

# HAMATEUR CHATTER

The Milwaukee Radio Amateurs Club

July 2013 Volume 21, Issue 7

One of the World's Oldest Continuously Active Radio Amateur Clubs—since 1917

## Presidents' Letter

I hope everyone has survived the rain and heat. This certainly has been an interesting weather so far. We did have good weather for our group outing at the South Milwaukee Ham Fest. This year we had a small group of people together that created a nice row of vendors. The next event on the calendar is our multi-club picnic on August 10th at Greenfield Park Area number 2. We are shooting for the food being ready at noon. The clubs will provide the hamburgers and Brats and refreshments. The rest of the food is Pot luck. There should be an HF radio and dipole setup for those of you who want to be radioactive. If you plan on attending please let us know.

This year for Field Day we had three groups working together. MAARS and Gateway Technical College put together a good showing. We operated as 3A with a Gota station. The new Greenfield Farmers market opened that Sunday and increased our exposure to the Public.

AES loaned us the new Yaesu FTDX-2000 radio. We also used the new to us club Cushcraft MA-5 beam for the first time. We found out that we had a balun failure after it was put up the first time. We created a temporary balun out of some spare coax lying around. Some of us have decided to make the fixing of this antenna into a small program for a meeting. The antenna worked but not as expected.

Just a reminder we do not have a meeting in July. If there are any ideas for topics at club meetings let us know.

## Membership Meeting Minutes

The MRAC membership meeting was called to order at 7:04 pm by Dave, KA9WXN, club president. The Mic was passed around for introductions. A sign-in sheet was circulated for the recording of membership information and attendance.

**Tonight's program** is on APRS, given by Steve, KC9WXC, you can use a device called the tiny tracker, and many other devices that communicate through the Internet. The Automatic Packet Reporting System goes all the way back to the DOS days of personal computing. It can be operated through a mobile radio, or HT.

It comes in very useful to find other Hams and interact with them without knowing what the repeaters are in the area. There is a APRS voice alert. This operates with a 100 kHz CTCCS tone, when signal is received, the two parties can then switch to simplex for voice messages. In this area, APRS is used for public events such as Bike rides that are popular in the Milwaukee area.

A lot of people are putting up weather station data into the APRS network. Digi-repeaters are used to extend the range of coverage. The APRS is also used nationally and internationally through the Internet radio linking software. APRS-IS, APRS-FI, APRS friends can locate each other through this application.

Lots of Kenwood handhelds have APRS built-in; ICOM also uses this technology in their newer models. The voice alert tone is an excellent feature of this type of system. Most computer operating systems have software written to interface APRS to radios and the internet.



### MRAC Officers:

#### Terms Expiring in 2014

- President – Dave, KA9WXN
- V-President– Dan, N9ASA
- Secretary – Mike, KC9CMT
- Treasurer – Joe, N9UX
- Director – Vacant

#### Terms Expiring in 2015

- Director – Al, KC9IJJ
- Director – Hal, KB9OZN

The Club Phone Number is: (414) 332-MRAC or

(414) 332- 6 7 2 2

Visit our website at:

[www.w9rh.org](http://www.w9rh.org)

Mail correspondence to:

**M. R. A. C.**

**PO Box 26233**

**Milwaukee, WI**

**53226-0233**

**Field day wrap-up:** 609 contacts were made during this years field day. 333 CW contacts, 256 Phone, 20 Digital. Stations were operated both day and night. 20 meters was mostly open during this event. Some 6 meter activity was reported on Sunday. Pat, WW9R was the top operator this year. Steve, KC9WXC came in as the second top operator. There were some problems setting up the logging program. The beam that was purchased in February had short circuits in it that hindered its performance. Friday afternoon setup started earlier than usual at Konkel park.

Dave, KA9WXN and crew put up the 30 meter beam antenna tower. Pat Hoppe, N9GTC group callsign, came up from Racine county with his club from the Gateway technical college to take part in our joint field day.

The Comet GP98 is a multi-band UHF/VHF antenna that topped our tower assembly. The tower has a tilt-over base that is very handy when putting multiple antennas onto the tower. Al, KC9IJJ had his station up and running again this year. A pictorial presentation was given by Dave, KA9WXN. Lots of photos were taken.

The club banner was up on Saturday and Sunday for visitors. Even solar panels were employed for the six meter station. The Greenfield police paid us a visit at Konkel park. Their car had a flat tire when it arrived. A camera crew from the MATC Channel 10/36 digital was there to report the story of Amateur radio field day in Milwaukee County. Dave actually took video of the task of erecting the 30 foot tower. See Dave, KA9WXN if you want a copy, or the club can upload this to the Yahoo Group.

Club president Dave asked for a break in activities at 8:23 pm.

Dave, KA9WXN, Club president called the business meeting to order at 8:36 pm. Al, KC9IJJ announced the joint club picnic with the MAARS group on **August 10th at Greenfield park** area #2. The club may setup a small station at the picnic. There will be no membership meetings in July and August. The club will have a presence at the SMARC swapfest coming up the First Saturday of July, July 6th, 2013.

Pancho is still looking for someone to help out during the club nets on Friday evening. We have a 10 meter and 2 meter net. At 8 and 9 pm respectively. On Tuesday nights there is a on-air class on the Club repeater at 8 pm. The class involves the questions for testing in the General, and Extra class question pool.

There will be a food gathering at Denny's with Pancho after the club meeting.

Dave accepted motions to adjourn the meeting at 8:43pm. Motion made by Al, KC9IJJ seconded by Pancho, N9OFA. Meeting adjourned at 8:44 pm. The room was then policed of trash and returned to an acceptable condition as found before the meeting commenced. A parts raffle will start immediately after the meeting.

## Protect Your Shack From An EMP Burst

### Some initial thoughts on EMP protection from the US military packaging division.

A continuously sealed metal barrier has proven to be very effective in preventing EM/HPM energy from reaching susceptible electronic or explosive components. Exterior packaging fabricated from plastic, wood or other fiber materials provides almost no protection from EM/HPM threats. The metal enclosure can be very thin provided there are no openings (tears, pin holes, doors, incomplete seams) that would allow microwaves to enter. Sealed barrier bags that incorporate a thin layer of aluminum foil and are primarily used to provide water vapour proof protection to an item, can add a great deal of resistance to EM/HPM penetration.

A number of cylindrical and rectangular steel containers have been developed by the Packaging Division for a wide range of munitions, weapon systems and associated components. The cylindrical containers are end opening and the rectangular containers are top opening. All the containers have synthetic rubber gaskets that allow them to maintain a +3 psi environmental seal to the outside environment. The containers are constructed using seam welding to provide for continuous metal contact on all surfaces of the body assembly.

The cover openings have been held to a minimum and the sealing gaskets positioned in a manner to allow overlapping metal parts to add additional protection to these areas. Microwaves are very adept at bouncing around and working their way into even the smallest opening. Tests of the cylindrical and rectangular steel containers used by this organization have demonstrated a high level of protection in preventing EM/HPM energy from entering the container.

The key is to use a metal enclosure and eliminate or minimize any openings. Where openings are needed they should be surrounded to the greatest extent possible by continuous metal and in the case of a gasket, metal sheathing or mesh can be placed around the elastomer material or conductive metal molded into the gasket. The closer the surrounding container comes to a continuous metal skin the more protection that will be provided.

High quality gaskets, utilizing either a mesh or embedded conductive metal design, are very expensive. They add a magnitude of cost to a normal gasket and can easily double the price of a container similar to the ones mentioned above.

### Heat Related Injury—A National Problem

Heat kills by taxing the human body beyond its abilities. In a normal year, about 175 Americans succumb to the demands of summer heat. Among the large continental family of natural hazards, only the cold of not lightning, hurricanes, tornadoes, floods, or earthquakes - takes a greater toll. In the 40-year period from 1936 through 1975, nearly 20,000 people were killed in the United States by the effects of heat and solar radiation. In the disastrous heat wave of 1980, more than 1,250 people died.

And these are the direct casualties. No one can know how many more deaths are advanced by heat wave weather - how many diseased or aging hearts surrender that under better conditions would have continued functioning.

North American summers are hot; most summers see heat waves in one section or another of the United States. East of the Rockies, they tend to combine both high temperature and high humidity although some of the worst have been catastrophically dry.

### National Weather Service Heat Index

Considering this tragic death toll, the National Weather Service (NWS) has stepped up its efforts to alert more effectively the general public and appropriate authorities to the hazards of heat waves - those prolonged excessive heat/humidity episodes.

Based on the latest research findings, the NWS has devised the "Heat Index" (HI), (sometimes referred to as the "Apparent Temperature"). The HI, given in degrees F, is an accurate measure of how hot it really feels when effects of the relative humidity (RH) is added to the actual air temperature.

### Summary of NWS's Alert Procedures

The NWS will initiate alert procedures when the HI is expected to exceed 105 degrees to 110 degrees F (depending on local climate) for at least two consecutive days. The procedures are:

- Include HI values in zone and city forecasts.
- Issue Special Weather Statements and/or Public Information Statements presenting a detailed discussion of
  - the extent of the hazard including HI values,
  - who is most at risk,
  - safety rules for reducing the risk.

Assist state/local health officials in preparing Civil Emergency Messages in severe heat waves. Meteorological information from Special Weather Statements will be included as well as more detailed medical information, advice, and names and telephone numbers of health officials.

### How Heat Affects the Body

Human bodies dissipate heat by varying the rate and depth of blood circulation, by losing water through the skin and sweat glands, and - as the last extremity is reached - by panting, when blood is heated above 98.6 degrees. The heart begins to pump more blood, blood vessels dilate to accommodate the increased flow, and the bundles of tiny capillaries threading through the upper layers of skin are put into operation. The body's blood is circulated closer to the skin's surface, and excess heat drains off into the cooler atmosphere.

At the same time, water diffuses through the skin as perspiration. The skin handles about 90 percent of the body's heat dissipating function. Sweating, by itself, does nothing to cool the body, unless the water is removed by evaporation - and high relative humidity retards evaporation. The evaporation process itself works this way: the heat energy required to evaporate the sweat is extracted from the body, thereby cooling it. Under conditions of high temperature (above 90 degrees) and high relative humidity, the body is doing everything it can to maintain 98.6 degrees inside. The heart is pumping a torrent of blood through dilated circulatory vessels; the sweat glands are pouring liquid - including essential dissolved chemicals, like sodium and chloride - onto the surface of the skin.

### Too Much Heat

Heat disorders generally have to do with a reduction or collapse of the body's ability to shed heat by circulatory changes and sweating, or a chemical (salt) imbalance caused by too much sweating. When heat gain exceeds the level the body can remove, or when the body cannot compensate for fluids and salt lost through perspiration, the temperature of the body's inner core begins to rise and heat-related illness may develop. Ranging in severity, heat disorders share one common feature: the individual has overexposed or over exercised for his age and physical condition in the existing thermal environment. Sunburn, with its ultraviolet radiation burns, can significantly retard the skin's ability to shed excess heat. Studies indicate that, other things being equal, the severity of heat disorders tend to increase with age - heat cramps in a 17-year-old may be heat exhaustion in someone 40, and heat stroke in a person over 60. Acclimatization has to do with adjusting sweat-salt concentrations, among other things. The idea is to lose enough water to regulate body temperature. with the least possible chemical disturbance.

### Cities Pose Special Hazards

The stagnant atmospheric conditions of the heat wave trap pollutants in urban areas and add the stresses of severe pollution to the already dangerous stresses of hot weather, creating a health problem of undiscovered dimensions. A map of heat-related deaths in St. Louis during 1966, for example, shows a heavier concentration in the crowded alleys and towers of the inner city, where air quality would also be poor during a heat wave. The high inner-city death rates also can be read as poor access to air-conditioned rooms. While air-conditioning may be a luxury in normal times, it can be a lifesaver during heat wave conditions. The cost of cool air moves steadily higher, adding what appears to be a cruel economic side to heat wave fatalities. Indications from the 1980 Texas heat wave suggest that some elderly people on fixed incomes, many of them in buildings that could not be ventilated without air conditioning, found the cost too high, turned off their units, and ultimately succumbed to the stresses of heat.

### Preventing Heat-Related Illness

Elderly persons, small children, chronic invalids, those on certain medications or drugs (especially tranquilizers and anticholinergics), and persons with weight and alcohol problems are particularly susceptible to heat reactions, especially during heat waves in areas where a moderate climate usually prevails.

## Know These Heat Disorder Symptoms

**SUNBURN:** Redness and pain. In severe cases swelling of skin, blisters, fever, headaches. Ointments for mild cases if blisters appear and do not break. If breaking occurs, apply dry sterile dressing. Serious, extensive cases should be seen by physician.

**HEAT CRAMPS:** Painful spasms usually in muscles of legs and abdomen possible. Heavy sweating. Firm pressure on cramping muscles, or gentle massage to relieve spasm. Give sips of water. If nausea occurs, discontinue use.

**HEAT EXHAUSTION:** Heavy sweating, weakness, skin cold, pale, and clammy. Pulse thready. Normal temperature possible. Fainting and vomiting. Get victim out of sun. Lay down and loosen clothing. Apply cool, wet cloths. Fan or move victim to air conditioned room. Sips of water. If nausea occurs, discontinue use. If vomiting continues, seek immediate medical attention.

**HEAT STROKE or SUN STROKE:** High body temperature (106 degrees F or higher). Hot dry skin. Rapid and strong pulse. Possible unconsciousness. **HEAT STROKE IS A SEVERE MEDICAL EMERGENCY SUMMON EMERGENCY MEDICAL ASSISTANCE OR GET THE VICTIM TO A HOSPITAL IMMEDIATELY. DELAY CAN BE FATAL.** Move the victim to a cooler environment. Reduce body temperature with cold bath or sponging. Use extreme caution. Remove clothing, use fans and air conditioners. If temperature rises again, repeat process. Do not give fluids.

### NOAA's National Weather Service

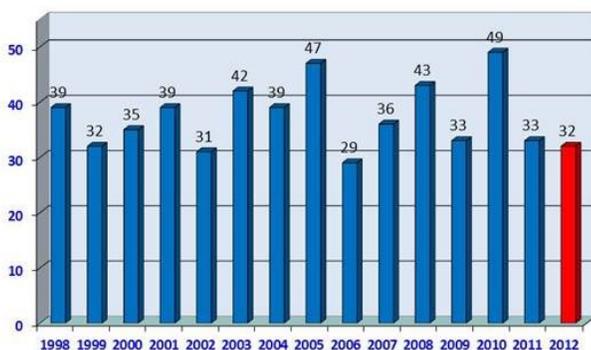
#### Heat Index Temperature (°F)

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

#### Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

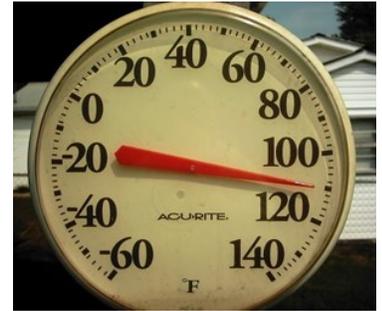
■ Caution    
 ■ Extreme Caution    
 ■ Danger    
 ■ Extreme Danger

### U.S. Heatstroke Deaths (Children in Vehicles)



## Safety Tips for Adults

- **Slow down.** Reduce, eliminate or reschedule strenuous activities until the coolest time of the day. Children, seniors and anyone with health problems should stay in the coolest available place, not necessarily indoors.
- **Dress for summer.** Wear lightweight, light-colored clothing to reflect heat and sunlight.
- **Put less fuel on your inner fires.** Foods, like meat and other proteins that increase metabolic heat production also increase water loss.
- **Drink plenty of water, non-alcoholic and decaffeinated fluids.** Your body needs water to keep cool. Drink plenty of fluids even if you don't feel thirsty. Persons who have epilepsy or heart, kidney or liver disease, are on fluid restrictive diets or have a problem with fluid retention should consult a physician before increasing their consumption of fluids. **Do not drink alcoholic beverages and limit caffeinated beverages.**
- **During excessive heat periods, spend more time in air-conditioned places.** Air conditioning in homes and other buildings markedly reduces danger from the heat. If you cannot afford an air conditioner, go to a library, store or other location with air conditioning for part of the day.
- **Don't get too much sun.** Sunburn reduces your body's ability to dissipate heat.



Do not take salt tablets unless specified by a physician.

## Safety Tips for Concerning Children

- **Make sure your child's safety seat and safety belt buckles aren't too hot** before securing your child in a safety restraint system, especially when your car has been parked in the heat.
- **Never leave your child unattended** in a vehicle, even with the windows down.
- **Teach children not to play** in, on, or around cars.
- **Always lock car doors and trunks--even at home--and keep keys out of children's reach.**

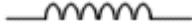
**Always make sure all children have left the car** when you reach your destination. Don't leave sleeping infants in the car ever



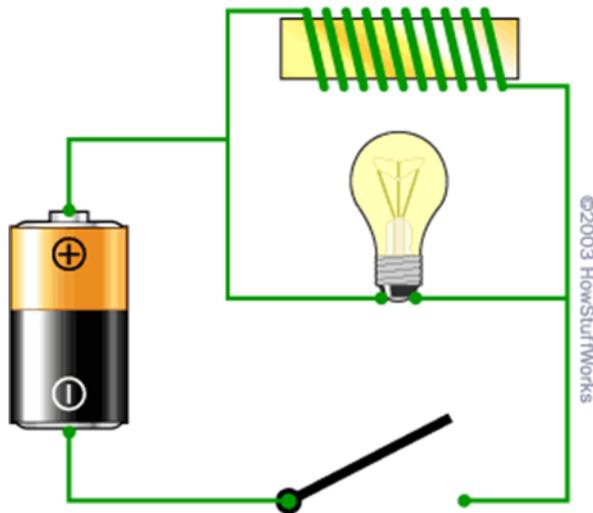
## The Experimenters Bench

### Inductor Basics

In a circuit diagram, an inductor is shown like this:



To understand how an inductor can work in a circuit, this figure is helpful:



What you see here is a [battery](#), a [light bulb](#), a coil of wire around a piece of [iron](#) (yellow) and a switch. The coil of wire is an **inductor**. If you have read [How Electromagnets Work](#), you might recognize that the inductor is an electromagnet. If you were to take the inductor out of this circuit, what you would have is a normal flashlight. You close [the switch](#) and the bulb lights up. With the inductor in the circuit as shown, the behavior is completely different.

Think About Water...

One way to visualize the action of an inductor is to imagine a narrow channel with water flowing through it, and a heavy water wheel that has its paddles dipping into the channel. Imagine that the water in the channel is not flowing initially. Now you try to start the water flowing. The paddle wheel will tend to prevent the water from flowing until it has come up to speed with the water. If you then try to stop the flow of water in the channel, the spinning water wheel will try to keep the water moving until its speed of rotation slows back down to the speed of the water. An inductor is doing the same thing with the flow of electrons in a wire -- **an inductor resists a change in the flow of electrons**.

The light bulb is a **resistor** (the resistance creates heat to make the filament in the bulb glow -- see [How Light Bulbs Work](#) for details). The wire in the coil has much lower resistance (it's just wire), so what you would expect when you turn on [the switch](#) is for the bulb to glow very dimly. Most of the current should follow the low-resistance path through the loop. What happens instead is that when you close the switch, the bulb burns brightly and then gets dimmer. When you open the switch, the bulb burns very brightly and then quickly goes out.

The reason for this strange behavior is the inductor. When current first starts flowing in the coil, the coil wants to build up a **magnetic field**. While the field is building, the coil inhibits the flow of current. Once the field is built, current can flow normally through the wire. When [the switch](#) gets opened, the magnetic field around the coil keeps current flowing in the coil until the field collapses. This current keeps the bulb lit for a period of time even though the switch is open. In other words, an inductor can **store energy** in its magnetic field, and an inductor tends to resist any change in the amount of current flowing through.

### Henries

The **capacity** of an inductor is controlled by four factors:

- The number of coils - More coils means more inductance.
- The material that the coils are wrapped around (the core)
- The cross-sectional area of the coil - More area means more inductance.

The length of the coil - A short coil means narrower (or overlapping) coils, which means more inductance.

Putting **iron** in the core of an inductor gives it much more inductance than air or any non-magnetic core would.

The standard unit of inductance is the **henry**. The equation for calculating the number of henries in an inductor is:

$$H = (4 * \text{Pi} * \# \text{Turns} * \# \text{Turns} * \text{coil Area} * \mu) / (\text{coil Length} * 10,000,000)$$

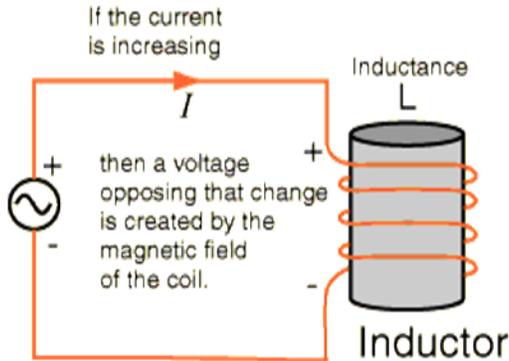
- The area and length of the coil are in meters. The term **mu** is the **permeability** of the core. Air has a permeability of 1, while steel might have a permeability of 2,000.

Inductors are closely related to capacitors; the rate of current change in an inductor depends on the voltage applied across it, whereas the rate of voltage change in a capacitor depends on the current through it. The symbol and defining equation for an inductor is where L is called the inductance and is measured in henrys (or mH, uH, etc.) and "di/dt" is the change in current over a small period of time. Putting a voltage across an inductor causes the current to rise as a ramp (for a capacitor), supplying a constant current causes the voltage to rise as a ramp; 1 volt across 1 henry produces a current that increases at 1 amp per second) The symbol for an inductor looks like a coil of wire; that's because, in its simplest form, that's all it is. Variations include coils wound on various core materials, the most popular being iron (or iron alloys, laminations, or powder) and ferrite, a black, non-conductive, brittle magnetic material. these are all ploys to multiply the inductance of a given coil by the "permeability" of the core material. The core may be in the shape of a rod, a toroid (doughnut), or even more bizarre shapes, such as a "pot core" Inductors find heavy use in [radio frequency](#) (RF) circuits, serving as RF "chokes" and as parts of tuned circuits. A pair of closely coupled inductors form the interesting object known as a transformer. An inductor is, in a real sense, the opposite of a capacitor. Arising from Faraday's law, the inductance L may be defined in terms of the emf generated to oppose a given change in current:

## The Experimenters Bench

$$\text{Emf} = -L \frac{\Delta I}{\Delta t}$$

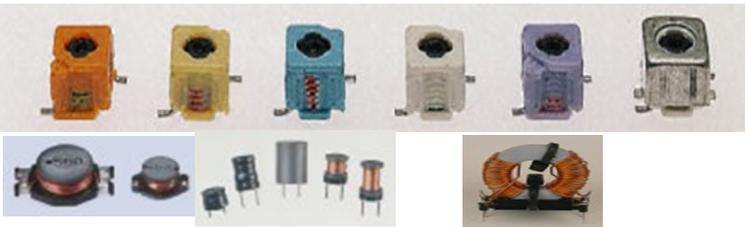
$$\text{Unit: } \frac{\text{volt second}}{\text{ampere}} = \text{henry}$$



Every conductor has inductance, even though the conductor may not have been designed as an inductor. Inductance in any circuit is the property that opposes any change in the existing current. The unit of inductance may be stated in henrys, millihenrys, or microhenrys. When an alternating voltage is applied to an inductance, a back electromotive force (emf) is generated in the inductance. This emf is proportional to the rate at which the current changes -- The more rapid the change, the greater the back emf developed. And this, in turn, is proportional to the frequency of the alternating voltage. This opposition to the flow of alternating current is called [inductive reactance](#), symbolized by XL.

Reactance is measured in ohms, and the formula for inductive reactance is:  $XL = 2 \pi f L$

Example: The reactance of a 5.26-millihenry coil at 50 Hz is:  $XL = 2 \pi f L = 6.2832 * 0.00526 * 50 = 1.65 \text{ ohms}$



In the real world inductors come in all shapes and sizes, like any other component. Depending on the application these components can have a wide range of inductances. The smaller values tend to be applied to [radio frequency](#) tuned circuits while the larger can be used for EMI (electromagnetic interference) suppression. i.e. high frequency filters commonly referred to as RF Chokes. Sometimes these chokes can be required to operate on high current power supplies. In these cases the coil windings can have large gauge wire windings and require significant pieces of [ferrite core](#) material to form the core.

## INDUCTOR COLOR GUIDE

Result Is In  $\mu\text{H}$

4-BAND-CODE  $\rightarrow$   $\rightarrow$   $270\mu\text{H} \pm 5\%$

COLOR	1st BAND	2nd BAND	MULTIPLIER	TOLERANCE
BLACK	0	0	1	$\pm 20\%$
BROWN	1	1	10	Military $\pm 1\%$
RED	2	2	100	Military $\pm 2\%$
ORANGE	3	3	1,000	Military $\pm 3\%$
YELLOW	4	4	10,000	Military $\pm 4\%$
GREEN	5	5		
BLUE	6	6		
VIOLET	7	7		
GREY	8	8		
WHITE	9	9		
NONE				Military $\pm 20\%$
GOLD			0.1 / Mil. Dec. Pt.	Both $\pm 5\%$
SILVER			0.01	Both $\pm 10\%$

Military Identifier  $\rightarrow$   $\rightarrow$   $6.8\mu\text{H} \pm 10\%$  MILITARY CODE

Electronix Express / RSR  
<http://www.elexp.com>

1-800-972-2225  
 In NJ 732-381-8020



## Early Radio: Military Communications

### BINH GIA – The Battle part II

13 March 2006

Michael Martin

"The VC took our weapons and tied all of us up, including the two US advisors with our company. Second Lieutenant Hoa, my platoon leader, was next to the Americans; he was wounded too. They [searched](#) all of us; they took the boots off the American sergeant and some other personal items.

"After spending an hour clearing the battlefield, the VC withdrew through a rubber plantation leading us and the Americans into the jungle in the direction of Xuan Son."

"I observed that the two Battalion advisors were not wounded. Lt. Hoa, even though he was wounded, was still able to walk. It was dark now, so taking advantage of this myself and Corporal Sang, who was also captured, slipped away from the group and managed to escape," recalled SFC Dam Van Phung of the 2<sup>nd</sup> Company, 33<sup>rd</sup> Ranger Battalion.

## Early Radio: Military Communications

So began the captivity of Ranger advisors Bennett and Crafts; for them, a period of uncertainty, isolation, sickness and physical abuse – conditions that would become familiar to many more American prisoners during the duration of the war.

As with other POWs in the coming years, the two advisors would be detained by the Viet Cong at several different camps, usually identified by the inmates with names referencing their locations or [the degree](#) of treatment they received from their Communist guards. Names such as: Camp S.O.B, Camp Bivouac, Camp Tay Ninh and Camp Carefree.

Distance and length of movement from camp to camp varied from two days to fourteen days. Likewise, the [degree](#) of suffering experienced by the prisoners travelling to the camps increased substantially as their health and over all physical abilities deteriorated during their imprisonment.

The VC guards, officers and interrogators, would also become the beneficiaries of the prisoners' imaginative labeling skills "Alex", "Interrogator", "Die Wee", "Prevaricator" and "Pussy", were just a few of the nicknames used by the Americans to personify their captors.

It didn't take the VC long to find out that they had a problem on their hands with Sergeant Harold G. Bennett. From the first day of his captivity, Bennett refused to cooperate with the enemy. He could not – and would not – accept the fact that he was a prisoner of war. Guys who had known or served with him would not be surprised by his attitude. Bennett was a soldier of the Old School, and was hardcore to the hilt.

Harold Bennett was a southerner from Perryville, Arkansas. He had a streak of obstinacy that had been untamed by Army disciplinarians. Before the Biny Gia operation he and Crafts had been enjoying a few words at the EM Club at Bien Hoa when Bennett lost his temper and threw a punch at a US Army Sergeant Major; it almost cost him his [promotion](#) to Staff Sergeant.

Charles McDonald (contributing writer to Behind The Lines) served with Bennett in the 101<sup>st</sup> Airborne Division at Fort Campbell, Kentucky in the late 1950s. He remembers him as a "fine soldier and a great friend".

Charles McKinsey, who also served with Bennett in the 101<sup>st</sup>, provided this panegyric of him: "Sergeant Bennett was a beer drinking, ass kicking, fun loving, son of a gun. I never heard any details of his capture and always wondered how they kept from killing him when he was caught. I know he didn't go without a struggle."

A villager who was captured and released said he saw Bennett and Crafts in captivity and remembered Sergeant Bennett from a previous occasion when he had befriended the children of his village while accompanying the 33<sup>rd</sup> Ranger Battalion.

Knowing the Viet Cong, their terrorist methods, and their insensitivity to Vietnamese peasants who were unwilling to aid in their so called revolution of the people, Bennett made up his mind to escape at the first opportunity. He knew that any chance of a successful escape would be minimized the longer he waited. As they were marched away from the battlefield, he told Crafts that they should make their escape as soon as possible. "It is your decision as to when we should make a run for it," replied the RTO. But as it grew dark the VC guards positioned themselves behind Bennett as he moved down the trail, making an escape attempt all but impossible.

They arrived at their first camp about midday on 30<sup>th</sup> December 1964 – the location is unknown. There were from 50 to 75 ARVN enlisted men, eight to ten ARVN officers, and two or three Vietnamese women being held as prisoner at the site. While there, two Viet Cong photographers took pictures of the two captured US Ranger advisors.

On the afternoon of 1<sup>st</sup> January 1965, Bennett, Crafts and their VC guards left the camp and travelled approximately two miles to another unknown camp. It was at this camp on 2<sup>nd</sup> January 1965 that they met another American prisoner, Captain Donald Gilbert Cook – the same Captain Cook who was caught in the ambush with the Vietnamese 4<sup>th</sup> Marine Battalion. He was brought into the camp in a hammock early that morning with a leg wound that prevented him from walking.

The same night, Bennett and Crafts attempted their second escape. The VC had overlooked a pair of jeep keys and a set of fingernail clippers when they initially searched Bennett. That afternoon, using the keys and a little Confederate ingenuity, the two Rangers weakened the springs on the inexpensive padlocks securing the chains that bound their ankles. After dark, they used the fingernail clippers to cut through the vines binding the bars overhead. Taking off their shirts, they reversed them and tore out the white labels, then sat back and waited for the guards to make the nightly security check just like they had done on the night before.

The guards had been squatting around a fire, chatting away noisily, so the two Rangers decided that it would be a good time to get away undetected. But suddenly the guards got and went to bed, leaving only one of their number on watch. Now it was deadly quiet in the camp and the two men knew that any movement would attract the guard's attention, so they waited.

The next morning the guards were unable to open the locks at first, the springs were sprung... Still, they gave no indication that they suspected anything was wrong. They simply replaced the broken locks with US Army type padlocks, which were impossible to pick.

On 25<sup>th</sup> January, Bennett and Crafts, with Captain Cook, departed for another camp.

They journeyed for about two days before stopping at a village. They remained there for four days. At the end of January both Rangers were moved to a new camp (which they nicknamed Camp S.O.B), arriving on 6<sup>th</sup> February 1965. Cook was left at the village so his wound could heal. By the middle of March, now walking on his own, he rejoined them at Camp S.O.B. It was at this camp that Bennett would make his last escape attempt, along with the other two advisors.

The three men were housed in a hut together where they made plans to escape during one of the occasions when they were allowed to answer nature's call. Leaving the hut, they walked toward the latrine when their guards stopped them, ordering Crafts back inside. Bennett and Cook kept walking past the guard towards the latrine. Suddenly, Bennett whispered, "We can't leave him behind." Cook looked at him and whispered back, "I'm in command here, and this is my decision. Let's go!"

They hadn't gone very far when Bennett's foot got caught in the undergrowth. Being too weak by then from weeks of vomiting, diarrhoea and not enough food, he was unable to free himself. At this time, one of the guards caught up with Bennett. As the VC turned to call for help, Bennett hit him and put his hand over his mouth to muzzle his shout. Cook then hit the guard several times but was unable to render him unconscious. In the course of the struggle the guard nearly bit off one of Bennett's fingers.

Suddenly, another guard showed up and forced the two Americans back to camp at gunpoint, where both were handcuffed and shackled and kept that way for several months. In addition, the VC clubbed Sergeant Bennett on the side of the head, knocking him to the ground. Later that night, two Viet Cong officers came in and pointed their pistols at the two men threatening, "We are going to kill you. We have the authority to kill you!" Bennett's time was running out.

In mid May the three Americans and a party of VC guards left Camp S.O.B for another POW camp, believed to be in Tay Ninh province. Bennett had lost a tremendous amount of weight and was growing steadily weaker. His stomach was constantly upset and he stopped eating the rice that his captors gave him. He despised the VC and refused to kowtow to any of them. He swore at them continuously, using a few choice Down Home obscenities. It was becoming more and more difficult for Bennett to reconcile the fact that he was a prisoner of war.

The Viet Cong hated Bennett as much as he hated them. They beat him severely on several occasions, striking him with their rifle butts. Once, he got into an argument with and it was becoming more and more difficult for Bennett to reconcile the fact that he was a prisoner of war.

Once, he got into an argument with one of the guards who pointed his submachine gun at him.

Bennett stood his ground and dared the enemy soldier to fire his weapon. But the travelling had now become an obstacle for Bennett. In his present physical condition, and with suffocating jungle heat, he was having a hard time keeping up. The guards vented their anger on him by kicking and punching him at every opportunity. The weakened Ranger would not let them hear him utter a whimper. He only grimaced and glared back at them defiantly.

In the early morning hours on 28<sup>th</sup> May 1965, the three prisoners and their guards set out on the final leg of their journey. They had travelled no more than two or three miles when the VC stopped and told the POWs to sit down. Sergeant Bennett was some distance behind, out of view of PFC Crafts and Captain Cook. Three of the guards were sent to the rear. When they returned a short time later, they reported, "We have killed Bennett."

In Camp Tay Ninh, around the middle of July 1965, a ranking communist officer told Crafts and the other US prisoners that Sergeant Bennett had been punished severely for attempting to escape. The officer informed them that Bennett was at a camp trying to redeem himself. In October or November 1965, a VC interrogator told Crafts and Cook that the South Vietnamese government had made a decision to execute two Viet Cong that they considered to be terrorists. The NLF threatened to retaliate by executing a POW named Hawks. The Saigon government ignored the threat and executed two other VC instead of the original pair. The Communists responded by immediately executing Sergeant Harold G. Bennett in place of Hawks.

I heard of the execution of Ranger Bennett over Armed Forces Radio in late 1965. The broadcast stated that Bennett was a Ranger advisor and the first American to be executed by the Viet Cong. To the families, friends, loved ones and comrades in arms of the still unaccounted for MIAs and POWs and to fellow Ranger Sergeant Harold G. Bennett, I dedicate this story.

**SOME GAVE ALL!**

"We are to remember our prisoners as if war chained to them..." A Biblical Quote

#### **SIDEBAR**

The ordeal of PFC Charles Crafts must not be overlooked. He was an eyewitness to the saga of Ranger Bennett. As a young soldier assigned to a foreign unit where the country and its people were alien to him, his capture by the Viet Cong in his first taste of combat was a trauma in itself. He resisted and survived the cruelties of a harsh and tenacious enemy, hardened by years of combat.

During his captivity he suffered the same agonies of physical and psychological torture that Bennett and the other POWs

endured: solitary confinement in shackles and handcuffs, restrained from communicating with other POWs, propaganda indoctrinations, little food and forced marches through dense jungle – at one point (28<sup>th</sup> October 1966) he departed a camp with two other prisoners and walked for 14 days to the next camp.

PFC Crafts was released by the communists on 12<sup>th</sup> January 1967. During his imprisonment he came into contact with several other Americans including three civilians and four Special Forces NCOs. The four were: SFC Isaac Camocho, SFC Kenneth Roraback, SGT Claude D. McClure.

At 2200 hours on 9<sup>th</sup> July 1965, Camacho escaped from Camp Carefree. Smith was supposed to escape with him, but decided not to at the last minute because a night lamp had been placed near his bed had illuminated his sleeping area, making his absence immediately noticeable to the guards. SFC Camacho's escape plan was known by all the POWs and had been delayed a few days to coincide with the rainy season.

The two US prisoners that most vividly filled the recollections of Charles Crafts are US Marine Captain Donald G. Cook, who he met on 2<sup>nd</sup> January 1965 and US Army Captain John Schumann, who arrived in a camp he was being detained at on 4<sup>th</sup> July 1965. Cook was the senior POW leader in the camps with Crafts; Schumann outranked him but due to his sickness, he felt that Cook should remain in charge. Captain Schumann suffered from kidney infection and acute pneumonia. He died in Crafts' arms on 7<sup>th</sup> July 1966. Schumann had been an advisor to a local Vietnamese commander at the time of his capture. The Code of Conduct makes some profound statements in regard to a leader's personal responsibility and the military's expectations of him while a prisoner of war. Captains Cook and Schumann exemplified this charge. Captain Cook provided a list of pertinent facts and recommendations – to include promotions and awards – that pertained to the prisoners, for Crafts to provide to the US Military Intelligence authorities in the possibility that he might be released. He had recommended Sergeant Bennett for the Silver Star. Schumann had recognized three NCOs on his advisory team for Bronze Stars.

Crafts hid this information and other personal letters to family members of the POWs in a slit in the case for his eyeglasses. He was able to conceal this valuable information and bring it out with him on his release at a great personal risk to himself – even jeopardizing his own freedom. In November 1966, Crafts, Cook and a Sergeant Womack were moved to a camp believed to be in Bien Hoa Province. Crafts left it on the 16<sup>th</sup> February 1967. It was the last time he would see Captain Cook who reportedly died in captivity during that same year.

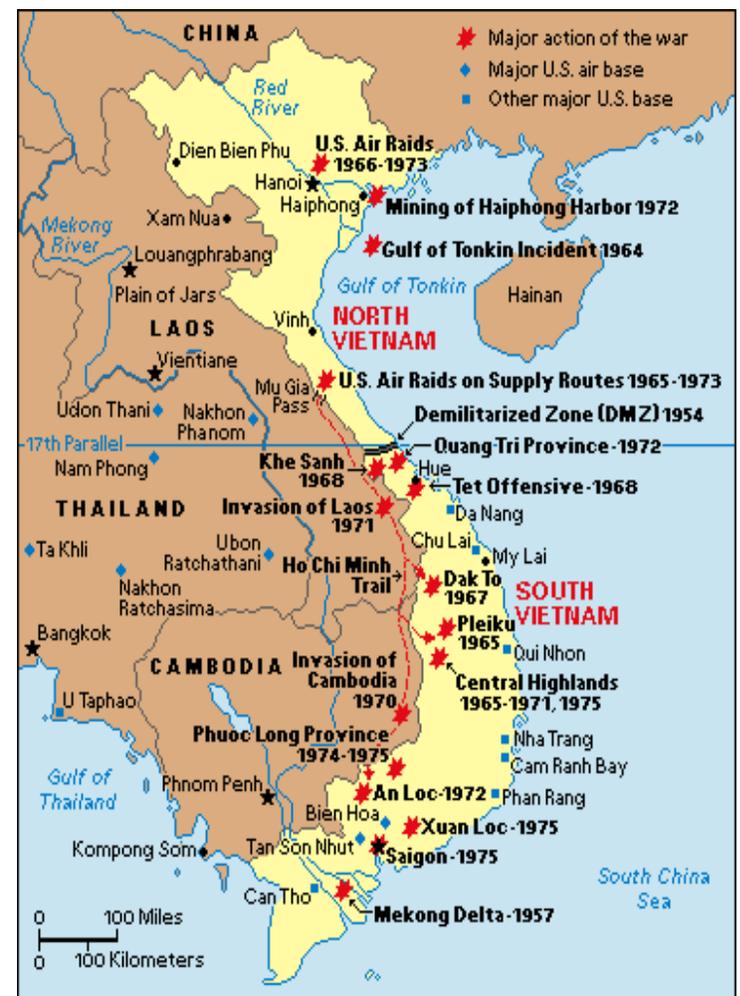
"If I am captured I will continue to resist by all means available..."

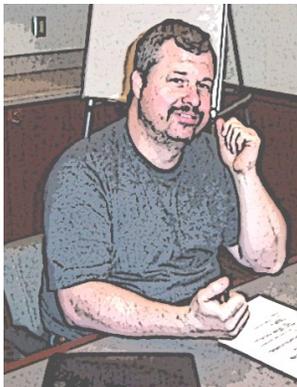


An M-163 Vulcan fires into the brush to flush out enemy troops along Highway 13 in Vietnam.

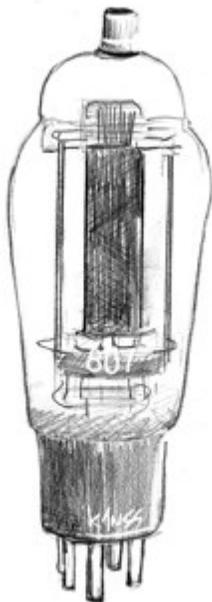
The M-163 Vulcan was a modified M-113 Armored Personnel Carrier with an M-61 Vulcan Air Defense System turret.

**Editor Note:** My unit, 62nd Air Defense Artillery, 25th Infantry Division had 2 batteries of the M-163 Vulcan. Fires 3600 20mm rounds per minute. Night vision & radar guidance.





Club President Dave, KA9WXN.



Greet New Members

## Next Regular Meeting

The next meeting will be on Thursday, September 26h at 7:00PM. We meet in the Fellowship Hall of Redemption Lutheran Church, 4057 N Mayfair Road. Use the south entrance. Access the MRAC Yahoo group for important details about the February Meeting.

**Meeting Schedule:**

**October 24th, 7 pm**

**Please do not call the church for information!**

## Club Nets

Please check in to our nets on Friday evenings.

Our ten meter SSB net is at **8:00 p.m. at 28.490 MHz USB** Our two meter FM net follows at **9:00 p.m.** on our repeater at **145.390 MHz** with a minus offset and a **PL of 127.3 Hz.**

Visit our website at: [www.w9rh.org](http://www.w9rh.org)

Or phone **(414) 332-MRAC** or **332 - 6722**



Name of Net, Frequency, Local Time	Net Manager
<b><u>Badger Weather Net (BWN)</u></b> 3984 kHz, 0500	<a href="#">W9IXG</a>
<b><u>Badger Emergency Net (BEN)</u></b> 3985 kHz, 1200	<a href="#">NX9K</a>
<b>Wisconsin Side Band Net (WSBN)</b> 3985 or 3982.5 kHz, 1700	<a href="#">KB9KEG</a>
<b>Wisconsin Novice Net (WNN)</b> 3555 kHz, 1800	<a href="#">KB9ROB</a>
<b>Wisconsin Slow Speed Net (WSSN)</b> 3555 kHz, Sn, T, Th, F, 1830	<a href="#">NIKSN</a>
<b>Wisconsin Intrastate Net - Early (WIN-E)</b> 3555 kHz, 1900	<a href="#">WB9ICH</a>
<b>Wisconsin Intrastate Net - Late (WIN-L)</b> 3555 kHz, 2200	<a href="#">W9RTP</a>
<b><u>ARES/RACES Net</u></b> 3967.0 kHz, 0800 Sunday	<a href="#">WB9WKO</a>
* Net Control Operator needed. Contact Net Manager for information.	

### Chatter Deadline

The **DEADLINE** for items to be published in the **Chatter** is the **15th of each month**. If you have anything (announcements, stories, articles, photos, projects) for the 'Chatter, please get it to me before then.

You may contact me or Submit articles and materials by e-mail at: [Kc9cmt@earthlink.net](mailto:Kc9cmt@earthlink.net)

**or by Post to:**

Michael B. Harris  
807 Nicholson RD  
South Milwaukee, WI 53172-1447

## VE Testing:

July 27th— AES— 9:30 to 11 am.

August 31st- AES - 9:30 AM - 11 AM.

ALL testing takes place at: Amateur Electronic Supply  
5720 W. Good Hope Rd. Milwaukee, WI 53223

## Area Swapfests

August 10th 2013 [6th Annual Racine Megacycle Freefest 2013](#) Location: Sturtevant, WI

Type: ARRL Hamfest Sponsor: Racine Megacycle Club  
Website: <http://www.w9udu.org>

August 24th 2013 [Circus City Swapfest](#)

Location: Baraboo, WI  
Type: ARRL Hamfest Sponsor: Yellow Thunder ARC  
Website: <http://yellowthunder.org>

Sept. 28th, 2013 [Ozaukee Radio Club Fall Swapfest](#) Location: Cedarburg, WI Type: ARRL Hamfest  
Sponsor: Ozaukee Radio Club  
Website: <http://www.ozaukeeradioclub.org>

## MRAC Working Committees

### 100th Anniversary:

- Dave—KA9WXN
- Dan—N9ASA

### Net Committee:

- Open

### Field Day

Dave—KA9WXN, Al—KC9IJJ

### FM Simplex Contest

- Joe - N9UX
- Jeff - K9VS

### Ticket drum and drawing

- Tom - N9UFJ
- Jackie - No Call

### Newsletter Editor

- Michael-KC9CMT

### Webmaster

- Mark Tellier—AB9CD

### Refreshments

- Hal—KB9OZN



## Membership Information

The Hamateur Chatter is the newsletter of MRAC (Milwaukee Radio Amateurs' Club), a not for profit organization for the advancement of amateur radio and the maintenance of fraternalism and a high standard of conduct. MRAC Membership dues are \$17.00 per year and run on a calendar year starting January 1st. MRAC general membership meetings are normally held at 7:00PM the last Thursday of the month except for November when Thanksgiving falls on the last Thursday when the meeting moves forward 1 week to the 3rd Thursday and December, when the Christmas dinner takes the place of a regular meeting. Club Contact Information

Our website address <http://www.w9rh.org>

Telephone **(414) 332-MRAC (6722)**

Address correspondence to:

**MRAC, PO Box 26233, Milwaukee, WI 53226-0233**

Email may be sent to: [w9rh@arrl.net](mailto:w9rh@arrl.net) . Our YAHOO newsgroup:

<http://groups.yahoo.com/group/MRAC-W9RH/>

## CLUB NETS:

- The Six Meter SSB net is Thursday at 8:00PM on 50.160 MHz USB
- Our Ten Meter SSB net is Friday at 8:00PM on 28.490 MHz ± 5 KHz USB.
- Our Two Meter FM net follows the Ten meter net at 9:00PM on our repeater at 145.390MHz - offset (PL 127.3)



The MRAC HamChatter is a monthly publication of the Milwaukee Radio Amateurs' Club. Serving Amateur Radio in Southeastern Wisconsin & all of Milwaukee County

**Club Call sign - W9RH**

**MRAC Website: <http://www.W9RH.org>**

**Editor: Michael B. Harris, Kc9cmt, [kc9cmt@Earthlink.net](mailto:kc9cmt@Earthlink.net)**

## Milwaukee Area Nets

- |   |   |
|---|---|
| <p>Mon. 8:00 PM 3.994 Tech Net</p> <p>Mon. 8:00 PM 146.865- ARRL Newsline</p> <p>Mon. 8:00 PM 146.445 Emergency Net</p> <p>Mon. 8:00 PM 146.865- Walworth County ARES net</p> <p>Mon. 8:45 PM 147.165- ARRL Audio News</p> <p>Mon. 8:00 PM 442.100+ Railroad net, also on EchoLink</p> <p>Mon. 8:00 PM 442.975+ WARC W9CQ net also on EchoLink 576754</p> <p>Mon. 9:15 PM 444.125+ Waukesha ARES Net on the 1st, 3rd, and 5th Monday of each month.</p> <p>Mon. 9:00 PM 147.165- Milwaukee County ARES Net</p> <p>Tue. 9:00 AM 50.160 6 . Mtr 2nd Shifter's Net</p> <p>Tues. 8:00 PM 145.390- General Class</p> <p>Tue. 9:00 PM 145.130 MAARS Hand Shakers Net</p> <p>Tue. 8:00 PM 7.035 A.F.A.R. (CW)</p> <p>Wed. 8:00 PM 145.130 MAARS Amateur Radio Newsline</p> <p>Wed. 8:00 PM 147.045+ West Allis ARC net</p> | <p>Wed. 8:00 PM 147.270+ Racine County ARES net</p> <p>Wed. 9:00 PM MAARS SwapNet, AllStar link to FM-38</p> <p>Thur. 8:00 PM 145.130- General Class</p> <p>Thur. 8:00 PM 50.160, 6 Mtr SSB Net</p> <p>Thur. 9:00 PM 146.910 Computer Net</p> <p><b>Fri. 8:00 PM 28.490 MRAC W9RH 10 Mtr Net SSB</b></p> <p><b>Fri. 9:00 PM 145.390 W9RH 2 Mtr. FM Net</b></p> <p>Sat. 9:00 PM 146.910 Saturday Night Fun Net</p> <p>Sun 8:30 AM 3.985 QCWA (Chapter 55) SSB net</p> <p>Sun 9:00 AM 145.565 X-Country Simplex Group</p> <p>Sun 8:00 PM 146.91 Information Net</p> <p>Sun 8:00 PM 28.365 10/10 International Net (SSB)</p> <p>Sun 9:00 PM 146.910 Swap Net</p> |
|---|---|

**First Thursday of the month 8:00 PM 442.200+ Round Table Tech Net**

**2meter repeaters are offset by 600KHz - - 70 centimeter repeaters are offset by 5 MHz**

