

## CLALLAM COUNTY AMATEUR RADIO CLUB

QTC  
JULY 09

### DRT's Shack:

Happy Independence Month Members!!

Now that Field Day is behind us, let's all take a little time for family, friends, yard and garden work, and for those fortunate enough, go do some fishing. Summer is here, the weather is being cooperative, so here's to getting out to play, no matter what you like to do...maybe even work on that 'honey do' list. I know, I know,...thank me later. :)

Matt, KC7EQO, will have the total contacts acquired from Field Day to us all soon, as we've yet to have the "paper party gathering", but we'll know soon. Perhaps meeting night!

The GOTA station was a training/learning opportunity for WX7RIK this year, as Tom, KE7XX, feels it time to hand off the torch. He knows he's always welcome to take command, as it's never easy to pass on something so dear to heart. It's second nature to him I suppose, after a 'few' years at it. Thank you Tom, for your sincere, dedicated, unselfish service to us all. You are the Superman in this Club, and always will be! Many young and future Hams earned their Get On The Air pin from you, so here's to many more! Many had that curiosity bug, and that's where we sent them. Thanks Rik, for taking on the responsibility of manning the GOTA station for so many hours!

Also to Paul, W6IAM, and Lee, KE7TTY, for taking full responsibility for the Welcoming Station, representing ARES, which had many visitors, and a pro, Paul, to answer question.

Matt made 6 satellite contacts that I'm aware of, and his station, as always, was lit up with every known contraption a Ham can think of. Not positive, but I'll bet his station ran close to 24 hours. Good job Matt in bringing in so many extra points.

Al, W7YLV, on 75-80 meters, is always one of those stations where it's non-stop, when your hot, your hot. Then the sun sets, and well, you all know how that band changes. Many worked this station with great success, and when a YL gets on when an OM can't get through, a contact is made and heads start shaking back and forth. Sorry fellas, it's just one of those things! Thank you Al for always being there with your equipment, as this station helps the new Generals communicate with ease.

CW had some issues, but contacts were made, and Theron, W7DTG, was the keeper of that tent. He even made a coil wrapped around a cola can, hooked it up to the fair ground fence to get better reception, but since I can't get that 'music to my ears' CW down yet, and he was doing all he could to make contacts, I'm sorry I didn't spend more time in there learning. Next year I'm hoping. With the Friday morning CW get together, I just may have it by then! Fun was had by all, including Mayor Gary Braun, who enjoyed lunch with us and also presented to us our City's Proclamation.

Thanks to each and every one who came to set up, work each station, break down on Sunday, clean up, only to do it all over again in one short year.

A special thanks to Al, KD7TFK, for his trailer, tools and time, and to Chuck, N7BV, for his hard work in setting up before visiting his friends at Ft. Flagger. His presence was missed, but his commitment to the CCARC surely was helpful and appreciated. To all, it was a Field Day that we can be proud of, as everything went smooth, we did what we could to make as many contacts as possible, but mainly for the smiles, laughter, and for sharing the week-end with everyone that could be there. Next year, same time, same local!

See you there, and hope to see you Wednesday night at OMC, meeting starts at 7PM.

73's,  
Nita KE7DRT

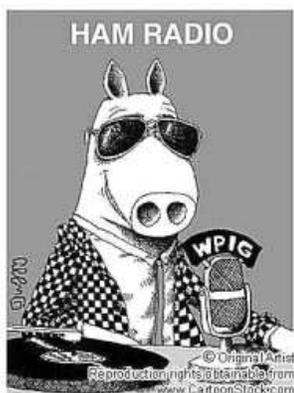
**Get Your License Here!**

The CCARC Amateur Radio License Classes will be

0845-1700 Saturday September 19th & 26th Review on October 3d. Exam Session at 1300.

If you know of anyone who would be interested in a Technician or General Class license please have them 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 how the QTC works.

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

**PROGRAM FOR July 8th**

**Cline Wilson (W7CNN) trip to the Antarctic**

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.

The passing of Leah, after a long illness on June 18th was tough to take for those who knew her.

We hear platitudes all the time about celebrities, but Leah was a celebrity in her own right. Even though she battled cancer and a host of other problems she was always there with a helping hand and advise if you asked her. Sometimes the advise was there even if you didn't ask for it, but the thing was, it was good and given with only the good cheer she could deliver.

I gave up trying to remember all the clubs and things she was into, ham radio, spinning, weaving, red hats and others that went in one ear and out the other. For us in the ham radio club she was our social chairperson. She organized the Field Day Food, the Canadian Pot Luck. and the Christmas Pot Luck. Even in failing health last year she insisted on doing all three of them. She also volunteered one time to teach one of the Technician chapters in our class sessions and brought to it her flare for teaching. It was way different from the normal fare and brought the class into active participation.

Like many others who knew Leah I feel a loss that will be hard to fill. We who knew you are blessed for having done so. RIP. KE7EZS de N7BV 73 & 88, SK

**CLALLAM COUNTY RADIO CLUB**  
**Minutes of the General Meeting June 10, 2009**

The meeting was called to order by club president, Nita Lyman, KE7DRT.

The Pledge of Allegiance was given.

Self introductions were made by those present.

The minutes of the May 13<sup>th</sup> meeting were approved as published in the QTC.

Announcements:

We should be careful about exceeding our band privileges during Field Day. We can operate at a level higher than our own license only if a person with a higher level license is physically present, for example in the GOTA tent and not out getting a cup of coffee.

Matt Lawson, KC7EQO, is not getting the newsletter. He should contact David McCoy, KE7JEJ, per Chuck Jones, N7BV.

Chuck Jones' Sunshine Committee announcements: Leah Benadum, KE7EZS, is in critical care as of yesterday with multiple health issues and Nola Judd, KC7ZNW, is recovering from a car accident. Cards are being sent around for you to sign.

It was moved, seconded and passed that 50% of the proceeds from the raffle go to purchasing flowers for these two. A discussion followed regarding flowers and meeting other needs.

UPDATE ON FIELD DAY from Matt Lawson, KC7EQO:

Matt showed an example of the wooden signs created for outside and inside the Fairgrounds. Schedule sign up sheets will be on a clip board behind the small signs. Paper logs will be used and we will have a paper party afterward to fill out the 2009 official Field Day log. We are going 3A not counting alpha and the GOTA tent.

We have enough generators but are short on tents. GOTA has an easy-up but it has no sides. Matt has blue tarps and Al Fisk, KD7TFK, has furniture blankets to create sides. Al Dawson, W7YLV, will have his tent. Al Fisk has tables and other Field Day supplies but bring your own chairs.

We are planning to configure antennas so they will cause the least amount of interference with each other.

DISCUSSION: A discussion on antennas followed. It was determined that we will be able to get enough antennas but one needs guy rope which the club will buy.

Matt asked Paul Honore, W6IAM, to be Safety Officer again and he agreed as long as : (1) hard hats are worn when working on antennas, (2) all generators are properly grounded, (3) ribbon tape or flags are on tent ropes or guy wires. (4) there is a fire extinguisher by each generator.

We will have pizza both Friday and Saturday nights. During the day Saturday, the food will be sandwiches and chips. Breakfast Sunday morning will be muffins and fruit.

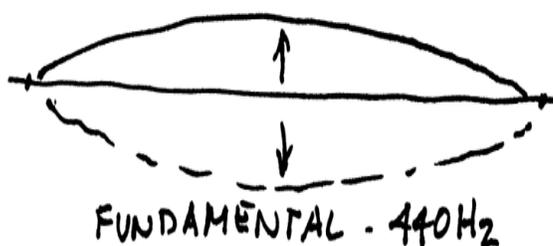
Nita will get the key to the Fairgrounds gate. We can get in by 9 AM Friday but no setting up until 11AM.

## Electronic Fundamentals, Part-1 (*Analog Circuits*)

### Unit-16 Transmitters and modulation

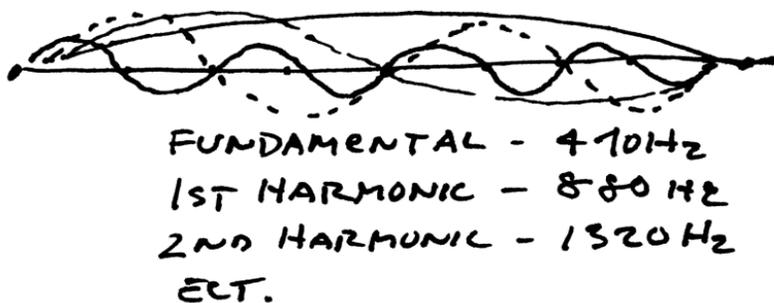
The heart of every radio transmitter is an oscillator, either a stand alone element, often referred to as an **exciter**, or as an integral part of a transmitter or transceiver circuit. If the frequency of transmission is low enough it can be produced directly by a crystal or a variable frequency oscillator (**VFO**). For transmitters operating at higher frequencies, the output of a low frequency oscillator is multiplied to the desired output frequency. Let's take a look at the multiplication process.

If you strike a key on a piano. Say the key of "A" above "middle C", the piano string corresponding to that key will vibrate, producing an audible sound. The fundamental frequency of vibration -- the frequency at which the whole string vibrates is 440 Hz.



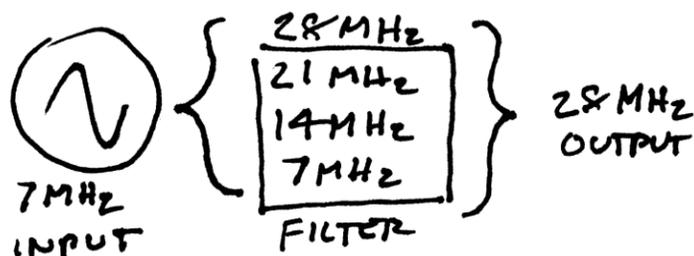
(Fig 16-1)

If the string were to vibrate in this manner only, you would hear a "pure" tone like a tuning fork; not like the sound of a piano at all. What gives the piano its characteristic sound is the string vibrates in such a way as to produce the fundamental tone plus **harmonics** of the fundamental frequency. The harmonics, at  $2 \times 440 = (880\text{Hz})$ ;  $3 \times 440 = (1320\text{Hz})$ ,  $4 \times 440 = (1760\text{Hz})$ , etc blend with the fundamental, to produce a much richer sound.



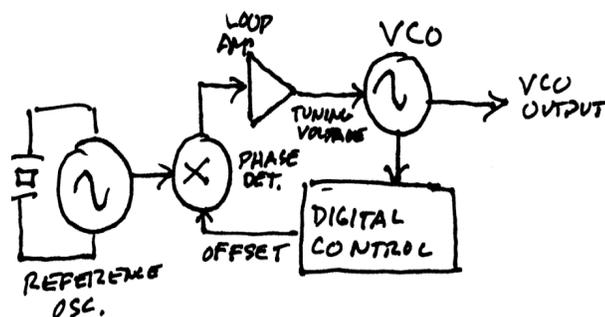
(Fig 16-2)

If we begin with a low frequency crystal oscillator and distort the sine wave in such a way that it produces harmonics, We can choose any one of the them and filter out the fundamental and all the rest. The chosen harmonic then becomes the frequency that is used to produce the transmitter output. Let's suppose we want The transmitter output to be 28 MHz. We could begin with a crystal, oscillating at a frequency of 7 MHz and ensure that the output was rich in harmonics. The first harmonic would be twice the oscillator frequency or 14 MHz. The second harmonic would be 3X the frequency, or 21 MHz. The third harmonic would be 4X the frequency, or 28 MHz., We would then pass the third harmonic and filter out all the rest.



(Fig-3)

Crystal oscillators are rare these days. They are still used but most oscillators in modern transmitters are VFOs, able to tune over a wide range of frequencies. This isn't as easy as it may seem. Vacuum tube Hartley and Colpitts oscillators found in "boat anchor" transmitters are notoriously unstable and tend to drift with changes in temperature and power supply voltage. They can be stabilized but it isn't easy. The difficulties have largely been overcome with the introduction of solid state microchips and a technique called **Phase Locked Loop**, ( **PLL**), The way it works is this:



(Fig 16-4)

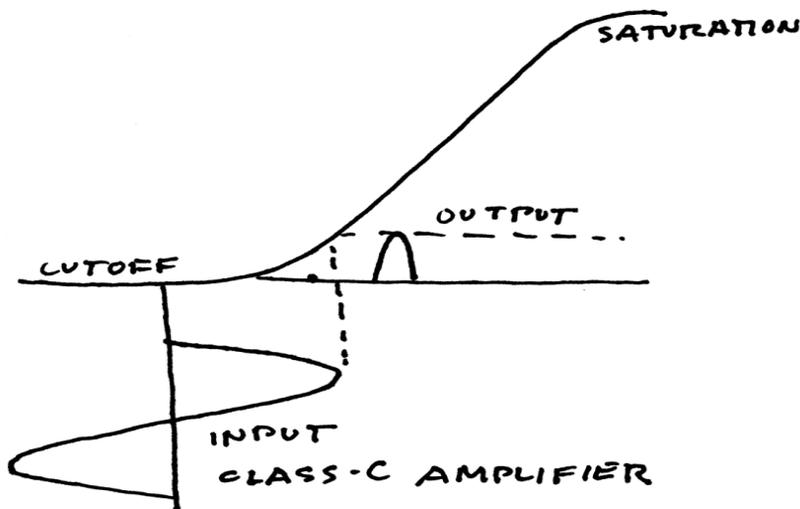
A voltage controlled oscillator, **VCO**, is sampled and compared to a crystal-generated reference frequency in a circuit called a **phase detector**. Any phase shift between the oscillator output and the reference source is amplified and converted to a DC voltage used to control a varactor diode to keep the VCO locked to the reference frequency -- at least that's how it works in principle. In practice, the VCO output frequency can be anything you choose. It doesn't have to be related in any way to the reference frequency. A pre-programmed microprocessor calculates the difference and automatically compensates for the offset between the VCO frequency and the output from the reference oscillator. A well designed PLL synthesizer will remain frequency stable over a wide range of environmental and operating variables. Whatever type of oscillator is used, its output is amplified by one or two buffer stages before driving a final Class C amplifier and tank circuit to produce a sine wave at the desired transmitting frequency, called a **carrier**.

### CONTINUOUS WAVE (CW)

So far, no information has been impressed on the carrier. We could simply switch it on and off with a telegraph key to produce Morse code signals. Keying can be done at any stage but is usually done at the final amplifier. A "shaping" circuit is used to soften the attack and decay of the carrier to eliminate key "clicks" and spurious signals beyond the carrier frequency. Except for the most rudimentary QRP transmitters, the oscillator won't have enough

power output to radiate much energy, Besides, any load on the oscillator will tend to affect its operation so one or more buffer stages follow the oscillator. The final amplifier is usually a Class-C amplifier.

In a class-C amplifier, the vacuum tube or the transistor is biased well below cutoff so conduction takes place only for a very small part of each cycle.



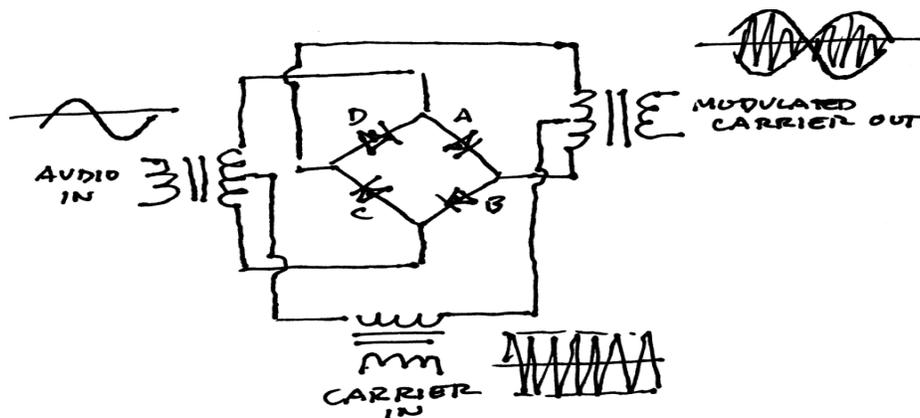
(Fig 16-5)

An LC tank circuit resonates at the frequency of the applied signal and smoothes it into a sine wave. If an external power amplifier is added to increase transmitter power it will be a linear amplifier, designed to operate over an extremely broad range of frequencies with no tuning required.

**AMPLITUDE MODULATION (AM)**

Audio modulation may be applied to any stage but it is usually done at the final amplifier stage. Since very high voltages are present in the tank circuit, an isolation transformer is used to couple the modulator to the final amplifier.

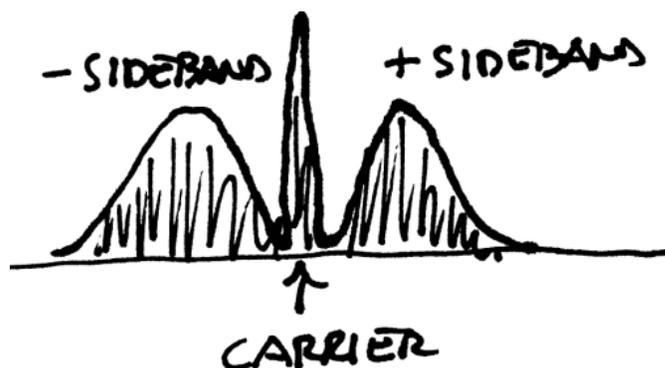
A typical balanced modulator looks like this



(Fig 16-6)

A ring of diodes is arranged so that, when audio is applied, diodes "a" and "b" conduct during half of each cycle, and diodes "c" and "d" conduct during the other half. The input and output are transformer coupled. The carrier is fed to the center taps of the transformers. In this way, if either the audio or the carrier is absent there is no output from the modulator. The output from this type of

modulation will be a **double sideband Amplitude modulated (AM)** signal.

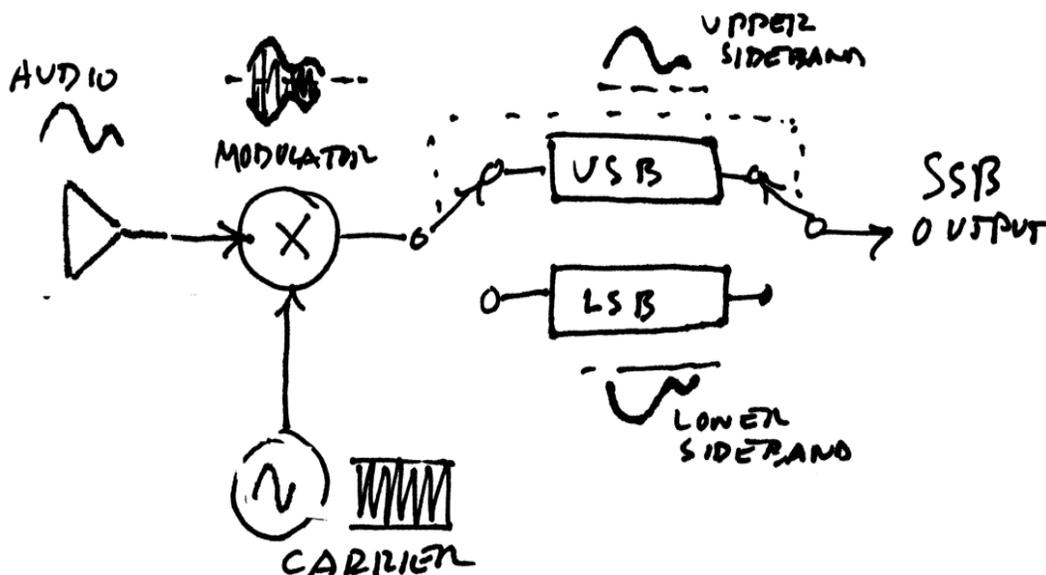


(Fig 16-7)

A typical AM signal has a bandwidth equal to the sum and difference of the carrier and the modulation frequency. This means that if the carrier frequency of the transmitter is tuned to, say, **3850 kHz** and it is modulated with an audio signal with a bandwidth of 5KHz, the transmitted AM signal will spread from  $3,850,000 - 2500 = 3847500$  Hz at the low end to  $3,850,000 + 2500 = 3,85,2500$  Hz at the high end. This is a fair amount of bandwidth and to prevent interference, transmitters need to maintain some space between carriers. Clearly, this limit's the number of stations that can transmit simultaneously on a given band.

#### **SINGLE SIDEBAND MODULATION (SSB)**

One way to reduce the amount of spectrum used and allow many more signals to crowd into the available space is to suppress the carrier and filter out one of the sidebands.



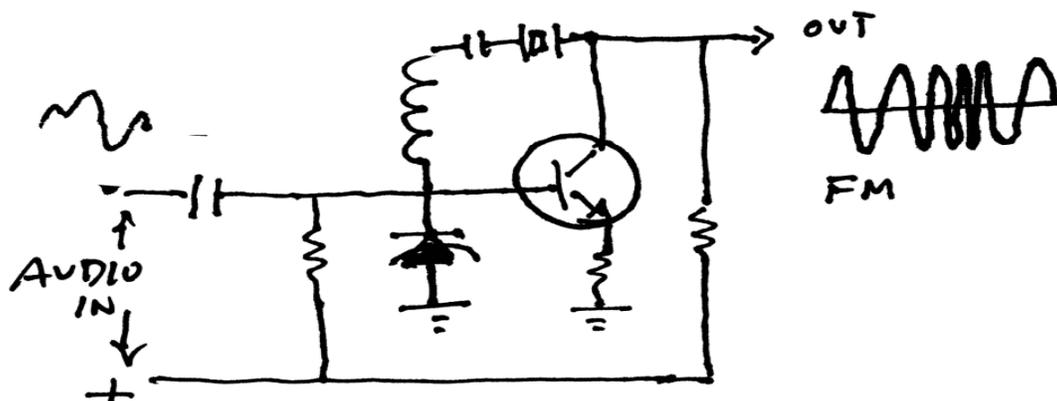
(Fig 16-8)

This type of modulation is called **single sideband, (SSB)**. Either sideband can be used but it's necessary for both the transmitting and receiving station to use the same sideband for two-way communication. The current convention is to use **Lower Side Band (LSB)** on frequencies below

10 MHz and **Upper Side Band (USB)** on frequencies above 10 MHz.

### **FREQUENCY MODULATION (FM)**

Frequency Modulation can be accomplished either by directly modulating the master oscillator to vary its frequency or by modulating a tank circuit at the oscillator output. To modulate the oscillator directly, a varactor diode can be used as the capacitance in a series LC resonant circuit. When audio is applied, the crystal frequency is "pulled" a bit off resonance by the varactor, causing the tuned circuit to become either inductive or capacitive in reactance. This is called **Phase Modulation (PM)**. Using this method, the carrier frequency varies a maximum of  $\pm 7500$  Hz from the resonant crystal frequency. The output is then multiplied to the desired transmitting frequency.



(Fig 16-9)

The carrier remains at a fairly constant amplitude but the resultant bandwidth is 15KHz wide. Add a guard band between signals to avoid interference and you can see this type of modulation is not an efficient use of the RF spectrum below the VHF bands.

In this unit, I've shown examples of RF carrier modulation. In the next unit we'll look at ways to detect the transmitted signal...

#### **Terms to remember**

|                |   |
|----------------|---|
| <b>Exciter</b> | <b>Master oscillator</b>                              |
| <b>AM</b>      | <b>Amplitude modulation</b>                           |
| <b>CW</b>      | <b>Continuous wave, (Carrier switched on and off)</b> |
| <b>FM</b>      | <b>Frequency modulation</b>                           |
| <b>LSB</b>     | <b>Lower sideband</b>                                 |
| <b>PM</b>      | <b>Phase modulation</b>                               |
| <b>PLL</b>     | <b>Phase locked loop</b>                              |
| <b>SSB</b>     | <b>Single sideband</b>                                |
| <b>USB</b>     | <b>Upper sideband</b>                                 |
| <b>VCO</b>     | <b>Voltage controlled oscillator</b>                  |
| <b>VFO</b>     | <b>Variable frequency oscillator</b>                  |

Paul Honore' W6IAM  
(rev-2 Jun '09)

## Electronic Fundamentals, Part 2 (Digital Circuits)

### Unit-5 (Data Busing)

In the 1950s, I worked at the Stanford High Energy Physics Laboratory. A major component of the Lab was the Mk-III linear accelerator. Experiments, located at the business-end of the machine, were more than 300 feet from the operating console. In addition, 15 1-megaWatt Klystron tubes and their support equipment were arrayed along the length of the accelerator. All of this complex equipment had to be monitored and controlled using individual hard wired cables - more than a thousand miles of them! Times have definitely changed for the better. Using today's digital technology, all of the signals needed to operate such a monster machine can be binary-encoded and passed back-and-forth on a single data bus.

As we've seen in previous units, data can be passed either serially or in parallel. There are valid arguments in favor of each method over the other but, the fact is, both are used in today's computing equipment and probably will continue to be used for the foreseeable future, so let's examine these two methods of data handling and see how they are used internally to interconnect the various circuit building blocks and externally, for various pieces of equipment to communicate with each other. The basic architecture for data busing looks like this

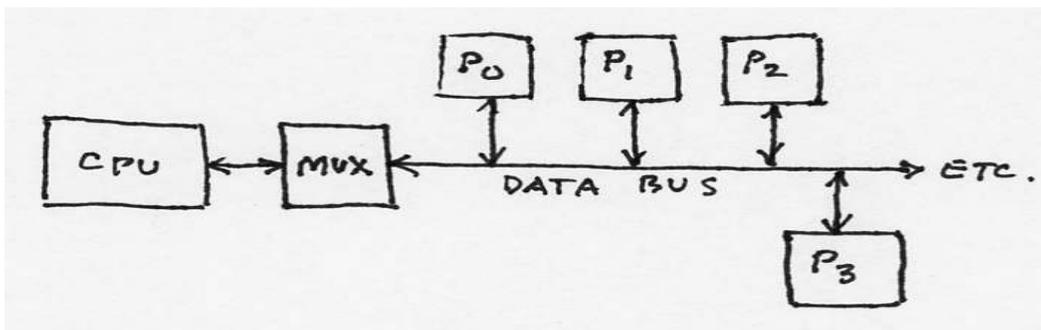


Fig 5-1

Data are passed between a CPU (Central Processing Unit) and peripheral modules on a two-way **data bus**. Think of it as a highway with traffic flowing in both directions and entering and leaving by turnouts. Traffic is directed by stop and go lights to eliminate conflicts and head-on collisions.

In a digital highway, traffic is regulated by a circuit called a **MUX (Multiplexer)** and **data distributor (De-multiplexer)**. Which are, in turn, controlled by a kind of translator called a **decoder**. Let's look at a typical decoder first. For our example, we'll use a 2-4 line decoder. A typical application may have many more lines to decode but it's just a matter of adding more gates

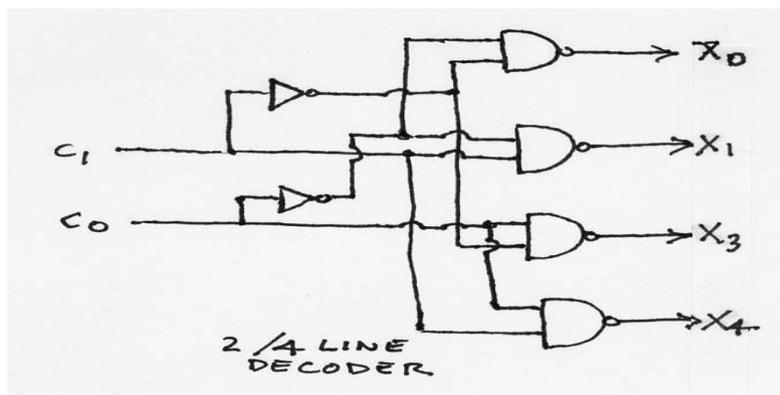
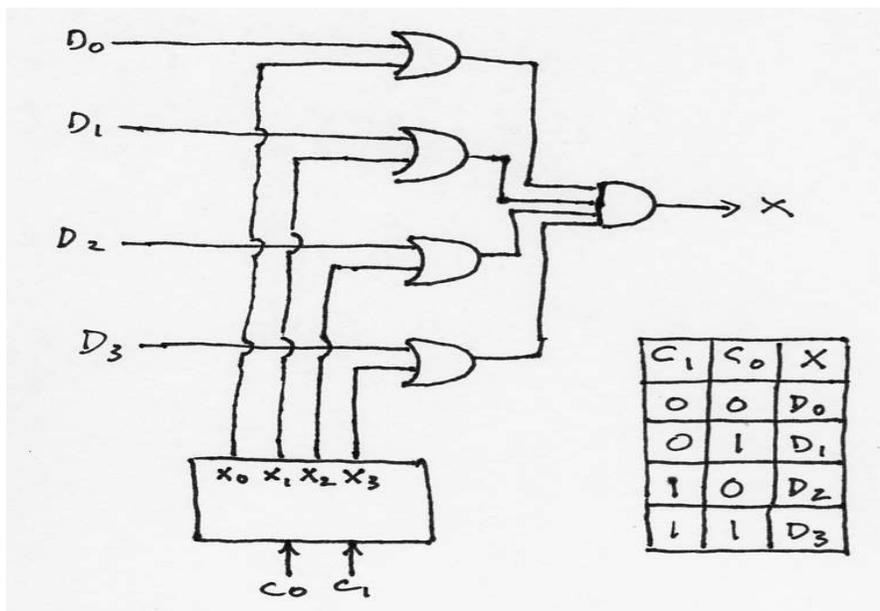


Fig 5-2

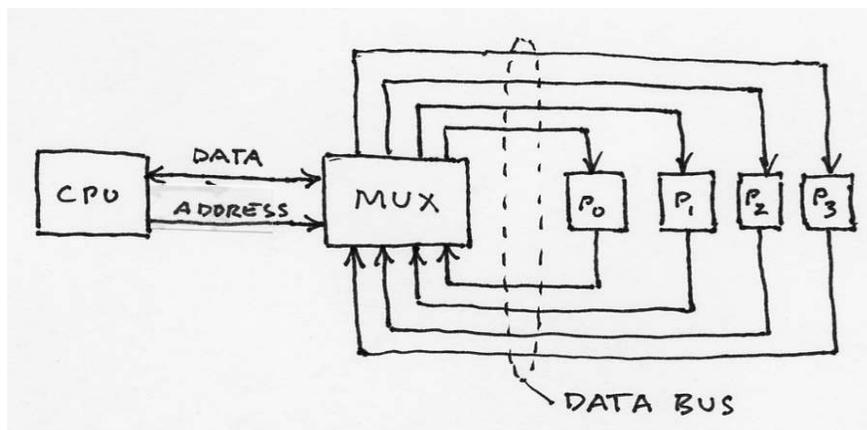
This circuit accepts a two bit binary address code and provides an output signal at one of four NAND gates. Each gate is activated by a unique address code and ignores all others.

The decoder, in turn, is used to switch on one of four OR gates in the multiplexer. As the truth table shows, an address code of "00" routes data from input "D<sub>0</sub>" to output "X". An address code of "01" routes data from "D<sub>1</sub>" to the output, etc.



**Fig 5-3**

So, we now have a mechanism to send and receive information on a single data bus and to address it to specific peripherals attached to the bus.

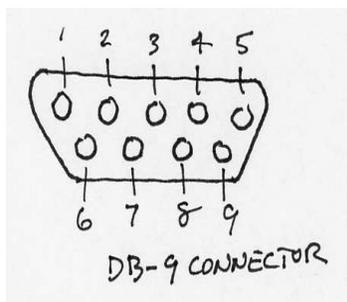


**Fig 5-4**

Now, let's get a bit more specific. About 1960, it became evident that there needed to be a standard busing arrangement so that the many equipment manufacturers could make their products talk to each other. The result was the RS-232 serial data bus with standard connectors and pinouts. Well, almost standard. There are three basic connector configurations. They are DB-9, DB-25, and telephone-type RJ-45 connectors. The DB-9 con-

nections are commonly used for personal computer serial port connections. The larger DB-25 connectors are used with Data Subset Terminals and other peripheral devices that utilize more “handshaking” functions. The RJ-45 connector is primarily used for Ethernet connections between computers. It requires a special crimp tool and can not be soldered.

Here are the pinout connections for the DB-9 connector widely used for PC serial data transfer.



**Fig 5-5**

|   |     |                     |
|---|-----|---------------------|
| 1 | DCD | Data Carrier Detect |
| 2 | RxD | Receive Data        |
| 3 | TxD | Transmit Data       |
| 4 | DTR | Data Terminal Ready |
| 5 | GND | Signal Ground       |
| 6 | DSR | Data Set Ready      |
| 7 | RTS | Request To Send     |
| 8 | CTS | Clear To Send       |
| 9 | RI  | Ring Indicator      |

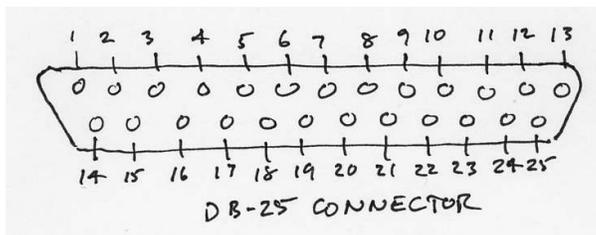
At the receiving end, the handshaking dialog between users goes something like this

RI Receiver wakes up and “listens”  
 DCD Notes the presence of a data carrier  
 RTS Ready to receive data?  
 DSR Ready. Go ahead with transmission.  
 RxD Data is received

To transmit, the dialog is similar.

DTR Remote terminal ready to receive data  
 RTS “I have data for you.”  
 CTS “Go ahead with transmission”  
 TxD Data is transmitted

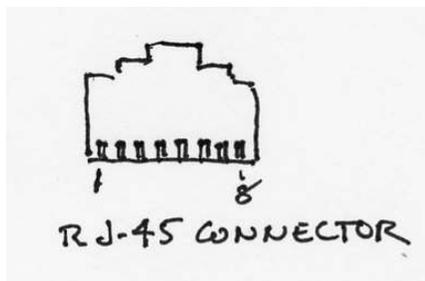
The same routine is used for the 25-pin DB-25 connector, except there are more connections and therefore more possibilities. This connector is usually found on a Data Subset Coupler that has to work with a number of different systems. Here’s the connector and its standard pinout connections.



**Fig 5-6**

|    |         |                                 |
|----|---------|---------------------------------|
| 1  | DCD     | Data Carrier Detect             |
| 2  | TxD     | Transmit Data                   |
| 3  | RxD     | Receive Data                    |
| 4  | Request | Request To Send                 |
| 5  | CTS     | Clear To Send                   |
| 6  | DSR     | Data Set Ready                  |
| 7  | GND     | Signal Ground                   |
| 8  | CD      | Carrier Detect                  |
| 9  | -       | +Voltage                        |
| 10 | -       | - Voltage                       |
| 11 | -       | Not used                        |
| 12 | SCF     | 2 <sup>nd</sup> Line Detector   |
| 13 | SCB     | 2 <sup>nd</sup> Clear To Send   |
| 14 | SBA     | 2 <sup>nd</sup> Transmit Data   |
| 15 | DB      | DCE Element Summing             |
| 16 | SBB     | 2 <sup>nd</sup> Receive Data    |
| 17 | DD      | Received Element Timing         |
| 18 | -       | Not used                        |
| 19 | SCA     | 2 <sup>nd</sup> Request To Send |
| 20 | DTR     | Data Terminal Ready             |
| 21 | CG      | Signal Quality Detector         |
| 22 | RI      | Ring Indicator                  |
| 23 | CH/CI   | Data Rate Detector              |
| 24 | DA      | Data Element Timing             |
| 25 | -       | Not used                        |

The third standard RS-232 connector is the telephone-type RJ-45 used mainly for interconnecting equipment in Ethernet applications - computer to computer.

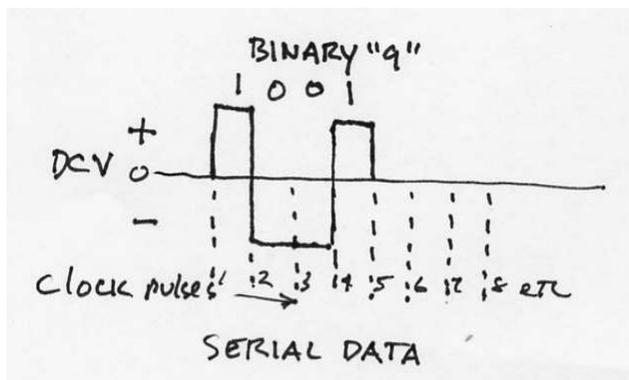


**FIG 5-7**

|   |     |                     |
|---|-----|---------------------|
| 1 | RI  | Ring Indicator      |
| 2 | DCD | Data Carrier Detect |

|   |     |                     |
|---|-----|---------------------|
| 3 | DTR | Data Terminal Ready |
| 4 | GND | Signal Ground       |
| 5 | RxD | Receive Data        |
| 6 | TxD | Transmit Data       |
| 7 | CRS | Clear To Send       |
| 8 | RTS | Request to Send     |

These are the most commonly used connections for serial data transmission. Connections for parallel data transmission are similar except there are more lines to carry the individual data bits. In all cases, the data, itself, is represented by positive and negative DC voltages representing binary "1" (+) and binary "0" (-), so a serial transmission of the binary number "9" (1001) will look like this.



**Fig 5-8**

The actual voltage can be as high as +/- 12VDC but the industry standard is a nominal +5V and 0V. Generally, anything in this ballpark will work for data transmission.

In this Unit, we've seen how data can be transmitted and received between different pieces of equipment using a single data bus, and we've examined the RS-232 standard for serial data connections. In the next unit, we'll see how analog data can be converted to digital format and back again to analog.

**Terms to remember**

- Data BUS**                 **Single line or group of lines used to interconnect digital modules for two-way communication**
- MUX**                       **Multiplexer**
- Multiplexer**           **Circuit for outputting data to selected modules**
- Data Distributor**      **Circuit for receiving data from selected modules**
- Decoder**                 **Circuit for "translating" between different binary codes**

**Paul Honore' W6IAM**

**FROM OUR TREASURER:**

As of June 30<sup>th</sup>, 2009:

First Federal Savings & Loan of Port Angeles Balance:  
 \$ 7,239.32  
 Outstanding Cheques: - 0.00  
**Current Checkbook Balance: \$ 7,239.32**

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

**FOR SALE OR TRADE**

~ ~ ~ ~ ~  
**FOR SALE:** KENWOOD TS-850S HF Transceiver; WITH BUILT IN AT-850 ANTENNA TUNER 2 THRU 150 OHMS; KENWOOD PS-50 Power Supply, Included:- Instruction Guide - MIC, Condition: Very good condition. ALL FOR \$750.00 Contact Ernie W7EWG 808-6668

~ ~ ~ ~ ~  
**For Sale:** Staco Variable Autotransformer Transformer Model 3PN1010 Input : 120 V, 10 A Output : 0-120/140 V Contact [wx7rik@pobox.com](mailto:wx7rik@pobox.com) or 360-460-2472

**Your Ad Could Go Here**

**COMING EVENTS**

7-9 Aug 2009\* 54th Annual Pacific Northwest DX Convention Spokane DX Association -

11 Jul 2009+ Swapmeet & Auction Chehalis Valley Amateur Radio Society

8 Aug 2009+ Radio Club of Tacoma Hamfest

**BIRTHDAYS:**

Birthdays for July, and the first week of Aug:

|                         |        |        |
|-------------------------|--------|--------|
| Lyman, Nita             | KE7DRT | Jul-03 |
| Sampont, Gerald M.      | WA7BUY | Jul-03 |
| Coffel, Floyd J. (John) | KE7RFO | Jul-05 |
| Newcomb, Shirley        | KC7ZQA | Jul-05 |
| Hannon, David H.        | KE7TTT | Jul-10 |
| Van Nimwegen, Johan     | KO6I   | Jul-19 |
| Luchini, David L.       | KE7WGR | Jul-23 |
| Fontaine Jr., Ralph     | AF7DX  | Aug-04 |

YL's Birthdays:

|                                    |       |        |
|------------------------------------|-------|--------|
| Wilson, Doreen (Robert C, AL7KK)   | KL1HG | Jul-04 |
| Kroll, Callie E. (James N, KB7QFI) | N7YMU | Jul-09 |
| Kagan, Onida (Jerry P, W7JRY)      |       | Jul-19 |
| Dawson, Maureen (Al, W7YLV)        |       | Jul-31 |

**Happy Birthday!**

I am not aware of any of our members operating outside their licencing privileges but I still think this might be a good thing to include in an upcoming issue of QTC

Paul W6IAM

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

From: "ARRL WWA Section" <memberlist@www.arrl.org>

To: <w6iam@olypen.com>

Sent: Wednesday, July 01, 2009 2:16 PM

Subject: Operating Beyond your License Class Privilages

Our Official Observer program has brought to my attention that several new hams are using HF frequencies to check into Traffic Nets and chase QSL cards, without the proper license class. Although it might be fun to do these things, the rest of the Ham Radio Community actually studied and passed an exam to allow them the privilege of using those frequencies.

Please, if you are not General Class or above, stay off the WARTS, Noon Time Net or any other HF traffic net, and leave the HF QSL chase to those who are licensed to do so, until you pass your General Class or above, examination. Yes, Technicians may operate an HF station while the Control Operator is in attendance, but you must identify the Control Operator's Station with his/her call sign, not yours. You might say this is K7=== with KF7=== at the mic or this is KF7=== operating K7===, but not just your call sign. The following is an excerpt from the FCC rules in regards to this matter. Pay close attention to Section 97.119 (e)

Our OO program will be happy send courtesy cards to those operating outside of their privileges, but after a couple warnings the offending licensee information will be sent to the National OO Coordination Center who will forward it to the FCC and the Licensee may receive a citation from the FCC.

Let's have fun with this great hobby, but le's stay legal!

#### Part 97.119 Station Identification

(a) Each amateur station, except a space station or telecommand station, must transmit its assigned call sign on its transmitting channel at the end of each communication, and at least every ten minutes during a communication, for the purpose of clearly making the source of the transmissions from the station known to those receiving the transmissions. No station may transmit unidentified communications or signals, or transmit as the station call sign, any call sign not authorized to the station.

(b) The call sign must be transmitted with an emission authorized for the transmitting channel in one of the following ways:

- (1) By a CW emission. When keyed by an automatic device used only for identification, the speed must not exceed 20 words per minute;
- (2) By a phone emission in the English language. Use of a phonetic alphabet as an aid for correct station identification is encouraged;
- (3) By a RTTY emission using a specified digital code when all or part of the communications are transmitted by a RTTY or data emission;
- (4) By an image emission conforming to the applicable transmission

standards, either color or monochrome, of §73.682 (a) of the FCC Rules when all or part of the communications are transmitted in the same image emission.

(c) One or more indicators may be included with the call sign. Each indicator must be separated from the call sign by the slant mark (/) or by any suitable word that denotes the slant mark. If an indicator is self-assigned, it must be included before, after, or both before and after, the call sign. No self-assigned indicator may conflict with any other indicator specified by the FCC Rules or with any prefix assigned to another country.

(d) When transmitting in conjunction with an event of special significance, a station may substitute for its assigned call sign a special event call sign as shown for that station for that period of time on the common data base coordinated, maintained and disseminated by the special event call sign data base coordinators. Additionally, the station must transmit its assigned call sign at least once per hour during such transmissions.

(e) When the operator license class held by the control operator exceeds that of the station licensee, an indicator consisting of the call sign assigned to the control operator's station must be included after the call sign.

-----  
 ARRL Western Washington Section  
 Section Manager: James David Pace, K7CEX  
 k7cex@arrl.org

Hello,

I was sent this link today from my uncle (K0ZXA) back in Kansas City. It is nearly 10 min of news coverage which aired on the local news in KC on field day. It is a very good report and shows ham radio in a very good light.

<http://www.youtube.com/watch?v=y3gRWG-EUGU>

Travis, KB0PWP

### Field Day Note

I was late arriving on the scene for Field Day setup but, when I got there, I was greeted with a sea of hard hats and properly attired folks putting up tents and antennas. Cables were dressed and flagged for safety, and generators properly grounded with fire extinguishers at the ready.

I don't know how you fared on points for contacts but I'll give you top marks for a well laid out, efficient and safe environment for both operators and visitors. Congratulations!

Paul Honore' W6IAM

## Scrapbook for Leah,

Nancy Richards, a very good friend of Leah's, is putting together a scrapbook for Leah's celebration of life ceremony in August. She is seeking photos of Leah at CCARC functions as well as comments about how Leah impacted your life. Specifically:

How did being around Leah make you feel?

How did you meet Leah?

What did you admire most about Leah?

Did Leah change your life in any way?

What is your favorite memory of Leah?

Or any other comments.

Please forward photos and comments to:  
 Nancy Richards  
 nancr3@gmail.com

### Expedition to North Point

For many of us we do not think in terms of Grid Squares. The world is broken into squares which are used in VHF/UHF contests for location reports. See: <http://f6fvy.free.fr/qthLocator/fullScreen.php> (you can move the map around with your mouse to find the USA and our county) or <http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=5846>

Here is a story of two northwest hams, KE7V and K7MDL who for the 2004 ARRL VHF contest put CN78 on the air from North Point lookout, west of Lake Crescent at 3000 feet. Johnny, KE7V lives here in the Port Angeles area and is a 6 meter aficionado.

Please go to [http://mysite.verizon.net/michael\\_d\\_lewis/SeptVHF2004/2004\\_Sept\\_VHF\\_Contest.htm](http://mysite.verizon.net/michael_d_lewis/SeptVHF2004/2004_Sept_VHF_Contest.htm) to read about their experience.

## Tower for the taking

Wave Broadband has a 30-50 foot tower they would like to get rid of. It was once a microwave tower so it must be pretty stout. New owner must take the tower down and haul it away.  
Contact for additional information:

Michael Douglas  
Wave Broadband  
Commercial / Residential Sales  
Lead  
Serving Port Angeles & Sequim,  
WA  
(360) 670 - 8990  
mdouglas@wavebroadband.com



## My first Field Day

WX7RIK here, and I just wanted to give a few impressions about my experience at my first Field Day. What a blast! I really enjoyed working with all the knowledgeable club members, and I think I even retained a little bit of what I learned. I spent the entire weekend at the fairgrounds, and mostly spent that time helping put up and take down all the equipment, and running the GOTA station. This was my first HF experience, unless you count me stopping by the GOTA station in 2007, where Tom helped me make my first contact. So I got my Icom radio out to the fairgrounds and actually got it working.

I almost hesitate to mention specific names, because I am afraid that I will omit someone, but I wanted to especially thank Ernie W7EWG for his help with the extremely complicated IC-7000 radio, Tom KE7XX for all his help and encouragement to get me up and running with GOTA, Bill W7WEC for his antenna help, Al W7YLV for his moral support, and Al KD7TFK for all the logistical support. I was really made to feel welcome by all the club members at Field Day, and almost everyone that was out there helped me at one time or another. I feel that by spending this time out there, I got to know the club folks better, and I hope they also got to know me a bit.

For all you "old" hams, it probably is no big deal, but I did get quite a rush out of plowing through the pile-ups to make contacts with Eastern Massachusetts and Hawaii. I also enjoyed getting the youngsters to make a QSO, as well as my Mom, sister and my YL. So the bottom line is that I really enjoyed myself, and can't wait for next year. I had a chance to get a few photos, check them out at:

<http://picasaweb.google.com/RedpointRik/ARRLFieldDay2009>

Thanks again everybody, and 73!



Field Day 2009 Photos



**NEXT YL LUNCHEON**

Joshuas  
113 Del Guzzi Dr.  
Port Angeles

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!**

**2009 YL Luncheons:**

March - Gordy's Pasta and Pizza - 1123 E. 1st - Port Angeles  
April - Oak Table - 292 W. Bell - Sequim  
May - Downriggers - 115 E. Railroad Ave. - Port Angeles  
June - Mariner - 707 E. Washington - Sequim  
July - Joshuas - 113 DelGuzzi Dr. - 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,<br>223 E. 4 <sup>th</sup> St., PA | Dan Abbott N7DWA<br>360-582-3824  |
| Clallam County Amateur Radio Club general meeting  | 7 pm, second Wed of every month | Olymp Med Center Basement<br>Linkletter Room                     | Tom Newcomb KE7XX<br>360-452-8228 |
| Clallam County Amateur Radio Club social breakfast | 8 am, first Sat of every month  | Joshua's Restaurant<br>Hwy. 101 & Del Guzzi Dr.                  | Tom Newcomb KE7XX<br>360-452-8228 |
| Clallam Country Amateur Radio Club YL social lunch | 11:45 am 2d Fri of every month  | Rotates - announced on Thursday<br>night Net                     |                                   |

**CLUB OFFICERS For 2009**

**President:** Nita Lyman KE7DRT 360-457-5022 Nita\_lyman@yahoo.com

**Vice President:** Dennis Tilton AC7TV 360-452-1217 3tiltons@wavecable.com

**Secretary:** Lee Diemer KE7TTY 360-683-5102 pathfindernorth@aol.com

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

**Board Member (Chairman):** Bill Carter W7WEC 360-6814375 w7wec@arrl.net

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

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