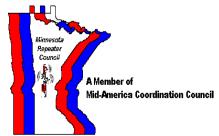
Minnesota Repeater Council



Spring 2003 Newsletter

Founding Member: National Frequency Coordination Council

MRC Officers:

Chair

Steve Glatzel, KØFHC 16200 62nd Street NE Otsego MN 55330 sglatzel@aol.com 763-441-0985

Vice Chair

Dan Swee, NØFKM 4250 Tyler St NE Columbia Heights MN 55421 nøfkm@amsat.org 612-363-5079

Secretary Treasurer

Jerry Dorf, NØFWG 1402 Pulaski Road Buffalo MN 55313 jerryd@jerryd.net 763-682-2169 952-473-5819 Fax

Appointments

Frequency Coordinator

Paul Emeott, KØLAV 3960 Schuneman RD White Bear Lake MN 55110 kø1av@arrl.net 651-429-5040

Technical Committee Chair

Brad Ornes, KAØSQO bradd1@iaxs.net

User Liaison

TBD

The Spring MRC Meeting will be held Saturday April 19, 2003 at 3:00 PM

2:00 PM Registration 3:00 PM Call to order

Eagles Club in Litchfield, MN

389 County Road 34 South Litchfield MN 55355

From the Minneapolis metro area take I394 or US Highway 12 to the East side of Litchfield. Turn North on County Road 34. The Eagles club is located near Cenex.

Pop and Coffee will be provided, I will be working on the possibility to purchase supper items after the meeting.

It is important that if your not going to attend the meeting to give your proxy form to someone who will be attending. This can be a club member.

Jerry Dorf, NØFWG

A note from the Chairman

Spring is in the air, antenna work will begin soon. We must also do something else, Paul has sent out coordination forms, by filling out and returning these forms it is your way of telling the MRC that you want to renew you coordination for another year. Yes, believe it or not your coordination is valid for a one year period, it is not a lifetime grant. The MRC is going to crack down on systems that are not on the air, you may do yourself a favor by turning in your coordination if you don't have a working system. I expect to clear a lot of frequencies at the fall meeting.

I will be sending out to selected people around the state a list of repeaters that I would like monitored. They will return to the MRC a form that will tell us if a repeater is on the air or if it is just holding a frequency. The results will be published in the fall newsletter and we will be revoking coordination at the fall meeting. It is time to act, it's either on the air or it isn't. This might seem a bit harsh but we need frequencies for people that want to put repeaters on the air.

Here is the definition of a repeater system from the MRC coordination policy

REPEATER SYSTEM - A device or combination of devices, in FIXED locations for receiving radio signals from a Base, Mobile or Portable station and automatically transmitting corresponding radio signals which have been amplified, reshaped, or both for the purpose of extending communication range.

Steve, KFØHC

Secretary - Treasurers Notes:

Since the Fall meeting in St. Paul there has been some activity with new applications for membership. Most of the activity has been simple dues payments and updates.

The return envelopes included in the past newsletter resulted in a high rate of response so I will continue to include them where ever possible.

I have not published a new version of the bylaws pending the possible change to the out state quorum requirement. Please see the proposed bylaw change in this newsletter

I will continue to ask that you do the following before the meeting. It is much easier to resolve any issues in advance than at a meeting. I can spend more time to help come to a solution.

- 1. Check your envelope for your membership status. If you need to pay dues, please fill out the membership form before bringing funds to the table. Or mail the application!
- 2. Membership or contact information changes.
- 3. If your sending a delegate please fill out a proxy form. If it is not completed or on file your representative will not be allowed to vote on your behalf. If there is any questions again feel free to make contact in advance.
- 4. If you have changed trustee's or contact info and sent a update to the coordinator, please send a copy to the Secretary so that we do not have any problems with different sets of data.
- 5. Do not assume anything.. If there is a question ASK.

Jerry Dorf, N0FWG

MRC Technical Committee Report

Nothing to report at this Time! Brad, KA0SQO

MRC Resources on the Internet

MRC Webpage 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!

EAS Alert Info:

FCC Says OK to Retransmit NWS SAME/EAS Messages.

FCC rule 97.113(e) says:

"No station shall retransmit programs or signals emanating from any type of radio station other than an amateur station, except propagation and weather forecast information intended for use by the general public and originated from United States Government stationssnip..... Such retransmissions must be for the exclusive use of amateur operators. Propagation, weather forecasts, and shuttle retransmissions may not be conducted on a regular basis, but only occasionally, as an incident of normal amateur radio communications."

This means that as long as you receive the audio directly from a NOAA NWS weather station, you can retransmit the audio over your repeater. The limitation of "not on a regular basis" would indicate that you can't program the repeater to transmit the NWS audio every day at noon. But as long as the activation method is controlled by the NWS, you can have it automatically activate your transmitter.

In practical terms, this means that you can use a 1050 Hz tone decoder or a SAME/EAS decoder to trigger transmission of NWS audio on your repeater. At this time, NWS still transmits at least five seconds of 1050 Hz tone before every SAME/EAS message. It is fairly easy to build a tone decoder that will monitor the NWS audio path and trigger an output after several seconds of tone. This is cheap and easy but will go off for every SAME/EAS broadcast in the entire weather warning area.

If you want a more restricted transmission system, consider building or buying a SAME/EAS decoder instead. SAME stands for Specific Area Message Encoding. EAS stands for Emergency Alert System. SAME/EAS is a digital system that would seem familiar to any ham who was active on RTTY 20 years ago. It uses different tones and "county codes" instead of call signs, but it is just an automatic method of sending a message to a selected group of people. With a SAME/EAS decoder you could have messages specifically for your county or state transmitted on your repeater and ignore all others.

If your repeater is operated by an emergency services group or is one of just a few repeaters in your area, you may want to consider adding the equipment necessary to retransmit these emergency broadcasts in your area. This could be particularly valuable if your repeater is also used for SKYWARN nets since it would automatically alert your spotter network. Just be sure that you can terminate the SAME/EAS audio with a DTMF command or when the repeater "weather mode" is active. Since the maximum EAS message length is 2 minutes, you may want to add automatic shut-off when you program the repeater controller.

The severe weather season is approaching. The Minnesota Division of Emergency Management and the state EAS committee are particularly interested in finding all possible methods of alerting the public when a SAME/EAS warning message is broadcast. For their purposes, hams are a very valuable portion of the public because they are often emergency volunteers and SKYWARN spotters too. If you are interested in adding this service/feature to your repeater, you'd better get started......

73, Doug Reed, N0NAS.

Results of MRC band plan meeting DEC 20 By Doug Reed

We had a nice little meeting with about 10-12 people, same bunch as at the November meeting. Several people represented ATV, several people represented weak signal, and several people represented repeaters, with alot of over lap of knowledge and interests among the people. I want to thank them all for coming.

Dan N0FKM brought in a suggestion for changing the 427.250 ATV carrier frequency to 426.250 MHz in order to allow using that channel for ATV repeaters. Moving the carrier down gets the modulation products out of the protected range above 431 MHz so the FCC is happy. Moving the carrier frequency does encroach on the 421.250 MHz ATV repeater frequency but the local ATV group did some checks and verified that with 25-30 mile separation between systems and antenna cross polarization, the interference isn't noticeable. After a fair amount of discussion we decided to recommend adopting the revised center frequency with the usual "first on frequency" stipulation in case of interference. We'll also leave the 427.250 frequency in the band plan for simplex ATV as originally intended. It seems unlikely that there would be much simplex ATV activity if there is a repeater available, but any such potential interference problems are strictly an internal ATV user problem and they'll work it out.

We also went back to the 902 band plan one more time. There was no new information to work with so instead of beating our heads on the wall, we simply decided to accept the 25 MHz split repeater frequencies and 927 MHz simplex frequencies as specified in the SERA band plan and worry about any further changes when we have more info about the primary users in the band. As you may remember, the idea of 25 MHz split came up because some surplus 900 MHz trunking equipment can be reprogrammed to work in the 902 ham band but not with the 12 or 20 MHz splits already in the band plan. Please note that there are also a band of frequencies in the SERA band plan specified for full duplex linking. We looked at the list and specifically excluded it from consideration at this time. The twenty 25 MHz split repeater channels are already getting within 300 KHz of the weak signal and EME areas of the band so we decided to leave the extra linking channels out. I would suggest that if we need any full duplex 902 MHz links in the future, we simply coordinate them in the repeater pairs.

The other point that needs to be emphasized in regard the 25 MHz repeater channels is that we WANT frequency reuse and dual PL when ever possible. I'd suggest using just a few of the channels on 25 KHz frequencies and do as much frequency reuse as possible. Maybe use the 12 KHz splinter channels for those duplex links.... The idea would be to have the same few frequencies used around the state with one PL used for local base station access and a statewide PL used for mobiles.

Other than that, Dan and I are going to try making a decent band plan chart including these recommendations that can go on the MRC web page and in the newsletter. The band plan committee has done its work for the last two meetings and we now need to hear comments, corrections, and criticism between now and January 6 so we can publish the recommendation in the MRC newsletter before the next meeting.

As I recall, the next MRC meeting was scheduled for February 8 at the St Cloud winter hamfest...... I'd like to get most of the discussion done by email so we don't have to spend a lot of time on it at the meeting. I've included most of the local ATV group in my distribution list as well as officials of the Wisconsin Association of Repeaters. I'd like everyone to feel free to join the discussion.

And please remember that the MRC remailer is open to everyone.

So the band plan recommendations for the next MRC meeting are:

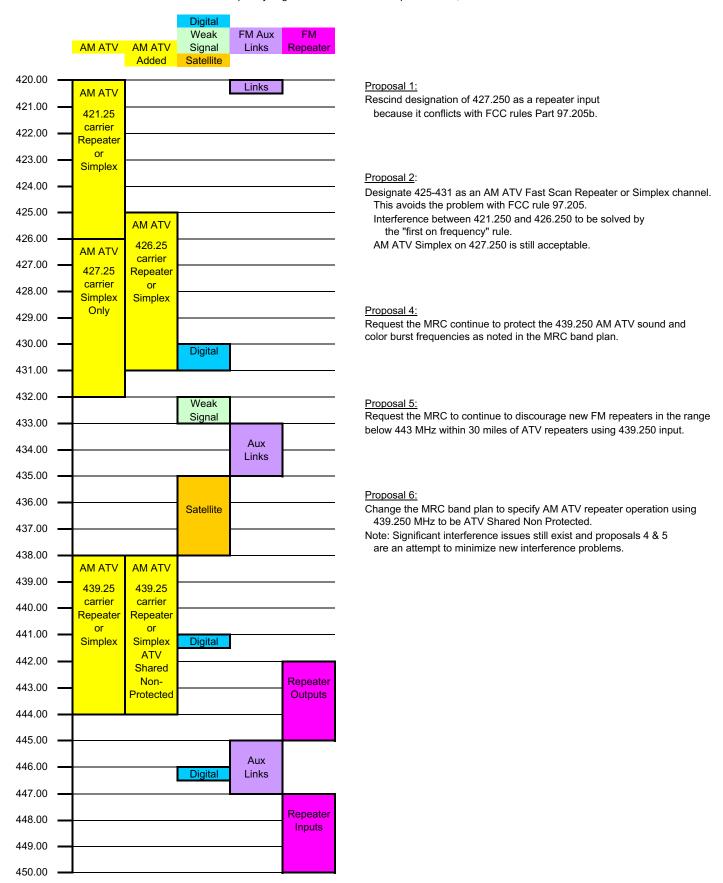
- 1. Rescind designation of 427.250 MHz as a repeater input because it conflicts with FCC rules Part 97.205b.
- 2. Add the frequency of 426.250 MHz to the MRC band plan as an acceptable ATV fast scan repeater or simplex frequency. This will avoid conflict with Part 97.205b while providing another potential ATV repeater frequency in the 420-450 MHz band. Interference between closely located adjacent channel repeaters is likely and the "first on frequency" rule applies. The use of 427.250 MHz for ATV simplex is still acceptable as a national allocation. Interference resolution options include antenna cross polarization, a VSB filter on the 426.250 repeater, and horizontal separation (miles).
- 3. Add 25 MHz offset repeater pairs to the 902-928 Mhz band plan using the twenty frequency pairs specified in the current SERA band plan (www.sera.org). Also add the 32 auxiliary simplex link and FM voice simplex frequencies specified in the SERA band plan.
- 4. Request the MRC Frequency Coordinator continue to protect the 439.250 MHz ATV sound and color burst frequencies as noted in the MRC band plan.
- 5. Request the MRC Frequency Coordinator continue to discourage new repeaters in the range below 443 MHz within 30 miles of ATV repeaters using 439.250 MHz input.
- 6. Change the MRC 420-450 MHz band plan to specify 439.250 MHz as ATV Shared-Non-Protected. The intent of this change is to allow coordination of in-band ATV repeaters and publication in the ARRL Repeater Directory while avoiding the coordination issues that led to the original MRC moratorium on such coordinations. It must be recognized that significant interference issues still exist and items 4 and 5 above are an attempt to minimize new interference problems.

Except for item number 1 above, the suggested changes that were adopted last May are still part of the band plan changes we've proposed for Minnesota. We are still working with the coordinating bodies in adjacent states to gain their acceptance of our proposed changes. If adopted at the February meeting, the items above would be added to the discussion. Our proposed band plan changes will not become effective until they are accepted as workable regarding the adjacent state's band plans.

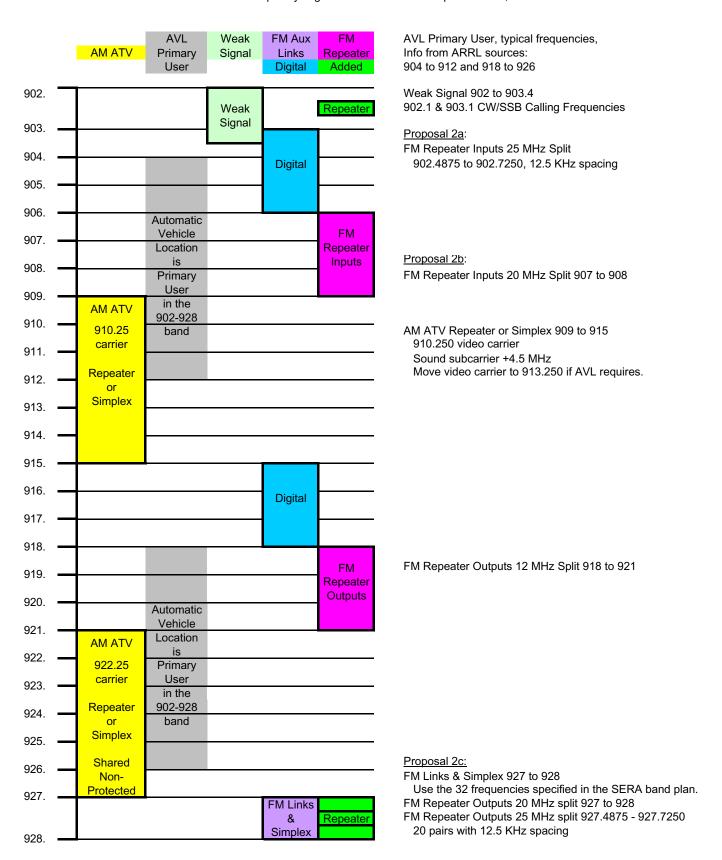
Bye for now! 73, Doug Reed, N0NAS.

Proposed MRC 420-450 MHz Band Plan (April 2003 Meeting)

Note: Frequency segments in the chart are representative, not exact.

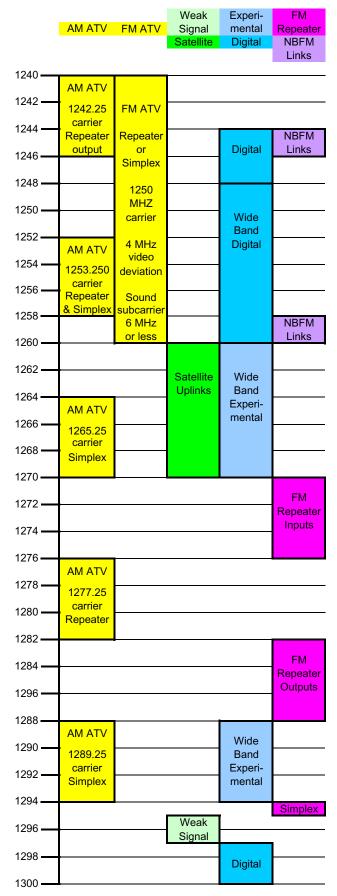


Note: Frequency segments in the chart are representative, not exact.



MRC 1240-1300 MHz Band Plan (Adopted May 2002)

Note: Frequency segments in the chart are representative, not exact.



Minutes of the Minnesota Repeater Council

Fall meeting held On October 26, 2002 St. Paul Technical College

Call to order by chairman Steve Glatzel, K0FHC at 12:30 PM.

Introduction of officers & members where made.

Secretary & Treasurer's report: Jerry Dorf N0FWG

Reports presented to membership in the newsletter. A motion was made to accept, seconded and passed.

Frequency coordinator: Paul Emeott, K0LAV

Brief report was made concerning current frequency availability and activities.

Technical Committee: Brad Ornes, KA0SQO

Report was presented in the newsletter,

New Members:

ASC	Jeff Clarine	N0ZR
ASC	Keith Mobarry	WA0TXJ
REG	ARTHUR RYAN CARLSON	WA0NJR
REG	JAY MAYNARD	K5ZC
REG	Michael Grenier	KC0IOC
REG	Patrick Mathiowetz	W0MTW
ASC	Dovid Blinderman	N0WEP
REG	Paul Germsheid	WA0WRG

Old Business:

Repeater de-coordination of the K0HPY repeater: Based on the conditions set at the spring meeting along with the technical committee's report. A motion was made, seconded and passed to de-coordinate the repeater. 2 members voted not in favor of the motion.

User liaison, position remains open. Discussion about is 1 enough or should there be more. However we should fill the 1 position before considering changes.

Technical and interference Committee, the following individuals volunteered:

Dan Swee N0FKM Don Rice N0BVE
Dovid Blinderman N0WEP Matt Genelin N0YNT

Jay Maynard K5ZC

Bylaw changes:

A list of proposed bylaw changes has been published in the Fall Newsletter.

A motion to accept the changes as presented was made by Jeff Goodnuff and seconded by Paul Emeott to accept the changes.

During discussion the following 2 amendments where made:

Article IV to read:

A Regular member who is the person holding the frequency coordination for a MRC coordinated repeater system, can attend a council meeting and vote on all matters before the council.

The words "Trustee of record" and... have been removed

Article VI to read

Chairman – Preside at all meetings, Administer the affairs of the council. Appoint all Committees. The Chairman shall be the representative for the council on all organizations of which the MRC is a member (currently MACC & NFCC).. Or provide a designee to take his place.

Motion passed.

Reuben Ruen withdrew his previous 2 motions that where tabled at the Spring meeting in Duluth.

Band plan Committee

The proposed changes to the MRC band plans that where previously discussed at the Spring meeting in Duluth have not been presented to the Wisconsin Association of Repeaters for review.

The chair officially called for a band plan review committee to be headed by the Vice Chairman.

Volunteers were called and the following came forth.

Vice Chair Dan Swee, N0FKM

Mike Griener KC0IC Doug Reed, N0NAS Jay Maynard K5ZC Reuben Ruen, WB0BWL

New Business:

Don Rice reports that there is some interference issues. The technical committee will follow up on the complaint.

Bylaw change proposal by Jerry Dorf. What is the feeling on lowering or eliminating the 40% non metro member quorum requirement. This matter was tabled for further feedback from the membership, it was suggested to ask the question on the Internet remailer.

On an administrative note: Jerry Dorf asked if there was any problem if the email listserv membership options where changed to require administrative approval for new members. This would be done to prevent possible spamming and problems. No objections where heard.

Dan Swee made some suggestions on how the MRC should look towards improving communications in the future. No action was taken.

Matt Genelin, motioned to have a worked all repeaters in the state prize. No action was taken, it was suggested the details be worked out and report back.

Election of officers:

A motion to open the floor to nominations for the office of Chairman was made Incumbent Steve Glatzel was nominated
No other nominations where heard. Nominations where closed.
Repeat for vice chair. Incumbent Dan Swee was nominated
Repeat for Secretary Treasurer. Incumbent Jerry Dorf was nominated.

Motion was made to accept the candidates by acclamation. Seconded and passed.

Location for the Spring meeting: It was suggested that St Cloud Hamfest on February 8, 2003 would be an option

Meeting Adjourned at 3:50pm

Jerry Dorf, N0FWG Secretary Treasurer Minnesota Repeater Council, Inc

Proposed changes to the Bylaws

Current:

ARTICLE X. QUORUM

A quorum shall consist of twenty five (25) percent (%) of the "Active" Regular Members of record at the start of the meeting. Forty percent (40%) of the members present at a Council meeting must represent a coordinated repeater outside the Metro Zone. (The Metro Zone is defined as the following seven counties in Minnesota: Ramsey, Anoka, Hennepin, Dakota, Carver, Scott and Washington).

If a quorum is present when a duly called or held meeting is convened, the Members present may continue to transact business until adjournment even though the withdrawal of Members originally present leaves less that he proportion otherwise required for a quorum.

Proposed change is to lower or remove the 40% non-metro zone quorum requirement. The exact number will be determined by discussion and feedback from the internet discussion list.

Reason behind the change is a historical low turnout by the non-metro members at meetings. We have come close to not meeting the quorum to hold a meeting.

Jerry Dorf, N0FWG

Minnesota Repeater Council Checking Account Report as of December 29, 2002

Date	Action	Name	Debit	Credit	Balance	Comments
7/30/2002	DEP	Fred Pfeiffer		\$30.00	\$5,112.90	Dues to 2005
9/28/2002	2004	Postmaster	\$156.45	φου.σο	\$4,956.45	Postage Newsletter
9/28/2002	2005	Office Depot	\$32.14		\$4,924.31	Newsletter enevlopes
9/29/2002	2006	Kinkos	\$405.77		\$4,518.54	Newsletter Printing
9/29/2002						
	2007	St Paul Technical College	\$115.00	¢40.00	\$4,403.54 \$4,403.54	Meeting Room
10/7/2002	Dep	Arthur Carlson, WA0NJR		\$10.00	\$4,413.54	Dues/new membership
		Dean Boelter		\$10.00	\$4,423.54	Dues to 2003
40/40/0000	DED	David Kellner		\$10.00	\$4,433.54	Dues to 2004
10/16/2002	DEP	DONALD YOUNGGREN		\$10.00	\$4,443.54	Dues to 2002
		ROBERT STARK		\$10.00	\$4,453.54	Dues to 2003
		JAMES R MAYNARD II		\$20.00	\$4,473.54	change to reg membership 2005
		MARSHALL RADIO CLUB		\$15.00	\$4,488.54	Dues and NL to 2003
		SAI SIMONSON		\$10.00	\$4,498.54	Dues to 2003
		MIKE SCHWENDEMAN		\$10.00	\$4,508.54	Dues to 2003
		RUNESTONE RADIO CLUB		\$10.00	\$4,518.54	Dues to 2003
		Gregory Carlson		\$20.00	\$4,538.54	Dues to 2003
		Tomas Svihel		\$10.00	\$4,548.54	Dues to 2002
		Joseph Sarkis		\$10.00	\$4,558.54	Dues to 2003
10/22/2002	DEP	Henn. Co RACES		\$140.00	\$4,698.54	Dues/Co-ordination
10/23/2002	Dep	Robert Bliss		\$10.00	\$4,708.54	Dues to 2007
10/26/2002	2008	City Veiw Catering	\$527.51		\$4,181.03	Catering for Fall meeting
10/28/2002	Dep	BRUCE BJORKLAND		\$20.00	\$4,201.03	Dues to 2004
		Peter Hoagland		\$20.00	\$4,221.03	2003
		David Furman		\$10.00	\$4,231.03	2003
		Crow River ARC/Roger Cacek		\$10.00	\$4,241.03	2003
		Steve Glatzel		\$20.00	\$4,261.03	2005
		Paul Henry		\$20.00	\$4,281.03	2004
		Smarts Radio Club/Mike Romine		\$10.00	\$4,291.03	2003
		Thomas Carlson		\$10.00	\$4,301.03	2003
		Marget Jordan		\$10.00	\$4,311.03	2003
		Harold Clough		\$10.00	\$4,321.03	2003
		Dovid Blinderman		\$10.00	\$4,331.03	2003
		Paul Germscheid		\$20.00	\$4,351.03	2003
		John Swanson		\$10.00	\$4,361.03	2003
		Janet Robidoux		\$20.00	\$4,381.03	2004
		David Cooper		\$30.00	\$4,411.03	2005 Pending vote at Spring 2003
11/4/2002	DEP	Kurt Eisenach		\$20.00	\$4,431.03	2005
		Spirit Valley Amateur Asoc D. Nelson		\$20.00	\$4,451.03	2004 Pending vote at Spring 2003
11/19/2002	Dep	Gerald Groeneleld		\$10.00	\$4,461.03	2003
		Steven A Csizmadia		\$10.00	\$4,471.03	2003
		VARS / Ray Thissen		\$60.00	\$4,531.03	2008
11/27/2002	Dep	Walley Erikson		\$5.00	\$4,536.03	2003 NL
		Stearns County		\$10.00	\$4,546.03	2003
		Brainerd ARC/ M. Fritz Berteut		\$30.00	\$4,576.03	2005 Pending vote at Spring 2003
12/19/2002	DEP	Alfred Belk		\$20.00	\$4,596.03	2004 Pending vote at Spring 2003
1/28/2003	DEP	MIKE SCHWENDEMAN		\$20.00	\$4,616.03	2005
2/24/2003	Dep	Dan Gelle		\$10.00	\$4,626.03	2003 Pending vote at Spring 2003

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):						
Т	rustee 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 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	# of years Paid:	Other Info:				
Jerry Dorf, N0FWG Secretary/Treasurer 1402 Pulaski Road Buffalo MN 55313	Total Amount:					
763-682-2169 Voice 952-473-5819 Fax jerryd@jerryd.net	Check #:	_				
Membership Approval Granted: Date:						

Dues Paid for: 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 Revised 12/2002 jkd

Agenda Minnesota Repeater Council General meeting Spring 2003

I. Call to order 3:00 PM

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

II. Reports

- A. Secretary & treasurer report, N0FWG
- B. Frequency coordinators report, K0LAV
- C. Technical Committee

III. Applications for membership

Alfred Belk WA0YRI
David Cooper KO0P
M Fritz Bertelt W0KO
Douglas Nelson AA0AW
Dan Gelle KC0CAP

IV. Old business.

- A. Bandplan committee
- B. Appointments
 - 1. User Liaison
- C. Bylaw change proposal
- D. Other old business

V. New business

VII. Fall Meeting, Metro location

VIII. Adjournment

If anything needs to be added, or you wish to add an item to the agenda please notify the secretary in writing 1 week prior to the meeting. Any reports or items that need to be presented to the membership should be also presented as to be included in the meeting informational packet.

Thank You

Secretary Treasurer

Jerry Dorf, NØFWG 1402 Pulaski Road Buffalo MN 55313 jerryd@jerryd.net 763-682-2169 952-473-5819 Fax

Delegate Registration (Proxy) Form

Regular member.		
Repeater Call:	Frequency:	
Trustee: Call: A regular member is an organization or in coordination database with MRC member		f record for an operating repeater in the MRC frequency tart of the meeting.
Primary Delegate Call:	Name	:
Alternate Delegate #1 Call:	Name	:
Alternate Delegate #2 Call:	Name	:
Restrict voting privileges: If you vyour assigned delegate to have vot	•	purposes if counting attendance, but do not want re []
Duration of Proxy: Check here [_altered or revoked at any time by t		be used at future MRC meetings. This proxy may be
Signed:		Date:
Regular Member (Trustee)		
Dlagge mail this progrette the Country	awaat laast ana waali niis	u to the meeting. Advance registration is enquesiated

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