

Minnesota Repeater Council



Fall 2007 Newsletter

Founding Member: National Frequency Coordination Council

MRC Officers:

Chair

Jay Maynard, K5ZC
1831 Oakwood Dr.
Fairmont MN 56031
jmaynard@conmicro.com
507-235-6485
952-960-3600

Vice Chair

Steve Glatzel, WØIDS

sglatzel@aol.com
763-441-0985

Secretary Treasurer

Jerry Dorf, NØFWG
1402 Pulaski Road
Buffalo MN 55313
jerryd@jerryd.net
763-682-2169

Appointments

Frequency Coordinator

Jerry Dorf, NØFWG
See Secretary's info

Technical Committee Chair

User Liaison

Thomas Gagnon KBØDCO
805 20th Street East
Glencoe MN 55336
320-864-4274
kbØdco@arrl.net

The Fall MRC
Meeting will be
held
Saturday
October 27, 2007
at the
North St. Paul
Community
Center
2290 1st Street
North St. Paul MN 55109

Registration 1:00 PM
Call to order 2:00 PM

The community center is located
near Minnesota Highway's
36 & 120.

Pizza & pop will be provided,
however a donation is encouraged!

Construction on Highway 36 is
expected to be completed by our
meeting date, however the route to
the community center will be
different from past years as the 1st
Street exit has been removed.

It is important that if your not
going to attend the meeting to
proxy your vote to someone
who can attend. This can be
another club member or any
licensed amateur, it does not
have to be a MRC member.

The world of narrowband digital radio continues to heat up. It's the talk of the coordination community. The big question is: How do we take advantage of great spectrum efficiency to allow more systems to fit in the same bands?

Icom is still selling lots of D-Star repeaters and user radios. The D-Star module for the IC-2820 sold out the first day at Dayton; I bought the last one one dealer had. There are systems going up almost daily around the country. D-Star isn't the only narrowband technology, either, and P-25 systems are going on almost as quickly in some areas. The user curve is shooting up exponentially.

All of this means that there's pressure to find places to put systems. Some repeater owners are converting their existing coordinations to narrowband, as I did with my 440 MHz channel. Others are getting new coordinations on standard channels. A few others are getting coordinated on channels that don't fit traditional band plans. Still others are being forced outside the coordinated band segments by coordination bodies that aren't able to find places to put them, aided by what's generally seen as a short-sighted decision by the FCC that D-Star repeaters, at least, are not actually repeaters under the definition in part 97.

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Annual Election of officers

At the fall meeting we need to elect or re-elect the officers. At this time the chair & sec-treas have agreed to run for office. Vice Chair position is open.

Waiting List

Greg Kitchak	N0GEF	2-meters	Crown
Bruce Williams	N0VOW	2-meters	Wyoming Twsp

New Coordinations

ATV Repeater (crossband) 426.250 input			
NEW BRIGHTON	N0NMB	910.2500	24-Jun-07
NEW BRIGHTON	N0NMB	1253.250	24-Jun-07

Voice Repeaters

OGILVIE	KD0CI	147.2400	30-Jul-07
BIG BEND	KC0TWQ	147.1200	01-Jun-07
ST. PAUL	N0NKI	443.1000	25-May-07
GRAND MARAIS	W0BBN	444.9250	15-May-07
STATEWIDE	N0GEF	443.7000	09-May-07
FAIRMONT*	K6ZC	1284.5000	26-Apr-07
FAIRMONT*	K6ZC	146.9700	26-Apr-07
COHASSET	KB0CIM	146.9850	09-Apr-07
COHASSET	KB0CIM	444.1500	09-Apr-07
SEBEKA	N0WN	147.3300	16-Mar-07
BLOOMINGTON*	K0UW	145.2500	16-Mar-07
BLOOMINGTON*	K0UW	1286.0000	16-Mar-07

* Indicates DSTAR

Secretary, Treasurers & Coordinators Notes

Fall updates have been mailed around the first week of August, please check them for accuracy and return them via mail or in person at the fall meeting

As of this newsletter no coordinations or applications have been received for D-STAR or other digital systems under the proposed plan. We know there are some systems on the air waiting for us to finalize the plans. We need to look at the IL plan as WAR has adopted it and is sending out proposals under it.

Overall the coordination process has been moving smoothly and no issues have been noted.

We have a higher than normal number of members who have not paid dues at this time so check your membership dates. Also a high number of outstanding repeater update forms.

At the fall meeting I will be bringing summary of where the MRC has been spending funds along with the income.

With price increases by the postal service, meeting rooms along with our paying for internet hosting services we need to look at the future.

This newsletter has been printed in house as a cost savings measure along with being able to control the delivery time. When I first started we printed the newsletter at Kinko's for \$164. I then moved to Custom Business forms, they do a good job and at the time very responsive. Last time they took almost 10 days to turn it around along with wanting a signed proof returned. Kinko's does a good job turning things around FAST, however they hand folded and charged accordingly. CBF does a very good job overall however we are a small customer and they use our newsletter as a filler. I'm considering this time a test run to see how it works out.

As this goes to the printer, I do not have a printable map of the area around the community center. I have looked at the engineering maps and note that the community center is now at the end of a dead end. Construction should be completed by the meeting date.

The detour directions are as follows:

From the West:

Use the White Bear Avenue exit off Hwy 36. Take a right on White Bear Avenue and continue to County Road B (South Avenue). Take a left on County B and continue two blocks to 7th Avenue (5 way stop). Turn on 7th Avenue and continue to 1st Street and take a left on 1st Street to center.

From the East:

Turn left off of Hwy 36 on Century Avenue. Continue on Century Avenue to 7th Avenue and take a right on 7th. Continue to 1st Street and take a right on 1st Street.

See you at North St. Paul, 73's Jerry N0FWG

MRC Resources on the Internet

MRC Webpage <http://www.mnrepeaters.org>
<http://www.mrc.gen.mn.us>

MRC Mailing list:

This mailing list is for announcements and general discussion of MRC events, policy and operations. Currently it is un-moderated and open to all.

Sign up at:

<http://mailman.qth.net/mailman/listinfo/mrc>

Don't forget to change your email program to "plain text" before you try to send anything. Messages with HTML or other fancy print will come through blank if you don't make the change.... Also do not include attachments!

Continued from page 1

It's a big mess. Fortunately, the coordination community is actively looking for answers. The NFCC meeting at Dayton was pretty much taken up with this one discussion.

Bob Shepard, KA9FLX, of the Illinois Repeater Association came up with an innovative, well thought out plan to help take advantage of narrowband digital systems' spectrum efficiency. The diagram below shows the heart of the proposal, which is to put two narrowband signals in the spectrum taken up by one analog FM system by moving their carrier frequency off of the channel center. The diagram shows the worst case, that of a 20 kHz channel on 2 meters. Even in this case, the signals still fit with room left over. It's even easier on a 25 kHz UHF channel, where the offset from center is 6.25 kHz.

I'll pick an example out of thin air. Let's say that 145.25 is available. Instead of putting a narrowband system on that frequency, the Illinois plan would move it up to 145.255 or down to 145.245 - and leave the other frequency of the two available for another system. Presto, instant channel!

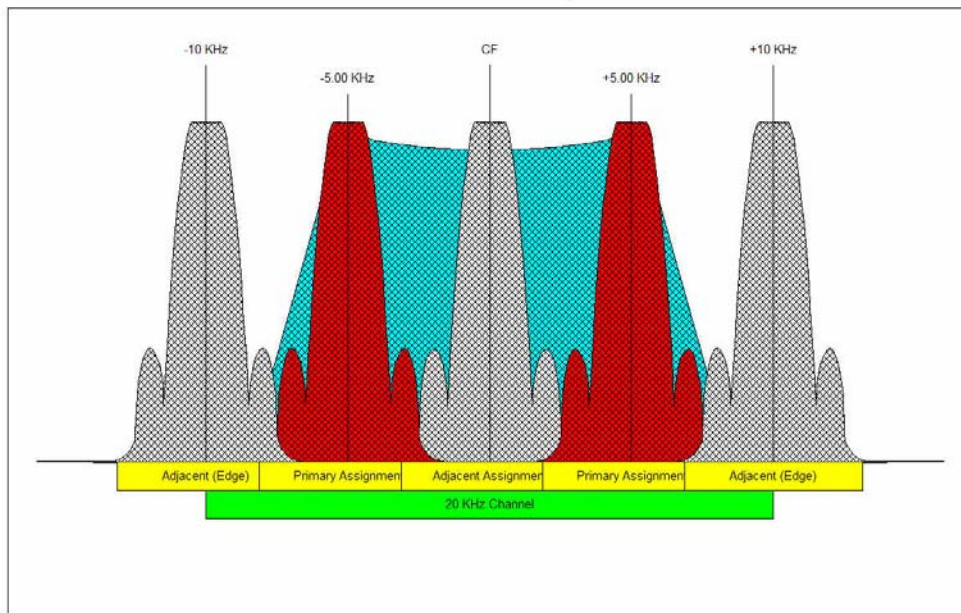
The system is still 15 kHz away from its neighbor on 145.27 or 145.23, and better yet, is even less likely to cause interference than an analog system 15 kHz away would be.

The real beauty of this plan is that it doesn't affect anyone but the folks using the new technology. All emissions are within the spectrum footprint of the analog system that would otherwise go there. The one real drawback is that it needs channels at least 20 kHz wide, so it would only work here on 2 meters in the 144.5-145.5 segment. That's not a problem on UHF, of course.

Wisconsin and Illinois have adopted this plan provisionally, and we've already received proposed coordinations based on it. (That's why I picked 145.25: the first one we got is for 145.255.) You can read all about it by going to the IRA's web page at <http://www.ilra.net> and following the link to the IRA's Digital Migration Guidelines (either the PDF or PowerPoint documents). I believe the MRC should look closely at this plan, and then adopt it provisionally, so we can gain more experience with how it works in the real world.

I hope I'll see you all in October. Thanks and 73...Jay

VHF 20 KHz Channel Plan



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2006,2007



Minutes of the Minnesota Repeater Council

Spring meeting held On April 28, 2007
Held at Lakes Area Recreational Center
Alexandria Minnesota

Call to order by Secretary Jerry Dorf , N0FWG at 1:00PM due to chairman's arrival being delayed.

Introduction of officers & members made.

Quorum was met with a total of 67 members in good standing on the roster, 23 in attendance, 7 non-metro at the start of the meeting.

Individual announcements:

Duluth Hamfest May 5

Secretary & Treasurer's report: Jerry Dorf N0FWG

Reports presented to membership in the newsletter, and handout.

A motion was made to accept, seconded and passed.

Frequency coordinator: Jerry Dorf

Reports presented to membership in the newsletter, and handout.

Chairman Jay Maynard K5ZC took over meeting at this point.

Chairman's Report:

Jay as of late 2006 is now the president of the NFCC with a meeting at Dayton. Nothing significant is occurring with the MRC at this point.

Technical Committee:

Volunteers are being sought for the technical committee, if interested contact a officer.

New Members:

Al Bennefeld, K0GKY Associate North Dakota Frequency Coordinator

Jim Johnson, KB0CIM Regular

Ben Franske, K0BEN Regular U o fM Radio Club

Motion to approve, seconded motion passed

Old Business:

Coordinator is still waiting for a channelized 900 & 1.2G band plan from the planning committee.

Jay has worked with Doug Reed to make a list of 1.2GHz channels. 900MHZ is still being worked on.

IRLP & Echolink ID's 2007/2008 ARRL repeater directory will not be published

Motion made that the MRC take out a full page add in the next ARRL Repeater Directory showing useful information about echolink and other information to be determined by the MRC. Seconded, motion failed.

DSTAR: Discussion on the 7 items as published

Motion to accept the coordinators recommendations to adopt items 1, 2, 3, 4 and 7 until the fall 2007 MRC meeting. Motion seconded.

Motion to strike the last sentence from item 7, seconded. Motion fails Motion to amend that items 1, 2, 3, 4 and 7 be conditionally adopted until the Fall 2007 meeting, at that time they will be terminated unless re-adopted. Motion seconded, Passed. Vote on original motion, passed.

Part 97 revisions, no apparent changes in MRC policy are needed to reflect changes in part 97 rules.

New Business:

Motion to De-coordination of Esko 442.600 N0NXA repeater, notice has been mailed out via certified mail. Moved and seconded. Passed.

Certified letter, has been mailed to Richard Donlon Jr, K0RMR, he has responded transferring control to Scott KC0OMC motion to grant Scott a 6 month with 1 possible extension as if it was construction.

Motion to adopt as policy, when a repeater is moved or significant changes are made; the coordination date is reset to the current date. When a repeater is surrendered all associated links are also removed at the same time if they are not specifically surrendered. Seconded, motion passed.

Fall Meeting: Metro location:

No other offers were heard for a different location so the Fall meeting will be held on October 27, 2007 at the North St. Paul Community Center. This is the annual meeting where we will elect board members. Motion to hold meeting at North St. Paul, seconded & approved.

Meeting Adjourned at 3:26 pm

Jerry Dorf, N0FWG

Secretary Treasurer

Minnesota Repeater Council, Inc

Narrowband Digital System Draft Standards for Coordination

These standards apply to any narrowband digital mode with an emission designator specifying a necessary bandwidth of no more than 13 kHz, such as APCO Standard P25 or D-Star.

- 1) Any repeater owner may convert his coordination from analog FM to narrowband digital at any time upon notifying the frequency coordinator. He may only convert back if no narrowband digital system has been coordinated on a frequency 10 kHz away within 120 miles, or 12.5 or 15 kHz away within 30 miles.
- 2) Narrowband digital systems may be coordinated 10 kHz away from adjacent narrowband digital systems with no minimum geographic separation.
- 3) Narrowband digital systems may be coordinated 20 kHz or more away from analog FM systems with no minimum geographic separation.
- 4) Narrowband digital systems may be coordinated less than 10 kHz away from other systems, either narrowband digital or analog FM, only if the same geographic separation requirements are met as currently exist for analog FM.
- 5) Narrowband digital systems may be coordinated 12.5 or 15 kHz away from analog FM systems with a minimum geographic separation of 30 miles, or if significant terrain features prevent signals from propagating into the adjacent system's coverage area. Narrowband digital systems on these frequencies will use the opposite frequency of the pair for transmit and receive from normal. If an analog FM system receives interference from a narrowband digital system on an adjacent channel more than 10 kHz away, it will be required to use CTCSS decoding on its receiver as a first step to resolve the interference.
- 6) There are nine new frequency pairs available on 2 meters for narrowband digital systems. The pairs are 146.41 through 146.49, 10 kHz apart, with a +1 MHz offset; the system will transmit on the lower frequency of the pair, and receive on the higher frequency.
- 7) Coordinations under these standards are provisional pending final adoption of changes to the MRC band plan and standards of coordination. Narrowband digital systems may be asked to change frequencies as experience is gained if these standards are found to be unworkable. Every effort will be made to accommodate provisionally-coordinated narrowband digital systems should changes be necessary. It is anticipated that a minimum of one year will pass before any final changes to the MRC band plan or standards of coordination are made.

Coordinators recommendations:

Conditionally adopt on a trail basis items 1, 2, 3, 4, 7 until the fall meeting.

Geographic features will need to be defined further as opens a possibility of speculation and interpretation by others.

Item 5 should be presented to the MRC body as a whole for comments and consideration. It raises a question of who should be protected, the older technology or the new. Or protect the users or the repeaters.

Item 6 will be controversial with simplex users.

Minnesota Repeater Council Checking Account

Report as of August 13, 2007

Date	Type	Description	Debit	Credit	Balance	Comments
11/15/2006	2069	Postmaster	\$4.64		\$4,055.05	Certified letter for waiting list
2/1/2007	2070	Lakes Area Recreation Center	\$63.90		\$3,991.15	Room rental
2/6/2007	DEP	St. Cloud Radio Club /Art Carlson		\$10.00	\$4,001.15	Dues 2007
	DEP	JON KRIZEK		\$10.00	\$4,011.15	Dues 2007
2/17/2007	2071	Postmaster	\$39.00		\$3,972.15	Postage
3/3/2007	DEP	RON KITTELSON		\$20.00	\$3,992.15	Dues 2008
2/20/2007	2072	Postmaster	\$9.28		\$3,982.87	Certified letters
3/16/2007	2073	Custom Business Forms	\$95.85		\$3,887.02	Print Newsletter
3/23/2007	Dep	STEVE LYNN		\$20.00	\$3,907.02	Dues 2008
	DEP	Steve CSIZMADIA		\$10.00	\$3,917.02	Dues 2008
4/2/2007	DEP	David Kellner		\$10.00	\$3,927.02	Dues 2007
4/9/2007	DEP	Dean BOELTER		\$10.00	\$3,937.02	Dues 2008
	DEP	Allan Bennefeld		\$15.00	\$3,952.02	Dues 2009 Assoc membership
4/18/2007	DEP	ARRL		\$297.00	\$4,249.02	Repeater Directory payment
		TCRC/Ivan Frantz		\$10.00	\$4,259.02	Dues 2007
4/28/2007	2074	Jay Maynard	\$145.21		\$4,113.81	Pizza & pop
4/30/2007	DEP	Pizza Donation		\$71.00	\$4,184.81	Donations towards Pizza
		Margaret Jordan		\$10.00	\$4,194.81	Dues to 2007
		Harold Clough		\$10.00	\$4,204.81	Dues to 2007
		Geoffery Ernst		\$20.00	\$4,224.81	Dues to 2012
		Bruce Granger		\$10.00	\$4,234.81	Dues to 2007
		John Swanson		\$10.00	\$4,244.81	Dues to 2007
		Don Hengemuehle		\$10.00	\$4,254.81	Dues to 2008
		Erik Jacobson		\$10.00	\$4,264.81	Dues to 2007
		Jim Johnson		\$10.00	\$4,274.81	Dues to 2007
		Ben Franske		\$10.00	\$4,284.81	Dues to 2007
5/2/2007	2075	North St. Paul Community Center	\$170.00		\$4,114.81	Room rental
	2076	North St. Paul Community Center	\$75.00		\$4,039.81	Damage Deposit
6/28/2007	Dep	Randy Donahue/Murray County		\$20.00	\$4,059.81	DUES 2008
		DAN SWEE		\$40.00	\$4,099.81	DUES 2010
7/7/2007	2077	Jerry Dorf	\$37.72		\$4,062.09	Anchor paper re-imb Paper/enevolpes
7/7/2007	2078	Postmaster	\$126.80		\$3,935.29	Postage
8/6/2007	2079	Pair Networks	\$124.43		\$3,810.86	Web hosting

Notes:

1. New & pending memberships checks have been deposited to avoid the past "Stale Check" problems.
2. The date in the comment field shows dues paid to the end of that year.

Minnesota Repeater Council

Membership and Renewal application form

Name of organization or individual sponsor: _____

Repeater Call: _____ Frequency(s): _____

Repeater Location(s): _____

Trustee information (MRC Main Contact).

Trustee Callsign: _____ Name: _____

Phone: _____ Address: _____

Email: _____ City: _____

Other: _____ State: _____ Zip: _____

Club or alternate contact/mailing address.

Callsign: _____ Name: _____

Phone: _____ Address: _____

City: _____ State: _____ Zip: _____

Type of Application: Renewal New membership Trustee Change Database Update

- Regular Membership
Dues \$10.00 year
Organization or individual who is operating a FCC licensed Amateur Repeater station on a frequency coordinated by the MRC. Has one vote at all meetings. Receives all mailings.
- Associate Member
Dues \$ 5.00 year
Organization or individual with a active interest in constructing an Amateur Radio Repeater station or in the activities of the MRC. Can participate in the activities of the MRC but has no vote.
- Newsletter
Receives one copy of MRC newsletter for 1 year. Dues \$ 5.00
Or download for free from the MRC webpage

Signed: Repeater Trustee/Regular Member

Date: _____

Mail all Applications and dues to:
Minnesota Repeater Council
Jerry Dorf, N0FWG Secretary/Treasurer
1402 Pulaski Road
Buffalo MN 55313
763-682-2169 Voice 952-473-5819 Fax
jerryd@jerryd.net

of years Paid: _____

Total Amount: _____

Check #: _____

Name on Check: _____

Other Info: _____

Membership Approval Granted: _____ Date: _____

Dues Paid for: 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Agenda
Minnesota Repeater Council General meeting
Fall 2007

I. Call to order 2:00 PM

- A. Welcome
- B. Establish quorum
- C. Introduction of officers and members
- D. Review Agenda

II. Reports

- A. Chairman
- B. Secretary & treasurer report, N0FWG
- C. Frequency coordinators report, N0FWG
- D. Technical Committee

III Individual Announcements

- A. Midwinter Madness, March 29, 2008
- B.

IV. Applications for membership

V. Old business.

- A. DSTAR & Digital coordination policy
- B. Financial & budget review
- C.
- D.

VI. New business

- A. Move internet mail list to Pair.net
- B.
- C.

VII. Spring Meeting, Non Metro location

VIII. Election of Officers

IX. Adjournment

Delegate Registration (Proxy) Form

Regular member: _____

Repeater Call: _____ Frequency: _____

Trustee: Call: _____ Name: _____

A regular member is an organization or individual that is the Trustee of record for an operating repeater in the MRC frequency coordination database with MRC membership dues paid in full at the start of the meeting.

Primary Delegate Call: _____ Name: _____

Alternate Delegate #1 Call: _____ Name: _____

Alternate Delegate #2 Call: _____ Name: _____

Restrict voting privileges: If you wish to be registered for purposes of counting attendance, but do not want your assigned delegate to have voting privileges, check here

Duration of Proxy: Check here to allow this proxy to be used at future MRC meetings. This proxy may be altered or revoked at any time by the regular member. Check here to restrict voting to current meeting.

Signed: _____ Date: _____

Regular Member (Trustee)

Please mail this proxy to the Secretary at least one week prior to the meeting. Advance registration is appreciated.