

HAMATEUR CHATTER

The Milwaukee Radio Amateurs Club

January 2011, Volume 19, Issue 1

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

Presidents Letter

Welcome to the new year. Let's not waste any time and get right to the ranting.

WE DO RADIO!

This is a newsletter of the Milwaukee RADIO Amateurs Club. Radio. Not the Milwaukee Doughnut Eaters Club. Not the Milwaukee Don't Ask Me To Do Anything Club. Radio. We do radio! In a few weeks we (MRAC) sponsor the FM Simplex Contest. This contest has been in place since 2003 (the club also had a VHF contest in the 1950's). Among other categories there is a club category. In the last 7 years MRAC has won 3 times. The reason only 3? We don't get participation from the membership. If you can't muster up an hour on a Sunday in February to play with one of your radios, why are you even in the hobby or in the club? If you can't make a contact or 2 or 3 on a simplex frequency on 6M, 2M, 222MHz, or 440MHz, what can you do? Oh, you don't do VHF or FM. I understand. I guess that means you do HF. Have you been to Field Day? Specifically MRAC Field Day. We need to contact Ozaukee County Historical Society (the keepers of Pioneer Village, our Field Day site for the last 16 or 17 years) this month regarding our plans for 2011. Yet I can't seem to recall anyone offering to be on the Field Day committee. Can you do radio? Show me!

WE DO STUFF!

Don't feel like playing radio with us? How about helping to run a Hamfest? We have one coming up the weekend after the FM simplex contest on Saturday February 19. The Hamfest idea was proposed thinking it would get people involved in some sort of common project. Was it a good idea? Can you do stuff? Show me!

Don't want to be in the FM contest? Don't want to help out for the Hamfest? How about planning for the 95th anniversary of the club to come one year from now? How about being an occasional net control for the 10M or 2M Friday night nets? How about something?

Can you do anything? Show me, I dare you.

Reminder, the January meeting will include voting on proposed by-laws changes that have been talked about for a few months now. If you care, by now you should have gotten a copy from the Club Yahoo group and read through it. You don't expect to vote without reading a copy do you? Not on the Yahoo group? If you have a computer with internet access why aren't you on the group?

I could write a long dissertation on what the proposed changes are about, but I don't want to bore you any more than I usually do. If you really want to know about the bylaws, come to the meeting and listen, discuss, vote.

By the way, if you are a member who happens to live greater than 100 miles away, you are entitled to cast a proxy vote. Just drop a note to the club or if you have email, to the club email address and cast your vote regarding the by-laws changes.

The first item for the January meeting is a discussion of the FM simplex contest. Next up is the "viewer questions" everyone asked for. Do you have something you would like an answer to or to discuss? Did you submit it to the board or me? If you didn't, we may not have time for anything you would want to bring up in person. Sorry, but we only have a couple of hours at the meeting. Send in your questions to the club email w9rh@arrl.net.

Finally, one of the announcements I don't like to make. On Dec 16, 2010 Eddie Smith W9DYO passed away. He was not currently a member but had been as far back as 1941. He did attend a few meetings, auctions and Christmas Parties over the last dozen years or so. The West Allis club newsletter for January had a very good obit on Eddie. I can't possibly improve on that. Yet another MRAC member SK.



MRAC Officers:

Terms Expiring in 2012

- President – Dave, WB9BWP
- V-President – Vacant
- Secretary – Mike, KC9CMT
- Treasurer – Vacant
- Director – Mark, AB(CD)
- Director – Dave, KA9WXN

Terms Expiring in 2011

- Director – Al, KC9IJJ
- Director – Hal, WB9OZN
- Director – Vacant

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

(414) 332- 6 7 2 2

Visit our website at:

www.w9rh.org

Mail correspondence to:

M. R. A. C.

P.O. Box 240545

Milwaukee, WI 53223

Board of Director's Meeting Minutes

Meeting called to order at 7:10 PM by President Dave DeFebo, WB9BWP.

Present: Dave, KA9WXN Mark, AB9CD, Dave DeFebo, WB9BWP Michael, KC9CMT, AI, KC9IJJ.

Absent: Hal, KB9OZN

Minutes of last meeting accepted as published in the HamChatter by voice vote. Accepted by a vote of 5-0

Treasurer report not read. Club has no treasurer.

PRELIMINARY DISCUSSIONS:

Hall being made available through Dave, KZ9WXN form his employer for the February 19th, 2011 club swapfest. Price is set at \$250.

Corrections to printed chatter mentioned by AI, KC9IJJ.

Discussion of upcoming West Allis SwapFest on January 9th, 2011. Club will have a table at the event.

Bob, W9FRD may be willing to accept the post of club Vice-President according to discussions with our club president.

No December board of directors meeting or club general meeting due to the holidays and upcoming Christmas party on December 6th at Meyer's restaurant.

No questions have as of yet been submitted for the January meeting discussion. Meeting may be used to discuss upcoming club swapfest and FM simplex contest scheduled for February 13th, 2011.

New Business:

Swapfest table: MRAC will purchase a table at the West Allis swapfest.

SwapFest: February 19th, 2011 will be the date of the MRAC/MAARS interclub first annual Swapfest. Flyers will be designed and printed up in time for the West Allis swapfest. Flyers will be distributed at all the upcoming swapfests until our club date arrives. Flyers will be sent via USPS to area clubs.

Volunteers: Need volunteers for group activities such as Field day, AES Superfest table staffing etc..

Repeater Report:

Repeater Nets: Milwaukee QCWA wants to use the club repeater for their 2 meter club net. At 8pm on Monday nights. Approval given by board.

Mark, AB9CD is in control of the technical aspect of the repeater and is charged with appointing control operators. There should be two levels of control operators: 1. Protected Control operator who would be in charge. 2. Assistant control operators who will follow the lead of the protected control operator in all aspects of running the club repeater. Mark, AB9CD in working on an official repeater policy.

Rain Report progress: No progress until Hardware upgrade in 2011.

Donation needs to be sent to Pioneer Village for the use of their facilities during Field day by the end of January.

New Committees:

Dave KA9WXN, has talked to AES about running a special event station at their business location to coincide with our clubs' 95th anniversary in 2012.

Net Committee:

John KB9SXH and Poncho KA9OFA, have been running the 2 meter and 10 meter nets that the club offers.

Class offering:

Interest has been shown in our club offering a General radio license class in the spring of 2011. Some of the West Allis Club members have shown an interest in this idea. We have been informed that we could use AES space for such a class. An offer was made to MSOE students, but no responses have yet been received.

By-Law Changes should be ready for a membership vote by January 2011. The board of directors seeks to change the by-laws to state that club officers will come from the elected board of director positions, not from a general club vote. It was noted that this used to be the way the club business was conducted.

Recruitment of new members: New member packages being put together. They may contain a certificate of membership, a club DVD, a printed roster and more.

Misc: Jerry Dozal had a tower & 10 meter, and 6 meter beams that Dave WB9BWP, and Mark AB9CD, took apart and took possession of at his offering. The equipment needs to be cleaned up but is in useable shape.

Special By-Law Election Meeting: At least Five days notice will be given to the membership before the by-law vote scheduled for the January 2011 meeting. This is a requirement written into the current by-laws. Notification will be by E-mail. The Club secretary will handle this business.

Old Business:

Life Member Review: Will discuss in depth will progress during the February 2011 Board Meeting.

Sound System: No progress to report. This will be investigated with donation to church early in 2011.

Programs:

January: FM Simplex Contest, By-Law changes. SwapFest.

February: Paul WB9ODQ, will present a program on Fox Hunting.

March: The Gordon West Show. Gordon West Will present a program in advance of the next days opening of the AES superfest.

April: Show & Tell Night. Fix ups Etc.. Projects or New Purchases from the Membership.

May: The annual Auction. Hosted by Dave DeFebo.

Motion to adjourn at 9 PM . Motion made by Mark AB9CD, Second by Michael KC9CMT. Passed by a voice vote of 5-0.

Room returned to condition as found upon arrival.

Respectfully submitted,
Michael, KC9CMT

Membership Meeting Minutes

General Membership assembly called at 7:02pm.

Excellent program presented by Ben Nelson on Electric Cars.

- Ben built his own electric car from a Geo Metro.
- His project started in January 2008. The project cost was about \$1300. He bought two electric motors from a scrap yard that had used forklifts on their lot.
- He needed to design and build a custom adapter plate to connect the motor to the cars transmission. He also designed a coupler for the transmission to motor shaft.
- His car uses 6-12 batteries in serial(144 volts) as power for the motors. Ben & his friends built their own controller for the battery charger. The cars charger plugs into a standard 20 amp outlet.
- The state of Wisconsin has stated that it will accept his vehicle on public roadways. The car runs on dual voltage 72 volts/12 volts, for care accessories. He uses a 12 volt charger in the vehicle. His car can travel 20 miles to a charging cycle.
- For more info: 300mph.org or Milwaukeeemakerspace.org.

Fellowship break.

Business Meeting called to order at 8:45 PM.

Minutes of October accepted as printed in the chatter. Motion made to accept by Mark AB9CD. Seconded by Al KC9IJJ.

Passed Microphone for introductions of membership.

New Business:

Board of Directors meeting facility scheduled through 2011 at Menominee falls Library board meeting room.

February 13th Sunday will be the date of the FM simplex contest coordinated by Joe, N9UX.

February 19th, 2011 will be the date of the MRAC/MAARS interclub swapfest.

Membership renewal drive is underway for the 2011 membership year.

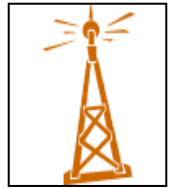
Club By-law changes will be uploaded to the Yahoo group for the membership to read prior to the January vote.

Election of new directors will take place at the April meeting starting in 2011.

Meeting adjourned at 9:20 PM by voice vote.

Respectfully Submitted,

Michael, KC9CMT



2011 FM Simplex Contest

February 13th, ham radio operators will get on the air for the annual FM Simplex contest sponsored by the MRAC. Once again, the club station will be on the air operating with the W9RH call sign. I invite everyone to join us on the air, on whatever band you can. 144, 440, 52 and 223 each have their own time slot.

Please promote the contest wherever you can, on the radio and club meetings. Please remind folks there is a club competition, the MRAC hasn't won in a few years, I'd like to see the club have another entry on the plaque at AES.

Full information is on the club website, including the flyer and complete rules. www.W9RH.org

Please note: The incorrect date was published in QST. February 13 is the correct date.

If anyone has questions regarding the contest, please free to contact me via email at n9ux@arrl.net.

Have fun and thanks for participating!

*Joe
N9UX*

A Simple 74HC240 Based DC Transceiver for 20m

By Bill, KD4PWB

This short article describes a direct conversion transceiver I recently built based on the N7KSB 74HC240 simple one chip transmitter. Some features:

- Uses 74HC240 as an oscillator/final
- Puts out about 450mW
- Uses a simple RC audio filter
- Uses a diode ring double balanced mixer
- Uses manual RIT and Transmit/Receive switching
- Uses a TL082 op amp as a audio preamp and an LM386 as an audio final.
- Constructed for 20m but can be put on 15 and 10m.
- Uses island type construction on double sided copper clad board.
- Simple to build, Simple to operate.



The circuit is pretty straightforward and uses N7KSB's original design. The only difference is pins 17 & 15 on the 74HC240 are ungrounded and connected to pin 4. Pins 3 & 5 are connected to form the output to the double balanced mixer. This provides enough signal to the double balanced mixer. Information on building the double balance mixer can be found at <http://www.qrp.pops.net/xmfr.htm> and won't be reproduced here.

The FT37-43 toroids for the mixer can be ordered online from Radio Shack for a few bucks.

The chip is fed with 8V because it may self-destruct at higher voltages. A 7808 IC provides the necessary 8V and the rest of the xcvr is fed with 12-13V. I used a 20-pin socket for the 74HC240 because I wanted to be able to easily replace it. The other IC's (TL082 and LM386) were super glued to the PC board dead bug style. The 74HC240 has to have a pretty substantial heat sink. You can see in the photo that I cut a piece of flashing and exposed it to the chip. The chip is barely warm to touch with operating. The 7808 gets much hotter.

You'll have to experiment with the value of the inductor in series with the 20pf variable-tuning cap. I had one lying around and took off turns until the oscillator tuned properly.

With my set up I'm getting about 20Khz of swing. The value for the cap in the RIT circuit was derived experimentally. You may want to try another value there.

The RC audio filter is simple and cheap. Without it you'll get all sorts of broadcast band interference. I do occasionally get some BCI but it fades as quickly as it comes in. BCI, at my QTH at least, is not a problem with this radio. Put L1 as close as possible to the chip keeping the leads of the DC blocking cap very short. This cuts down on L1's tendency to be effected by stray inductance. If you build your rig for 10m N7KSB advises not to use a socket for the 74HC240 as it induces too much stray capacitance. Build it dead bug style on 10m. You may want to lay the xcvr out pretty much like the schematic keeping as much distance between the inductors of the filter and the rest of the circuit. You can wind the inductors on a BIC pen (app 3/8" diameter) with #14 bare wire.

The LM386 does provide audio but I usually route that through a Radio Shack pocket amplifier for adequate volume. The audio quality seems very good but the filter could be more selective and that's something you could experiment with.

Operation...I usually switch the RIT off and the Transmit/Receive switch to receive. Then I zero beat the signal, switch the RIT in and listen for the call. Then I call back. I do sometimes call CQ but not as often. I like to find the strong signals because they'll usually hear me better. My antenna is a 40m dipole fed with window line about 25 ft up.

Stories - Rockpile

Jim DeMers - Pet Rat - January, 1967

I had a pet Rat on the Rock Pile. One night I awoke with one crawling across my head. I figured out he was after my food. So after that, I would leave a little piece of food at the foot of my sleeping back. The rat would come up at night, eat the food. When I would wake up in the morning, The Rat would run out.

Ted Dudley - Sapper Ate and Dropped - November, 1966

Life on the Rockpile could be very boring at times, but we "Had Our Moments". Picture yourself sitting 750 feet up in the air on a pile of rocks that Mother Nature did not know what else to do with. There were just a handful of U.S Marines living (existing) on the Rockpile in October & November of 1966, mainly from Force Recon & 1st Radio BN, and we all had a job to do. An Army Green Beret unit would come through once in a while, arriving in the daylight and gone by sun up the next morning or a Forward Observer from the Artillery Plateau would spend a day or two with us, but mostly just the same two teams. One night after everyone had gone to sleep with the exception of Winnie Boyce, who's turn it was to be on guard duty, a lone NVA soldier made it through the maze of trip wires and release wires which were all tied into a system of flares, grenades and claymores that were placed along the south side of the Rockpile to warn us of any impending danger. To this day I don't know how he managed it, but they were crafty "little people".



My hooch was beside the only path leading down the south side of the Rock, and I had built a "Dock" so I could stretch out when I slept instead of being all curled up under my own rock. 1st Radio C- rations were all stored right under my "Dock" and the Pig Pen, home of the Pig (PRD-1) was just a few feet from my feet. Just beyond that was a pile of neatly stacked 81mm mortar rounds.

As the NVA soldier got to my feet, Winnie took notice, took aim but did not fire. Winnie took a few things into consideration that night, and I'm glad his Marine Corps training overrode his instincts. His choice at that moment was to shoot and hit the gook or shoot and hit my feet. I think I would have found a way to get to him with or without feet so I could strangle him if he had taken the shot. That thought may have gone through Winnie's mind as well.

The gook took a case of c-rats and then decided to inspect the Pig Pen and the Pig. Once again Winnie had to make a choice. Shoot and hit the gook or shoot and knock out our only contact with the outside world and the equipment that every other Marine on the DMZ was counting on to locate Charlie. (I guess we really didn't need the PRD-1 since Charlie was right there beside it) As before, Winnie's training took over and he held his fire. Next, the gook went over to inspect the neatly stacked pile of 81mm mortar rounds, and again Winnie held his fire. We still don't know for sure what a single 7.62 M-14 round would do if it hit a stack of mortar rounds. It was, and still is, my belief that the Rockpile would have been a little shorter after that night if Winnie had fired. Charlie then used some commo wire to tie the c-rat case to a single 81 round, still in it's casing, so he could carry it down to his buddies surely waiting patiently below.

If curiosity killed the cat, it got Charlie that night too. He decided to open the casing of the mortar to inspect his prize. What he found was the increment charges and he must have thought it was some sort of American cheese. Now I've never tried to eat the stuff myself, but from what Winnie told us it must not agree with the stomach of a human. After some moaning, the gook just disappeared over the side of the Rockpile. If the increment charge didn't kill him from the inside out, the 750 foot fall to the base of the Rockpile should have done the job.

At first light I went down to the inspect the area with one other 1st Radio Marine and there we found the half eaten charge and the open mortar case. The possibility of a booby trap existed, so we tied a piece of comm wire to the round and pulled it out of it's casing from a safe distance. No boom, no gook, no damage done.

Seth Taylor was up there just after me and e-mailed me a while back. Part of his e-mail was: "Also, I remember that story about the gook and the increments -- had to come from Winnie". 40+ years later we are still talking about a night that could have been a disaster, but is just another funny story to be told. I still have my feet, and I know Winnie is out there somewhere very thankful he did not **"Take The Shot"**.



MARINES
THE FEW. THE PROUD.

Next Regular Meeting

The next meeting will be January 27th at 7:00PM. We meet in the Fellowship Hall of Redemption Lutheran Church, 4057 N Mayfair Road. Use the south entrance.

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 **8:30 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

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

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

or by Post at:

Michael B. Harris

807 Nicholson RD

South Milwaukee, WI 53172-1447

ARRL Weekly Newsletter Articles

ARLB003 New Amateur Radio Bill Introduced in Congress

The Amateur Radio Emergency Communications Enhancement Act, which died at the end of the 111th Congress, has been reintroduced in the 112th Congress as HR 81. The sponsor is Representative Sheila Jackson Lee (D-TX-18). The new bill -- which was introduced on January 5 -- has been referred to the House Committee on Energy and Commerce.

Rep Jackson Lee first introduced the bill -- HR 2160 -- in the 111th Congress in April 2009. It gained an additional 41 co-sponsors but did not progress out of the committee of jurisdiction. A similar bill introduced in the Senate -- S 1755 -- made it all the way through that body in December 2009, but likewise was not taken up by the House.

The objective of the bill -- which is supported by the ARRL -- is for the Secretary of Homeland Security to study the uses and capabilities of Amateur Radio communications in emergencies and disaster relief and to identify and make recommendations regarding impediments to Amateur Radio communications, such as the effects of private land use regulations on residential antenna installations.

"We are hopeful that this early start will lead to success in the new Congress," commented ARRL Chief Executive Officer David Sumner, K1ZZ.

HR 81 can be found on the web in PDF format at, <http://www.gpo.gov/fdsys/pkg/BILLS-112hr81ih/pdf/BILLS-112hr81ih.pdf>



**Club Repeater,
145.390Mhz Minus Offset
(127.3 PL)**

Testing & Local Swapfests

VE Testing

Testing Session on January 29th, 10am-noon.

**Amateur Electronic Supply 5720 W. Good Hope Rd.
Milwaukee, WI 53223**

Swapfests

Capitol City Swapfest, January 23rd.

Fitchburg Wisconsin <http://www.wd8das.net/hamfest>

Sunday, January 23th, 2010, 8am– 2pm

MRAC-MAARS Interclub Swapfest, February 19th.

Milwaukee Public Television Auction Warehouse.

12560 West Townsent Street, Brookfield, WI

Saturday. 7am to 12 noon. www.w9rh.org

Tri County Amateur Radio Club Swapfest March 14th.

Jefferson County Fairgrounds, Activity Center

503 North Jackson Avenue, Jefferson, WI 53549

Working Committees

Field Day

- Open

FM Simplex Contest

- Joe – N9UX
- Jeff – K9VS
- Brian— K9LCQ

Ticket drum and drawing

- Tom – N9UFJ
- Jackie – No Call

Newsletter Editor

- Michael-KC9CMT

Webmaster

- Joe Schwartz—N9UX

Refreshments

- Michael – KC9CMT

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, Box 240545, Milwaukee, WI 53223

Email may be sent to

w9rh@arrl.net

Our YAHOO newsgroup:

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



CLUB NETS:

- Our 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)

Milwaukee Area Nets

- | | |
|---|--|
| <p>Mon.8:00 PM 3.994 Tech Net</p> <p>Mon.8:00 PM 146.865- ARES Walworth ARRL News Line</p> <p>Mon.8:00 PM 146.445 Emergency Net</p> <p>Mon.8:00 PM 146.865- ARES Net Walworth</p> <p>Mon.8:45 PM 147.165- ARRL Audio News</p> <p>Mon. 9:15 PM 444.125+ Waukesha ARES Net</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>Tue. 7:00 PM 145.130 MAARS Trivia 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 Newslne</p> <p>Wed. 9:00 PM 145.130 MAARS IRLP SwapNet d FM-38 Repeaters (IRLP 9624)</p> | <p>Thur. 8:00 PM 50.160, 6 Mtr SSB Net</p> <p>Thur. 9:00 PM 146.910 Computer Net</p> <p>Fri. 8:30 PM 28.490 MRAC W9RH 10 Mtr Net SSB</p> <p>Fri. 9:00 PM 145.390 W9RH 2 Mtr. FM Net</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 146.91 Swap Net</p> |
|---|--|

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

SSB frequencies below 20 meters are LSB and for 20 Mtr and above are USB.



NWS Windchill Chart

