

MAD RIVER



MAD RIVER RADIO CLUB

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THE CLEVELAND TRIP

THE MRRC HAD IT'S ANNUAL MEETING AT THE HOME OF K8MR. THIS IS THE LARGEST NON-DAYTON GATHERING WE HAVE. THE ATTENDANCE WAS STAGGERING, OVER 50% OF THE MEMBERSHIP. THE GET TOGETHER STARTED AT THE K8AZ STATION IN THE MID-AFTERNOON, THEN MOVED OVER TO JIM'S ABOUT 7'ISH. THE SHOW BROKE UP ABOUT ??? (I LEFT AT MID-NIGHT)

AS IT TURNS OUT A LOT OF DISCUSSION WAS HEARD ON THE SUITE IN DAYTON. A MOTION WAS MADE BY DOC TO BACK CHARGE THE MEMBERSHIP TO COVER ANY LOSS INCURRED BY THE SUITE AT THE DAYTON HAMFEST. THIS WAS SECONDED BY MANY, AND WAS MOTION WAS PASSED. THEN ANOTHER POINT WAS MENTIONED ABOUT COLLECTING FUNDS PRIOR TO DAYTON. AS USUAL, THE DOC PITCHED THIS ONE TOO. HE DID SO WELL THAT THE COFFERS NOW HAVE \$160 TOWARD THE SUITE. THIS WILL NOT COVER THE WHOLE BILL, SO DONATIONS FROM THE BALANCE OF THE MEMBERS WILL BE APPRECIATED. SEND YOUR DONATION TO ALAN, N8BTU.

THIS YEAR THE SUITE WILL BE MANAGED BY 'AQM AND 'INF. BOTH TED AND KEN WILL BE LOOKING FOR HELP IN BARTENDING. DAVE, 'CC STILL HANDLES THE SUITE ROOMS. THE PRE-DAYTON FLASH WILL HAVE MORE ON THE SUBJECT.

THE BIGGEST DISCUSSION OF THE NIGHT WAS LITERALLY THE FUTURE OF MRRC. LET'S FACE IT, OUR CLUB PARTICIPATION IN CONTEST'S REALLY SUCKS. WE HAVE THE SAME PEOPLE ON FOR EVERY CONTEST. APPROXIMATELY 90% OF OUR SCORE IS TURNED IN BY 15% OF THE MEMBERSHIP!

THE MEMBERSHIP AT THE MEETING DECIDED TO PUT FORTH A MAJOR EFFORT IN THE ARRL DX CONTEST, BOTH MODES. YOUR AREA'S VP. WILL BE CALLING YOU TO GET YOUR COMMITMENT. WITH THE PACKET MODE THAT'S AVAILABLE, THE STATION THAT'S PUTS IN 10 TO 15 HOURS CAN MAKE A AWFUL LOT OF POINTS.

YOU WILL NOTICE THAT WE HAVE INCLUDED COPIES OF THE ARRL LOG SHEET AND SUMMARY SHEET. ALL YOU NEED TO DO IS MAKE SOME COPIES AND GO FOR IT. TIM, KQ8M, HAS OFFERED TO COMPUTER DUPE YOUR LOGS. BUT, HE HAS SET A LIMIT OF 300 Q'S. IF YOU WANT TO COMPUTER DUPE THEM, I HAVE THE KVOI PROGRAM AND WILL SEND YOU A COPY. IT'S FOR A C-64 OR C-128. JUST SEND ME A BLANK DISC IN RETURN.

WE HAVE A DESIGNATED SCORE COLLECTOR NOW. JIM, K8MR WILL COLLECT SCORES FOR EVERY 'TEST. JIM WILL COLLECT THE SCORES VIA PACKET, MONDAY NITE NET, MAIL OR PHONE.

THIS IS IT, THIS IS THE TIME TO MAKE OR BREAK MRRC. YOUR EFFORTS ARE NEEDED. LET'S MAKE THIS A CONTEST CLUB AGAIN. GOOD LUCK!

N8CXX

40 HALF SQUARE + 160M

Dan Kovatch, WBCAR

When I moved to the present QTH in Sandusky, the need for an antenna before winter set in became a priority. No tower was available but I did have a tall maple tree in the back of the yard. A hastily installed 40 meter vertical worked against a mediocre ground system sufficed for that year. I was not happy with its performance and began to think about a change (the previous WBCAR QTH had a pair of phased verticals with an extensive ground system).

It was not long before I ran across my old articles about the bobtail and its cousin, the half square (see references at the article's end). The half square is basically two top fed 1/4 wave radiators spaced 1/2 wave apart and giving a bidirectional broadside pattern with about 3db. at a very low angle of radiation. It appealed to me because it fit on my property and would not require a huge ground radial system.

The antenna was fed with a parallel tuned network consisting of a 0-100 pf capacitor and a 7 turn coil of approximately a 2 inch diameter. These component values were derived using the usual WBCAR empirical method, i.e., "This coil and capacitor look like they will tune 40 meters!" In fact, a quick grid dip showed they did. See pictorial 1.

This configuration was an improvement over the vertical for several reasons. It was a much quieter listening antenna and tended to deliver strong DX signals with less QSB. Almost any station heard could be worked. The SWR with the tuned network is 200 KHZ.

Then last year I decided to enter the CQ WW 160 fray but still had no antenna for 160 (or tower to shunt feed!!!). In looking at the half square, it is a 1/4 wave inverted L on 160m. I threw out a few radials and tried direct feed but the SWR was high.

Persuing an old handbook (circa 1960's) I ran across a simple series network that did the trick. It allowed for impedance matching and antenna tuning together. Soon I was on 160 with 100 watts. Conditions for the cw portion last year were outstanding...I ran the 20db attenuator all weekend! I managed 292 Q's and PJ9, KL7, G, YV, YU, HA, and KP4...all in a part-time effort. I have been more than happy with the results. More radials have been added since last year to enhance the 160 performance.

This year I have added relays to switch the networks in and out to QSY from the shack rather than by going out in the weather. The diagram gives the particulars (insert pic. 2,3).

One thing should be noted, the relay at the feedline end looks into 50 ohms and can be any garden variety dc relay that will handle a KW.

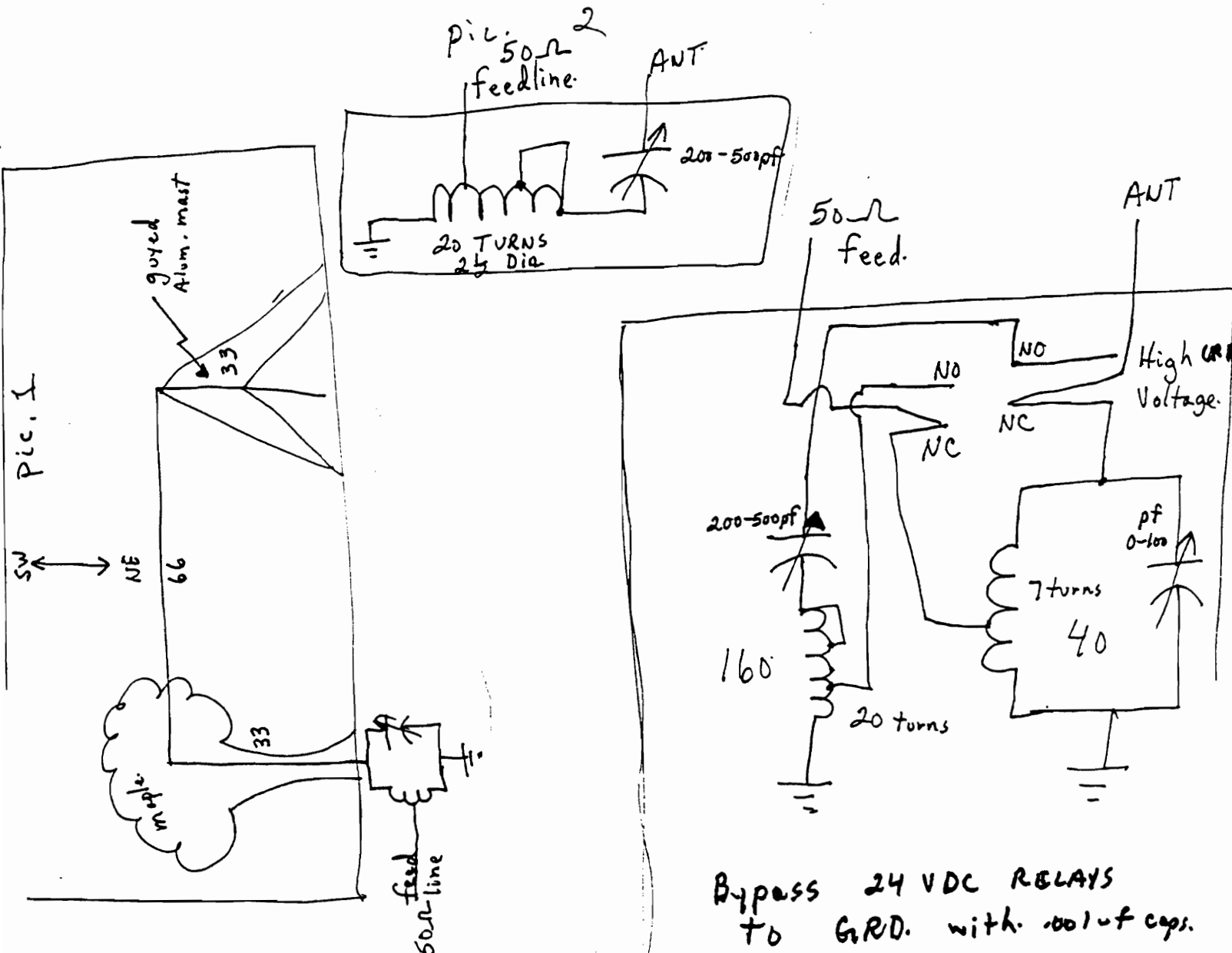
Remember though, the relay on the antenna side operates at high RF voltages on 40. My present relays are OK but care must be taken when tuning or arcing occurs. I am in the market for a large open frame relay with large contacts and spacing to improve this situation.

There is a lot of satisfaction now as I sit and flip a switch to operate 160 rather than make a trek in the cold and snow to change networks.

73, Dan, W8CAR

References: TNX to Pete, NBATR who provided copies of these articles several years ago.

1. The Half Square Antenna, QST, March 1974.
2. The Bobtail Curtain and Inverted Ground, Ham Radio, Feb. 1983.
3. The Half Square Antenna, Ham Radio, 1981
4. Low Band DXing, ARRL Publication, pages 11, 104-105.



ARRL 160M CW

	WPA		MICH		OHIO	
79	s K3BSY	50232	K8MJZ	40880	K8CCV	72494
	m		W8SJX	71923	W8JI	79849
80	s K3BSY	78408	N8EA	89700	K8CCV	78329
	m		W8JSX	95985	W8JI	124290
81	s K3LR	127296	W9EP/8	89150	K8CCV	94248
	m K3LR	1476	K8LX	88111	W8LT	97966
82	s K3LR	131556	N8EA	101824	AD8I	103074
	m K3UA	28244	W8MNL	90596	W8LT	130393
83	s W3HDH	24885	K88P	30885	AD8I	116584
	m		W8MNL	81315	W8LT	105228
84	s K3ND	81548	N8EA	60789	AD8I	129397
	m K3UA	18945	AC8W	95985	KS8S	139357
85	s K3UA	131680	N8EA	123768	W8FN	119712
	m		W8MNL	105968	KS8S	201782
86	s W3QM	58499	W8TU	110495	W88JEM	135372
	m		K8AQM	93063	W8JI	181170
87	s W3QM	31200	N8EA	61410	K3LR	204767
	m W3KWH	21600	K8AQM	106002	KS8S	220523
88	s W3QM	101232	W8UVZ	63549	W8FN	82002
	m W3KWH	31512	.....		W8LT	181090

During those quiet summer days when you are reflecting on the forth coming and past contest season think on these 160 scores from ARRL and CQ WW. Quite a few Mad River members have made some great showings.

CG WW 160 CW

	WPA		MICH		OHIO	
79	s W3BGN	39066	NBEA	29526	KBUS	35454
	m		WBUM	40356	....
80	s K3WW	93010	KBXR	41104	KBMFO	70656
	m		WABLSS	4482	.....
81	s W3BGN	59520	KCBF	38418	KJBI	23256
	m K3YTL	7956	NBEA	53676	ADEF	68880
82	s N3AMK	68442	KCBF	42610	KBUS	51198
	m W3TS	68408	NBEA	60512	KSBS	60512
83	s W3BGN	51776	NBEA	94017	KBAC	72800
	m K3FD	60903	WBYVR	70518	ADBI	140310
84	s W3BGN	74550	KCBF	28998	KUBE	31110
	m K3YTL	13728	KCKQ	79560	WB8JBM142013	
85	s W3BGN	183183	WBLVZ	100396	KBMFO	137530
	m K3UA	112258	.....		WBJI	194463
86	s W3BGN	303042	WBLVZ	79875	WBIMZ	81260
	m K3ND	218463	KBAQM	98700	WBJI	226670
87	s W3BGN	263538	NBEA	109099	WB8JBM192465	
	m K3WW	58140	WOOD	147060	KSBS	236130
88	s W3TS	167508	WBUA	43920	KUBE	95965
	m W3BGN	274598	K8CC	197820	KBAZ	57850

CG WW 160 SSB

	WPA		MICH		OHIO	
82	s N3AMK	75480	KCBF	55974	KBUS	70224
	m K3YTL	24376	....		WB8PAT	54696
83	s W3TS	68672	W8FGA	59832	WB8JBM106524	
	m K3YTL	38475	N8AKY	42840	KBUS	50337
84	s W3TS	101844	KCBF	44250	NBTR	130166
	m K3YTL	46700	NFBC	62496	WBLT	55620
85	s W3GM	87016	N8BQV	20670	KCBJH	69120
	m K3UA	65675	WBRA	136800	KCBMK	224042
86	s W3TS	79254	WBLVZ	23613	NBET	48308
	m W3BGN	200070	WBRA	126820	KCBMK	199342
87	s W3TS	54656	N8BH	44492	K8BYGL	35600
	m		K8BPOW	89310	WBIMZ	60312
88	s W3BGN	108675	K8MJZ	54505	NBTR	53625
	m K3TUP	156436	K8BFX	77691	WB8DXG100928	

144.95 DX PACKET ACTION

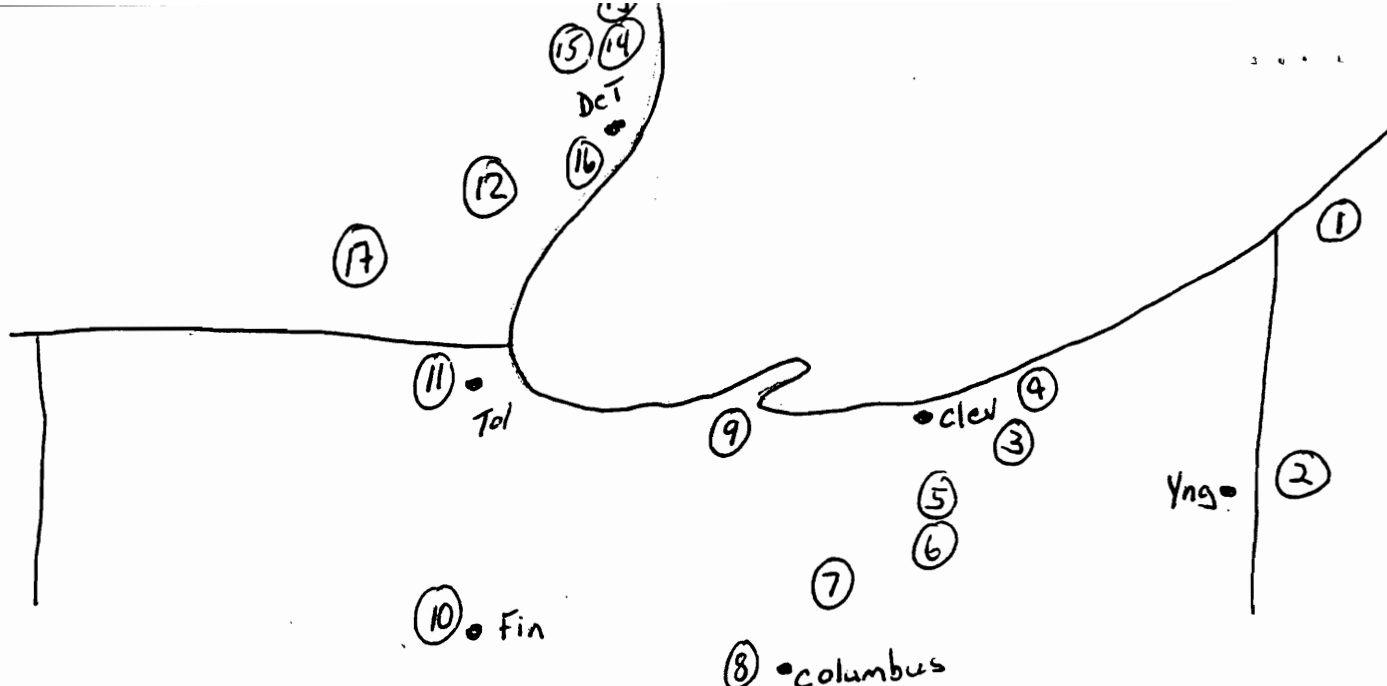
On the following page you will find the first of several maps showing the higher profile packet stations using 144.95 for DX. This first issue is not meant to be a complete list of Mad River members using packet but may give you leads to getting to any of the three packetclusters shown on the map. Hopefully, we can update this map next month after a very successful ARRL DX showing with new and better routes. Give these stations a try and record your results and pass them on to me for incorporation in the next installment.

In the forthcoming CW DX TEST, K8AQM and K8CC will be dumping DX into the NLD-1 board. It will be interesting to note QRM problems that may occur between AZ, JEY and NLD-1. Let's all throw into the packetclusters and see what develops. By the way, CC will be a one-way in only as single op and AQM will be multi two so the DX here in SE Michigan should flow. It should be interesting from the QTH here in Adrian as I am able to copy JEY, NLD-1, and AZ most of the time...hope we can keep up with the screen!

P.S. FLASH = FLASH!

1. Get those pictures of the shack ready for WDBRHO for Dayton.
2. Next month's FLASH will have a sign-up sheet for suite work
3. Work to K.B. in ARRL DX TESTS!
4. Drop DX into the packetclusters!
5. GO MAD RIVER!

Check into the Monday night net - 3825 ±
8:30 PM.



144.95 DX PACKET ACTION

- | | | | |
|-----|---------|--------------|---|
| 1. | K3TUF-2 | Eire | Digi @ 650 ft. Not yet in full operation. |
| 2. | K3LR-1 | W. Middlesex | KA node K3LR-2 MiniBBS @ 100ft. |
| 3. | KBAZ | Chesterland | Packetcluster/Digi beaming SSE |
| 4. | KQBM-1 | Mentor | PBBS (C-128), forwarding capability |
| 5. | KBMR | Parma | Digi @ 150 feet beaming WNW |
| 6. | KBYSE | N. Royalton | Digi @ 100 |
| 7. | KNBCOQ | Mansfield | Digi @ 150 |
| 8. | WBBJEY | Columbus | Packetcluster |
| 9. | WBCAR | Sandusky | SAN KA Node; WBCAR-1 miniBBS |
| 10. | NABW | Findlay | |
| 11. | WD9INF | Toledo | Digi @ 100 |
| 12. | KBCC | Ypsilanti | YPSI KA Node; MRRC MiniBBS |
| 13. | KBDD | Fort Huron | Digi, KBDD-3 MiniBBS |
| 14. | ACBW | Fort Huron | Digi @ 80 ft. |
| 15. | NBCOA | Fort Huron | Digi @ 70 ft. |
| 16. | KBNLD-1 | Detroit | Packetcluster, Digi |
| 17. | KBAQM | Adrian | ADRI KA Node, EMCC MiniBBS |