

MAD RIVER



MAD RIVER RADIO CLUB

VOLUME X NO. 3 JULY 1988 EDITORS: TED-K8AQM & KEN-WD9INF

WELCOME. . .

We welcome three NEW members to Mad River. Denny - WE8Z from Adrian, Mark - WB8JKR from Toledo, and Mike - WB8MZZ from Toledo. All three are active contesters and became new members at the Michigan picnic.

SUMMER/FALL MRRRC ACTIVITIES . . .

July 16 - Southwest Ohio Regional MRRRC meeting at W8FN.

August 6 - Pennsylvania MRRRC Meeting at K3TUP.

September - Findlay meeting and N8ET Bash!

CQWW SSB EXPEDITION TO ZONE 2 . . .

Fall contest expedition plans are in full swing for VO2USA - zone 2 for CQWW. MRRRC members KA8POW, K8AQM, KD8SF, and WE8Z will be teaming with others including a Canadian team headed by VE2ZP and VE6CB.

WPX SSB RUMORS . . .

WD8LLD	20M	980q's	915px	1,035,425
NE8T (K8JM-op)	15M	1415q's	506px	1,849,827 (NEW RECORD!)

EDITORIAL . . .

It was my pleasure to host the Michigan MRRRC picnic this year and it was great getting together with everyone from this area. My wife commented how pleasantly surprised she was at the young age (hmm) of the group and at how "civilized" we all were - guess I lead her astray telling about the blood-and-guts attitude we have in MRRRC over contesting.

I, of course, got to show off "Moby Dick" and the modest antenna farm that at least makes some noise in the contests. I managed to pick up quite a few tips from helpful members to improve the AQM RF - mainly - BIGGER antennas!

With the increase of summer meetings, I think a smaller turnout can be expected at each meeting but overall, the number of members involved will increase and that's good for Mad River. As stated elsewhere in the paper, the Dayton Suite has undergone some major growth and sophistication. It seems that MR is growing and the changes are in the making. From my perspective this is good and a natural tendency that follows the trend in contesting. Scores are bigger, towers are taller, booms are longer and skills are growing; why not the perspective of the club and its activities? Mad River has been good for me and I welcome these growth movements. Those of you on the leading edge of Packet and computer generated antennas keep going - the rest of us are coming along and we'll be there soon.

Mad River has made a difference for me and with our contesting efforts in operating, technical knowledge and inspired leadership we'll reach others within our circle and then gain their input. Go Mad River!

---Ted, K8AQM

JUNE MEETING

The Michigan meeting this year was held a month earlier than normal. This was done in order to have a meeting in July. This time 17 of the roster joined us at the Qth of K8AQM in Adrian Mi.. Ted place overlooks the town of Adrain from high upon a hill. In fact you can see the ant system from the roadway then wonder how to get to the house. This meeting was well arranged by the yl's of 'AQM and INF. A special Thank You to the 2 ladies who made a excellant performance in suppling the MRRC group a well rounded meal.

Yes fellows, 17 from the Ohio, Michigan area looked, discussed and commented on Ted's station. It is rather unique, operating from an converted travel trailer. The station layout is designed for operation not socialization. Everything is right there. Nice planning Ted.

The meal served included your typical picnic foods PLUS the world reknown CONTEST CHILI of 'AQM. When all finished eating, we called the meeting to order. The main topics of discussion were the suite at Dayton, Dues and future meetings.

Dave, K8CC has volunteered to chair the suite committee at Dayton for next year. If you notice, you read committee. Yes, we are going to make this a club effort. One man cannot do this whole project alone. Right now we have some of our members signed up to help out.

REFRESHMENTS 'AQM & 'INF to handle the beer
'CXX to handle the liquor
??? to handle the pop

Rick 'RHO has volunteered to handle a new concept in club presentation to the suite attendee's. We would like all members to supply a 14"x18" poster type picture for hanging on the walls of the suite. I know this sounds difficult, but Rick has a connection to make the posters if we supply him with the slides/negatives required. Rick will have more information in the next FLASH.

The advent of hot weather has made it difficult to find some energy to work on the ant system here. But planning is half the fun. If the weather breaks and the aluminum boat comes in, we will be erecting more beams for the upcoming season. YES, the Fish is on PACKET. (ask Dave how many times I have crashed his system) Leave a message on the MRRC MINI-BBS at 145.95 (K8CC).

The next meeting is at the new QTH of Randy, W8FN. This is scheduled for the 16th of JULY. Look elsewhere in the FLASH for the directions and the time.

The August meeting is tentatively scheduled for the 6th. A map to the QTH a K3TUP is included elsewhere in the FLASH.

That's it for now, cu all in Ohio or in Penn.

'CXX

MICHIGAN REPORT - By Dave Pruett, K8CC

Lotsa things happening in the Michigan part of MRRRC country. Packet activity continues to grow, with Dayton the perfect opportunity to acquire the hardware to be digital-QRV. The following stations are now on packet in Michigan: K8CC, W8UA, KE8OC, W8BRHO, KN8S, W8WD, N8BV, K8JM, & N8CXX. K8AQM has a TNC and will be QRV soon.

The MRRRC mini-BBS at the K8CC QTH has proven to be an asset in the Detroit metro area. Recently, the 2M packet RingoRanger was raised from 35' to 100', to improve coverage. Connecting to Cleveland or Findlay appears to be propagation-dependent, but W8CAR in Sandusky plans to soon upgrade his 2M FM signal, solidifying the path.

Enough of this packet stuff! On the HF front, N8CXX and K8CC are organizing a large aluminum buy. What started as a minor project has turned into 720 pounds of aluminum. This material is intended for summer aerial upgrades at MRRRC stations K8CC, W8UA, and N8CXX.

The Daiwa rotator under the 40/20 yagis at W8UA suffered massive failure, causing the beams to freewheel and severing the feedlines. Anybody considering one of these rotators should have a chat with Mike about his experiences. The cables have been repaired, and the Daiwa will be replaced with a prop-pitch. In other projects, Mike plans to add a second 6L yagi for a stack on 28 MHz.

Progress is also being made at the N8CXX station. The cables to the second tower have been buried, making the XYL happy. John purchased a Cushcraft 402CD at Dayton, to replace the 402BA. Other projects before fall include a second 5L yagi for a stack on 15m, and revising the current 6L 10m system to a 5L/5L stack.

If all goes well, there will be lots more high band aluminum in the air at K8CC. The 5L 15M yagi will be cloned to make a stack, with a 3L South America antenna for that band. For 28 MHz, the 5L yagi will also be cloned for a stack, plus a 3L South America antenna, and some sort of long boom yagi (40' or so) up high. Inside, the plans are to convert the 20m 4-1000 amp to a 15m 3-1000Z, and to build a new 20m 4-1000 RF deck. The homebrew amps, plus the current Alpha 70 and Henry 2K3 are slated to be mounted into two six foot racks, courtesy of the NBET Surplus Barn.

The KE8OC station is now QRO. Tim purchased a Heathkit SB-1000 at Dayton, and has finished assembling the kit. The little single 3-500Z puts out in excess of 1000W, and appears to work well.

Big antenna improvements have been made at W8BRHO. A ten foot roof tripod has been installed, which now supports a Mosley MP-33 tribander, augmenting the ground mounted trap vertical. Performance on the high bands is so much improved that Rick has had the courage to horserace with a barefoot K8CC (score: RHO-1, K8CC-0).

FUTURE BIG SIGS - Brian, W8WD, has purchased five acres north of Detroit for the purpose of building a contest station and a home (in that order!). He already has a bunch of Rohn 45G and some beams, and is participating in the big Michigan aluminum buy.

That's all the news for this month. CU at Findlay!

DAYTON 1988 REPORT - By Dave Pruett, K8CC

Well, the Dayton Hamvention has come and gone for another year. Once again, the MRRRC Suite had a very good turnout, and from that standpoint was a big success. One interesting statistic is that in 1987, there were 129 calls on the Suite Sign-In Log - in 1988, there were 236, which is a BIG increase.

Another bright spot concerning the suite was that our expenses were down for this year. The official tally of out-of-pocket expenses comes to \$387 for 1988, vs. \$532 for 1987. This was helped by a drop in the suite rental from Stouffers, plus member contributions from NBET (soft drinks) and K8MR (CocaCola).

However, the dark side was that the improved turnout did not generate improved revenue. The actual cash brought in from the bar till was \$270 in 1988, vs. \$443 in 1987. The second evening in particular was very low, which is surprising considering the number of people present, and that we kept the suite open until almost 4 A.M.

The MRRRC Dinner held Saturday night at the Old Hickory had a very good turnout, with lots of MRRRC people plus guests K4VX, W9RE, W8BYVR in addition to honored guests G3FXB, G3MXJ, G4BUE and G1OAIJ. MRRRC picked up the tab for honored guests, totaling \$83.

In summary, MRRRC expenses for the 1988 Hamvention totaled \$470, against generated revenues of \$270. While we would all like to see a positive cash flow on the balance sheet, I believe it is important to recognize the benefits MRRRC receives from these activities. As the "home" contest club, it is important that we host events to entertain those of like interest at the Hamvention. The stature of our club in the eyes of our peers was enhanced by the Suite and the Dinner, in addition to good times provided for our own membership. In that light, Dayton 1988 should be considered a success for Mad River.

DAYTON 1989 PLANNING

There was much discussion of Dayton 1989 at the Michigan MRRRC meeting. The concensus was that MRRRC should again host the Hospitality Suite, but that we should attempt to move up to a larger suite, such as KCDXC has.

I contacted Stouffers and was offered Suite 425 for our use. This is on the fourth floor (one below KCDXC) and was occupied by the SEDXA the past two years. Suite rental will cost us \$150 + \$9 tax per night. Also, there are two rooms associated with the suite, one with two queen size beds, and the other with a single king size bed.

Based on the member concensus at the Michigan meeting, I went ahead and sent in a deposit for the suite and the associated rooms. K8CC and KK4QA will stay in the queen/queen rooms, while NBATR/DMM have agreed to take the single king room.

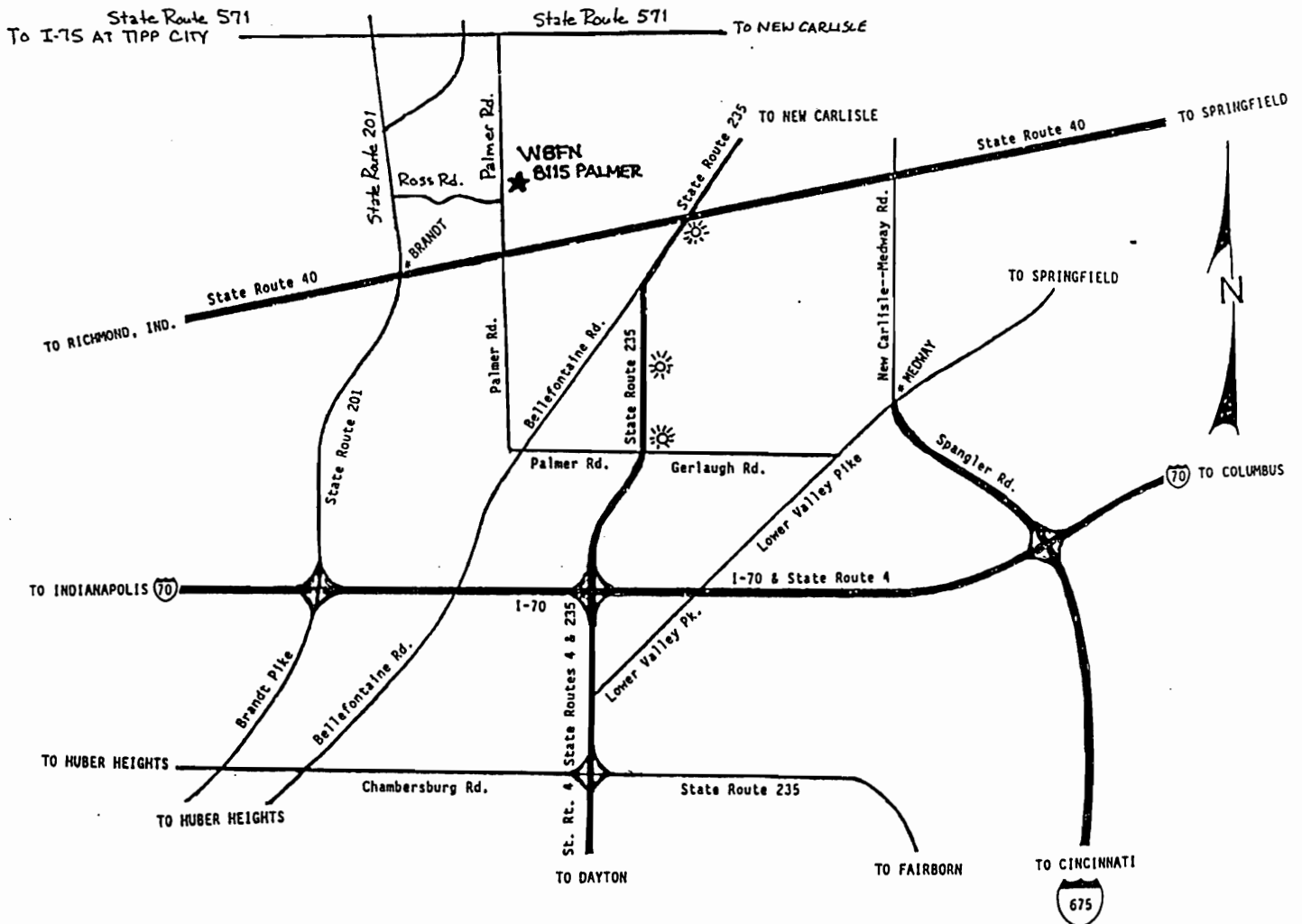
In other planning for Dayton 1989, K8AQM and WD9INF have agreed to handle the beer supply for the suite. Likewise, N8CXX for the hard liquor, and NBET for the soft drinks.

SOUTHWEST OHIO REGIONAL MRRC MEETING AT W8FN

The Southwest Ohio regional meeting will be held Saturday, July 16 at the still-evolving W8FN station/residence. The meeting will commence at 1:00 PM, or whenever we accumulate enough folks to make it worthwhile. Since your host is, to say the least, not a domestic type, don't expect a lavish feed. There will, however, be ample quantities of cold beer and various sorts of other belly washers, plus lots of starchy junk food. Sounds just great, eh? We may be able to crank up a mass pizza feed courtesy of the local Domino's if there is sufficient interest. Come on down and be surprised. For those who may need to crash overnight, there is plenty of room on the floor and a couple of spare beds.

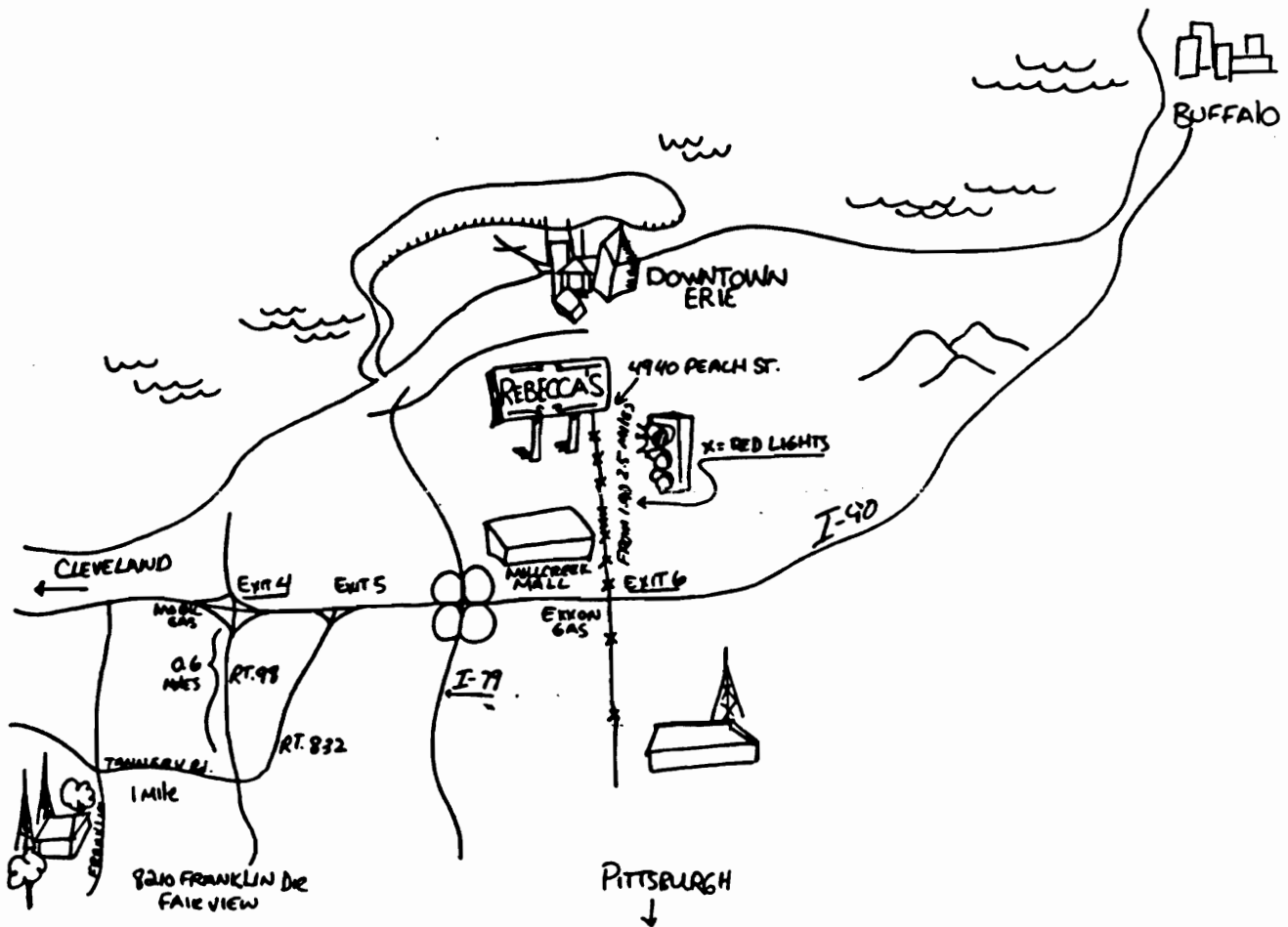
W8FN is conveniently located just off I-70 and I-75 as shown on the accompanying map. If you somehow manage to get lost despite these crystal-clear directions, call in on 146.25/146.85. See you there!

TALK-IN : 146.25/146.85



THE FLASH

PENNSYLVANIA MRRC MEETING: There will be a Mad River Radio Club meeting on Saturday, August 6, 1988, hosted by John Kanzius, K3TUP, in Erie, Pennsylvania. Everyone is invited to attend. For further information, call John at (814) 474-2402.



SIMPLE MODS FOR THE HEATH SB-220:
HIGHER RELIABILITY WITHOUT AFFECTING RESALE VALUE.

POWER SUPPLY PROTECTION

Install a 20 ohm 20 watt resistor in the B+ line by removing the short blue wire between HV board hole J and feed thru insulator CK. Install the resistor in its place. This will protect the H.V. supply and the tubes in the event of an internal tube flashover. (Manual Ref. p45, pictorial 4-8)

T-R RELAY CONTACT SEQUENCE

Relay contacts 2 and 5 are the output contacts for the amp. Bend the N.O. contact #5 up slightly. This will allow the common contact on the output side to "make" before the input contact, thus preventing hot switching of the relay. (Manual Ref. p49, pictorial 4-11 and 4-12)

SPIKE PROTECTION FOR SUPPLY

Install a 510K .5 watt 5% resistor and a .005uf 1KV disk across each diode on HV board. I also recommend replacing each diode with a motorola Hep-170 or =. Install a 130 vac MOV between each circuit breaker (lug 2) and chassis ground. (Manual ref. p49, pictorial 4-13)

METER PROTECTION

Place a cross-connected pair of diodes (Hep-170) across each meter. These will conduct under gross current conditions and protect the movements. (Manual ref. p45, pictorial 4-8)

ALC MODIFICATION

Replace R5, the 33K resistor, with a 25K linear taper pot. The ALC is now adjustable from 0 to approximately -55 volts and can be adjusted to work with any rig. Mount the pot on the rear panel above the plate transformer and run leads thru hole Y. (Manual ref. p49, pictorial 4-10)

COOLER TUBES

With glass tubes, infared rays can be reflected back to the plate by the shiny chassis walls. The tube(s) should be placed at least 1/2 their diameter from such walls to cut down on heat reflection. I would also suggest painting the inside of the final compartment around the tubes with flat black engine paint. This can reduce internal tube temperatures substantially.

LONGER FILAMENT LIFE

Filament failures occur 90% of the time at turn-on. Some of the stress can be eliminated by installing a standby switch so the amp can be switched out of line without turning off power. We don't really want to alter the front panel in order to preserve resale value. By moving the filament transformer back up against the filter bank bracket, enough room is gained to install a 100K pot with a built-in switch in place of the old sensitivity pot. Cut the switch lugs so they just protrude from the switch. Wire the pot as it was before, and wire the switch into the blue wire that goes from relay coil lug 10 to the relay control jack "X" pin 1. Another way to do this is to hard wire the SSB/CW switch lines to SSB (the new power level allows this) and use this switch for operate/standby. However you lose control of the plate voltage level. In tuning the amp in the SSB mode, maximum plate current after tuning should be 660 to 700 mA. (Manual ref. p49, pictorial 4-12)

PLATE TUNE ARCING

I have cut down plate capacitor arcing by removing 1 turn from each supsressor at the plate caps. Be sure to check for parasitics after the change. There shouldn't be a problem but one should check! (Manual ref. p56, pictorial 4-15)

73! from MARK - WB8JKR

(ed.note: Mark is a new member of Mad River and resides in Toledo. He has serviced and rebuilt amplifiers at K8AQM, KD8SF, W8IQ, and WD9INF along with homebrewing his 8877. He would welcome your business! He's good in the call book)