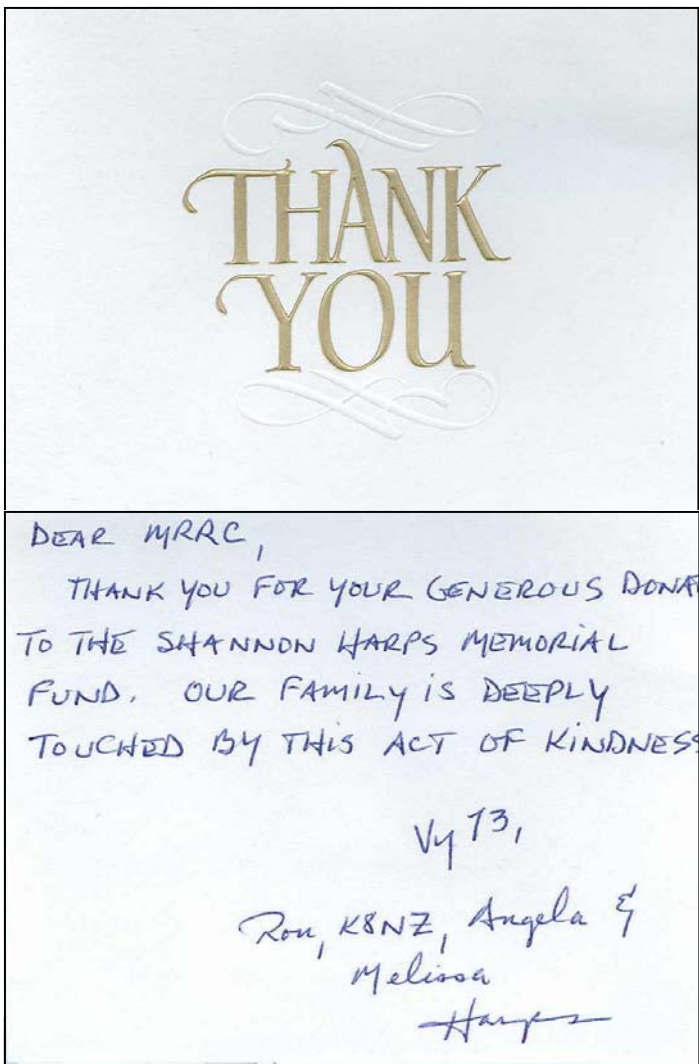


Editor's Note:

Back in January, the club was shocked to learn about the senseless murder of Shannon Harps, the daughter of MRRRC and NCC founding member Ron Harps, K8NZ on New Year's Eve, 2007 out in Washington State where she lived.

At the K8MR and K8AZ Christmas Parties this year, MRRRC joined with the North Coast Contesters to contribute as a club to the memorial fund in Shannon's name. In February of this year there was a memorial service in her honor in suburban Cleveland where the Harps family lived for many years.

The card at the right was received by MRRRC from Ron and his family, and we wanted to share it with the membership. Ron and his wife Angela now live in Florida, from where K8NZ/4 continues to appear in MRRRC logs for MiQP, FQP, SS, etc.



MiQP 2008 Update

By Dave Pruett, K8CC

The May 20th log deadline for MiQP has come and gone, with 2008 shaping up as a record-setting year for MiQP. For this year's event, the committee received 300 logs, representing more than 40,000 QSOs by over 4,000 participants, all representing new record totals. Most of the major in-state category records appear to be in serious jeopardy if being broken as well (subject to logchecking, or course).

The official MiQP 2008 results will be available on the MiQP web site <http://www.miqp.org> by the beginning of August.

Treasurers Report June 2, 2006

Balance Forward	\$1101.21
Dues collected this period	\$653.00
2006 MiQP Plaques (holding)	\$325.00
2006 OhQP Plaques (holding)	\$505.00
2006 Dayton SITS Expenses	(\$230.00)
KE8OC Dayton Ticket	(\$20.00)
Shannon Harps Memorial Fund	(\$100.00)
2007 OhQP Plaques	(\$600.00)
Balance	\$1634.21

Monies collected for MiQP and OhQP plaques are held as sponsors send in checks to the respective contest committees. This money

is disbursed when the plaques are produced and should result in a net zero balance.

The only MiQP and OhQP expenses MRRRC is responsible for are the In-State Club Competition plaque that MRRRC sponsors and up to \$50 in incidental expenses, as approved by the membership at the 2006 Dayton meeting. This applies to each contest.

Please remember that Dayton was the end of one MRRRC dues year and the beginning of another. Members receiving a FLASH by mail can check the address area above to see your dues status. Dues can be paid at the Findlay meeting.

Respectfully Submitted,
Dennis Ward, KT8X

How MRRC Won The 2007 SS Club Competition

By Dave Pruett, K8CC

The June 2008 issue of *QST* announced to the world that MRRC had won the Medium Club Category in the Club Competition for the 2007 Sweepstakes. This was not a year where the club made a particular "push" in SS, and yet we won. I thought it would be instructive to analyze the results, perhaps as "lessons learned" for future years.

2007 was the fifth time MRRC has won the Medium Club category in the SS Club Competition. This is pretty impressive when you consider that in the 36-year history of the club, we've entered the medium category 25 times. So on average, we win one out of every five times we enter the Medium Club competition.

Our score this year was 3,573,384 points from 41 entries. Our points total was slightly above our average of 3,450,097. Our 41 entries was better than our historical average of 36, but since Medium Category clubs are allowed up to 50 entries, we certainly left some score-generating capability on the table.

The second place club was the Southern California Contest Club (SCCC), an experienced and capable group who has also won the competition in the past. SCCC had one less entry and 169,824 less points, or about the equivalent of one serious entry. This shows the importance of every MRRC entry—if one serious score, or several smaller scores had sat out, we would not have won.

The MRRC score consisted of 24 CW entries totaling 2,127,330 points with an average of 15 hours operating time, and 17 phone entries totaling 1,446,054 points, also with an average of 15 hours operating time. 24 stations were operated by 24 operators on CW, while 17 stations were operated by 22 operators on phone. (Note: stations and operators aren't always equal because of multi-operator stations and K8MR's single-op/multi-station operations.)

A total of 32 MRRC members (roughly one third of the club roster) participated in the 2008 Sweepstakes.

Interestingly, SCCC had almost the exact same division of entries between modes. They had 23 entries totaling 1,738,452 points on CW with an average of 15 hours operating time, and 17 entries totaling 1,665,108 points on phone averaging 13 hours of operating time. The observation we can make from this is that while MRRC got more of its points from CW, SCCC was closer to 50%/50% and the amount of operating time was similar for both clubs.

The chart at the bottom of this page compares the population of MRRC scores vs. SCCC scores. MRRC had only one entry over 200K; that was W8MJ single-op/assisted entry on phone. SCCC had four 200K+ entries; one on CW and three on phone. On the other hand, SCCC has 19 scores (almost 50% of their entries) below 50K while MRRC had the same number of logs in the more-valuable 50K-100K category. In general, SCCC has more big scores and small scores, while MRRC had more middle-range scores.

We reported earlier that the average amount of operating time was virtually identical between MRRC and SCCC. MRRC entries averaged 15 hours of operating time apiece. When considered by the amount of operating time, the population of MRRC and SCCC logs appears as follows:

Op Time	MRRC	SCCC
0-6 hours	8	8
7-12 hours	9	9
13-18 hours	8	9
19-24 hours	16	14

So MRRC did a pretty good job of putting people in the operating chair. But we still missed out on 37.5% of the available operating time for the stations that we did have on during the contest.

Another useful breakdown is to examine the categories entered, the logic being that certain categories have more score potential.

Category	MRRC	SCCC
A	16	19
B	10	14
Q	4	0
M	3	2
U	8	5

So the characteristics of our winning 2007 SS effort are:

1. We put 80% of the allowable number of entries on the air.
2. We utilized 62.5% of the allowable operating time.
3. For the most part we entered categories with good score potential.

Each of these characteristics can be improved to result in a higher club score, but perhaps that's next month's article...

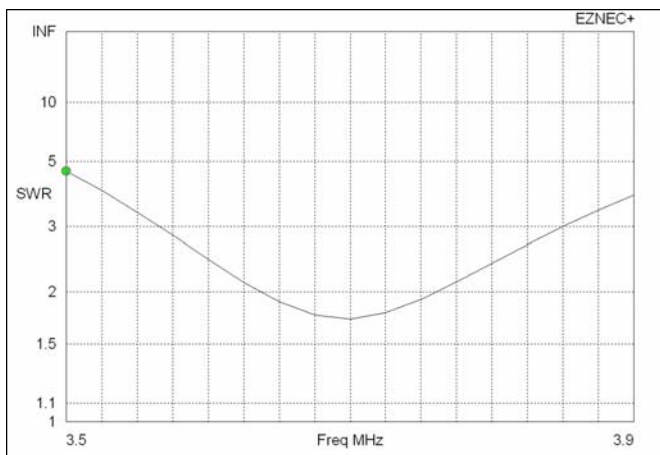
club	< 50K	50K-100K	100K-150K	150K-200K	>200K
MRRC	8	19	10	3	1
SCCC	19	8	3	6	4

Comparison of MRRC and SCCC Score Populations

Broadband 80M Antennas for the Contester

By Dave Pruett, K8CC

The 80M band poses a challenge for the contester wanting to operate both CW and SSB modes. Because the band is relatively wide in relation to its low center frequency, simple antennas like dipoles and verticals cannot present a good SWR to untuned feedlines over the entire band. The plot shown below illustrates the extent of the problem.



Modeled SWR Plot of a Dipole Cut for 3700 KHz

The recent FCC rules changes for the 80M band changes the range of necessary frequencies somewhat. Despite the lower phone band limit being extended down to 3600 KHz, a lot of domestic contesting activity still takes place above 3800, dictating the need for good antenna performance in that part of the band.

This short article pulls together some recommendations for 80M antennas which will work both modes. This information is hardly new - it is offered as examples of what has worked for other MRRRC members.

Adjusting the Length

Many contesters deal with the 80M bandwidth issue by cutting their dipoles or verticals for CW, then folding back the ends when operating on SSB. This method works very well, but is extremely inconvenient for operating mixed-mode contest such as QSO parties or the IARU HF championship; particularly if the ends of your antenna is extremely high in the air.

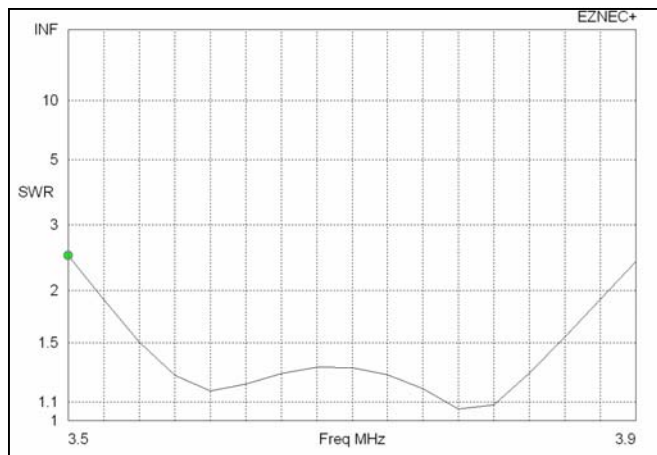
Using a Tuner

For many years, at K8CC I've cut my 80M dipoles for 3625 KHz and used an old Drake MN-2000 tuner to provide a perfect match to the rig anywhere in the band. While this method is extremely convenient and easy to implement, there are drawbacks. At least with my MN-2000, the SWR bandwidth of the dipole

matched by the tuner is narrower than that of a dipole cut of that part of the band without a tuner. It's not bad over a 25-50 KHz range, but as more CW activity creeps up near 3600, the tuner has to be re-adjusted often as you move around. This condition is much more pronounced on phone, where you typically have to cover 200 KHz or more in contests. I also wonder whether tuner losses are an issue. There are times (particularly on the MRRRC net) where my coax-tuned dipole is seemingly outperformed by lesser dipoles, but this might just be my paranoia.

Using a 'Q' Section For a Broader Match

The first reference I could find about broadbanding an 80M dipole by feeding it through a quarter-wave section of 75 ohm line at the shack end of a half-wave multiple 50 ohm feedline was in an article by Frank, AI1H in the September 1993 issue of QST. This configuration is also analyzed in depth at W4RNL's web site <http://www.cebik.com>.



SWR Plot of a 3700 KHz Dipole w/'Q' Section

As shown this configuration has poor SWR at the edges of the contesting frequency range (3500 and 3900 KHz). However if the dipole is cut 50 KHz lower, then 3500-3800 KHz can be covered under 1.5:1.

The AI1H CRM Dipole

In the April 1989 issue of *QST*, Frank, AI1H wrote about a broadband 80M dipole using a coaxial resonator match (CRM). This design uses sections of coax connected in an unusual configuration with wire tips as the antenna to produce a broad-banded match to the feedline. In addition to the *QST* article, this antenna has been described in several editions of the ARRL

(Continued on page 6)

The MRRC "Club Circle" Explained

Reprinted from the FLASH, Vol. 36, Nr. 1

If you hang around MRRC long enough, you'll eventually hear people refer to the "Club Circle" There seems to be a fair amount of confusion as to what the circle is (or isn't) so we thought it would be a good idea to reprint the article which explains the whole thing.

The history of the club circle dates back to 1972, when the ARRL, in order to prevent the formation of huge, artificial contest clubs that only existed on paper, made a rule for clubs entering an ARRL Affiliated Club Competition in the Medium and Unlimited categories that **all members contributing scores for that competition had to reside within a 175 mile diameter circle.**

The effect of this rule is that for ARRL Club Competitions, a club such as MRRC has to identify a geographic club center and submit a roster to the ARRL showing all club members and stations that are located within 175 miles of the club center. The ARRL then will only count scores from members/stations from that roster when totaling MRRC's club score.

MRRC's original club center in 1972 was selected to be at Marion, OH, which is east of Lima and north of Columbus. This location was chosen to encompass the population of MRRC members, as it was at that time. Since then, the circle has been moved twice to reflect changes in the club's demographics. In the early 90s the center was moved northwest to Findlay, to better cover the growing membership base in Michigan. In the late 90s the center was moved to Lima, OH, to capture the growing cadre of MRRCers in SE OH and in WV. The club center has remained at Lima to this day.

The map on this page illustrates

the current club circle, covering a 175 mile radius from Lima, OH. The circle covers all of Ohio except for a narrow sliver along the eastern border. It also covers approximately one-third of Michigan's lower peninsula. In the process, it also covers a large portion of Indiana, which is of no benefit to MRRC since we have no members there (and most contesters belong to the Society Of Midwest Contesters (SoMC)).

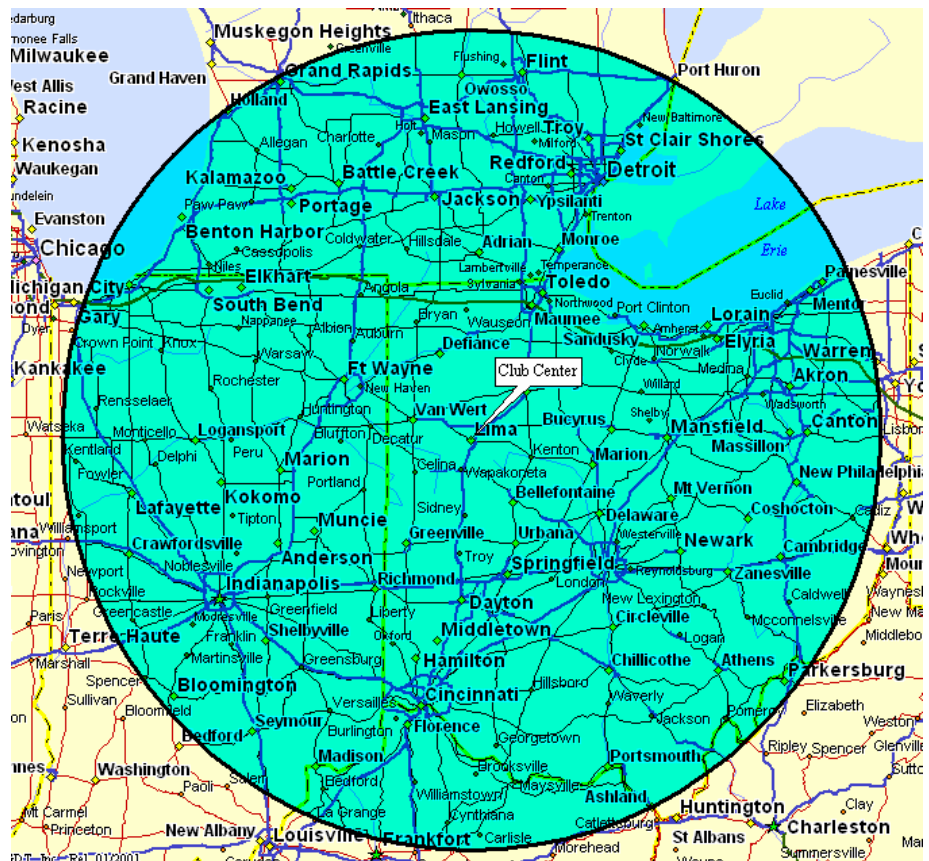
Some things to recognize about the MRRC Club Circle:

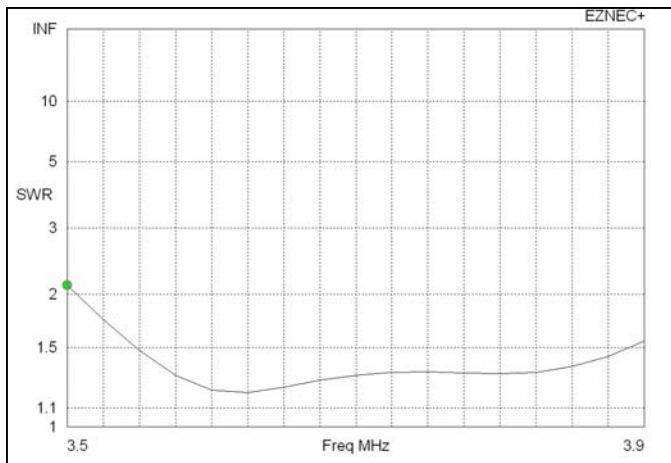
- 1) **The club circle is an ARRL requirement, not an MRRC requirement.** The club circle only applies to score submissions for ARRL Club Competitions like SS, ARRL160, ARRL10 and ARRL DX. It does not apply for score submissions in contests sponsored by the NCJ, CQ

Magazine, or any others

- 2) The club circle has nothing to do with membership in MRRC. Everyone is welcome to join MRRC - you do not have to live or operate from within the club circle to be a member.
- 3) As mentioned earlier, the club tries to position the circle to cover the maximum number of club members. If you find yourself outside the circle, and you'd like to be inside, please contact club officers **K8MR** or **KT8X** to indicate your interest, and the club will look into a way to accommodate your request. Moving the club circle is considered official club business and requires a membership vote at an official club meeting (historically, this has been done at the Dayton meeting).

Hopefully, this information will clear up any misunderstanding about the MRRC Club Circle and what it applies to.





SWR Plot of the AI1H Broadband 80M Dipole

Broadband Dipole

(Continued from page 4)

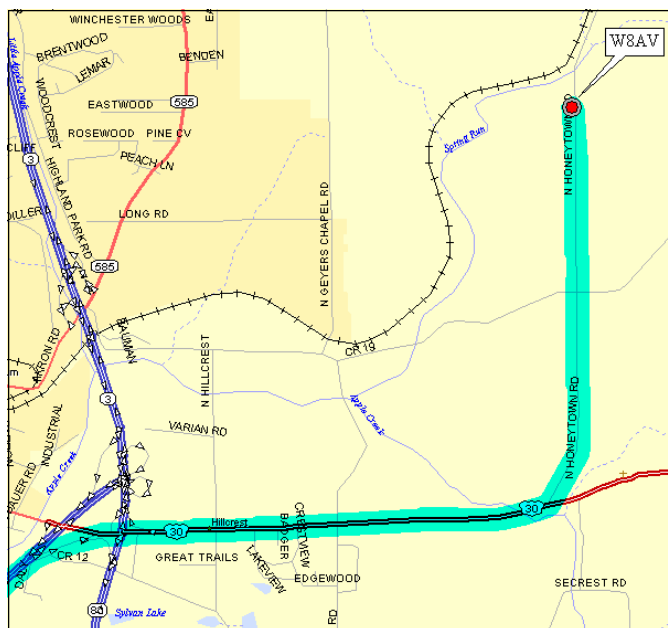
Handbook and Antenna Handbook.

The modeled plot of the AI1H dipole is shown at left. The broadband characteristic of the antenna is clearly seen. Several MRRC members have built this antenna, such as N8SS and K9TM/KP2TM. They report that the antenna works very well, and that minor adjustment of the overall antenna length allows centering the SWR curve for optimal coverage of both CW and phone to compensate for height and installation differences.

July MRRC Meeting Goosapalooza at W8AV

After several years of absence from the calendar, the summer MRRC meeting at W8AV (a.k.a. GOOSAPALOOZA) is planned for Saturday, July 26, 2008 at the W8AV QTH located at 1690 N. Honeytown Road in Wooster, OH. Starting time will be at Noon and we will go until about 5:00. Food and beverage will be provided. Goose will need a head count to determine how many burgers, wieners, potato salad, pop and beer to buy. Post a note to the MRRC reflector or e-mail w8av@aol.com.

W8AV is not hard to locate. Referring to the map, take US-30 about two miles east out of Wooster, to where Honeytown Road splits off to the north. Follow Honeytown Road for about 1½ miles to W8AV.



Club Resources

The Mad River Radio Club is an ARRL affiliated club of amateur radio contesting enthusiasts. The club is centered near Findlay, OH and serves Ohio and the surrounding States. Membership is open to anyone.

The **Flash** is the official newsletter of MRRC and is published six times per year. Submission of material for publication is welcome. It may be sent to the editor at the postal or e-mail addresses shown at right. The **Flash** may be reprinted in whole or in part provided proper credit is given.

Club dues are \$12 per year, payable after the 1st of May each year with a grace period thru 31st of July each year. Members of the same family living at the same address may elect to receive a single **Flash** for one set of dues. Fulltime students are eligible for dues at half price. Dues are to be paid to the treasurer at the address shown above. Please make checks payable to *Mad River Radio Club*.

The club roster appears annually in the October/November issue of the **Flash**. It is also available on the club web site with private information hidden.

The Mad River Net is held on Monday nights at 8:30 PM Eastern time on 3625 KHz.

The MRRC web site is <http://www.madriverradioclub.org>.

Keep up with MRRC happenings by subscribing to the MRRC Internet Reflector. To join send an email to mrc-request@contesting.com. The body of the message should include the word "subscribe".

K8MAD is the club call sign of the Mad River Radio Club.

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