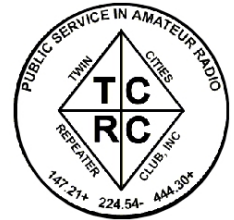


# The Repeater



The Official Publication of the Twin Cities Repeater Club, Inc.

## Mission Statement of the Twin Cities Repeater Club, as Adopted on September 20, 1993

The purpose of the TCRC is to facilitate the local communication needs of its members by owning and operating a state of the art wide area coverage two meter repeater system. The club will further involve itself in secondary activities intended to (1) Promote the exchange of ideas and information related to amateur radio, (2) strengthen the fellowship and camaraderie among the members, (3) serve the local amateur radio community, and (4) increase local public safety.

## Quarterly Membership Meeting

The fourth and final quarterly TCRC membership meeting of the year 2004 will occur on November 17th at 7:30 PM (right after the net). All current and prospective members are encouraged to attend. Come early (6:30 PM) for coffee and cookies. The official meeting begins at 7:30 PM. **This meeting location is once again back at the usual (Burnsville City Hall) spot.** At this meeting, we will be electing club officers for the 2005 calendar year, and selecting the recipient of the Arnie Pung Award for outstanding service to Amateur Radio. Please join us for this meeting.

## Welcome, New Members!

The following folks have recently joined the ranks of the Twin Cities Repeater Club. Please welcome them the next time you hear them on one of our repeaters! The club thanks them for their willingness to participate.

KA9DJA	John Kalina
KAØPMD	Steve Lawrence
KCØTAP	Dale Morgan
KGØKN	Mike Schmidt
NN7L	Jason Fallon
KA3TKN	Calvin Love, Jr.
KCØQOX	Evan Baskerville

KCØLKS	Frank Nook
NØVZJ	Vince Pavkovich
KCØTAK	Chris Bopp
KCØSXN	Chris White
WØLT	Tim Payne
NØLOM	Mark Gottlieb
KCØQEL	Neil Dolan

## Request for Newsletter Submissions

**John P. Toscano, WØJT, Newsletter Editor**

If there is some topic you'd like to see covered in a future edition of the TCRC newsletter, I'd love to hear from you. You can send me a finished article, an outline, or even an idea for an article. Don't worry about your writing skills, I will be happy to do my job as editor and tweak your submissions into an article that meets the high standards our members have come to expect from us. Any document format that Microsoft Word can understand is fine for me, including plain vanilla unformatted ASCII text. Although I love to write, I have lately been exceptionally busy with work (dang it!), so I need a little help from you folks with ideas for articles. Send ideas or articles to me at: [WØJT@tcrc.org](mailto:WØJT@tcrc.org) Thanks in advance!

**Autumn, 2004**  
**Volume 27, Number 3**

### Inside this issue

Mission Statement .....	1
Quarterly Membership Meeting .....	1
Welcome, New Members .....	1
Request for Newsletter Submissions ....	1
President's Report .....	2
"Magnetic Water" Study .....	3
Skywarn Update .....	3
Minnesota Repeater Council Update ....	3
Membership Application .....	4

## Remember!

### TCRC Quarterly Membership Meeting

*Tuesday, November 16th*  
*Burnsville City Hall*

*6:30 PM Coffee & Cookies*  
*7:30 PM Meeting begins*

### Election of Officers Arnie Pung Award

*Talk-in available during the TCRC*  
*Info Exchange Net, 147.21 MHz*

## Please Join Us!

The Repeater is published quarterly by the Twin Cities Repeater Club, Inc. (the TCRC). The TCRC is organized as a nonprofit corporation in the State of Minnesota, with Articles of Incorporation and Bylaws. The club elects officers annually. These officers are simultaneously elected for a two-year term on the Board of Directors. The Repeater Trustee is a permanent member of the Board of Directors. Unlike the other Officers and Board Members, the Trustee may select a proxy to serve in his place at meetings of the Board. Membership in the TCRC is \$25 per year. The TCRC is an official ARRL affiliated society.

#### **TCRC Officers:**

**President:** Phil Lefever, KBØNES  
**Vice President:** Steve Filek, NØOWL  
**Secretary:** Jim Rice, NØOA  
**Treasurer:** Pat Cain, KØPC

#### **Board Members:**

All of the above Officers, plus...  
Ivan Frantz, WØBU, **Repeater Trustee**  
*Ivan has currently appointed Mogens Dantoft, OZ9MD, as his proxy for Board Meetings.*  
Kevin Uhler, NØBEL  
John Toscano, WØJT  
Janet Skovran, KBØZFB  
Mark Neuman, KCØITP

#### **Technical Committee (a/k/a Tech Team):**

Kevin Uhler, NØBEL, **Chair**  
Phil Lefever, KBØNES, **Vice Chair**  
Doug LaBore, NØBIS  
Mike Ferguson, NØDGG  
Rich Kenney, WØRFK  
John Toscano, WØJT  
John Phelps, KFØZM  
Steve Filek, NØOWL  
Kent Peterson, KCØDGY

#### **Field Day Committee:**

Phil Lefever, KBØNES, **Past Chair**  
Kevin Uhler, NØBEL, **Site Setup Manager**  
Monica Filek, KBØUWZ, **FOOD Station Manager**

#### **Information Services Committee:**

Kevin Uhler, NØBEL, **Chair and Head Webmaster**  
Phil Lefever, KBØNES, **Assistant Webmaster**  
John Toscano, WØJT, **Assistant Webmaster**  
Jeff Goodnuff, WØKF, **Web Calendar Maintainer**

#### **Membership Committee:**

Mark Neuman, KCØITP, **Co-Chair**  
Pat Cain, KØPC, **Co-Chair**

#### **Newsletter Committee:**

John Toscano, WØJT, **Editor**

#### **Net Control Operators:**

Kevin Plummer, KBØUEU, **Chair**, 1<sup>st</sup> Tuesday  
Larry Jenkins, KØLEJ, 2<sup>nd</sup> Tuesday  
Steve Shaner, ABØYS, 3<sup>rd</sup> Tuesday  
Phil Lefever, KBØNES, 4<sup>th</sup> Tuesday  
John Toscano, WØJT, 5<sup>th</sup> Tuesday  
Jeff Goodnuff, WØKF, alternate  
Mark Newman, KCØITP, alternate

#### **Metro Skywarn Liaison:**

Jeff Goodnuff, WØKF

#### **Minnesota Repeater Council Liaison:**

Jeff Goodnuff, WØKF

## **President's Report**

by Phil Lefever, KBØNES

It's November, which means that we are getting ready to close out another year. The annual TCRC election of club officers for the 2005 term, will be held on Tuesday November 16<sup>th</sup> at Burnsville City Hall. Each of the current group of officers has stated that he is willing to run again, but I'd like to encourage others to get involved. Mark Neuman, KCØITP, has also indicated his interest in running for the Vice-President's position. We have four elected officials: President, Vice-President, Secretary and Treasurer. At the first Board of Directors meeting of 2005, we will also have several open positions on the Board. These positions are filled by a vote from the elected officers at the January board meeting. If you would like to get more involved with the operations of the club, here is a great chance.

Overall, the club is doing well. We have been seeing the membership start to climb. We are in better financial shape than many other similar clubs in the area. We have also been seeing an increase in activity on the repeaters. The Tech Team has a few surprises in store for upcoming year. Hopefully, we can also revisit the stalled club station project. As always, the TCRC is the sum of all the effort put in by its members, and we can always use additional help and guidance.

Personally, I have been involved with the TCRC for 11 years now. I have served on the Board for most of that time, and I was happy to step in as President when Shanon decided he needed to step down. Often, I feel that I don't have enough time to give to the club. I do plan to run as President for 2005, unless a candidate turns up who has a lot more free time! I have resigned from being the Field Day chairperson – after 10 years, it's time for someone else to have all the fun. While not confirmed, we might be able to rope Jim, NØOA into doing it next year.

The only other comments I have are in response to the increased repeater activity. Now that I am on again during "drive time", I hear heavy activity at times on the 147.21. Remember that we have 3 other repeaters as well, so feel free to strike up a conversation on one of them if 147.21 is busy. I know that I personally prefer a conversation with one or two other people, as compared to a 5-person roundtable. Finally, when using the 147.21 repeater, try not to let the carrier drop between transmissions. The 3 up - 3 down courtesy tone does confuse people at times. The repeater timer has reset as soon as you hear the first set of tones. The best analogy is that the 3 up tones represent someone tossing a ball into the air for someone to catch before it hits the ground. Allowing the repeater tail to drop all the way cycles several electromechanical relays in the repeater needlessly. While the solid-state components of the repeater "don't care", mechanical pieces like relay contacts wear out more quickly the more often they are set into motion. Of course, good amateur practice is to leave enough room for others to break in. Hopefully, the courtesy tones provide that timing.

I hope to see everyone out at the club meeting next Tuesday, November 16<sup>th</sup> at Burnsville City Hall. Come on out, vote, and stay for the refreshments and good conversation that always follows.

73, Phil Lefever, KBØNES

## **Amateur Radio Operators' "Magnetic Water Study" Funding Request Turned Down**

A group of Amateur Radio operators have prepared a grant request to fund the study of possible magnetic interaction between the Minnesota River and vehicles being driven over that body of water. The study covers several local road crossings over the river starting in the West at 41 with Artie (WBØJMG), at 101 with Keith (KCØIVN), I35W with Larry (KØLEJ), and on the East at 77 with Stephen (ABØYS) and I35E with Kris (KCØREO).

These Amateurs, along with other members of the TCRC of Burnsville, have noted the interaction between vehicles and collections of water, especially the Minnesota River. The interactive forces seem to slow the vehicles below the posted speed limits while in the proximity of the water. The group has also noted that pools of water in various forms (snow, ice, rain, hail, and fog) have ancillary effects that enhance and extend the river's magnetic properties. The study seeks to develop a unified theory that explains the varied effects that the "magnetic water" exerts on vehicles during these river crossings.

On April 1, 2004, this group of Amateur Radio operators had their request for funding turned down. While the funding agencies thought it was interesting (well actually funny) they denied the funding request. In denying the request the federal, state and local authorities cited their lack of interest in the subject stating "in the old days we walked to work, in the snow, up hill both ways."

The group of radio operators, wishing to continue their study, has set up a grass-roots fund to help them obtain the money needed to continue their work. Not wanting to be outlandish, the Amateur Radio operators are asking anyone interested in funding the study send a \$25 contribution to the following address:

Twin Cities Repeater Club (TCRC)  
PO Box 11534  
St Paul, MN 55111-0534

The funds will used to maintain the TCRC communications equipment so that the "important" water study can be continued. If you want additional information, check in during the morning and afternoon work-day commute hours on the 147.21MHz. repeater operated by the TCRC. Tune in on the 147.210 mornings from 7 to 7:30 or afternoons from 4 until 5 or

so for updates on the research. Ask questions or just join in!

## **Skywarn Update By Jeff Goodnuff, WØKF**

Here it is November, and the severe weather season is over (we hope). The Skywarn board of directors had their annual meeting on November 1<sup>st</sup>, and plans are being set for next year's spotter training sessions. As usual the TCRC will sponsor training classes. In 2005, however, the TCRC will sponsor two classes. One will be held on March 5 (the first class of the season), and the other one will be on June 4. Both classes are tentatively set for Burnsville City Hall. Keep a watch on [www.tcrc.org](http://www.tcrc.org) for final details.

Remember, Skywarn spotter training is required every two years, so if you didn't attend a training class this year (2004) you will need to attend one next year (2005). The TCRC's two meter repeater (147.21) is the official Skywarn repeater for the south metro area, so check now and update your training next spring so you will be prepared for whatever comes our way.

## **Minnesota Repeater Council Update By Jeff Goodnuff, WØKF**

The Minnesota Repeater Council (MRC) held its annual meeting in North St. Paul, on the afternoon of Hamfest Minnesota (October 23, 2004). For those of you who don't know, the MRC is the organization that takes care of frequency coordination for all amateur repeaters in the state of Minnesota. Also, all the data that appears in the ARRL repeater directories comes from the various state repeater councils. With four repeaters on the air, the TCRC is an active member in good standing with the MRC. I am happy to report that all of the paperwork required to keep our four fine repeaters on the air was in order and has been renewed for another year.

The MRC maintains a current web page:  
[www.mrc.gen.mn.us](http://www.mrc.gen.mn.us)

and the most up to date coordination data for repeaters located in the state of Minnesota are located there. A current list, in PDF format, may be downloaded from:  
[www.mrc.gen.mn.us/MN\\_List.pdf](http://www.mrc.gen.mn.us/MN_List.pdf)

If you haven't done so, take a look at this website as it contains a lot of interesting information about Minnesota repeaters.



**Twin Cities Repeater Club, Inc.**  
**P.O. Box 11534**  
**St. Paul, MN 55111-0534**

**Place  
Stamp  
Here**

Your Membership Dues Have Expired.  
Please Renew your Membership Today!

## Join the Twin Cities Repeater Club!

P.O. Box 11534, St. Paul, MN 55111-0534

<http://www.tcrc.org>

Fill out this Membership Application Form, and mail it with your check for \$25.00 payable to the Twin Cities Repeater Club, to the mailing address listed above. You can also fill out this form electronically at the web address listed above, and either send us a check, or pay online using the PayPal system.

Name \_\_\_\_\_ Callsign \_\_\_\_\_ License Class \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Phone \_\_\_\_\_ Work Phone \_\_\_\_\_ Computer Phone \_\_\_\_\_

Ok to list your address in club publications?    \_\_\_No \_\_\_Yes

Ok to list your phone in club publications?    \_\_\_No \_\_\_Yes

Are you available for Emergency Service?    \_\_\_No \_\_\_Yes

Are you a member of the ARRL?    \_\_\_No \_\_\_Yes

Are you a member of Metro Skywarn?    \_\_\_No \_\_\_Yes, spotter ID: \_\_\_\_\_

Are you a member of ARES?    \_\_\_No \_\_\_Yes

Would you like an autodial speed dial number?    \_\_\_No \_\_\_Yes, to phone # \_\_\_\_\_

Would you like a club ID badge?    \_\_\_No \_\_\_Yes (free to new members, otherwise \$5.00)

What is your internet e-mail address, if any?    \_\_\_None

Would you like an e-mail alias set up, so that mail sent to **yourcallsign@tcrc.org** gets redirected to the e-mail address you listed above? This can be handy on the air!    \_\_\_No \_\_\_Yes

Do you want a copy of the TCRC Handbook?    \_\_\_No \_\_\_Yes (add \$9.50, which includes postage)

Do you want a TCRC binder to hold it?    \_\_\_No \_\_\_Yes (Add \$5.50 to the above)

This is    New Application    Renewal    Other Change    Callsign update, old call was