



# March - 2008

## Officers

Operating the 146.91- repeater under the callsign WI9MRC. For best access use 127.3 PL. Mailing address: PO Box 2123 Milwaukee, WI 53201	President Vice Pres Secretary Treasurer Activts Mgr	Dean Hoover Kurt Elfers Cindy Waltemath John Lasko Vince Morano	KB7QDI N9DWG KC9HJU KC9FJX KB9ZOT	kb7qdi@yahoo.com kelfers@wi.rr.com kc9hju@arri.net johnny-05@peoplepc.com vincemorano@yahoo.com
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## Meeting Notice...

**March 8** (Sat) 6:30pm Meeting, 7:30pm Weather Spotter Training at Woodlawn Lutheran Church, 2217 S. 99th St (99th and Lincoln)

## 2008 Club Calendar...

- May 21** (Wed) Meeting
- July 16** (Wed) Meeting
- September 10** (Wed) Meeting
- October 8** (Wed) Meeting
- November 12** (Wed) Meeting

**Board Meetings:** Call a board member for date, time and location of the meeting.

### Oak Creek Location

Wauwatosa Savings (Basement)  
6560 S. 27<sup>th</sup> Street, Oak Creek, WI

## From the President

All of us knew that Wisconsin is known to have a "wintery wonderland", but I think few envisioned this. And me, during the one year I am without a snow-blower, just makes it that much more fun.

When you think about it, I can remember the last few months having just about every different type of weather condition. We've had days of -11 degrees below zero, with the next week being in the upper 40's. We've had rain, sleet, snow, hail, and even an unexpected tornado hit SE Wisconsin. In the end, it doesn't matter how much we try to predict the weather, Mother

Nature is going to do what she wants to do. I want to personally thank people like John KC9FMC, Charles KC9IIV, Jon W9AOL, and others that have taken time to help donate supplies and time to the tornado-stricken area in Kenosha County. I'm sure that along with the local ARES/RACES operators, the amateur radio community was well represented.

That incident should be a reminder to all of us that anything can happen with Wisconsin weather, and usually does. With that, it is a perfect opportunity to learn as much as we can, as ham radio operators, so that when inclement weather happens, we are ready to help support the National Weather Service by being weather-spotters.

I encourage everyone to come join our club as we once again host the annual Weather Spotter Training presentation at our next membership meeting, this March 8th. The membership meeting will start at 6:30 PM, with the presentation starting promptly at 7:30 PM. This is one of those occasions where we encourage your family to attend as well.

In election news, I want to thank our previous MRC Secretary, Mike K9MDJ, and welcome Cindy KC9HJU on board as our 2008 MRC Secretary. Mike did a most outstanding job over the last few years, and has promised that he is still going to be involved in club activities. Cindy has some big shoes to fill, but all of us feel that she is going to do a great job as secretary.

Lastly, I want to thank everyone for giving me an opportunity to serve again as your club president. I look forward to the challenges the position brings with it, and will work hard to keep the club the best it can be.

Until next time, 73 de  
Dean KB7QD

## From the Treasurer

It was good to see all those who were able to make it to the January election meeting. I would like to thank all those who participated. I want you all to know it is a pleasure to serve the club again this year as the treasurer and I will continue to help the club in any way I can. If I can be of any assistance to anyone, please do not hesitate to contact me.

Again, I have to ask if any member wants to make the change for newsletter delivery via email, I encourage them to contact me. You can be assured that if you make this change, your email address will be held confidential and will not be used for any other purpose except for club business. Due to the increase costs associated with the newsletter printing and mailings, starting this year there is an additional assessment fee for anyone who still desires to receive the newsletter via US Mail, so if you have paid your dues or are planning in paying your dues in the future, please remember this. If you do not pay the assessment fee for this year and I have an email address on file for you, I will automatically change your newsletter notification to email.

I also encourage you to contact me if any of your information like call sign, email address, street address, phone number, or class of amateur license has changed. Please contact me and let me know the updated information. You can contact me via email at johnny-05@peoplepc.com or you can mail it to the club's post office box. If I can be of any service to you, please do not hesitate to contact me. Again, thanks to those who have made the change.

Thank You,  
John Lasko – KC9FJX

## Committees

Awards . . . . .	AI . . . . .	KC9IJJ	Newsletter . . . . .	Heidi N9TUY & Bob AA9JW
Computer Net . . . . .	Dean . . . . .	KB7QDI	Public Service . . . . .	Kate . . . . . KA9MWT
Control Operators . . . . .	Gary . . . . .	N9UUR	Station Trustee . . . . .	Warren Schall . . . . . K9IZV
Emer Operations & Training . . . . .	Gary . . . . .	N9MGJ	Swapfest . . . . .	Bob AB9FB & Matt KC9COY
Fun Net . . . . .	Warren . . . . .	K9IZV	Swap Net . . . . .	Leroy . . . . . WD9HOT
Historian . . . . .	Warren . . . . .	K9IZV	Technical . . . . .	Mark . . . . . KB9VJQ
Librarian . . . . .	Steve . . . . .	W9GSD	Weather . . . . .	Skip . . . . . WD9HAS
Membership Coord. . . . .	Kate . . . . .	KA9MWT	Webmaster . . . . .	Gary . . . . . N9UUR
Net Announcements Coord . . . . .	Milan . . . . .	N9IDX	Asst. Webmaster . . . . .	Donovan . . . . . KC9FGJ

## ***PL Tones- What they are and how they are used***

Back in the early 1960's Motorola introduced a system called CTCSS which stands for 'Continuous Tone Coded Squelch System'. Motorola used the trademark 'Private Line' or 'PL' for short. Other manufacturers also used this system. RCA called theirs 'Quiet Channel', GE used the name 'Channel Guard' to mention a few. The way this is used in commercial 2-way radio is a bit different than how Amateur Radio uses it. A transmitter using CTCSS sends a low level audio tone along with the voice transmission. At the receive end the presence of the correct tone allows the receiver to produce audio, otherwise it remains muted. The tone is a pure sine wave. These tones are low in frequency, ranging from 67.0 Hz to 250.3 Hz. The frequency tolerance of the tone is typically  $\pm 0.5$  Hz. There are 30+ tones to choose from, each at a different frequency. The level of the tone is typically much lower than the voice modulating the carrier. While the voice is typically 5 KHz deviation, CTCSS tones are 0.4 to 0.8 KHz deviation. In commercial equipment the tone is usually filtered out of the audio at the receive end so a listener does not hear it. Some amateur receivers filter it out, some do not.

At the receiver end the tone is detected in a decoder circuit. When decoded the circuitry in the radio un-mutes the receiver and the transmission is heard. In a commercial application this is used to allow several services to share a common frequency. An example might be a small city. Many departments are equipped with radios. Let's say the Parks department and the Street Maintenance department. The total amount of traffic is relatively low so sharing a common frequency is not a problem. Only issue is everybody hears all the transmissions. While the transmissions are seldom confidential, different departments do not need to be bothered with traffic from other departments. If they were to hear everything on frequency they would be interrupted by messages of no interest to them. By equipping the Parks department radios with one CTCSS tone, and the Streets department with a different tone they do not have to hear each other. When a transmission for their department comes along they will hear it. Transmission for other departments will not be heard. End result – better productivity.

The same RF frequency is shared so something needs to be done to ensure the

frequency is clear before someone transmits. This is accomplished by having a monitor mode where the CTCSS decoder is bypassed and all transmissions are heard. In a typical commercial mobile installation there is usually a switch in the microphone hanger bracket. When a user removes the mic from the bracket the switch is activated and the radio decoder is bypassed. All transmissions are then heard. When the mic is hung back on the bracket the CTCSS decode is reactivated.

In the Amateur Radio world CTCSS is used a bit differently. It is generally used for access to repeaters. Not for security or keeping people out but instead to minimize interference from distant repeater systems. With only a finite number of repeater frequency pairs these need to be reused. While they may be a hundred or more miles apart, atmospheric conditions may, at times, allow distant users to key up an unwanted repeater. By utilizing different CTCSS tones the undesired signals will not key up a repeater system. Nearby users signals, being much stronger, will usually override a distant user if the two were to talk at the same time. This way the desired user gets through and the distant one is blocked. An Amateur Radio user who is has CTCSS decoding in their radio enabled will also block out distant repeater signals from being heard on their radio.

Many modern Amateur Radios with CTCSS typically refer to encoding or sending a tone as 'Repeater Tone' and decoding or receiving a tone as 'Tone Squelch'

The Milwaukee Repeater Club uses a CTCSS tone of 127.3 for access to most of the receive sites. The MRC repeater also transmits 127.3 on its output. For best results you should set your radio to use 127.3 for both transmitting and receiving.

by Kurt Elfers VP, N9DWG

## ***From the Activities Manager***

What a start to the year we are having. Snow, snow and more snow. Soon it will be severe weather season and we've even had a taste of that because of the January tornadoes in Kenosha county. I want to thank everyone for trusting me with the position of activities manager for 2008. Let's make this year better than last year. If anyone has ideas for presentations and/or would like to do one let me know. Our next meeting is Saturday March 8 at Woodlawn Lutheran Church on 99th and Lincoln in West Allis. This is the annual weather meeting. The business

meeting will be at 6:30 and the weather meeting will begin at 7:30. This is a good opportunity all of us to prepare for the severe weather season and we will also learn the procedures used on the repeater to report severe weather. Bring a friend who is interested in weather. They don't have to be hams. Maybe they'll want to get a license after the presentation. Hope to see many of you there.

73, Vince KB9ZOT

## ***MRC Meeting Minutes January 16, 2008***

**Location:** Oak creek

**Attendees:** Dean(KB7QDI), Kurt(N9DWG), Mike(K9MDJ), John(KC9FJX), Vince(KB9ZOT)  
Plus sign in list

Meeting called to order at 7:09pm by KB7QDI

**President Dean(KB7QDI)**

Motion to accept new members by Gregg W9AWX, 2<sup>nd</sup> by John KC9FMC, motion passed. Welcome to Skip WD9HAS (Returning member), William WB9HJH, Nick KC9HNU, Brian KC9HEK, Ed KC9MKO, Dean KB9YDK Chris W9JOL, Jeff N9XAK, and Jon KC9IQO.

Motion to accept the minutes of the last meeting as published by Charles KC9IIV, 2<sup>nd</sup> by Dean KB9RCB. Motion passed.

Field Day – Dean will not be able to Co-chair Field day. Matt KC9COY is Co-chair. John KC9FMC volunteered to take Dean's place.

Thanked Bob Manak AA9GW for an outstanding job taking care of compiling the newsletter.

Maureen KB9VLJ has done a great job with the standard announcements for the public service net. She has requested someone else take this over due to time constraints.

**Vice President Kurt(N9DWG)**

Thanked everyone for their help in making this a great year for the club

**Secretary Mike (K9MDJ)**

Motion to hold a swapfest in 2009, 2<sup>nd</sup> by

Gregg W9AWX. Motion passed.

#### **Treasurer John(KC9FJX)**

Financial report, Total funds \$8919.73, Expendable cash \$4145.26. Motion to accept by Milan N9IDX, 2<sup>nd</sup> by Joe N9UX. Motion passed.

Reminded everyone that there is a \$5.00 assessment if you want to receive the Newsletter by mail.

Presented the proposed 2008 budget to the membership. Motion to accept the proposed budget by John KC9FMC, 2<sup>nd</sup> by Richard KB9KYS. Motion passed.

#### **Activities Manager Vince(KB9ZOT)**

Vince is looking for a larger location for the March weather spotter training.

#### **Old Business**

Al KC9IJJ – Awards were presented at the Christmas party.

John KC9FMC is the Friendly One for 2007 Skip WD9HAS was given the Outstanding Service Award for being the Weather Guy for the club.

Mark KB9VJQ – Tech update. The Sinclair cavities have been retuned and show less loss than our present cavities. He will need help installing them.

The downtown receive site is down and will be checked shortly.  
The control operators manual needs updating.

Bob AB9FB – Swapfest was a huge success this year, we took in \$1910.81 for the club. He is looking for help organizing next year's swapfest.

#### **New Business**

Gary N9MGJ – Discussed repeater etiquette regarding good operating practice and emergency procedures. Timeouts are again becoming a problem. Also, if it sounds like someone may have a problem (sudden cutoff while talking, or “oh-oh” with a cutoff) give them time to make a call for help if they need it. Have fun on the repeater but be mindful of developing situations.

John KC9FMC – Asked for donations for the area affected by the January tornado (Wheatland, WI). They are also looking for volunteers to help with cleanup.

Gregg W9AWX – There have been some changes to the severe weather reporting procedures. Windspeed of 58 mph or greater

is reportable, and hail of ¾” or larger. Reporting landmarks have been expanded, and GPS coordinates can be taken along with a landmark.

#### **Adjourned \_8:12pm\_ By \_KB7QDI\_**

Elections for the 2008 board followed the meeting.

Congratulations to

President: Dean KB7QDI

Vice President: Kurt N9DWG

Secretary: Cyndi KC9HJU

Treasurer: John KC9FJX

Activities Manager: Vince KB9ZOT

Thanks for letting me serve on the MRC board for the last 3 years. It has been a pleasure working with this organization. Respectfully submitted:

Respectfully submitted:

Michael D. JONES (K9MDJ)

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### **Short Notes**

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#### **Name Badge**

Anyone wishing to purchase an MRC name badge should e-mail Tom WI9TOM at wi9tom@arrl.net. The price is \$7.75, and anything left after the badges are sent will be put in the Capital Improvement Fund.

#### **Yahoo! Group Page**

Come visit SE Wisconsin's only Yahoo! group page:

[http://groups.yahoo.com/group/amateurradio\\_milwaukee](http://groups.yahoo.com/group/amateurradio_milwaukee)

It is designed specifically to promote all the great people and clubs in SE Wisconsin. It contains links to all the different clubs in the area, times and locations of the different area nets, and also an opportunity to ask a question on a ham-radio topic, or share your unique knowledge.

#### **Club Library**

The club library is still available for those wanting to know more about upgrading, antennas, and all the other aspects of this great hobby. Talk to Steve KC9AYN and ask what's available.

Milwaukee Repeater Club Membership Application

Type of Application \_\_\_ New Member \_\_\_ Renewal

Type of Membership \_\_\_ Individual \_\_\_ Family

(If Family: Please list the names, calls and other pertinent information on any family members living at the same address who are Hams and desire to become MRC members. The \$20.00 dues payment covers an entire family for MRC membership.)

NAME(s) \_\_\_\_\_ CALL SIGN(s) \_\_\_\_\_

NAME(s) YOU USE ON THE AIR \_\_\_\_\_

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

HOME PHONE #: \_\_\_\_\_ WORK (optional) \_\_\_\_\_

CELL (optional) \_\_\_\_\_ BIRTH DATE (optional) \_\_\_\_\_

CLASS OF LICENSE \_\_\_\_\_ EXPIRATION DATE \_\_\_\_\_

PLEASE NOTE! If there is ANY personal information that you DO NOT wish to be published into the club roster, please note it on this form.

EMAIL ADDRESS (for newsletter notification) \_\_\_\_\_

Please indicate if you would you like the Club Newsletter delivered by \_\_\_ e-mail (free of charge) or \_\_\_ U.S. Mail (additional \$5 per year)?

Are you currently an ARRL member? YES \_\_\_ NO \_\_\_

DUES:

NEW MEMBERS - January thru December	\$20.00	\$	_____
NEW MEMBERS - After July 1	\$10.00	\$	_____
ANNUAL RENEWAL -	\$20.00	\$	_____
NEWSLETTER POSTAGE ASSESSMENT -	\$5.00	\$	_____
MRC COFFEE MUG	# OF CUPS _____ x \$5.00 =	\$	_____
MRC NAMETAG w/MRC LOGO	\$ OF NAMETAGS _____ x \$7.50 =	\$	_____
DONATION TO MRC CAPITAL IMPROVEMENT FUND (tax deductible)		\$	_____
TOTAL AMOUNT ENCLOSED		\$	_____

Send check payable to 'Milwaukee Repeater Club' at the address below:

THE MILWAUKEE REPEATER CLUB, INC.  
P.O. BOX 2123  
MILWAUKEE, WI 53201

I hereby agree to abide by the Constitution, by-laws and rules of the Milwaukee Repeater Club.

(Signed) \_\_\_\_\_ Date \_\_\_\_\_

Your membership will be voted on at the next membership meeting once the application is received.

THANK YOU FOR SUPPORTING THE MILWAUKEE REPEATER CLUB!