

# MRAC Hamateur Chatter

The Milwaukee Radio Amateurs Club

February 2015 Volume 23, Issue 2

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

## Presidents' Letter

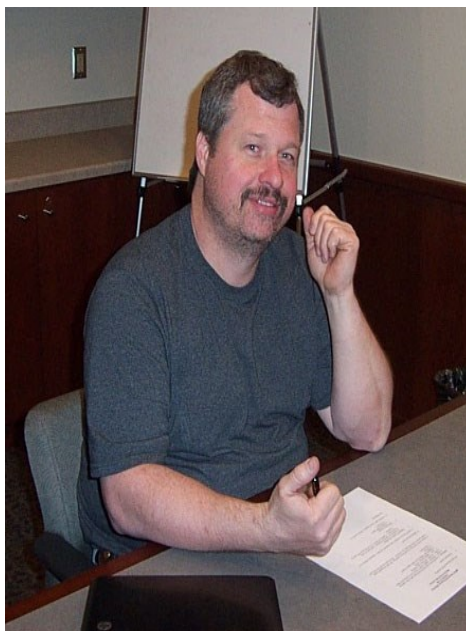
First, I want to thank everyone who helped with this year's Swapfest. Even though our attendance was down due to the weather, which caused some travel headaches for our vendors outside of our area, the feedback we received vendors was really positive regarding sales. I was pleased to see many people leaving with new treasures and smiles on their faces. We are still working on the final figures, and hope to have these ready for the March 19 meeting.

This is also a reminder that our annual Food Meeting is coming up on Thursday, February 26. Profits from our Swapfest help to defray costs for this gathering, as does everyone's donation of a dish to pass as part of the potluck dinner. The club will provide a main course, soft drinks/water, and utensils. Chef Al KC9IJJ is still working on the menu, and we are really looking forward to seeing everyone for this fun, social event. Please feel free to invite your ham friends and others who might be interested in ham radio.

Also, a quick recap on our Annual Simplex Contest, held on February 8. This year, we added digital modes to the contest. Sadly, we found out it wasn't as "easy" as we thought it would be regarding operation or making contacts, compared to analog. I personally tried to work 3 different digital modes as W9RH, which turned out to be a real challenge for me. There are definitely things we need to reconsider for next year, so if you have any input/feedback, please let us know.

Finally, a reminder that the March meeting has been moved to Thursday, March 19. We are able to get representatives from Yaesu to attend this meeting to discuss the System Fusion equipment that we are running on the club repeater. This will be a great time to get our questions answered, so come prepared with your thoughts. Moving this meeting also better aligns us with AES Superfest being held on Saturday, March 21st. Please mark your calendars and join us on **March 19**.

*73 Dave, KA9WXN*



## MRAC Officers:

### Terms Expiring in 2016

- President – Dave, KA9WXN
- V-President– Dan, N9ASA
- Secretary – MBH, KC9CMT
- Treasurer – MBH, KC9CMT
- Director – Mark, KB9RQZ

### 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)

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**PO Box 26233**

**Milwaukee, WI**

**53226-0233**

Board of directors meeting called to order at 6:50 pm by Dave Shank, KA9WXN club president.

Director's present: Michael KC9CMT, Dave KA9WXN, Dan, N9ASA. Mark, KB9RQZ, Hal, KB9OZN, Al, KC9IJJ.

Absent: None

The Board of Director's minutes were accepted as published in the November Chatter by a motion forwarded by Michael, KC9CMT seconded by Dan, N9ASA. The Treasurers report was given by Michael, KC9CMT. A motion was made by Mark, KB9RQZ to accept the Treasurers report as read; Dan, N9ASA seconded the motion. The December balance ended with \$19,737.09 in our Club accounts. We make \$8.62 a month in CD interest. We still will be sending the ARRL Spectrum Defense Fund \$200 early in 2015. The Church will be getting a donation of \$100 for allowing us to use their facility for the 2014 calendar year.

**Meeting programs:** For the month of January, 2015, Joe, N9UX will be giving a short program on the FM simplex contest that is coming up on February 8<sup>th</sup>, 2015. The WARAC will be giving a short talk on the Wisconsin QSO party. The February meeting will be a food gathering again in 2015. April 2015 is still open for presentations. The MRAC/MAARS joint picnic will be on August 8<sup>th</sup>, 2015 at Greenfield park, picnic area number 2, a permit has already been issued for the picnic. The March meeting this year will be one week earlier, on March 19<sup>th</sup>, 2015. AES SuperFest will be that weekend. We will be having someone from Yaesu give a presentation on the Fusion system they have been selling. The club meeting is before field day this year.

**Field Day:** The MRAC field day will be at Konkel park in Greenfield again in 2015. Dave, KA9WXN has received a permit that secures our spot at Konkel Park in June of 2015. Dave will be asking the membership for station captains to help coordinate activities during field day. The Gateway Technical group will be joining us again this year.

### Special Project Committees & Committee reports:

**Repeater Report:** The Yaesu Fusion repeater that Yaesu gave the club a great deal on, is on back order. Dave, WB9BWP is the repeater trustee and a control operator. The club would like more than one repeater control operator. A club repeater control operator should be a extra class operator to have the kind of privileges that are necessary to operate field day to its fullest extent. We need to ask for volunteers at the membership meeting. The State official Operator has sent a email to Pancho about the clubs' 2 meter net preamble. He wants the wording to be changed to comply with FCC part 97. Pancho has changed the opening preamble to comply with his ruling.

**New Business:** There have been discussions with the Menominee Falls library people about our ability to remain in our present location for the club's Board of Directors' meetings. We need to start working on what we are going to do at the AES SuperFest at the end of March this year.

Dave, KA9WXN proposed to the board that the Club have a booth at the Maker's Fair to take place in the fall of 2015. Booth space in the structure at state fair park is \$150. For that price we would get a 10 x 10 booth space. It would be easy enough to set up an antenna outside the facility, for a special event station. The LeFrog group was mentioned has a partner in this venture. The clubs' anniversary is in 2017. We need to start planning event stations for the entire year. Dave, KA9WXN will attempt to generate interest among the membership in forming a committee to handle planning.

**Swapfest Committee:** The Swapfest is on February 14<sup>th</sup>, 2015 this year. The club would like to promote the 10-10 international radio club. Dan or Dave are going to contact American Science and Surplus about having a table at the MRAC swapfest. Tickets were printed and advanced table sales and ticket orders will be mailed the last week on January. There will be Friday the 13<sup>th</sup> setup at 1 pm again this year. The facility will open up for vendors' at 6 am. Volunteers will be asked to report at 5:30 am. Fliers are being distributed to select businesses in the Milwaukee area. The club will be offering the West Mountain Group a free table at the swapfest in exchange for a membership meeting presentation. The suggestion was made to take photos for the MRAC Facebook Page of swapfest activities.

**Special Projects:** The club needs someone to take over the FM simplex contest for February of 2016. What swapfests will the club be manning tables at in 2015? Ham radio is on the rise numbers wise, with more retirees and younger people entering the hobby, due to the influx of cheap Chinese HT Radios for sale. The club really needs PR and recruitment.

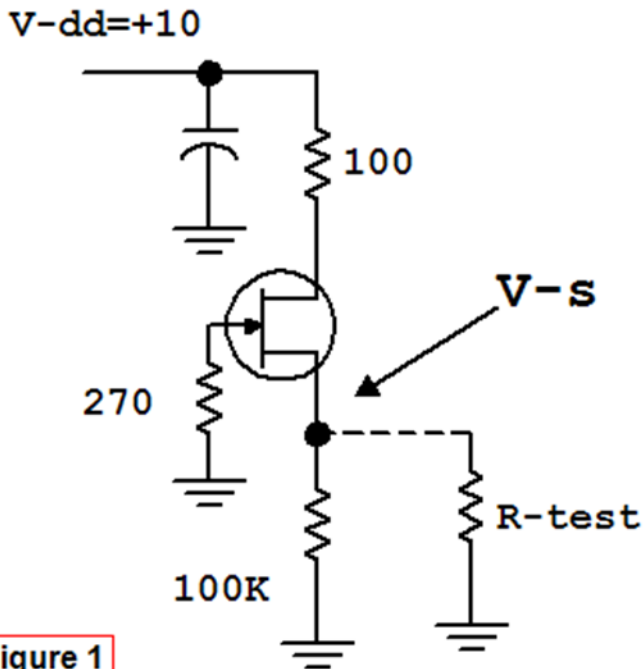
Clubs throughout the country need to use the spectrum that they have been given. Both 440 & 220 are not used very often in the Milwaukee area. A Club calendar is a project that the Board of Directors' would like to pursue. We would like to organize meeting programs far enough in the future that a calendar of programs can be produced. [www.Bldinfourms.net](http://www.Bldinfourms.net) is the Atlantic division directors' site that shares content for club newsletters.

A motion was made to adjourn the meeting at 7:52 pm by Dave, KA9WXN seconded by Mark, KB9RQZ. Meeting adjourned at 7:56 pm. The room was returned to an organized condition as it was when the room was opened.



## Experiments with JFET Biasing

The most common way of biasing a Junction Field Effect Transistor (JFET) is with a source resistor. This method, shown in Fig 1 below, has the advantage of offering negative feedback to stabilize the bias conditions. This is the same thing that happens when a bipolar transistor uses an emitter resistor. Self bias can be used as a method to evaluate a JFET to determine the critical parameters that describe it:  $I_{dss}$  and  $V_p$ .



**Figure 1**

These are discussed in Chapter 2 of **Experimental Methods in RF Design** and many other places.

The method used in our experiment is to set up the FET of interest in a test fixture with a power supply, bypass capacitor, resistors in the drain and gate to suppress parasitic oscillations, and a handful of extra resistors, R-test, that can be paralleled with an existing 100K source resistor. A digital volt meter (DVM) is the basis for the measurements. We begin by using the DVM to measure the resistance of our test resistors, for the values will be used in calculations. The DVM is then attached to the FET source to measure the DC voltage. The first value we measure is with no attached R-test. The measured value will be very close to the FET pinchoff voltage.

The measurements we will perform infer drain current as a function of gate-to-source voltage. The physics of the FET support the model that there is no gate current so long as the gate is not forward biased with regard to the source. Hence, the drain current equals that in the source. We will measure the source current by measuring the voltage drop across the source resistor. The gate is at ground potential, for there is no gate current, so the gate-to-source voltage is just the negative of the source to ground voltage.

The resistors that I pulled from my stock for some measurements were marked as 22, 39, 68, 100, 150, 300, 510, 680, 1K, 2K, 3.3K, 6.8K, and 10K Ohm. The measured values are shown in attached figures.

A systematic pattern was noticed with all of the measured resistances under the marked value, suggesting an error in the calibration of my DVM, a Fluke Model 73. All resistors were 2% carbon film 0.25 Watt. However, when I measured a 499 Ohm, 1% metal film resistor, it came up exactly at 500 Ohms. The differences between the measured values and those marked on the part were small enough that I neglected the details and used measured values for calculations.

The first FET I examined was a 2N5454, a common JFET that I had in my junk box. The source voltage was 3.26 with nothing but the 100K for source bias. I started my measurements with the largest resistor, 10K. The voltage dropped to 2.90 and was stable. I merely held the resistor in place rather than soldering it. The resistor was kept in place long enough to get a stable reading that I could record in my lab notebook. All results were of the same character until I got to the 300 Ohm resistor. At that point I started to notice a slight heating effect. The source voltage was 1.523, but slowly dropped to 1.518 volts. This behavior continued through the lower value resistors. The 22 Ohms produced 264 mV on the source that then dropped to 256 mV.

Later I examined a J310 JFET. This is a much larger area part than the 2N5454 with an  $I_{dss}$  that is about three times larger. With the 22 Ohms in the test fixture, V-source went to 701 mV, but settled at 652 mV. The drain current was then 32 mA. With a 10 volt power supply, there was nearly 200 mW dissipated in the FET. This is within ratings, but high enough to produce heating. Operation at higher voltages and at  $I_{dss}$  would further tax the part. One must take care when doing these measurements to be sure that the source voltage is observed quickly.

Attached are the MathCad documents that I used to examine the data. A spread sheet such as Excel could be used, but I prefer the graphics of MathCad. The second page for the 2N5454 shows a graph for the observed data as well as a calculated one. The two FET parameters for the 2N5454 were varied to obtain a good correspondence between the two. The part had  $I_{dss}=15$  mA with  $V_p=-3.5$  volts. This is similar to the popular MPF-102, but close to the high  $I_{dss}$  extreme for that part.

The data presented for the J310 is more abbreviated with only two points shown. I picked the 22 Ohm and 1K source resistors. This still produced data that is very close to that obtained with many more data points.

My initial analysis suggested that we could characterize the FET by measuring the source voltage with 100K in place to approximately determine  $V_p$ , and to then short circuit the source through the mA scale on the DVM to obtain  $I_{dss}$ . This is a reasonable start. However, the pinchoff will usually be a few percent more negative (for an N-channel depletion mode part). The long leads in the source also make me feel uncomfortable with regard to parasitic oscillations.

After the DC measurements were done, I thought it wise to look at the potential for oscillation. The J310 was in the test circuit at this time. The TO-92 J310s are parts that are well known for their propensity for oscillation, so I guessed that it would not be difficult to coax this one into such a mode. But this was not what I found. I eliminated the 100 Ohm drain resistor, but moved the FET close to the 0.1 uF bypass. This bypass is not a very good one for VHF and upward.



No oscillation was seen. I then eliminated the gate resistor, replacing it with the normal gate lead. Still no oscillation. I eventually added a gate inductor and a parallel tuned circuit in the source. The source bias resistor had a RF choke in series with it. I finally saw a robust VHF oscillation, but nothing else up through 1.5 GHz.

## Weather Hazard Awareness

### What Is Windchill?

Weather forecasters use an index to try to indicate how the average person will feel in the wind, this is known as wind chill.

The skin is our largest organ and is vital in temperature control. When we are hot we sweat, this removes excess heat and cools us down.

When we are cold, the skin warms a thin insulating boundary of air, trapping in body heat and keeping us warm.

There are 2 ways in which wind cools the skin, firstly it disturbs the insulating boundary layer of air, and secondly it increases the evaporation of moisture from the skin – this takes body warmth with it.

When the wind chill is below -50°C on an exposed forehead unconsciousness can occur in minutes, also skin may freeze within 30 seconds when the wind chill is -75°C.

### Individual differences

The effects of wind chill affect people differently. Wind chill is based on the average person; however there are a number of factors that can cause differences in how we feel in a cold wind.

Extreme cold can cause both frost bite and hypothermia. Depending on your build, you can be more susceptible to one than the other.

If you are tall and thin you will probably feel cold sooner than shorter stockier people because you have a greater surface area of skin compared to their mass. People with greater insulation are more likely to suffer frost bite but less likely to suffer hypothermia, as they lose body heat to their cooling skin more slowly.

Young and elderly people have less developed and less effective body temperature control systems, so they are at particular risk from the cold. In Canada, where wind chill effects are very important, they have a 'Cold Weather Policy' where children are kept indoors when wind chill reaches a certain level.

If you have damaged blood vessels, which carry heat around the body, you are also more likely to feel the cold. This can be the case if your iron levels are low which can happen when taking some medications.

Metabolism rates can also have an impact on how cold you feel, as slow metabolism can result in poorer circulation.

Some medical conditions, or even medications, can also have an effect on how we feel in a cold wind.

If you have diabetes and have peripheral neuropathy (a disorder of the nerves) you may find that you sweat more on your face and neck – from which we lose a large proportion of our body heat. If your blood glucose levels are high this can also damage the nerves in your legs and feet, which means that cold may not be felt as easily – this makes you more likely to suffer frostbite when it is very cold.

If you take Beta-Blockers they can also increase the likelihood of frost-bite because they cause blood vessels to constrict, and this results in colder hands and feet.

### Avoid the chill

Apart from staying inside on windy days, there are simple things that you can do to lessen the effects of wind chill.

Drink plenty of water to hydrate your skin inside and outside (dehydration affects your ability to regulate your body temperature) and if you apply moisturizer to wet skin this seals in the moisture and prevents heat loss.

When you go out in the cold make sure you wrap up well – wearing a hat and scarf can help keep in the 40 – 50% of heat that would otherwise be lost through the head and neck, mittens help keep hands warmer than gloves, and by wearing several thin layers of clothes you help create more insulating layers of boundary air.

Before going out if you eat a light snack rather than a big meal you will ensure that less blood goes to your stomach to aid digestion leaving more to circulate to the extremities of your body like fingers and toes.

If you wear waterproof clothes in wet weather they prevent the increase in heat loss from damp skin and clothes – heat loss occurs about 20 times faster from wet clothes than dry clothes.

When the wind is strong the body can react as if it is under attack – this creates the 'stress hormone' dopamine. The body can't sustain stress like this for long, which is why you may feel exhausted at the end of a windy day.



### Spring Health Tips - How to Prevent Diseases & Live Healthy Lives

Spring Health Tips provide tips for many people to stay healthy, young, how to live a healthy life, live longer, prevent diseases, and stay diet. Also, information on more common diseases, how to prevent or cure those diseases.



#### How To Prevent Kidney Stones?

How are kidney stones formed? Kidney stones is a common disease of the urinary tract. Kidney Stone diseases has been showing a rising trend in recent years. Kidney stones can occur in the calyx, renal pelvis, removable and enters the ureter or bladder. It is unknown how the first stones originate, but secondary stone often caused by metabolic disorders, endocrine disorders and chronic pyelonephritis.

Kidney stones are often formed during the hot summer. Because during the summer, people are sweat is a lot of sweat, which results in decreasing urine output, as well as coupled with the summer exposure to the sun for a long period of time, on top of that, ultraviolet radiation and increased synthesis of vitamin D and vitamin A, which increased urine excretion of calcium to form stones, and caused the kidney stones.

Kidney stones is a common disease, too many patients do not really care until their lower right belly become very pain and could not endure, and then they begin to seek treatment. A lot of patients do not know that if kidney stones diseases were able to discovered early, they would not have to endure the unbearable pain.

**Addition to timely treatment, following are few tips on How To Prevent Kidney Stones:**

1. Drink plenty of water, not holding back urine

Do not be holding back urine, drink more and urine more can helps eliminate bacteria, carcinogens from the body, reducing the opportunities for forming kidney and bladder stones.

2. Drink less beer

Some people think that beer can be a diuretic which can also prevent the occurrence of urinary stones. They are wrong; in fact, the brewing of beer contains acidic substances such as calcium, oxalate, allows the body's uric acid increased, becoming important cause of kidney stones.

3. Eat Less Meat

Control the intake of meat and animal offal, because they have high-purine foods, catabolism also have a high blood uric acid, and they are uric acid stone formation ingredients. Therefore, people should eat more vegetable.

4. Eat Less Salt

Salt will increase the workload of the kidneys, salt and calcium in the body have a synergistic effect and can interfere with drug metabolism in prevention and treatment of kidney stones. Salt daily intake should be less than 5 grams.

5. Do not Consume Spinach

According to statistics, more than 90% of stones are calcium, and calcium oxalate stones account for about 87.5%. Food oxalate intake too much calcium oxalate in the urine is too saturated, the excess of calcium oxalate crystals may be precipitated from the urine to form stones. Spinach has those characteristic, so it is important to avoid eating them.

**Therefore, it is important to learn How To Prevent Kidney Stones**

### Early Radio: Military Communications

#### **An Eerie Sucking Sound - November, 1969, by Chuch Truit**

By mid November 1969, atop Dong Ha Mountain there in the Republic of Vietnam, things had changed greatly from just a few weeks earlier. As time moved on, the weather became cooler, and there was beau coup (a lot) more cloud cover. I had mixed emotions about the whole situation. I loved being there and especially working DF. Yet, on an immediate and local level it seemed that the wind quit making the usual wooing sounds, but rather, it seemed to make an uncanny sucking sound as it blew down across Mutter's Ridge and the DMZ from the communist north or from Leatherneck Square to the east. All of a sudden we were the only Marines there on the mountain. The army had arrived in the next step of our president's plan of Vietnamization. My mixed emotions, or ambivalence was that I loved my job, but at the same time the situation sucked. It was kinda like playing sports such as football, and motocross. I loved the sports, both in high school and later years. I played hard too but you gotta pay the price. For instance, I've managed to have sixteen broken bones in thirteen separate incidents. I love the activities, but sometimes the situation sucked. And, that's how it was in Vietnam.

It really was an important job; after all, we were fighting to keep the aggressor communists of the north from taking over the country. Looking back upon it now from a different perspective, or point of view I can also see that America's expenditure of blood and bucks ended up helping to stop the advance of communism on a world-wide level. We drained them and even the giant Soviet Union was defunct in twenty years.

During the day of November 17th, our own 1st Radio Battalion's SigInt efforts produced an incident very reminiscent of the one that greatly influenced the American victory at the Battle of Midway in WWII. In this particular event we found that a NVA regiment (my memory seems to tell me it was the 246th of the 304th Division) was in comms with an NVA arty unit. A combination that always spelled t-r-o-u-b-l-e for someone. Whenever any part of the 304th was on the move, somebody was going to die. And, amazingly it was them that always got hit way harder than us, but they'd just didi mau back across the DMZ, or into Laos.

There they just regrouped, resupplied, rebuilt, and re-trained with immunity their devastated elements, while awaiting for another time to create hate and discontent. We couldn't touch them there thanks to our all wise congress, who were greatly influenced by maggots like Tom Hayden and Jane Fonda, and their blind and self centered followers. People like that were responsible for much American blood. So the big question was, who would that lucky somebody be? Well, we had a tri-nome indicator that signaled who the somebody was that would have the honors. It's just that we weren't exactly sure who the three number indicator indicated. Possibly the tri-nome was C2, a fire support base that was just a little to our east, or possibly the Khe Gio bridge near the southern base of our mountain. It could also be Camp Elliot at the Rockpile, but then again, it could be us as well. Not knowing who caused us all to spin the dials on our radios more intently and I was purposed to locate them with my Pig (PRD-1 direction finder) atop our bunker in the Pig Pen.

Every American unit in the whole northern "I" Corps area was alerted that something was up. Everyone was on standby to assist the "chosen somebodies." Every arty unit that could push out a round far enough with maximum charge was ready to participate. Every air unit was standing by to render assistance even though the cloud cover was heavy and no aircraft could drop bombs without possibly hitting the good guys.

Early in the evening, up in my Pig Pen, the speaker crackled, "All Stations, All Stations this is Florida Vacation Alpha with a message on Bravo Zulu; standby to receive traffic." Net control at Dong Ha had a target for us. In just a short minute's time, I was sending my own traffic back which was a really good shot/bearing on the enemy transmission whom I believe was the 81st Artillery Battalion. It seems that they were to provide artillery support for the 246th as that infantry regiment made it's assault on the chosen somebody. But, who was chosen? We'd all find out soon enough.

I recall hearing the bru ha ha from the big boys (155mm and 175mm howitzers) at Dong Ha, Alpha 4, Charlie 2, and Camp Carroll as their big guns were firing on the enemy's 81st arty, at least on their radio operator. Seems like everybody was getting in on the action. So we thought we knew where their arty support was coming from, but we still had no location on the 246th, nor did we know who they were about to play "Patty Cake" with. For some reason I recall going back down into our operations bunker. Possibly because those big guns were impacting not too far from us, (danger close) and the rounds, especially the 175s from Camp Carroll were doing their "freight train impressions"

as they passed just over our heads; just a slight mis-calc. or a short round would create beau coup "hate and discontent" right in our own perimeter. Some days I'd hear our 1st RagBag DF guy at Camp Carroll talking on our net radio frequency when the 175's, right near him, would start shooting in our direction, then he'd say something like "hey, Foxtrot (that's us at Fuller) you've got some 'Big Boys' heading your way," and sure enough, those 175 rounds would go roaring by. On this occasion, I recall being told across the radio that they were firing some kind of pattern to saturate the suspected target area with steel. Not being an artilleryman, was the term "shooting Iron Crosses" or something like that?

Regardless, for whatever reason, we were all in the bunker as Camp Carroll's 175's were doing their fly-by. Those of us who were not actually on the radio (seems like our Dancers were the ones spinning the dials) were playing Back Alley. I distinctly remember that at 2130 hours we were all actively discussing who was going to get hit. All of a sudden I remembered that all my "deuce gear" was in our sleeping bunker next door. That required my leaving the entrance to our bunker, traversing the ledge and going into the other bunker to retrieve my flack jacket and junk. I recall standing at the entrance and saying "who's it gonna be." "Not us" came the consensus, though the Dancers weren't saying much, but seemed rather shook up. One step along towards the other bunker, just one step and all of a sudden a great big KA-WAAAM . A B-41 (RPG) impacted right on the other side of the bunker entrance where I was headed. I felt the concussion, but continued into the other bunker, after just a slight pause, during which time I yelled back into the Ops. bunker, "It's Us! As if they hadn't already figured that out. Those RPGs were not accurate at all past fifty to a hundred yards, but they could be used as an indirect fire weapon for distances out to nine hundred yards or so. After the retrieval of my combat gear, to include my M-79, I went back to the Operations bunker where my rifle was, and all the other guys. Then NVA 82 mm mortars started dropping in on us, but kind of spread out, not nearly as heavy as I expected.

My memory is sketchy here, because I remember at sometime being along our sandbagged wall awaiting an enemy assault, as well as being in the Operations bunker. I also remember that we could hear the wonderful sound of the flares as they'd pop overhead, but we just couldn't tell exactly where they were at because of the thick cloud cover. We were definitely "socked-in." In the bunker with our radios we could tune in to any frequency, one of which I recall was the "basketball ship." It was a large aircraft that kept orbiting overhead and dropping those large drum sized flares. He stayed there for hours always keeping a flare in the air, and when one would leave another would take his place. Sometimes when a flare would be dropped a little too far away, or it'd drift too far, one of our 81mm mortars would pop a flare and there would be more light. It was always really eerie though as the parachutes would float down through the clouds. Sometimes they'd be real close and we'd hear the sizzle, feel the heat, and smell the fumes as it'd float by, then sputter and extinguish, sometimes just right there. I remember getting the call to return to my Pig Pen to get some RDF shots. The Pig was the very highest point on the mountain, and I could see a full 360 degrees all around - for a few feet that is - because of the clouds, that's really eerie you know, people trying to kill you and not being able to see anything.

It was just a little after the NVA mortars started coming in on us that we got the word from Dong Ha that the enemy 246th regiment would no longer be supported in their assault by the assigned artillery unit. Seems that they had been decimated by American Artillery. Ha! That means that we had saved our own butts! Our own Radio Direction Finding had located and caused our own big guns and howitzers to deliver steel on the enemy so that they could not support the ground assault. Evidently the 82's that were falling on us were indignant to the NVA 246th regiment, because the artillery unit that we had destroyed probably would have used rockets and howitzers.

Although the mortars fell throughout the night, and an occasional RPG came slamming into something, the expected ground assault never materialized into anything that caused major concern, because as soon as we realized that we were the lucky somebodies, every arty unit within range started pumping steel in patterns all around our perimeter. The crescendo was intense at first but abated after awhile. I was told that there were more than a hundred dud 82mm NVA mortar rounds with their fins sticking up the next day, that had been dropped into our perimeter by the enemy. Possibly they were defective, maybe they just weren't detonating in the rain, and moisture softened earth. I know there a lot that weren't duds.

The next morning, the 18th of November 1969 as the light stabbed through the heavy clouds, all enemy activity had been completely non-existent for a few hours. There were no KIAs of ours and the WIAs were staged by the LZ to be medevaced as soon as a bird could get in. We could hear them overhead, above the cloud cover just watching for a hole. There were several of them, just orbiting around. Ah, a hole appeared and zoom, in no time at all a bird appeared and set down right on that little LZ. It was unlike any bird that I had seen yet in Vietnam.

There were still several birds up above us but out of sight as it was a very fleeting hole. The pilot disembarked as well as the one, possibly two passengers. Ha! I couldn't believe my eyes. It was some civilian pilot and a Donut Dollie in her pretty blue dress. Must have come up from Quang Tri, where the nearest Red Cross folks were. Now possibly there were two of them, but it doesn't seem like that "whirleybird" was big enough to carry a pilot and two people. Regardless, they were there for a very short time before an army officer ran up screaming "get out of here, get out of here!"

We had WIAs staged by the LZ awaiting a medevac to find a hole in the clouds. One of the WIAs was a lieutenant with a piece of steel shrapnel in his forehead; we needed BBs and stuff as well. Finally a hole broke and that's what we got, a sightseeing Donut Dollie? My memory mainly sees the blue dress and the soldier running up with his arms waving; if she'd a stuck around, probably she would have **seen several Harvest Moons. Di Dah, Di Da Dit Chuck Truitt sends**

## Amateur Radio Roundtable

Don't forget **Amateur Radio Roundtable**, a new series of W5KUB.com live weekly webcasts airs every Tuesday night at 8:00 PM Central Time (0200 UTC Wednesdays) at W5KUB.COM

Amateur Radio Roundtable is an informal discussion of all aspects of ham radio with the intent of allowing viewers to [watch this live webcast](#) or be a guest via Skype or [Google Hangout](#). A question and answer session with viewers will follow each topic.

The show covers all aspects of ham radio; such as, balloon launches, Satellite, go-kits, emergency comm, SDR, digital modes, DXing, home brewing, and much more. This weeks guests include Arnie Shatz, N6HC who has been a team member of many of the great DXpecitions, Eric William showing the prototype of a Cubesat that he is building, and a special guest from Sweeden, SM4VPZ.

During the last half of the roundtable, every viewer is invited to make a virtual appearance on the show. Guests will need a Google+ [account](#), microphone, and camera. Viewers will be provided a link allowing you to join. This part of the show is very informal. Just pop in to say hello, or stay a while and join in on a wide range of topics. We can have up to 10 people in the roundtable at all times.

We need your help with programming. If you have a specific subject that you would like to present in a [future](#) show, [send an email](#) to [tom@W5KUB.com](mailto:tom@W5KUB.com).

Thanks,  
**Tom W5KUB**

Welcome



## BASIC DISASTER SUPPLIES KIT

A basic emergency supply kit could include the following recommended items:

Water, one gallon of water per person per day for at least three days, for drinking and sanitation

Food, at least a three-day supply of non-perishable food

Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both

Flashlight and extra batteries

First aid kit

Whistle to signal for help

Dust mask to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place

Moist towelettes, garbage bags and plastic ties for personal sanitation

Wrench or pliers to turn off utilities

Manual can opener for food

Local maps

Cell phone with chargers, inverter or solar charger

Once you have gathered the supplies for a basic emergency kit, you may want to consider adding the following items:

Prescription medications and glasses

Infant formula and diapers

Pet food and extra water for your pet

Cash or traveler's checks and change

Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container. You can use the Emergency Financial First Aid Kit - EF-FAK (PDF - 977Kb) developed by Operation Hope, FEMA and Citizen Corps to help you organize your information.

Emergency reference material such as a first aid book or free information from this web site. (See Publications)

Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.

Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.

Household chlorine bleach and medicine dropper – When diluted, nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.

Fire extinguisher

Matches in a waterproof container

Feminine supplies and personal hygiene items

Mess kits, paper cups, plates, paper towels and plastic utensils

Paper and pencil

Books, games, puzzles or other activities for children

In any emergency a family member or you yourself may suffer an injury. If you have these basic first aid supplies you are better prepared to help your loved ones when they are hurt.

Knowing how to treat minor injuries can make a difference in an emergency. You may consider taking a first aid class, but simply having the following things can help you stop bleeding, prevent infection and assist in decontamination.

Two pairs of Latex or other sterile gloves if you are allergic to Latex

Sterile dressings to stop bleeding

Cleansing agent/soap and antibiotic towelettes

Antibiotic ointment

Burn ointment

Adhesive bandages in a variety of sizes

Eye wash solution to flush the eyes or as general decontaminant

Thermometer

Prescription medications you take every day such as insulin, heart medicine and asthma inhalers. You should periodically rotate medicines to account for expiration dates.

Prescribed medical supplies such as glucose and blood pressure monitoring equipment and supplies

Non-prescription drugs:

Aspirin or non-aspirin pain reliever

Anti-diarrhea medication

Antacid

Laxative



Other first aid supplies:

Scissors

Tweezers

Tube of petroleum jelly or other lubricant

Remember the unique needs of your family members, including growing children, when making your emergency supply kit and family emergency plan.

For Baby:

Formula

Diapers

Bottles

Powdered milk

Medications

Moist towelettes

Diaper rash ointment

For more information about the care and feeding of infants and young children during an emergency, visit the [California Dept. of Public Health website](#).

For Adults:

Denture needs

Contact lenses and supplies

Extra eye glasses

Ask your doctor about storing prescription medications such as heart and high blood pressure medication, insulin and other prescription drugs.

If you live in a [cold climate](#), you must think about warmth. It is possible that you will not have heat. Think about your clothing and bedding supplies. Be sure to include one complete change of clothing and shoes per person, including:

Jacket or coat

Long pants

Long sleeve shirt

## The Thought Experiment

### The Incoherence of Moral Bioenhancement

**Terri Murray** responds to an article in Issue 91 that argued that our moral dispositions should be improved by the use of drugs.

"Each is the proper guardian of his own health, whether bodily, or mental or spiritual. Mankind are greater gainers by suffering each other to live as seems good to themselves, than by compelling each to live as seems good to the rest."

John Stuart Mill, *On Liberty*

In July and August we watched in awe as Olympians from around the world exhibited extraordinary athleticism, the outcome of years of training, persistent mental and physical discipline, and sheer will power. We marvel at these individuals precisely because their outstanding physical and mental prowess is a personal achievement. When we learn that an athlete used drugs or other artificial shortcuts to excel beyond those who competed without these external aids, we feel that somehow they have tainted the very meaning of the Olympics. This is because we measure an individual's success by how far he or she is able to achieve it by means of their own efforts. This is especially true in a moral context. We know that we can only be blamed or praised for what we do or fail to do. We cannot take, or be given, responsibility for what is not within our power to control. Imagine a world in which governments acted as moral police and coerced individuals to do charitable acts. Suppose you could be arrested for not giving money to a beggar. In such a world, charity and virtue would cease to exist, since good deeds would no longer be voluntary. The individual would do them from fear of punishment and not from good will. In fact, their behavior could not properly be called 'moral' at all.

In Issue 91 of *Philosophy Now*, [Professor Julian Savulescu of Oxford University and Professor Ingmar Persson of Gothenburg University argued](#) in a distinctively illiberal vein that we have a moral obligation to benefit others, and not merely to abstain from harming them. This, they claimed, is because technological advances have made it so much easier for us to harm than to benefit one another. Their solution: more (biotechnology! They claimed that negative liberty and its attendant rights are no longer sufficient to protect us from looming disaster and this furnishes the justification for using all available means, including bioenhancement, to limit the damage.

On the one hand, the reason for the grave dangers we face is our technological advancement (presumably this is something beyond our control and inevitable). On the other hand, our inability to cope with the situation unaided by biotech is due to a lack of political will. So, while the reason for our demise is beyond our control, the blame nevertheless lies with us for why it cannot be rectified. Presumably this is why Savulescu and Persson find it useful to appeal to our sense of moral responsibility to persuade us that we can't possibly be expected to voluntarily take such responsibility, given our flawed human nature.

By contrast, an existentialist or a liberal like myself would argue that what makes it 'so much easier' to harm others than to benefit them is not technology but the global scale on which we now have to contemplate regulation of big business, the weakness of our current laws to punish harmful corporate greed in this relatively new global economy, and the reluctance of powerful individuals to choose human decency over profit. These are moral failings precisely because they are within our human power to control. Savulescu and Persson claim that we 'naturally' focus on the immediate future, and 'can only' empathize with our immediate circle of friends, and "our natural moral psychology does not provide us with the means to prevent" these moral failings. Existentialists call these kinds of naturalistic explanations or excuses 'bad faith'. If they were true, and we really were incapable of doing otherwise, then these self-centered behaviors would cease to be moral issues. Essentially it would mean that there is no moral dimension to our lives and we were deluded to suppose there is.

But there is nothing natural or inevitable about our tendencies to myopic tribalism. With education, human beings can and do have empathy for others, and do take responsibility for the long-term effects of their actions. The ecological movement has formed a subculture where over-consumption and pollution are taboo, and it is attempting to re-educate the wider culture. Many people who have not been biochemically morally enhanced already make small but significant sacrifices every day in order to help others or to avoid harming them or the environment. As Savulescu and Persson themselves illustrate through their story of 'the tragedy of the commons', the only reason these morally responsible people do not make a more significant impact is that their selfless behavior is not adopted by a sufficient number of others. Instead, as in their story, the majority continue to over-exploit the common resources. But this is a moral failing, and should be treated as blameworthy rather than as inevitable or 'only natural'. Where the majority in a culture choose to treat the over-exploitation of resources as taboo (as opposed to 'natural' or even praiseworthy, as in our culture) it soon reaps the material benefits. Savulescu

and Persson use the tragedy of the commons to say that it is irrational to behave responsibly unless we can trust a sufficient number of people to do the same; and since we can't trust the majority of people to behave responsibly, they conclude that we can only make the majority behave morally by using 'chemical moral enhancement' as a supplement to education.

### Major Problems With Bioenhancement

There are two major problems here. First is the assumption that better education and tougher laws cannot ensure that a sufficient number of people will behave responsibly. This idea reminds me of the teaching in certain Islamic countries that men can't control their sexual urges, so women should be forced to wear the burka and stay indoors. The falsehood of this assertion is exposed by the fact that men who live in Western countries, including Muslim men, *do* control their sexual urges. This can be explained by the deterrent effect of laws against raping women, or perhaps simply in terms of social pressure.

The truth is that there is a political will to treat women as equals in the West that is apparently absent from countries governed by Islamic law. What Savulescu and Persson do is to similarly treat the will not to be moral on a larger scale as though it were an inevitable and natural part of human biology rather than a political and cultural choice.

Secondly, the idea that biological enhancement can make us morally good completely undermines our understanding of moral goodness. For a start, the idea that someone could be made morally good by altering her biology presupposes that it is her biology that makes her morally bad. However, it is relatively uncontroversial that moral character is the product of an agent's free choices, not of their biological endowments.

Savulescu and Persson refer to their dubious concept of 'the biology of moral dispositions', which leads them to ponder how (not *whether*) we should enhance human nature. But it is questionable whether 'dispositions' that are determined biologically are correctly described as 'moral'. Most philosophers acknowledge that 'morality' applies only to an agent's decision to act upon their dispositions, not to the having of the dispositions. Much of Savulescu and Persson's argument trades on the reification of behavior patterns: that is, a tendency to act in a particular way is re-defined as a condition or an entity within a person's brain chemistry. If the seemingly value-neutral medical term 'psychopathology' stretches to *voluntary behavior patterns*, then I agree that there is a lot of 'sick' behavior in this world. But does that mean that there are many sick individuals who

were *born* that way and didn't *choose* to behave badly towards others? Is every white-collar criminal who is 'getting away with it', often in a corporate culture that encourages the idea that winning by any means is laudable, incapable of behaving differently? Or is it because they are encouraged by a culture that allows them to feel impunity when acting selfishly and rewards them with huge profits for doing so?

According to this paradigm, sinful or criminal tendencies reside within the natures (or 'dispositions') of persons, undermining their potential to lead morally good lives. This way of thinking provides the justification for paternalistic 'experts' (medical professionals) to intervene in order to re-direct the individual's behavior to conform to their or society's 'best interests'. Paternalistic interventions of this sort *presuppose* the absence of the necessary conditions for moral responsibility in the individual, and then actively remove moral responsibility from the individual on that basis, relocating it in external authority figures or social institutions. This policy presupposes that the moral guardians are infallible, or at least know better than the individual which kinds of behavioral dispositions will be 'best'. Indeed, Savulescu and Persson say of the vast destructive power we already possess that "it should be entrusted only to those who are both morally enlightened and adequately informed." Who are these moral elites? How will we identify them?

Savulescu and Persson offer no answer to this conundrum, and admit that the very people who will develop and select the cures are equally in need of them, and that moral bioenhancement technologies are open to abuse and misuse. Their only reply to this criticism is to remind us that our present situation is so desperate that it must override the risks associated with moral bioenhancement. Thus they dismiss critics of yet more technological advancement as obstructing the proposed remedy to a dire situation that has been caused by too much technological advancement.

## Brave New World

We should guard negative liberty (freedom from interference, including harm) jealously because the ability to pursue our values, or to perfect our character in our own way, is essential to our sense of what it means to be a person. We should reject the notion that the individual's happiness could be adequately provided by others. Consequently, the absence of harm/interference is not tantamount to the provision of well-being, but is the necessary condition for its achievement. As such, the absence of interference and paternalistic control is more valuable to an individual's *eudaimonia* (happiness) than a well-being bestowed by others could ever be. It is true that political freedom doesn't guarantee good moral sense; nor was

it ever intended to. However, political freedom is valuable precisely because it is the only context in which the concept of morality makes sense. It is the only context in which people can make major choices for their lives and lifestyles.

Abandoning the autonomous model of human nature and moral responsibility has serious implications. Modern concepts of jurisprudence, justice, forensics, and even political democracy presuppose that moral agency and its attendant responsibilities are grounded in the autonomy of the individual. If we instead adopt a Nietzschean perspective on morality that bases the individual's moral activities on their subconscious drives and takes us forever beyond good and evil, this will be a sea change. It will place massive power in the hands of the moral engineering experts, and so should not be done without open public debate and cognizance of the ways in which it will shake the very foundations of liberal democracy and human rights.

Very soon, social conservatives will have at their disposal a new and powerful means of promoting their vision of public morality. Although it will be done by means of the free market, re-designing human nature presupposes an ideal that will inform in which direction human nature should be improved. In every culture there are always prevailing ideas about what constitutes 'beauty' or 'success' or the 'ideal' human type, even 'ideal' moral behavior. These ideas are human constructs. Regardless of how popular they may be, these beliefs are fallible. Often, they are the narcissistic projections of the popular majority's (or a powerful minority's) self-image. They do not tell us what human nature is: they tell us what some people wish it were. John Stuart Mill and John Locke both cautioned against the political promotion of any fallible vision of the good life as the benchmark for human fulfillment or 'integrity'.

Mill claimed that the individual needs protection from the tendency of a powerful majority "to fetter the development, and, if possible, prevent the formation, of any individuality not in harmony with its ways, and compel all characters to fashion themselves upon the model of its own." (*On Liberty*, p.8) Re-making human nature according to our wishes instead of passively accepting its various manifestations is not, of itself, problematic. Indeed, each of us strives to make ourselves better, according to our potentials. Mill felt that this was an integral part of our humanity. He believed that happiness involves the knowledge that we're living as much as possible in accordance with our own conception of a good life, where 'good' means morally admirable as well as enjoyable and fulfilling. However, we could never achieve this sort of moral autonomy and self-respect from fearfully obeying the will of others, nor by being biologically programmed with their fallible conception of the good life.

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Terri Murray has taught Philosophy and Film Studies at Hampstead College of Fine Arts and Humanities since 2002.

## Savulescu and Persson's Argument

In their article in Issue 91 of *Philosophy Now*, Professor Julian Savulescu of Oxford University and Professor Ingmar Persson of Gothenburg University argued that humanity is in great danger due to the combination of two factors. Firstly, they say that it is a fact of the human condition that it is always easier to cause harm than to do good, but that our ability to cause harm has been massively enhanced by our technological progress, so that it would now be very easy for humanity to suffer catastrophe due to global warming or weapons of mass destruction.

Secondly, they say that our evolutionary history has equipped us with the moral responses appropriate to life in villages or small tribal groups of 100-150 people, so that we tend to have a very weak sense of responsibility towards people outside our immediate circle; we tend to distrust strangers; we focus on the immediate future, discounting the more distant future; and we feel bad if we have individually caused harm, but tend to feel less bad if we have caused the same harm as part of a large group of people so that our own share of the blame is hard to single out. These psychological factors make it much harder to gather the political consensus needed to counter the imminent technological risks, making global disaster a strong likelihood.

In the face of this situation Savulescu and Persson proposed the artificial moral enhancement of human beings – perhaps through drugs designed to boost our sense of empathy – so that we will make the necessary choices to avert catastrophe.

## USE YOUR BRAIN TO CHANGE YOUR AGE

Dr. Daniel Amen

**No matter your age, income, IQ, or education there are dozens of ways to help your neurons grow, stretch and branch into a younger, more beautiful brain every day.**

**1. Learn a new language.** Language uses the temporal lobes of the brain and requires that you analyze new sounds, improving auditory processing and memory.

**2. Play Sudoku.** This numbers (not math) game is popular and fun. It can help increase your logic and reasoning skills, as well as memory. Cross-word puzzles do the same.

**3. Lose the list.** Using mnemonics (visual imagery or sounds, such as rhyming) can boost your brain while developing a system to remember things. Look for memory courses available on audio or video recordings, often at local libraries or online.

**4. Get in the game.** Games like chess, checkers or Scrabble uses the prefrontal cortex of the brain (forethought). Trivia games can boost memory using the temporal lobes, jigsaw puzzles can help visual and spatial skills and Mah Jong can help executive function (the capacity to control and apply your mental skills).

**5. Online brain training games.** Brain Gym center at [www.theamensolution.com](http://www.theamensolution.com) can be quite helpful in keeping your brain fit. Spend about 10 minutes a day doing these fun games, and see if you don't find your brain beginning to process better and faster.

**6. Be a Curious George.** Stay curious about life and learning. Read and study or take courses in subjects or the arts or activities that capture your fancy. Be a life-long learner and you're more likely to stay young at heart and in your brain.

**7. It is never too late to learn.** People with fewer academic qualifications may grow old faster, according to a new DNA study. The ones who spent the least time had shorter telomeres or "caps" on the ends of their DNA, a sign of premature aging in cells. Take a college level class, a continuing education course, or anything that engages the brain.

**8. Learn to play a musical instrument** or a different instrument than you normally play.

**9. Try a yoga, Pilates class or meditation.** These disciplines engage the Basal ganglia (modulate anxiety and motivation) region of the brain.

**10. Try a new or old sport or activity.** Dancing, martial arts, golf, softball, Ping-Pong and more help keep your Cerebellum (coordination) young. Juggling activates the parietal lobes (direction sense and spatial orientation) of the brain. Fun stuff!

**11. Break your routine.** Untether yourself from bad habits that are harming your brain. Change your daily habits and routines to help rewire your brain so you don't fall back into the same patterns of activity. If you take the same route to work stopping at the same doughnut shop, take a different route and pick up a brain-healthy protein powder-and fruit smoothie that you can sip along the way instead!



## The Faraday Cage

A Faraday cage is best understood as an approximation to an ideal hollow conductor. Externally or internally applied electromagnetic fields produce forces on the [charge carriers](#) (usually electrons) within the conductor; the charges are redistributed accordingly (that is, [electric currents](#) are generated). Once the charges have rearranged so as to cancel the applied field inside, the currents stop.

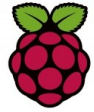
If a charge is placed inside an ungrounded Faraday cage, the internal face of the cage becomes charged (in the same manner described for an external charge) to prevent the existence of a field inside the body of the cage. However, this charging of the inner face re-distributes the charges in the body of the cage. This charges the outer face of the cage with a charge equal in sign and magnitude to the one placed inside the cage. Since the internal charge and the inner face cancel each other out, the spread of charges on the outer face is not affected by the position of the internal charge inside the cage. So for all intents and purposes, the cage generates the same [DC](#) electric field that it would generate if it were simply affected by the charge placed inside. The same is not true for electromagnetic waves.

If the cage is [grounded](#), the excess charges will go to the ground instead of the outer face, so the inner face and the inner charge will cancel each other out and the rest of the cage will retain a neutral charge.

Effectiveness of shielding of a static electric field depends upon the geometry of the conductive material. In the case of a nonlinear varying electric field, and hence an accompanying varying magnetic field, the faster the variations are (i.e., the higher the frequencies), the better the material resists penetration, but on the other hand, the better it passes through a mesh of given size. In this case the shielding also depends on the [electrical conductivity](#) of the conductive materials used in the cages, as well as their thicknesses.

## Next Regular Meeting

The next meeting will be on Thursday, February 26th, 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:

**March 19th, 2014 - 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)-459-9741**

Name of Net, Frequency, Local Time	<a href="#">Net Manager</a>
<a href="#">Badger Weather Net (BWN)</a> 3984 kHz, 0500	<a href="#">W9IXG</a>
<a href="#">Badger Emergency Net (BEN)</a> 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="#">N1KSN</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>
<a href="#">ARES/RACES Net</a> 3967.0 kHz, 0800 Sunday	<a href="#">WB9WKO</a>
* Net Control Operator needed. Contact Net Manager for information.	

Welcome!



We are Glad  
You are Here!

## 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: [W9rhmrac@Gmail.com](mailto:W9rhmrac@Gmail.com)

**or by Post to:**

Michael B. Harris

807 Nicholson RD

South Milwaukee, WI 53172-1447

## VE Testing:

March 28th, 9am— 11:30am

**No testing: June, August, or December**

**Location: Amateur Electronic Supply Time: 9:30 AM (Walk-ins allowed)**

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

## Area Swapfests

**March 15th, [HAMFEST 2015](#) Location: Jefferson, WI**

**Type: ARRL Hamfest**

**Sponsor: Tri-County Amateur Radio Club - W9MQB**

**Website: <http://w9mqb.org>**

**May 2nd, [ORC Spring Hamfest](#) 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
- Mark - AB9CD

### Ticket drum and drawing

- Tom – N9UFJ

### Newsletter Editor

- Michael-KC9CMT

### Proofreader

- Pancho-KA9OFA

### Webmaster

- Dave, KA9WXN

### 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)-459-9741**

Address correspondence to:

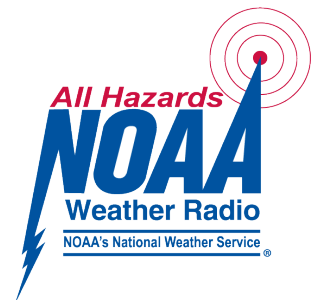
**MRAC, PO Box 26233, Milwaukee, WI 53226-0233**

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



## 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  $\pm$  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

Mon.8:00 PM 3.994 Tech Net

Mon.8:00 PM 146.865- ARRL Newsline

Mon.8:00 PM 146.445+ Emergency Net

Mon.8:00 PM 146.865- Walworth County ARES net

Mon.8:45 PM 147.165- ARRL Audio News

Mon. 8:00 PM 442.100+ Railroad net, also on EchoLink

Mon. 8:30 PM 442.875+ WARC W9CQ net also on EchoLink 576754  
Mon. 8:30 PM 442.150+ Waukesha ARES Net on the 1st, 3rd, and 5th Monday of each month.

Mon. 9:00 PM 147.165- Milwaukee County ARES Net

Tue.9:00 AM 50.160 6. Mtr 2nd Shifter's Net

Tue. 9:00 PM 145.130+ MAARS Hand Shakers Net

Tue. 8:00 PM 7.035 A.F.A.R. (CW)

Wed. 8:00 PM 145.130+MAARS Amateur Radio Newsline

Wed. 8:00 PM 147.045+ West Allis ARC net

Wed. 8:00 PM 147.270+ Racine County ARES net

Wed. 9:00 PM 145.130+MAARS SwapNet, link to FM-38

Thur. 8:00 PM 50.160, 6 Mtr SSB Net

Thur. 9:00 PM 146.910+ Computer Net

Fri. 8:00 PM 28.490 MRAC W9RH 10 Mtr SSB Net

Fri. 9:00 PM 145.390+ W9RH 2 MTR. FM Net

Sat. 8:00 PM 146.910+ YL's Pink HAMsters Net

Sat. 9:00 PM 146.910+ Saturday Night Fun Net

Sun 8:30 AM 3.985 QCWA (Chapter 55) SSB net

Sun 9:00 AM 145.565+ X-Country Simplex Group

Sun 8:00 PM 146.910+ Information Net

Sun 8:00 PM 28.365 10/10 International Net (SSB)

Sun 9:00 PM 146.910+ Swap Net

Daily: Milwaukee — Florida Net 7 am, 14.290 mhz.

**Thursday's 8:00 PM 448.300+ Tech Net**

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

Wisconsin Amateur Radio Club Monday evening 70cm net: WIARC Net on Monday evening @ 8:00 p.m. on 442.875 MHz repeater or 147.390 repeater, EchoLink node # 576754.

