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.

TCRC Annual Membership Meeting with Election of Club Officers for 2007

Tuesday, November 28, 2006 7:30 PM until 10:00 PM

The next Quarterly membership meeting of the Twin Cities Repeater Club will be held on Tuesday, November 28th, at Burnsville City Hall, in one of the basement rooms. As we usually do on the Tuesday evenings of the quarterly membership meeting, we will have an abbreviated version of the TCRC Information Exchange net, from 7:00 PM to about 7:30 PM, so the meeting can get started at that time. You are welcome to show up at Burnsville City Hall before 7:30 PM (as early as 6:45 PM is okay), so you can chat with the other folks who have come to the meeting, and enjoy the coffee and cookies that will be provided.

Although we have meetings quarterly, this is the annual meeting at which we elect club officers. All four elected offices are up for grabs: President, Vice-President, Secretary, and Treasurer. We will also select the next recipient of the Arnie Pung Award for Outstanding Service. This award has been given annually since 1988 to a deserving member of the Twin Cities Repeater Club. We need a quorum of club members to have a legal election, so you are especially encouraged to come to this meeting and cast your votes. We hope to see you there!

Field Day 2006 Results are Published

Field Day was held on Friday June 23 – Sunday June 25, 2006. Look inside to see how the TCRC did in comparison to other groups that were active in the state, and nationally!

Fall, 2006 Volume 29, Number 3

Inside this issue

Please Join Us for the TCRC Annual Membership Meeting and Election of Club Officers for 2007

Tuesday, November 28th, at the Burnsville City Hall! 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: Mark Neuman, KCØITP Secretary: Tanna Morse, KCØURO Treasurer: Craig Larsen, KCØDMF

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. Jim Rice, NØOA, **Past Secretary** Jeff Goodnuff, WØKF

Larry Jenkins, KØLEJ Artie Johnson, WBØJMG

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

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

Field Day Committee:

Mark Neuman, KCØITP, Chair Jim Rice, NØOA, Vice-Chair Kevin Uhlir, NØBEL, Site Setup Manager Open, FØOD Station Manager

Information Services Committee:

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

Membership Committee:

Doug Ayers, NAØVY, **Chair** Craig Larsen, KCØDMF Tanna Morse, KCØURO

Newsletter Committee:

John Toscano, WØJT, Editor

Net Control Operators:

Chair:Larry Jenkins, KØLEJ1st Tuesday:Jeff Goodnuff, WØKF2nd TuesdayDoug Ayers, NAØVY

3rd Tuesday: *Open*

4th Tuesday: Phil Lefever, KBØNES 5th Tuesday John Toscano, WØJT Alternate: Mark Newman, KCØITP

Metro Skywarn Liaison:

Jeff Goodnuff, WØKF

Minnesota Repeater Council Liaison:

Jeff Goodnuff, WØKF

Welcome, New Members!

The following folks have recently joined the ranks of the Twin Cities Repeater Club, or have re-joined after a period of elapsed membership. Please welcome them the next time you hear them on one of our repeaters! The club thanks them for their willingness to participate in the club.

КСЙҮНН	Tony Lambertz	
WØXH	Bud Gooch	
NØRTZ	Bill King	
ACØEF	John Thompson	
KBØUPJ	Jeremy Rogness	
KCØWAQ	Brian Kluck	
KE7FAQ	John Machaby	



TCRC Field Day 2006 Results

by John P. Toscano, WØJT VHF/UHF/Satellite Station Manager, 2006



Any way you want to look at it, the Twin Cities Repeater Club did a fantastic job in the 2006 Field Day Operating Event.

Our total score was 6,582 points, with 1,705 QSO's completed. Our Field Day effort included 64 participants.

Our total score placed us in 143rd place of 2,184 total entries, or in the top 7% of all participating clubs in any class. Similarly, we placed 18th of 279 entries in the 3A class in which we participated. Once again, this is in the top 7% of the 3A class entries. There were a total of 34 entries from the state of Minnesota, and we placed 4th in total points of those 34 clubs.

However, we in the TCRC consider the Field Day event to be much more than a contest, and our number one priority is not to get the highest score. Our number one priority is to have a lot of fun, making this the premier social event of the year for our club members. Looking at it this way, you will find that the TCRC placed first of 34 entries from the state of Minnesota in terms of the number of participants at Field Day, and 48^{th} of 2,184 entries (top 2.2% of all entries) in terms of the number of participants. And those of us who were there will attest to the fact that we had a great time! Therefore, I have to conclude that our Field Day 2006 event was an unqualified success!

This was the last year we will be able to use the site we have been using for the last many years. Sadly, the farm will be changing to a housing development, so we are in need of a new site for future operations. If you know of a good place to hold our Field Day event next year, please let us know. In any case, plan to join us for the 2007 event. As always, it will fall on the 4th full weekend in June. That would be June 23 and 24, 2007. Plan now to join us for the fun!

FCC Releases Long-Awaited "Omnibus" Amateur Radio Report and Order

adapted by John Toscano, WØJT, from the ARRL web report: http://www.arrl.org/news/stories/2006/10/11/100/?nc=1

The FCC's Report and Order (R&O) in the so-called "omnibus" Amateur Radio proceeding, WT Docket 04-140, was adopted October 4 and released October 10. In it, the FCC adopted nearly all of the changes it had put forth in its 2004 Notice of Proposed Rulemaking (NPRM) in the proceeding, but *took no action at this time* on the Commission's proposal to eliminate the Morse code requirement for all license classes. The complete R&O can be found at:

http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-149A1.pdf

The changes spelled out in the R&O go into effect 30 days after their publication in the Federal Register. You may want to check periodically at the ARRL web site to find out when this implementation has actually occurred.

Highlights of the R & O

- expands the phone sub-bands in the current 75 and 40 meter Amateur bands
- allows Novice and Tech Plus (Technician with Element 1 credit) licensees to operate in the General class CW subbands on 80, 40, 15 and 10 meters
- implements rules to discourage multiple vanity call sign filings on the same day from the same applicant
- permits auxiliary stations to transmit on portions of the 2 meter band (previously, all such transmissions were required to be on frequencies above 222 MHz)
- permits the use of spread spectrum on 222-225 MHz
- permits amateurs to retransmit communications from the International Space Station (analogous to the existing authorization on the re-transmission of communications from the Space Shuttle)
- permits amateur licensees to designate a specific Amateur Radio club to receive their call sign in memoriam, instead of requiring that surviving family members authorize the allocation after the death of the licensee
- eliminates certain restrictions governing the manufacture, marketing and sale of external RF power amplifiers intended for Amateur Radio use
- clarified that "amateur stations may, at all times and on all frequencies authorized to the control operator, make transmissions necessary to meet essential communication needs and to facilitate relief actions" (because there had been some concern before the clarification that volunteers who had been given time off work or other valuable support from their employers might be mis-construed as receiving payment for providing communication services in a disaster relief situation)
- deleted the frequency bands and segments specified for Radio Amateur Civil Emergency Service (RACES) stations
- deleted the requirement to publicly announce Amateur Radio examination locations and times, and

 permits Amateur Radio stations in Alaska and surrounding waters more flexibility in providing emergency communications.

Novice / Tech Sub-Band "Re-Farming"

- The Commission agreed to "refarm" the HF segments currently authorized to Novice and Technician Plus licensees. The reallocation will expand the phone subbands for General, Advanced and Amateur Extra licensees. On 75 meters, Generals will be able to operate on phone from 3800-4000 kHz, an increase of 50 kHz. Advanced class licensees will be able to use voice from 3700-4000, an increase of 75 kHz, and Amateur Extras will be able to use voice from 3600 to 4000 kHz -- a generous increase of 150 kHz. On 40 meters, Advanced and Extra Class licensees will be able to use voice from 7125-7300 kHz, an increase of 25 kHz. General class licensees will be able to use voice on 7175-7300 kHz, an increase of 50 kHz. On 15 meters, General class operators will have phone privileges on 21275-21450 kHz, an increase of 25 kHz. To accommodate the remaining Novice and Tech Plus (or Technician with Element 1 credit) licensees on HF CW, the FCC affirmed its intention to permit these licensees to operate CW in the current General exclusive-CW allocations on 80, 40, 15 and 10 meters.
- Novice/Tech Plus licensees still may only run no more than 200 W PEP on those HF CW segments, but the Commission has done away with similar power limitations on HF segments for higher-class licensees, with the exception of the 200 W PEP power limitation already in place on 30 meters and the 50 W ERP restriction on 60 meters.

Vanity Call Sign Applications

The FCC has revised its vanity call sign rules to discourage the filing of multiple applications for the same call sign on the same day, in an attempt to improve the odds of receiving the desired call over other amateurs making only one application for the call. As implemented in §97.19(d)(1), if the FCC receives more than one application requesting a vanity call sign from a single applicant on the same receipt day, it will process only the first application entered into the Universal Licensing System. "Subsequent vanity call sign applications from that applicant with the same receipt date will not be accepted," the rule concludes. Current Commission rules and procedures do not preclude applicants from filing multiple applications on the same day for the same vanity call sign, provided that they pay the filing fee for each application. Furthermore, the new rule of one application per day "will not prevent an individual from requesting multiple vanity call signs per se," because an applicant may request up to 25 call signs at a time.

RF Power Amplifiers

The R&O also affirms changes to Part 2 and Part 97 rules the FCC had proposed regarding the manufacture, marketing and

sale of external RF power amplifiers. Current FCC rules prohibit commercial manufacturers from marketing RF power amplifiers capable of transmitting on the 12 and 10 meter bands. The rules were put in place as a way to prevent use of such amplifiers by CBers. To prevent the use of Amateur Radio amplifiers by CBers, the FCC says it's still necessary to require manufacturers of Amateur Radio amplifiers design their products to avoid operation on the CB frequencies, by retaining the current requirement that amplifiers exhibit no amplification capability between 26 MHz and 28 MHz, and continuing to require manufacturers to certify that amplifiers are not capable of amplification between 26 MHz and 28 MHz and are not easily modifiable to operate between 26 MHz and 28 MHz prior to the grant of an equipment certification. The FCC also concluded that the definition of an external RF power amplifier kit is no longer needed in Part 97. The Commission said it may deny certification of external radio frequency power amplifiers to prevent their use in services other than the Amateur Radio Service. Non-amateur licensees will not be permitted to construct or modify an RF amplifier capable of operation below 144 MHz without a grant of certification from the FCC. Radio amateurs may build or modify RF amplifiers for use at an Amateur Radio station without a certification grant, however.

Less Spam!

The TCRC's
Board of Directors
Takes Steps to Reduce
the Flow of Spam Into
Your Email
inbox



by John P. Toscano, WØJT, Newsletter Editor

Due to ever-increasing problems with spamming of the TCRC mail lists, the Board of Directors has taken some steps to reduce the problem for club members. The main mail list, TCRC-L, which delivers messages to all current club members with an email address on file, has been made a *closed list*. This means that all attempts to send messages to the list by non-members of the list will be automatically rejected. While this will eliminate all of the incoming spam unless it is being sent by a club member (heaven forbid!), it will also make it impossible for a non-member to post an email announcement to all TCRC club members. For example, if another Ham Radio club wanted to send a message to all of our members, they would now be unable to do so, unless the message originates from someone who is (also?) a member of our club. The Field Day mail list was likewise closed to non-members.

At the present time, the Board and Tech Team lists have *not* been closed, so that people with legitimate issues to bring up to those groups can do so even if they are not currently a

member of either of those two groups. At the last Board of Directors meeting, this matter was brought up for further discussion, and it was decided that those lists will not be closed to non-members of the lists unless there is excessive spam traffic on those lists.

If there is a legitimate need to post messages to one of these newly-closed lists by a non-member of the list, the best solution would be to send an individual message to one of the list members, and ask that person to forward it to the rest of the list. In virtually all cases, Board members, Committee chairs/members, and Tech Team members (for that matter, most TCRC club members) should be reachable by sending email to the individual person's callsign @ tcrc.org because that alias is automatically set up when people are made members of the Board or Tech team, or become members of the club, respectively. To reach the Field Day list, you can again start by contacting any list member and asking to have your message distributed to the list, or you can self-enroll in the Field Day list, on line, at the TCRC web site.

TCRC is present at NWS Open House

by Jeff Goodnuff, WØKF

On September 16, 2006 the National Weather Service held an open house in Chanhassen for the education and entertainment of the general public. This was the first open house held in the past five years and, as such, was very successful with about 2,000 visitors in attendance.

The TCRC, as the primary Skywarn repeater, occupied a table right next to Metro Skywarn. The table was attended by Larry, KØLEJ, Craig, KCØDWG, Artie, WBØJMG, Lucia, NØFBM and Jeff, WØKF. We had a constant flow of visitors with a plethora of questions about the TCRC and ham radio in general.

Skywarn Recognition Day

Skywarn Recognition Day was developed in 1999 by the National Weather Service and the American Radio Relay League. It celebrates the contributions that volunteer SKYWARN radio operators make to the National Weather Service. During the day SKYWARN operators visit NWS offices and contact other radio operators across the world.

For details about the activities including operating procedures, frequencies, NWS Offices and other details see: hamradio.noaa.gov

Activities begin at 6:00PM Friday December 1, and continue for 24 hours until 6:00PM Saturday December 2.

The International Language: Esperanto and Ham Radio

In 1924 the ARRL adopted Esperanto as the International Auxiliary Language of Amateur Radio. As DX was increasing, a need was immerging to improve international communications. Although this movement did not catch on very well with the Amateur Radio community, the need still exists.

What is Esperanto?

Esperanto is the most successful of the so-called "constructed languages." In 1887, Dr. L.L. Zamenhof (an eye doctor by trade) published the first book of Esperanto Grammar under the pen name of Doctor Esperanto (Doctor who is hoping) and the name for the language became known as Esperanto. Dr. Zamenhof lived in a town in Poland, where Polish, German, Yiddish, and Russian were spoken by neighborhoods that had little understanding of each other, and less trust. A common politically neutral language seemed to be the answer.

Why learn Esperanto?

We know English already. Everybody in the world knows English, right? Why, even aliens on Star Trek speak English. We Americans think that the whole world speaks English, and we can be understood if we just talk slower and louder. Anyone who does not speak English well is either stupid, uneducated, or both.

Attitudes like this are the problem that Esperanto is trying to fix. Since Esperanto is not claimed by any country, it is neutral. Esperanto is easy to learn, so easy in fact that it can be taught in correspondence courses or from text books and give the user a great deal of facility right away. The Boy Scouts use it for international Jamborees. The UN uses it. There are some short wave broadcasters that transmit radio programs in it. Some musical groups have used it, not only to promote international sales, but because of its lyrical structure.

The structure is simple, one letter = one sound. Words are built up from roots with prefixes and suffixes to modify it. Nouns end in "o", adjectives end in "a", and verbs in "i." The accent is always on the second to the last syllable of each word.

For example:

- Urbo = town (like urban, suburban, etc.). (Pronounced: OOR boh)
- **Urbeto** = small town = urb(town) + et(small) +o(noun) (oorb-ET-oh)
- **Urbego** = Large town = urb(town) +eg(large) + o(noun) (oorb-EGG-oh)
- **Urbestro** = Mayor = urb(town) estr(leader) o(noun) (oorb-ES-troh)
- **Urbestraro** =City Council = urb(town) +estr(leader) +ar(collection of) o(noun) oorb-estr-AR-oh)

• **Urba** = City(adjective) for example: urba trafiko = City Traffic. OOR-ba tra-FEE-ko

Here are some associations between Ham Radio and Esperanto from the beloved internet:

ILERA (Internacia Ligo de Esperantistoj RadioAmatoroj) - **International League of Esperantists - RadioAmateurs**. http://www.esperanto.org/ilera/ They also offer an award for working 10 of their members. (Not necessarily in Esperanto!)

The USA national organization for Esperanto known as **ELNA** (the Esperanto League of North America) had a place on its application form for Amateur Radio Call Letters. Why? I think because many Hams are also interested in international communications.

http://www.esperanto-usa.org/

There is a lively culture of literature, poetry, science, music, and fellowship within the Esperanto movement. World travel opens up new opportunities with the directory of persons who will put you up in their homes if you are an Esperanto speaker.

I believe that, for people who like to learn about people from foreign lands, Esperanto and Ham Radio go together. It is probably the easiest language to learn. It can show to other cultures that you are willing to meet them half way on language. And lastly, I find it fun to learn this language. For further information, search the internet, or contact the Minnesota Esperanto Association.

73 (Sep-dek-tri), Artie WB0JMG

Locally, meeting twice a month:
Minnesota Esperanto Association
1422 Como Ave.
St. Paul, MN 55108
E-mail: yerdul0@ourtownusa.net

Shameless Plug: (Expired) Members, Please Renew!

Please look carefully at the mailing label on your copy of this newsletter. If the label shows that your membership dues are "in grace" or "expired", you are overdue to pay your \$25 annual membership fee. Please take a moment to renew now!

Because of the demise of most Hamfests in the Twin Cities area (which often prompted some folks to renew each year), and our difficulty in publishing four full newsletters each year (volunteers/articles always welcomed!), it seems to be more easy lately for people to forget when their club dues come due. (We've even had club officers and committee chairs forget!) We really do hope you will consider renewing your membership.



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.

a check, or pay online using the PayPal system	m.	
Name	Callsign	License Class
Address	City	State Zip
Home Phone	Work Phone	Computer Phone
Ok to list your address in club publications? Ok to list your phone in club publications? Are you available for Emergency Service? Are you a member of the ARRL?	No	_Yes _Yes _Yes
Are you a member of Metro Skywarn? Are you a member of ARES?	No	_Yes, spotter ID:
Would you like an autodial speed dial numbe Would you like a club ID badge? What is your internet e-mail address, if any?	No	_Yes, to phone # _Yes (free to new members, otherwise \$5.00)
Would you like an e-mail alias set up, so that above? This can be handy on the air! Do you want a copy of the TCRC Handbook' Do you want a TCRC binder to hold it?	mail sent to yourca No No No	_Yes (add \$9.50, which includes postage)