know.

73
Kim - AC7YY
WWA Section ACC

Please give some thought to this Email and hwhat/how the club should venture into this arena. Thanks, Chuck and Bob



W7YLV "Darn is that a dupe??"

COMING EVENTS

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3rd Annual
Port Ludlow Amateur Radio Club - N7PL
Old Fashion - Tailgater Swap Meet
Saturday, June 21, 2008
Setup at 07:30, Starts 08:00, Runs to Noon

There is no Entry Fee. Sell from your trunk or tailgate.
Radio and Computer Equipment only please.

The coffee pot will be on and a test table will be provided with 110VAC & 12VDC

Read the details at http://www.n7pl.org/swapmeet.html

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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.

Clallam County ARES/RACES

Clallam County ARES/RACES is actively seeking new members and would like you to consider joining. This is a chance to prepare to be part of a solution during an emergency.

January and February meetings are being used to re-register members under a new ID system with the County Emergency Management office.

All RACES members will be required to pass the FEMA/NIMS training IS-100 and IS-700. These courses are free and have been mandated by Homeland Security. They are available on-line at http://training.fema.gov/EMIWeb/is/.

Dan Abbott, N7DWA, EC Clallam County

CLALLAM COUNTY AMATEUR RADIO CLUB
Minutes of the General Meeting May 14, 2008

The meeting was called to order at 7:00 P.M. by club president, Chuck, N7BV.

The Pledge of Allegiance was given.

Introductions were made around.

Chuck N7BV announced that the Pacific DX Club meeting will be held in Portland.
The ARRL sent a thank-you to the club for donating to the scholarship fund.
Club members are encouraged to join the ARRL, and first-timers are encouraged to join through the club.
A get-well card to Wes W7MAW was sent around during the meeting for members to sign.
Chuck asked for help in delivering new name badges to new members.

Chuck introduced Paul W6IAM, who presented the program, which was his great adventure as part of a film crew tracking down an Iban (Borneo) headhunter. It was a fun, interesting and educational presentation.

After break, Chuck asked members to give him input on what the members might like to have presented by Ward Silver N0AX at a future meeting.

The rest of the meeting was devoted to discussion of Field Day.

Matt KC7EQO stated we need generators for power. There was discussion of who could bring them.
A way is needed to mount the portable tower to the trailer.
Paul W6IAM, as safety officer, pointed out the need to look at equipment grounding, things that might be a tripping hazard, and antenna RF.
The Club operation will be at the west end of the fairground.
Johan KO6I will do the VHF/UHF stations. There will also be SSB, CW, and more.
The food committee needs a count of who will be eating when. The Red Cross will do a practice mass feeding for the Saturday lunch.
The drawing for the TM-D710-A will be held at the Saturday evening meal time.
Setup will begin at 11 A.M. Friday.

It was moved and seconded that the meeting be adjourned. Motion passed. Meeting was adjourned at 8:57 PM.
There were 35 members and guests in attendance.

Minutes by Rich N7NCN

Electronic Fundamentals (Unit-)

The multimeter

Before proceeding further with this course, let's take a side trip into the wonderful world of test equipment. After all, you probably would not have read this far without at least planning to lift the lid on your transciever to see what's inside -- maybe do some calibration or repair. So let's start at the beginning. The basic tool for any kind of electronic work is the **multimeter,** sometimes called a **volt-ohmmeter (VOM).** No electronic tool kit should be without one and you can use it to measure any of the things we've talked about so far.

Multimeters come with analog or digital readouts. Although they perform many of the same functions, Digital **Multimeters (DMMs)** are a different cat altogether, processing and displaying information in finer detail than their analog counterparts. All multimeters are useful but, like most things in life, you get what you pay for. Let's take a look at a typical mid-price VOM, it's the instrument on the left in this picture.

(Fig-1)

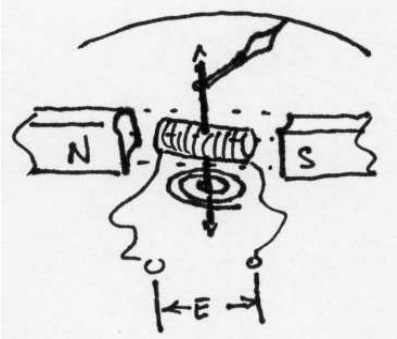
The VOM contains an analog meter with several scales,

Ohms	Read from right to left with zero at the right ,
AC Volts	Read from left to right,
DC Volts	Read from left to right
DC Milliamperes	Read from left to right
dB-	Read left and right from zero

A mirror is provided so you can align the indicator needle with its reflection to be sure you are reading the scale correctly. There is rotary switch with positions for each of the meter scales, and a pair of test leads. There is also a thumbwheel adjustment labeled "*ohms adjust*" Somewhere on the meter scale you'll find a very important piece of in formation that says something like 1000 ohms per volt or 20,000 ohms per volt. It tells you how much load the meter will put on the circuit you are testing. For very rudimentary measurements, 1000Ω per volt will do but for average circuit testing, at least 20,000Ω per volt is a necessity. Modern integrated circuits must be tested using a **DMM,** or an older vacuum tube voltmeter **(VTVM)** These are high impedance instruments containing active amplifiers so as not to load down the circuits they are measuring.

The basic functions of both kinds of meter are the same so I won't go into the details of the DMM here. It is a rather delicate and expensive instrument and unless you intend to do precise calibration of your equipment, you won't need one.

The meter in an analog VOM is an electro-mechanical device called a D'Arsonval movement after the inventor and professor of experimental medicine, Jaques D'Arsonval, (1851-1940),



(Fig-2)

A coil of wire is suspended between magnet poles and connected to a pair of terminals. When current is applied to the coil, it is deflected by the magnetic flux to move a needle across a scale. A coil spring applies a counter force to allow positioning of the needle for a given amount of current. The device is simple and elegant, requiring very little current to deflect the needle full scale.

To make the meter read a given voltage, only requires a resistor in series with the coil. Remember ohm's law, I=E/R ? Suppose the basic meter movement requires 1 mA of current for full scale deflection and we want that the meter to read 100 V full scale. What resistance would be needed?

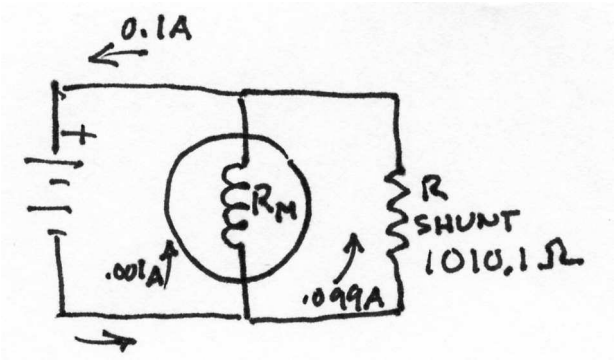
Answer: **I = E/R, .001 = 100/R, R = 100/.001, R = 100,000Ω (100k)**.

With a resistance of 100k in series with the meter movement, any applied voltage less than 100V will deflect the needle only part way up the scale. For instance, at an applied voltage of 50V, the coil will draw,

I = E/R, I = 50 / 100,000, I = ..0005A or **.5mA**

The needle will be deflected half way up the scale so the voltage scale would be marked 50V at that point. As you can see, the meter can be calibrated to read any desired voltage simply by changing the value of the series resistor. And that's exactly what is done in the VOM. The selector switch chooses a resistor value appropriate for the full-scale range of voltages to be measured. For AC measurements, a rectifier is added and to read current, the meter is shunted by a resistor across the coil. Suppose we want the meter to read a full scale deflection of 0.1A. We need to shunt the coil with a resistor that will draw all but

.001A What we have here, is a parallel circuit where one resistor is represented by the meter movement and the other is the unknown resistor in our formula.



(Fig-3)

Here's where Kirchoff's law comes to the foreground. We know that the total current for full scale deflection should be 0.1A and we know that the meter movement draws .001A. Mr Kirchoff states that the sum of the individual currents in a parallel circuit must equal the total current flowing in and out of the circuit. Therefore the current flowing through our unknown resistor must be
.1-.001=.099A So, let's pick an arbitrary voltage - say, 100V as our source voltage. Using ohm's law, we get:

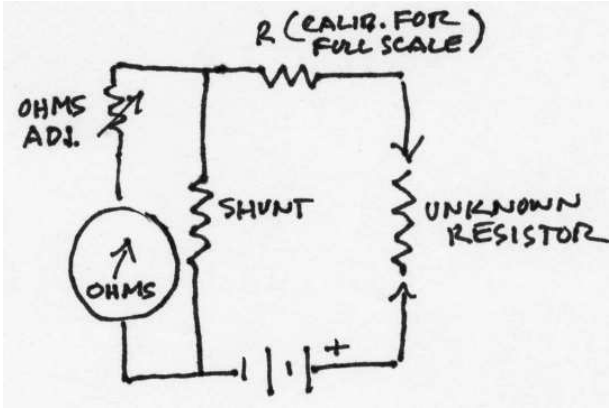
.099 = 100/R, .099R=100, R=100/.099, R=1010.1Ω

There's one more thing to consider. The shunt resistor must handle 0.1A of current without burning up. Using Watt's law, we can calculate the power dissipation of the resistor**.**

P = IE P =.099 X 100, P = 9.9W

So, to conduct a maximum current of 0.99A, we will need a **1010.1Ω 10W resistor.** This is a non-standard resistor value so it can be fabricated by placing two or more resistors in series or parallel to bring the total resistance to the exact value needed. The rotary switch on the VOM selects appropriate shunt resistors for the current scales.

In order to read resistance, the meter must supply a known voltage to the unknown resistor and display the resistor value in ohms, based on the amount of current the resistor draws.



(Fig-4)

An internal battery supplies the voltage, and the meter is shunted to read current. An "ohms adjust" potentiometer is placed in series with the meter coil to allow accurate zeroing of the meter scale. A series resistor, selected by the rotary switch, determines the range of unknown resistances to be measured. To measure an unknown resistor, the test leads are shorted together and the meter is zeroed. Then the test leads are placed across the unknown resistor. Its value is indicated on the appropriate **ohms** scale. A word of caution: It is essential that all power be disconnected from a circuit when making resistance measurements or the meter can be severely damaged. To prevent catastrophic failure, a fuse is supplied but it might not blow quickly enough to prevent meter burnout.

Before connecting the VOM to any circuit, think about what it is you intend to measure. Don't try to measure voltage with the meter switched to resistance or current. Unless you know for sure what you are probing for, start at the highest scale then switch down to a lower value for a more accurate reading. When working with energized equipment, keep one hand in your pocket. Work safely!

In this unit, I've shown the analog Multi-meter and described its principle of operation. There's nothing mysterious about it. You can use any meter with a sensitive movement to read any conceivable amount of voltage or current. In fact you can purchase meter movements with blank scales so you can "build your own" In the next unit, we'll discuss capacitance.

Terms to remember:

DMM	**Digital multimeter**
Multimeter	**Meter calibrated for several kinds of measurement**
Shunt resistor	**Resistor in parallel with a meter coil to increase the range of current to be measured**
VOM	**Volt-ohmmeter**
VTVM	**Vacuum tube voltmeter**

Paul Honore' W6IAM

Subject: International Lighthouse and Lightship Weekend (ILLW) Event
Date: Fri, 6 Jun 2008 18:42:32 -0700

INTERNATIONAL LIGHTHOUSE / LIGHTSHIP WEEKEND

This highly popular annual amateur radio event (not a contest) will be held over the week-end of 16-17 August 2008. There were 380 lights on the air from 48 countries last year. All you need to know about the event is contained on the official web site at http://illw.net <http://illw.net/.
Originating in 1999, the event is organized and managed by the Ayr Amateur Radio Group in Scotland since the passing of the founder of the weekend, Mike Dalrymple,GM4SUC, in December 2005.

To register for the event go to the web site at http://illw.net and complete the online entry form so you can be listed on the entrants page. Any questions about the event can be sent to Kevin, VK2CE, the ILLW Webmaster and Coordinator via the web site email facility.

Publishing this notice in your club bulletin or sharing it with your club members would be most appreciated.

Kevin, VK2CE
ILLW Webmaster and Coordinator
http://illw.net/

Silent Key.

Wes Doty W7MAW
On May 24th, 2008

I show Wes as being a club member Since 1987, but I'm sure he was a member longer then that.

Chuck
N7HFL

Wes was one of the regulars at the monthly Breakfast, may he rest in peace.

Thursday Night Club Net

Congratulations to the following hams who checked into the Net every week during the month of May:

N7BV Chuck	KE7DRT Nita
W7DTG Theron	N7HFL Chuck
KE7JEJ David	K7NIA John
K7RGR Roger	W7RJW Becky
K7WZ Bill	

John, K7NIA Net Control Coordinator

FOR SALE OR TRADE

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I am looking for work on weekends and after school (2:30) to make money to pay for my Drivers Ed. I can be reached at (360)452-6614 or ke7lka@yahoo.com Thanks, Jody

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2m/440 dual band J-pole antenna. Excellent antenna and price $20. Similar to http://arrow-antenna.com/j-pole.html Made by KN7R. Proceeds to ARES. Chuck, N7BV or Burt, KN7R

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WB0NAI Lue needs tower climber call 452-2045

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Wwo 14AVQ vertical antennas, with manual, looking for deserving homes. Free, you pick up, in Sequim. Available in early July. If interested, drop me an email at w6su@att.net.
73, John W6SU

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FROM OUR TREASURER:

As of May 26th, 2008:
First Federal Savings & Loan of Port Angeles

Balance is:	$ 3,579.54
Outstanding	- 100.00
Current Book Balance:	$ 3,479.54

CD at WestSound Bank (6-month, 2.50% APY):	+ 1,025.04
CD at WestSound Bank (18-Month, 5.13% APY):	+ 3,000.00
Total Cash Assets:	$ 7,504.58

The 6-Month CD matured this in May, yielding interest of $25.04 and was reinvested at West Sound Bank for another 6-months (along with interest earned) at the prevailing rate of 2.50% APY.

David R. McCoy,
KE7JEJ -.- . --... .--- . .---
CC-ARC Treasurer

June Birthdays:

Baker-Wilson, Jan	N7JAN	Jun-02
Golding, Rich	N7NCN	Jun-05
Lindecrantz, Robert	K7PVZ	Jun-11
Church-Smith, Henry A. (Pete)	KG4IXZ	Jun-13
McGilvra, Chuck	N7HFL	Jun-14
Edes, Richard	WA6CUE	Jun-16
Kagan, Jerry P.	W6JGC	Jun-16
Jones, Chuck	N7BV	Jun-17
McPherson, Robert W. (Bill)	KE7RFM	Jun-18
Stearns, Mary	N7MES	Jun-19
Hubley, Jack	K7JBH	Jun-25
Doherty, Frank	KJ7SK	Jun-29
Drath, William A.	K7WWU	Jun-29
Kasicki, Charles	KE7KVZ	Jun-29
Lyman, Nita	KE7DRT	Jul-03
Newcomb, Shirley	KC7ZQA	Jul-05

YL's Birthdays:

Jones, Karen	N7BV	Jun-05
Dundas II, Jody	W6SU	Jun-06

YL LUNCHEON

June 13th Danny's in the JC Penny Plaza – Next to Police Sta. – Sequim

Time: 11:30 a.m.

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

2008 - CCARC Ladies Luncheon Schedule
Reservations are made for 11:30 – 2nd Friday of each month

June – Danny's - JC Penny Plaza – Next to Police Sta. – Sequim
July – Michaels – 117 – 1st St. – 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 – Paradise – 703 S. Sequim Ave. - Sequim

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	Chuck Jones N7BV 360-452-4672
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	

CLUB OFFICERS For 2008

President: Chuck Jones N7BV 360-452-4672 n7bv@yahoo.com

Vice President: Bob Sampson K6MBY 360-582-9116 k6mby@olypen.com

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

Treasurer: David McCoy, KE7JEJ 360-461-5470 mccoy.d.r@olypen.com

Chairman of the Board: Tom Newcomb 360-452-8228 ke7xx@arrl.net

Board Member: Bob Kennedy AC7RK 360-457-6177 ark@tenforward.com

Board Member: Bill Carter W7WEC 360-681-4375 bcarter@olypen.com