



# Minnesota Repeater Council

## Spring 2010 Newsletter

Founding Member: National Frequency Coordination Council

### MRC Officers:

#### Chair

Jay Maynard, K5ZC  
1831 Oakwood Dr.  
Fairmont MN 56031  
chair(at)mnrepeaters.org  
507-235-6485  
952-960-3600

#### Vice Chair

Greg Kitchak, NØGEF  
10238 Humboldt Ave S.  
Bloomington MN 55431  
vicechair(at)mnrepeaters.org  
952-886-0281

#### Secretary Treasurer

Jerry Dorf, NØFWG  
1402 Pulaski Road  
Buffalo MN 55313  
coordinator(at)mnrepeaters.org  
763-682-2169

### Appointments

#### Frequency Coordinator

Jerry Dorf, NØFWG  
See Secretary's info

#### Technical Committee Chair

Alan Knutson, WBØZKB

#### User Liaison

Lion Templin, KB9ENE

### THE SPRING MRC MEETING Will be held

**Saturday  
April 17, 2010**

**At The  
Brainerd Fire Station  
23 Laurel St.  
Brainerd MN 56401**

**Registration at 10:00AM  
Meeting at 11:00AM**

First building east of the river on Laurel St. Come in on business 371 (same as south 6th street) turn right (west) on Laurel street and it is about 3 blocks

**NO Refreshments will be provided so plan accordingly.**

If you have questions regarding your repeater coordination or membership please email or ask before the meeting date!

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.

### Chairmans Message

The Minnesota Repeater Council's membership took a major step forward at the Fall 2009 meeting when it adopted the revised coordination policy, based on coverage modeling rather than a fixed separation distance. We joined the other services that work on that basis, and made it possible to fit more repeaters into the existing spectrum in Minnesota.

We can't do the best we can in that area, however, unless we have accurate information. We need exact latitude, longitude, and altitude for every repeater, as well as the technical data we have always asked for such as ERP and the like. This takes on new importance when we coordinate by modeled coverage, because without it, the model may well be wrong.

As I write this, there are about 120 coordinations that do not have the required data in the database. It's in the owner's best interest to make sure the data is updated, as any coordination not in compliance with the revised policy is subject to a vote for decoordination at the spring meeting.

It's really not that hard any more to get the exact location. Small handheld GPS receivers are common and inexpensive. There's almost certainly someone you know, or someone in your club who knows someone, who has one.

If you're one of the 120, I can't recommend you come into compliance strongly enough. The requirements are in a letter you were sent in November.

On another subject...

There was a discussion about at the fall meeting about systems that ID, or send out other transmissions, when they have not been activated by a user over the air. This is not within the scope of the repeater rules.

A repeater is defined in part 97 as a station that automatically retransmits the transmissions of other amateur stations. It's not only acceptable but required for a repeater to send out one ID after users stop using it. Once it's done so, however, the rules require for it to remain silent until it gets a signal on the input again.

There's a term for a station that transmits automatically without receiving a signal to retransmit. It's called a beacon, and it must follow a different set of rules - which include band segments where repeaters are not allowed to transmit.

Beaconing does nobody any good at all. If your system is doing it, you need to reprogram it so it doesn't any more.

I hope to see you all in Brainerd! 73...Jay

### 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://eight.pairlist.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!

### §97.3 Definitions.

(9) *Beacon*. An amateur station transmitting communications for the purposes of observation of propagation and reception or other related experimental activities.

(39) *Repeater*. An amateur station that simultaneously retransmits the transmission of another amateur station on a different channel or channels.

### §97.113 Prohibited transmissions.

(b) An amateur station shall not engage in any form of broadcasting, nor may an amateur station transmit one-way communications except as specifically provided in these rules; nor shall an amateur station engage in any activity related to program production or news gathering for broadcasting purposes, except that communications directly related to the immediate safety of human life or the protection of property may be provided by amateur stations to broadcasters for dissemination to the public where no other means of communication is reasonably available before or at the time of the event.

### §97.119 Station identification.

(a) Each amateur station, except a space station or telecommand station, must transmit its assigned call sign on its transmitting channel at the end of each communication, and at least every ten minutes during a communication, for the purpose of clearly making the source of the transmissions from the station known to those receiving the transmissions. No station may transmit unidentified communications or signals, or transmit as the station call sign, any call sign not authorized to the station.

### §97.203 Beacon station.

(d) A beacon may be automatically controlled while it is transmitting on the 28.20-28.30 MHz, 50.06-50.08 MHz, 144.275-144.300 MHz, 222.05-222.06 MHz, or 432.300-432.400 MHz segments, or on the 33 cm and shorter wavelength bands.

(g) A beacon may transmit one-way communications.

Coordinators note:

Automatic beacon ID's on repeaters operating on the 145.230, 443.000, 443.700, 444.325 and 444.725 Shared Non-Protected (SNP) pairs are not in the spirit of good amateur practice.

## Secretary, Treasurers & Coordinators Notes

Under the new coordination policy that we adopted at the fall meeting, all coordinated systems need to provide detailed site info. This started what will be the largest database update & verification process the MRC has ever done. Currently we have approximately 440 records in our database, out of that approximately 112 are not in compliance with the new requirements. I have included a list of those systems in this newsletter. At the end of each line is a letter indicating whether your missing technical data, location data or have not returned one of the last 2 update requests. The first one was sent out in August as a normal update, then in November I sent out a special update request with the missing fields marked with a yellow highlighter.

Also you can update your coordination at any time of the year, in fact any changes now require re-coordination. Keeping your coordinator informed year round and making updates before you make those changes is in your best interest. I will accept & process changes any time of the year. This helps make the fall updates much quicker as I do not have to make minor changes to each record as they come in.

For those who filled out the updates correctly and accurately I will say thank you, as for the other 112 records read on.

If you are a MRC member expect your MRC membership to be suspended per policy until your records are updated.

Now I suspect some of you are colorblind to yellow as some came back with no information filled in for those fields and simply checked the "On the Air" box then returned it. I also asked for the actual transmitter power, use a wattmeter or the manufactures specifications! More than 20 of the special update forms were sent back a second time.

Like Jay states its not that hard to get your exact repeater coordinates. GPS receivers are quite common, Maps can also be used, Internet map sites like maps.yahoo.com will show the exact lat/lon where the cross hair + is clicked in the URL bar. You can use the satellite view to locate your site. If your concerned about your site security keep in mind that the MRC does not publish any of the site info, this is considered confidential. The coordinator will not release this or any data to anyone outside of the coordination community and only then on a need to know basis. Now if you are on a tower over 200 feet the FCC ASR database is public record!

If at the spring or a future meeting a system gets de-coordinated a new coordination form will be required with ALL of the current data requirements meet, not your grand-fathered data

I expect the MRC membership to stand behind the policy and allow enforcement of the coordination timelines set forth. I also found a coordination holder that has a 440 pair that lists it on QRZ as his personal simplex frequency. Another has moved out of state and has not returned his pair or the update forms sent to his new address

A new ham asked me why we have repeaters listed that are not on the air! He bought a new 6 meter radio and attempted to access several metro repeaters with no results. So by listing a repeater that is not on the air your causing frustration to new hams, is my radio working or is the repeater not?

On a more positive note the ARRL repeater directory submission has been done, Coordinators Tool Kit did not recognize the not current flags so many repeaters that did not update in the past 1-2 years got listed, his bug has been patched. Last year we did not receive a check from the ARRL for data usage, they did not receive the tax form that I sent. This year I emailed it and have a confirming email that it was received.

In 2008 Midcountry bank merged with a larger organization, this changed the account number internally. They expected that a majority of customers would exhaust their check supply making a seamless transition. We do not write enough checks so they provided replacement checks starting with standard block number at no charge.

In the spring meeting handout I will present a basic income & expense report showing data since 2003.

Typically we have made a donation to organizations that host the meeting location if its not a leased rate. We did not do this for the Hennepin County Library, perhaps check to see if the library has current copies of the ARRL handbook or other reference guides?

We also need to continue with our new coordination policy in documenting the methods that we will use in the future. Being I have been busy with updating coordination records and chasing down missing information I have not worked on the policy.

I would also like to explore one feature of CTK for the next update, this is using a flatbed scanner with a automatic document feeder to scan sheets as they are received and entered. This would save time when verifying entered data against submitted paper.

**Preliminary Minutes of the  
Minnesota Repeater Council**  
Fall meeting held On October 31, 2009  
Hennepin County Library, Edina, MN

Call to order by chairman Jay Maynard, K5ZC at 1:00PM

Quorum established with a total of 75 members in good standing on the roster, 24 in attendance, 7 non-metro at the start of the meeting.

Introduction officers & members made.

**Chairman's Report:** NFCC

**Frequency coordinator Secretary & Treasurer's report: Jerry Dorf, N0FWG**

Reports presented to membership in the newsletter & handout. Everything is moving along smoothly. Motion to re-imburement for fuel to attend Wisconsin Association of Repeaters meeting in the amount of \$20.83. How to deal with records with silent keys, also records with incomplete data. Motion to approve re-imburement made, seconded and passed.

Motion to approve

**Individual announcements:**

Midwinter Madness Hobby electronics show March 27, 2010

Skywarn Workshop April 10, 2010

MNYARC starting a collective calendar for all amateur radio groups to list events training etc. <http://ps.mnyarc.org>

**New Members:**

- A. Thomas G Rukavina KA6WXR Hibbing Associate Member
- B. Kevin Saur, KT0S St Cloud 444.350 Regular Member
- C. John Wetter, K0WDJ Maple Grove Associate Member
- D. Brian Dale, KG0SG St Louis Park 444.900 Regular Member

Motion to approve all 4 members, seconded Motion passed

**Old Business:**

900 MHz band plan is still not published. Follow-up with Doug Reed by Jay Maynard. Remains tabled.

Band plan committee to evaluate 440 Mhz Full duplex links remains tabled as it was presented to the coordination committee.

Coordination Policy review: New policy has been published on the MRC website, comment period has passed with no major objections. Discussion to include all parameters that are used in Radio Mobile to allow someone else replicate the same data and results used by the coordinator. Policy to be adopted with the proviso that the exact parameters used in Radio Mobile be documented along with the criteria used to document interference also is documented as well. All documented changes in the past minutes that have occurred also need to be included into the new policy document. Motion to approve. 17 votes in favor 6 opposed policy is adopted.

Motion made to establish a new committee to develop a new 900 MHz bandplan and report by the next meeting. Seconded, motion passed. Committee to be headed by Dave Kleindl N0KP and Paul Emeott K0LAV.

Motion to allow for a special mailing to be made no later than December 15, 2009 to all repeaters with incomplete or missing data needed to do modeling, this information must be returned by February 15, 2010. A list of non-compliant repeaters to be published in the spring newsletter for de-coordination. Motion seconded

**Motion:** To publish a reminder in the newsletter that beaconing is not permitted under part 97, cite code seconded. Passed Chair will make this part of his next column in the newsletter

**Motion:** That the repeater council publishes a voluntary list of people with portable repeaters in Minnesota that are willing to allow them to be used for disaster response, any information provided will be made public. Seconded and passed.

**Motion:** That SNP repeaters employ a guard receiver to lockout the transmitter when there is co-channel activity. Motion died

**Spring Meeting: Non-Metro location.**

Suggestions for Alexandria, St Cloud or Brainerd, secretary to find a location.

**Elections:**

Nominations were opened, then closed for each office.

Alan Knutson was appointed as a election teller by the chariman

Election Results. 23 ballots cast

Chairman:	Jay Maynard, K5ZC	19	Ben Franske , K0BEN	4
Vice Chairman	Greg Kitchak, N0GEF	15	Write in ballots Matt Genelin, N0YNT	2
Sec-Treas	Jerry Dorf, N0FWG	19	No other nominations or write in's	

Motion was made to destroy the ballots, seconded & passed.

Motion to adjourn, seconded. Meeting Adjourned at approximately 3:25 PM

Jerry Dorf, N0FWG  
Secretary Treasurer  
Minnesota Repeater Council, Inc

**New Coordinations**

RPTLOCAT	RPTCALL	RPTOUT	RPTRSPON	AREA	CORDATE	USE	STATUS
TRACY	W0DRK	147.1500	RANDY DONAHUE	SW	6/13/2009	RO	OTA
NEVIS	KC0CBM	147.3900	CASS/HUBBARD ARC	NC	10/14/2009	RO	OTA
GEM LAKE	K0LAV	145.2300	PAUL EMEOTT	MET	10/19/2009	RO	CNST
BLUE EARTH	K0USR	147.0000	JAMES EKSE	SC	11/4/2009	RO	OTA
CHASKA	KD0JOS	147.2700	ALAN KNUTSON	MET	12/5/2009	RO	OTA
WABASHA	WA0UNB	421.2500	JON PETERSON	SE	12/5/2009	TV	OTA
AITKIN	N0BZZ	147.3600	N0BZZ	NC	1/6/2010	RO	CNST
GRAND RAPIDS	KB0CIM	53.2900	JIM JOHNSON	NC	1/6/2010	RO	CNST
MOUNDSVIEW	W0MDT	444.5250	MEDTRONIC ARC	MET	1/6/2010	RO	OTA
COLUMBIA HEIGHT	K0LAV	Link	PAUL EMEOTT	MET	1/25/2010	AL	CNST
DULUTH	N0ED	444.3000	SPIRIT VALLEY AMATEURS	DUL	1/25/2010	RO	OTA
GRAND RAPIDS	K0GPZ	53.2500	NORTHERN LAKES ARC	NC	1/25/2010	RO	CNST
STILLWATER	W0JH	147.0600	STILLWATER AMATEUR RADIO	MET	1/25/2010	RO	OTA
MCGREGOR	N4TGO	444.4500	DOUGLAS W PARIS	NE	3/2/2010	RO	CNST
SHOREVIEW	K9EQ	444.0750	CHRIS PETERSEN	MET	3/2/2010	RO	OTA

**Waiting List**

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

DSTAR Pending/waiting list

Alan Knutson	WB0ZKB	2-meters	Chaska/ west metro
Anoka ARES	W0ANA	2-meters	Fridley (Ross Demeyere, W0FTX)

# Minnesota Repeater Council Checking Account

## March 6, 2010

Date	Type	Description	Debit	Credit	Balance	Comments
5/2/2009	Dep	Paul Germscheid		\$10.00	\$5,040.77	Dues 2010
	Dep	Sheldon Mann		\$20.00	\$5,060.77	Dues 2011
5/5/2009	Dep	THOMAS SVIHEL		\$10.00	\$5,070.77	Dues 2009
5/9/2009	2089	Southern MN Red Cross	\$50.00		\$5,020.77	Donation for Meeting room
5/9/2009	2090	Void	\$0.00		\$5,020.77	Void
5/11/2009	Dep	REUBEN RUEN		\$20.00	\$5,040.77	Dues 2010
	Dep	Sean Stepanek		\$20.00	\$5,060.77	Dues 2010
	Dep	Richard Auld/TCFMC		\$10.00	\$5,070.77	Dues 2009
	DEP	Bob Bliss		\$20.00	\$5,090.77	Dues 2010
	Dep	JAY MAYNARD		\$20.00	\$5,110.77	2011
	Dep	Michael Langer		\$10.00	\$5,120.77	Dues 2009
	Dep	Christopher Buck/TCRC		\$20.00	\$5,140.77	Dues 2011
	Dep	DON RICE		\$20.00	\$5,160.77	Dues 2010
	Dep	Jerry Dorf		\$20.00	\$5,180.77	Dues 2010
	DEP	Thomas Carlson/SMARTS		\$10.00	\$5,190.77	Dues 2010
5/11/2009	2091	Jerry Dorf	\$220.00		\$4,970.77	Re-imb for Lurodata Radio Mobile data
5/23/2009		Bank changed account #			\$4,970.77	New Check # due to Bank acct change
8/3/2009	2101	Anchor Paper Company	\$47.62		\$4,923.15	Paper/envelopes
8/3/2009	2102	Pair Networks	\$120.89		\$4,802.26	Web hosting
8/21/2009	DEP	DAN GELLE		\$20.00	\$4,822.26	Reg Dues 2010
8/24/2009	DEP	Robert Stone		\$60.00	\$4,882.26	Reg Dues 2014
	DEP	Robert Stark		\$30.00	\$4,912.26	Reg Dues 2010 & extra NL
9/9/2009	Dep	Don Hengemuehle		\$20.00	\$4,932.26	Reg Dues 2012
	Dep	THOMAS G RUKAVINA		\$5.00	\$4,937.26	Asc Dues 2010
9/14/2009	DEP	Jeffery N Clarine		\$10.00	\$4,947.26	Reg Dues 2010
9/24/2009	DEP	Art Carlson /ST Cloud ARC		\$60.00	\$5,007.26	Reg Dues 2014
9/29/2009	DEP	ELVIN SCHMIDT		\$10.00	\$5,017.26	Reg Dues 2011
10/19/2009	Dep	Kurt Eisenach		\$50.00	\$5,067.26	Reg Dues 2015
10/26/2009	DEP	Norman D Yeautter		\$10.00	\$5,077.26	Reg Dues 2010
	DEP	Michael Langer		\$10.00	\$5,087.26	Reg Dues 2010
	DEP	Kevin Sauer		\$50.00	\$5,137.26	Reg Dues 2013
10/29/2009	DEP	John Wetter		\$15.00	\$5,152.26	ASC Membership 2011
11/2/2009	DEP	Brian Dale		\$10.00	\$5,162.26	Reg Dues 2009
	DEP	MARGARET JORDAN		\$20.00	\$5,182.26	Reg Dues 2010
	DEP	HAROLD CLOUGH		\$20.00	\$5,202.26	Reg Dues 2010
	DEP	MATTHEW E GENELIN		\$20.00	\$5,222.26	Reg Dues 2010
	DEP	Dan Karg		\$20.00	\$5,242.26	Reg Dues 2010
	DEP	Paul Emeott		\$20.00	\$5,262.26	Reg Dues 2010
	DEP	Gordon Hanson		\$20.00	\$5,282.26	Reg Dues 2010
	DEP	Ben Franske		\$10.00	\$5,292.26	Reg Dues 2010
11/2/2009	2103	Jerry Dorf	\$20.83		\$5,271.43	Re-imb for Gas to WAR meeting
11/4/2009	DEP	KEVIN MAGLOUGHLIN		\$10.00	\$5,281.43	Reg Dues 2010
11/14/2009	2104	Postmaster	\$44.00		\$5,237.43	Postage for Special Mailing
11/23/2009	Dep	Richard Neish		\$10.00	\$5,247.43	ASC Dues 2019
12/7/2009	DEP	Rrichard Kolter		\$20.00	\$5,267.43	REG DUES 2010
	DEP	CHRIS PETERSEN		\$10.00	\$5,277.43	PEND DUES 2010
12/21/2009	DEP	Mary Nystrom/Austin ARC		\$10.00	\$5,287.43	Reg Dues 2010
1/6/2010	DEP	JOHN KRIZEK		\$30.00	\$5,317.43	Reg Dues 2012
2/26/2010	DEP	PAUL HOLM		\$20.00	\$5,337.43	Reg Dues 2011
2/27/2010	2105	USPS	\$44.00		\$5,293.43	Postage Newsletters
2/27/2010	2106	Reimb Pair Nic/ Jerry Dorf			\$5,293.43	Register mnrepeaters.org 5 yr

### 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/mailling address.

Callsign: \_\_\_\_\_ Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

**Type of Application:**    Renewal     New membership     Trustee Change     Database Update

- Regular Membership      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.  
Dues \$10.00 year
- Associate Member      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. Receives all mailings.  
Dues \$ 5.00 year
- 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 Fax available upon req  
jerryd@jerryd.net

# of years Paid: \_\_\_\_\_

Total Amount: \_\_\_\_\_

Check #: \_\_\_\_\_

Name on Check: \_\_\_\_\_

Other Info: \_\_\_\_\_

Membership Approval Granted: \_\_\_\_\_ Date: \_\_\_\_\_

Dues Paid for: 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025

**Agenda**  
**Minnesota Repeater Council General meeting**  
**Spring 2010**

**I. Call to order 11:00 AM**

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

**V. Old business.**

- A. Coordination Policy Committee
- B. 900Mhz bandplan
- C.

**II. Reports**

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

**VI. New business**

- A.
- B.

**III Individual Announcements**

- A.

**VII. Fall Meeting, Metro location**

**VIII. Adjournment**

**IV. Applications for membership**

- A. Chris Peterson K9EQ Ham Lake  
Regular membership 444.525

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**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.**



A= HAS NOT BEEN UPDATED SINCE JAN 1, 2009  
C= ANT HEIGHT AND OR POWER

B= LOCATION IS NOT WITHIN 1 SECOND

Other repeater records may exist that are not in compliance.

RPTLOCAT	RPTCALL	RPTIN	RPTOUT	TRUSTEENAN	RPTRAR	RPTRS	LSTCHGDATE		
BEAVER CREEK	WA0YRI	147.6300	147.0300	ALFRED BELK	SE	OTA	8/19/2009	B	C
MINNEAPOLIS	W0YC	449.4250	444.4250	BENJAMIN J FRANSKE	MET	OTA	10/19/2008	A	C Duplicate
MILACA	WB0MPE	144.7500	145.3500	BOB BLISS	CEN	OTA	3/2/2010		C
MINNEAPOLIS	WB0MPE	147.6300	147.0300	BOB BLISS	MET	OTA	3/2/2010		C
MINNEAPOLIS	WB0MPE	449.8750	444.8750	BOB BLISS	MET	OTA	3/2/2010		C
INTERNATIONAL F	K0NAR	146.0700	146.6700	BRUCE CHRISTOPHERSON	NC	OTA	11/19/2004	A	
BIG LAKE	N0RPP	146.1750	146.7750	BRUCE GRANGER	CEN	OTA	10/3/2006	A	
PRINCETON	N0RPP	146.2950	146.8950	BRUCE GRANGER	CEN	OTA	7/6/2006	A	
ROCHESTER	KG0BP	449.5750	444.5750	CHRIS PETERSON	SE	OTA	10/18/2005	A	
ARDEN HILLS	KA9YPF	222.3400	223.9400	CURT PHELPS	MET	OTA	11/10/2007	A	
ARDEN HILLS	KA9YPF	LINK	LINK	CURT PHELPS	MET	OTA	11/10/2007	A	
ARDEN HILLS	KA9YPF	447.0750	442.0750	CURT PHELPS	MET	OTA	11/10/2007	A	
APPLE VALLEY	W0LYM	144.8100	145.4100	DALE HAGERT	MET	TOTA	11/22/2009	B	C
ERHARD	KC0AIW	146.2200	146.8200	DALLAS BUCHHOLZ	CEN	TOTA	12/19/2009	B	C
ST ANTHONY	KA0SDU	222.2600	223.8600	DAN MCNULTY	MET	OTA	3/13/2007	A	B C
ROSEMOUNT	KA0SDU	223.3600	224.9600	DAN MCNULTY	MET	OTA	3/13/2007	A	B C
BLAINE	W0YFZ	146.0700	146.6700	DAVID T RUNKLE	MET	OTA	11/3/2006	A	
MOUNDS VIEW	W0YFZ	223.3400	224.9400	DAVID T RUNKLE	MET	OTA	11/3/2006	A	C
EAST BETHEL	W0YFZ	146.0700	LINK	DAVID T RUNKLE	MET	OTA	11/3/2006	A	
CENTERVILLE	W0YFZ	146.0700	LINK	DAVID T RUNKLE	MET	OTA	11/3/2006	A	
FRIDLEY	W0YFZ	146.0700	LINK	DAVID T RUNKLE	MET	OTA	11/3/2006	A	
RAMSEY	W0YFZ	146.0700	LINK	DAVID T RUNKLE	MET	OTA	11/3/2006	A	
TWIN CITIES	W0YFZ	146.0700	LINK	DAVID T RUNKLE	MET	OTA	11/3/2006	A	
DULUTH	KG0QR	447.2000	442.2000	DONALD HOUCK	DUL	OTA	11/15/2006	A	C Moved WV
LITTLE CANADA	KB0UPW	52.4900	53.4900	DOUGLAS H REED	MET	CNST	10/14/2006	A	C
MINNEAPOLIS	N0TL	144.5100	145.1100	DOUGLAS H REED	MET	OTA	10/14/2006	A	C
LITTLE CANADA	KB0UPW	LINK	146.9250	DOUGLAS H REED	MET	OTA	10/14/2006	A	C
LITTLE CANADA	KB0UPW	146.3250	146.9250	DOUGLAS H REED	MET	OTA	10/14/2006	A	C
MAPLEWOOD	KB0UPW	146.3250	146.9250	DOUGLAS H REED	MET	OTA	10/14/2006	A	C
FALCON HEIGHTS	KB0UPW	447.7000	442.7000	DOUGLAS H REED	MET	OTA	10/14/2006	A	C
LITTLE CANADA	KB0UPW	146.3250	LINK	DOUGLAS H REED	MET	OTA	10/14/2006	A	C
MAPLEWOOD	KB0UPW	146.3250	LINK	DOUGLAS H REED	MET	OTA	10/14/2006	A	C
LITTLE CANADA	KB0UPW	146.9250	LINK	DOUGLAS H REED	MET	OTA	10/14/2006	A	C
MAPLEWOOD	KB0UPW	146.3250	LINK	DOUGLAS H REED	MET	PROP	10/14/2006	A	C
BLAINE	KB0UPW	52.4900	LINK	DOUGLAS H REED	MET	TOTA	10/14/2006	A	B C
LINO LAKES	N0QPJ	146.3250	LINK	DOUGLAS H REED	MET	OTA	10/14/2006	A	C
HIBBING	KB0HYB	146.1900	146.7900	DUANE C. SWANSON	NE	OTA	8/28/2009	B	C
INTERNATIONAL F	WV0O	146.0100	146.6100	GALE STONE	NC	TOTA	11/22/2009	B	C
BIG FALLS	WV0O	146.3100	146.9100	GALE STONE	NC	OTA	11/22/2009	B	C
GHEEN HILL	WV0O	147.8100	147.2100	GALE STONE	NC	OTA	11/22/2009	B	C
AFTON	N0ODO	448.3500	443.3500	JEFF MORGAN	MET	OTA	10/30/2008	A	B C
AURORA	N0OIW	146.0400	146.6400	JERALD MURPHY	NE	OTA	2/25/2008	A	
GILBERT	NT0B	147.7500	147.1500	JERALD MURPHY	NE	OTA	9/16/2009	B	C
STATEWIDE	KB0UPJ	449.3250	444.3250	JEREMY ROGNESS	ME	CNST	10/6/2007	A	
DULUTH	W0GKP	146.3400	146.9400	JERRY FREDERICK	DUL	OTA	10/2/2004	A	C
MAHTOWA	N0BNG	146.4000	147.0000	JERRY FREDERICK	EC	OTA	10/2/2004	A	
DULUTH	W0GKP	449.1000	444.1000	JERRY FREDERICK	DUL	OTA	10/2/2004	A	
MOORHEAD	W0ILO	144.7500	145.3500	JOE GREGG	NW	CNST	9/11/2007	A	
MOORHEAD	W0ILO	449.8750	444.8750	JOE GREGG	NW	CNST	9/11/2007	A	
WOODBURY	KF0ZM	448.0500	443.0500	JOHN PHELPS	MET	OTA	2/1/2004	A	B C
NORTHFIELD	WA0YCZ	449.8500	444.8500	JOHN ROOKS	SC	OTA	8/27/2004	A	B C
NORTHFIELD	W0IHI	444.2500	449.2500	JOHN ROOKS	SC	OTA	8/27/2004	A	B C
NORTHFIELD	W0IHI	444.8500	449.8500	JOHN ROOKS	SC	OTA	8/27/2004	A	B C
FISHER	W0JON	146.1000	146.7000	JON E LINNELL	NW	OTA	8/23/2008	A	B C
FOREST LAKE	K0HPY	146.1300	146.7300	LEE DUGDALE	EC	OTA	8/28/2008	A	B C
COLUMBIA HTS	K0HPY	449.5500	444.5500	LEE DUGDALE	MET	OTA	8/28/2008	A	B C
SCANDIA	K0HPY	146.1300	LINK	LEE DUGDALE	MET	OTA	8/28/2008	A	B C
WYOMING	KC0BZE	LINK	LINK	LELAND CASTO	MET	OTA	8/17/2007	A	B C
TWO HARBORS	KB0TNB	52.0200	53.0200	PATRICK WILMERS	DUL	OTA	2/25/2008	A	B C
DULUTH	KB0QYC	52.1300	53.1300	PATRICK WILMERS	DUL	OTA	2/25/2008	A	C
VIRGINIA	KG0QR	52.1500	53.1500	PATRICK WILMERS	NE	OTA	2/25/2008	A	C
MAHTOWA	KB0TNB	52.1700	53.1700	PATRICK WILMERS	NE	OTA	2/25/2008	A	C

GIESE	KB0QYC	146.2650	146.8650	PATRICK WILMERS	NE	CNST	2/25/2008	A	
DULUTH	KC0IPA	147.6600	147.0600	PATRICK WILMERS	DUL	OTA	2/25/2008	A	C
VIRGINIA	KB0QYC	147.6600	147.0600	PATRICK WILMERS	NE	OTA	2/25/2008	A	
COLERAINE	KB0QYC	147.7650	147.1650	PATRICK WILMERS	NE	OTA	2/25/2008	A	C
WALES	WB0DGK	147.8700	147.2700	PATRICK WILMERS	NE	OTA	2/25/2008	A	
ISABELLA	KB0QYC	147.9000	147.3000	PATRICK WILMERS	NE	OTA	2/25/2008	A	C
DULUTH	N0BZZ	447.8000	442.8000	PATRICK WILMERS	DUL	OTA	2/25/2008	A	B C CALLSIGN?
ISANTI	KB0QYC	448.3250	443.3250	PATRICK WILMERS	CEN	OTA	11/15/2006	A	
GILBERT	KB0QYC	448.5000	443.5000	PATRICK WILMERS	NE	OTA	2/25/2008	A	B C
HINKLEY	KB0QYC	449.5750	444.5750	PATRICK WILMERS	NE	OTA	2/25/2008	A	
DULUTH	KB0QYC	902.4875	927.4875	PATRICK WILMERS	DUL	OTA	2/25/2008	A	C
DULUTH	KB0QYC	902.6000	927.6000	PATRICK WILMERS	DUL	OTA	2/25/2008	A	C
RICHFIELD	WB0PWQ	144.7900	145.3900	PAUL J DIETZLER	MET	OTA	11/13/2009		B C
RICHFIELD	WB0PQW	449.4750	444.4750	PAUL J DIETZLER	MET	OTA	11/13/2009		B C
ANDOVER	W0PJH	448.5500	443.5500	PAUL J HENRY	MET	TOTA	10/27/2007	A	B C
DULUTH	W0MD	147.9750	147.3750	RALPH KERSTEN	DUL	OTA	8/24/2005	A	B
PROCTOR	N0BZZ	52.0500	53.0500	RANDY HAGLIN	DUL	OTA	10/28/2008	A	C
DULUTH	KC0HXC	144.8100	145.4100	RANDY HAGLIN	DUL	OTA	10/28/2008	A	B C
SILVER BAY	N0BZZ	147.6900	147.0900	RANDY HAGLIN	NE	OTA	10/28/2008	A	B C
PROCTOR	N0BZZ	147.9300	147.3300	RANDY HAGLIN	DUL	OTA	10/28/2008	A	B C
COOK	N0BZZ	147.9600	147.3600	RANDY HAGLIN	NE	OTA	10/28/2008	A	
GRAND MARIAS	N0BZZ	147.9600	147.3600	RANDY HAGLIN	NE	OTA	10/28/2008	A	B C
DULUTH	N0BZZ	222.3400	223.9400	RANDY HAGLIN	DUL	OTA	10/28/2008	A	B C
PROCTOR	N0BZZ	448.1500	443.1500	RANDY HAGLIN	DUL	OTA	10/28/2008	A	B C
TAMARACK	N0BZZ	448.2000	443.2000	RANDY HAGLIN	NE	OTA	10/28/2008	A	
DULUTH	N0BZZ	448.7500	443.7500	RANDY HAGLIN	DUL	OTA	10/28/2008	A	B C
KARLSTAD	KA0NWV	144.8700	145.4700	RICHARD COLLINS	NW	OTA	8/20/2009		C
KARLSTAD	KA0NWV	146.0550	146.6550	RICHARD COLLINS	NW	OTA	8/20/2009		C
KARLSTAD	KA0NWV	449.9750	444.9750	RICHARD COLLINS	NW	OTA	8/20/2009		B C
ZIM	KC0PDJ	223.0000	224.6000	RICHARD WEIDEMAN	NE	TOTA	5/12/2008	A	
MARGIE	N7ZIB	449.2000	444.2000	SCOTT BERRY	NE	CNST	6/2/2008	A	
ROSEVILLE	KC0OZC	52.1300	53.1300	SCOTT ERB	MET	CNST	11/27/2008	A	
HUGO	KC0OZC	52.1300	LINK	SCOTT ERB	MET	CNST	6/3/2008	A	B C
HUGO	KC0OZC	52.1300	LINK	SCOTT ERB	MET	CNST	6/3/2008	A	B C
GEM LAKE	KC0OZC	52.1300	LINK	SCOTT ERB	MET	CNST	6/3/2008	A	B C
FERGUS FALLS	K0QIK	146.0400	146.6400	STAN OLSON	WC	OTA	8/28/2006	A	B C
FERGUS FALLS	K0QIK	147.8850	147.2850	STAN OLSON	NW	OTA	8/28/2006	A	B C
FERGUS FALLS	K0QIK	449.2000	444.2000	STAN OLSON	NW	OTA	8/28/2006	A	B C
VERDI	KA0BWS	144.5100	145.1100	STEVE LYNN	SW	OTA	3/22/2007	A	
NORTH BRANCH	N0KVL	52.2100	53.2100	THOMAS LAMBERT	EC	TOTA	12/21/2009		B C
NORTH BRANCH	N0KVL	144.7300	145.2300	THOMAS LAMBERT	EC	TOTA	12/21/2009		B C
NORTH BRANCH	N0KVL	447.9500	442.9500	THOMAS LAMBERT	EC	TOTA	12/21/2009		B C
DETROIT LAKES	N0IZZ	146.1750	146.7750	TODD CHAMPION	NW	OTA	4/14/2007	A	
ROOSEVELT	W0WKM	146.4000	147.0000	WILLIAM K MAAT	NC	OTA	9/19/2007	A	B C
WANNASKA	W0WKM	147.6900	147.0900	WILLIAM K MAAT	NW	OTA	9/19/2007	A	B C
WARROAD	W0WKM	448.0000	443.0000	WILLIAM K MAAT	NC	OTA	9/19/2007	A	B C
WANNASKA	W0WKM	449.7000	444.7000	WILLIAM K MAAT	NW	OTA	9/19/2007	A	B C
WASECA	W9ALD	448.8250	443.8250	WILLIAM KNISH	SC	OTA	7/31/2007	A	C

If you are on this list, you need to contact the coordinator ASAP to update your records!

Do not wait till the spring meeting to return your update or discuss with the MRC before the meeting, as we are very busy at that time.

If you are a user or friend of someone listed please inform them that they are on this list and need to take action now.

Please be tactful if you take this action, they are not de-coordinated yet!