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the official journal of the MAD RIVER RADIO CLUB

the world's most entertaining contest club

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from the DEPARTMENT OF FISCINE PHILOSOPHY

Well, the dog days have arrived and with them my annual ritual of looking up at the antennas and declaring to hell with working on them. I'll wait for the week before Sweepstakes to do serious antenna maintenance, as usual. I trust not everybody has the same poor work habits. I can just hear the busy little Mad River beavers tending to their constructions. Antenna work is undoubtedly a good thing to do since we will need to squeeze out every last point in the contest wars to come.

Our June meeting at the WBUA domicile was well attended by the Michigan contingent, and a few of us Ohioans also showed up. A steady drizzle was unable to dampen the enthusiasm of those present, and a few hardy souls even ventured out into the rain to survey Mike's beautiful installation. The formal meeting was quite lively and productive. The principal topic was the club's priority effort for contest season 1985. The consensus was that this year we will put on a maximum push in a DX contest. A lengthy and frequently animated discussion of which one to hit hardest ensued. When all was said and done it was settled: this year Mad River Radio Club will Stomp Ass in the CQ WorldWide DX Contest. This is of course a formidable challenge. We are going to have to get every last potential point out of every single member on both modes. We could also benefit from one or more DXpeditions by the membership (are you listening Mr. Stahl?). For the first and last time in many years the CW portion of CQWW does not fall on the weekend after Thanksgiving, so we should be able to muster more participants for code. You will be hearing more about this from your friendly regional VP. Get ready now.

The other significant happening at the Michigan meeting was a discussion of how to set up an efficient way of passing multipliers among the multioperator stations within the Club circle. NSET suggested looking into packet radio links for this purpose. Packet radio seems to be a near-ideal way of doing this since it allows unattended operation. I have since heard from KBCC and WABYVR about their research into this matter and it seems to be a very good way to go. Most stations should be able to scrounge a computer of some kind and the Terminal Node Controller (packet box) is available for a reasonable price. continued on page 11

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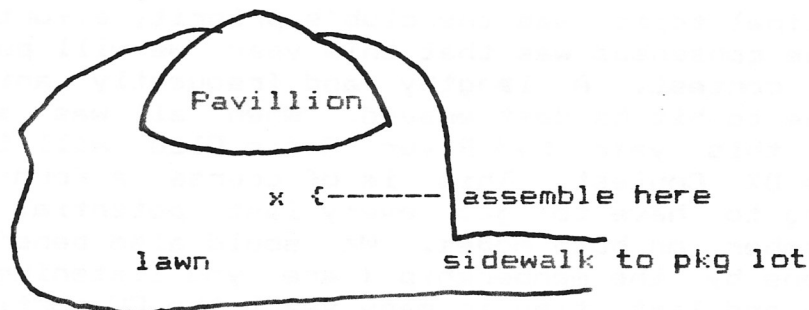
**CULTURAL EVENT** de KBMR

As I mentioned at the Dayton meeting, I think it would be fun to have a MRRC event suitable for wives, dates, etc., as well as us radio nuts. Here in Cleveland in the summertime a concert at the Blossom Music Center, located between Cleveland and Akron, is an obvious choice. Although one can sit in a seat inside the pavilion, the real way to do it is to bring a blanket, picnic lunch, and bottle of wine and enjoy the music from out on the lawn.

The date for this is Saturday evening, August 17. The Cleveland Orchestra will be performing. Concert time is 8:30, but be there by 7 or so to find each other, and enjoy dinner and gossip. Let's stake out an area straight back from the podium, a little way up on the Grass.

Tickets are sold at the gate, \$6.00 for lawn admission. in case of nasty weather. call KBMR to confirm (216-381-7030). In any event, you could get seats undet the pavillion (\$11 to 15.00).

Bring your wife, girlfriend, kids or just yourself. For those coming a long way, an overnight place to stay can no doubt be arranged. As an added incentive for the hard core hams, the following day is the Warren Hamfest, one of the better ones around. See you!

**EDITORIAL**

Beneath his exterior, replete with bravado and opinion, your Editor is actually a man of very few words. However, the powers bestowed upon me by the MRRC membership provide for occasional BS and expression of opinion beyond that allowed the normally reserved WBLNO.

I GOTTA TELL YA! I'm so proud of our membership. We may have lost the war on SS; however, we went out and Stomped some Ass for Field Day. If we had taken a poll prior to June 22 I am convinced that NO ONE would have predicted the number of entries and generally high scores that we achieved. Congratulations to you all!

## FIELD DAY REPORT

Although reports with final results have been sketchy, the following tabulation does include final data for the KUBE, K3LR, W8GZ, KBCC and NBAA operations.

CALL	CW Q'S	SSB Q'S	TTL Q'S	QSO PTS	BONUS
K3LR	1184	680	1864	6090	400
W8GZ	822	1136	1958	5560	700
KUBE	829	264	1093	3844	300
WK4D	500	1200	1700	4400	UUU
KBCC	911	634	1545	4912	300
NBAA	896	627	1523	4838	200
AD8P	620	780	1400	4040	UUU
WB3KKX	300	1200	1500	3600	UUU
WBLT	400	960	1300	3520	UUU
AND, IN A CLASS BY THEMSELVES WITH FIVE WATTS OUTPUT:					
WB8JBM	700	250	950	16500???	WOW!!

Ten 1-A entries is an unbelievable tribute to the competitive spirit of the MRRC membership. PLEASE, send your summary sheets to NBCXX--

John Tymensky, NBCXX  
12333 Sandy Bottom Drive  
South Lyon, MI 48178

The MRRC-Special Operations Branch (fitting acronym) is already making plans for 1986. The three old guys and one kid, AD8I, had a lot of fun and no fights. Hard to believe that W8LND, KN8Z AND K8HFO/AA could survive their mutually disgusting social habits for 24 hours in a 24 foot motor home! The secret seemed to be not running out of appropriate beverages and not allowing Doc too many of those high-ethane veggies.

Using W8GZ, the group assembled on a FB hill near Buckeye lake in Fairfield County. Phased 40 meter delta loops were hung on a tower at the 65 foot level. The tribander was installed on a 35 foot cherry picker. Our 80 meter antenna was only about 30 feet above ground suspended between two push up masts. We have to improve on that for '86 cause the rate was stinko!

AD8I made a super contribution to the score by providing packet, satellite and solar power mults as well as sending and receiving the field day messages. Bennett and Warden have put together a slide/audio program which will be shown to the Columbus ARA at the annual FD meeting. If others have shots of their operation it may be fun to show them at the KBMR Christmas Party or some other suitable time. Enough about the Second place lids. On to the big time operation!

**FIELD DAY continued****K3LR REPORT PREPARED BY KBMR**

The 1985 K3LR Field Day effort was from the same hilltop as the various efforts over the last 15 years. For those who have been there in the past, this year's setup was almost identical to the 40 meter position of the 3A years. The site is on a very nice hilltop about 8 miles north of Sharon, with convenient trees to hold up a 135 foot dipole at about 60 feet at the ends.

This year K3LR did the 27 hour setup operation. It took one and a half hours to get on the air. It would have been less but for the rain at the start, forcing us to fool with a tent as well as the radio gear. The main rig was Tim's C-line. My TS-830 got wet in the rain, causing the receiver to die. But by night it dried out and healed itself.

For our 160 effort we also put up a 260 foot dipole, about 50 feet at the center and 10 feet at the ends. The first qso was K7TR in Arizona! Still, results were limited by activity--12 Qs in 16 minutes.

We also go on 2 meters with the TS-830/tv502, a 70 watt amp and 8 elements at 15 feet. Most of the Qs were Sunday morning in 2 or 3 minute bursts while Tim was changing bands on the main station. We worked from Indiana to Virginia, including 3 CW Qs by asking SSB Qs to switch to CW.

With Dry weather to eliminate the need for tents, and a couple of warm bodies to hold fishing rods etc., we could be on in not much more than 30 minutes. As it was, the 27 hour routine was probably worth about 100 Qs. So hope for short skip like this year and see you in 86!

Just a few words about the KBCC operation from WBLND since I had a verbal report from Dave. Their crew consisted of Chicken Chicken, WAB Triple R and N8DET. An unknown non-MRRC type was also present, to add dignity to the occasion.

The CC group did the late set-up routine and made do with one 80 meter dipole center fed with open wire line using a squirrely Johnson matcher. The location was in a state park on Lake Superior (?). Based on the description of the set-up and the results, One must conclude that the location was FB. Dave reports that the crew is reved up for 1986.

**TOWERS towers towers**

KBAZ is in the midst of ordering tower sections from Rohn, at a better than you can get price. If Tom hasn't put it in the mail, you may be able to get a good deal on some support for that new 80 meter twister!



**MAD RIVER HISTORY** by JIM STAHL, K8MR

In the beginning was the Potomac Valley Radio Club and the Frankfort Radio Club. In the contests they would go head to head, and when it was all over they would congratulate each other, and say it was good.

Over the years FRC drifted away from the domestic contests and toward the DX contests. Murphy's Mauraders was born and took on the job of providing competition for the PVRC. It was still all simple, and it was good.

In the spring of 1970, at the urging of people from the other side of the country, the ARRL Board of Directors voted to extend the limits for club territories to 175 miles. The Atlantic Division Director was not sure this was good, and asked to be recorded as voting against. The July 1970 issue of QST announced this change, with the Operating News column including examples such as a New York City club covering from Baltimore to Boston.

Living in the Center of Ohio was Dick Bennett, K8EHU. He looked at what such a radius would cover in his neighborhood. He also asked how much area might be covered by careful location of the center of this 175 mile radius circle. With a circular paper cutout and a Gulf road map, he discovered that it could cover such cities as Detroit, Indianapolis, Louisville, Cincinnati, Pittsburgh and Cleveland.

At Dayton in April 1971 K8EHU approached various big guns about forming a club covering such an area. On Saturday morning, April 24, 1971, a group of a dozen or so contesters ate breakfast at the VJ Pancake House across the street from the Dayton Sheraton (later the Biltmore Towers), which was the downtown Hamfest hotel in those days.  
*continued page 6*

**DAYTON SUPPORT**

a BIG THANK YOU to the following members who threw in cash to support our hospitality suite at the 1985 Hamvention: K8BE, AD8C, W8UA, W8FN, W8LNO, N8EKS, K8CC, N8CXX, W9DBF, K8NZ, W8KIC, K8BWC, K3LR, A8BS, AD8I, K8AZ, N8DET, W8BYVR, K8BJH, K8MR, W4MT. The donations ranged from \$10 to \$50 and were each very helpful to the cause. In addition the Yankee Clipper Contest Club members who were present at the Hamvention passed the hat and came up with over \$100 allowing us to come through the year with no net drain on the Treasury from the Dayton event. de K8NZ

**W8KKX FIELD DAY**

Scott and his pals N8EKE AND N3CGK went out as the MAD RIVER RADIO CLUB- THE PAN-GALACTIC GARGLE BLASTER BABEL FISH BRIGADE. The group enjoyed itself greatly and is looking forward to the 1986 outing. Scott is a new MRRC member and showed his FB skills in this first event.

**MAD RIVER HISTORY** continued

Over pancakes and eggs the testers decided to go for it with the proposed club. Naturally the question arose of what to call the club. The Ohio-Michigan-Indiana-Kentucky-West Virginia-Pennsylvania-Ontario Contest Club somehow didn't make it. Where again was the club center? No, the Wapakoneta Radio Club wouldn't do either. What's this river shown running through western Ohio? The Mad River? Sold! The group also decided to make the 1971 Sweepstakes their first serious contest effort, elected K8EHU the "Big Fish", and then left to go forth, multiply, and search for flea market bargains.

The first club membership list in the second issue of the 'FLASH' listed 36 members, including (with today's calls) N4AR, K5TM, K7GM, K7NHV, KU7U, N8AA, K8BPX, K8EHU, W88EUN, K8IA, W8KIC, K8MR, K8NZ, W8TBQ, W8WPC, W8YVR, KN8Z. Each subsequent issue of the 'FLASH' listed more new members. The weekly net on 75 meters was bustling with activity. By SS time the club roster had grown to 154 members. Needless to say, on the SS weekends the bands were filled with the sounds of "GO MAD RIVER" as the members greeted each other. Naturally all this caught the attention of the PVRC and Murphy's. When the SS dust settled, it was a close finish, with MRRC out in front. As the 'FLASH' put it:

*The SS results have not been taken well on the East Coast, especially by many of Murphy's members. It is also reported that many PVRC members do not like our victory, but, they have generally accepted the situation like the sportsmen and gentlemen they long have been respected for. On the other hand, some of Murphy's members are very bitter and are acting very frustrated. However, we have expected this reaction.*

Murphy's did protest. The SS results were published in the May 1972 QST: Mad River was first with 9,960,874 and 174 entries, with K7NHV operating W8SH winning both modes; PVRC took second with 8.79 meg and 133 entries, and Murphy's third with 7.36 meg and 116 entries. The Mad River listing included the famous asterisk, with the footnote saying the validity of the entry was in question and would be determined later. There was much haggling back and forth with ARRL Headquarters over whether certain MRRC membris were indeed within the 175 mile radius, and whether the MRRC needed to have any in person meetings at all (the rules said nothing on this topic). A QST "Stray" in the June issue announced that MRRC had been DQ'd, and tha the club gavel went to the PVRC. Today it rests at the QTH of W3LFL.

At a Mad River dinner that spring at Dayton, ARRL President W2HD appeared to attempt to soothe the feelings, and managed to give one of the better foot in mouth performances of recent times. He told us that as an experienced tester, he knew that "when Murphy strikes, Murphy strikes hard". We already knew.

**MAD RIVER HISTORY** continued

MRRC submitted a much smaller entry for the 1972 SS, but it was ignored. No specific rules for clubs were adopted until 1974 when the present four in-person meeting rule was instituted. By 1975 the MRRC concept was again bubbling up, based around the idea of holding the four meetings at popular hamfests around the MRRC territory. Prompted by KBMR and KBNZ, a reorganization meeting was held at an ARRL division convention in October 1975. By Dayton time in 1976 the club was back in full swing. KBNZ was elected Big Fish, succeeding founder KBEHU who was keeping himself busy enough with night time law school. The 1976 SS entry was accepted with no problems at ARRL, taking fourth place with 42 entries and 3.7 meg. The 1977 ARRL DX test was the first DX effort. MRRC was by now off and running, quickly becoming an active force in the contests, a legitimate contender for club awards, and frequent contest/DXpeditioners.

**THE BIG FISH**

1971-1976 KBEHU  
 1976-1977 KBNZ  
 1977-1978 KBMR  
 1978-1979 KBND  
 1979-1980 ACBE  
 1980-1981 K3LR  
 1981-1982 AD8P  
 1982-1983 KBCC  
 1983-1984 KBCC  
 1984-1985 NBET

<b>FIELD DAY</b>		<b>BAND BY BAND</b>				
BAND	80	40	20	15	10	160 (2M)
K3LR CW	336	566	228	51		(3) 12
SSB	266	264	103	26		(21)
NBAA CW	261	302	250	68	15	
SSB	267	227	87	46		
KUBE CW	233	193	238	98	58	9
SSB	118	66	42	26	12	
WBGZ CW	270	219	251	60		(22)
SSB	114	504	506			(12)
AD8P CW	256	296	54			14
SSB	254	301	215			7
KBCC CW	294	257	226	70	64	
SSB	266	132	60	93	83	

THE FOLLOWING ARTICLE WAS LIFTED, WITH DUE CREDIT TO THE PUBLICATION AND AUTHOR, FROM THE KANSAS CITY DX CLUB NEWSLETTER. THANKS!!

**BIG EAR** by John Chass, W0JLC, KCDXC President

You say you're tired of weak low band signals? You say you're tired of heavy low band static noise? You say you can't hear a W1, much less the S92 on 3795? Then try an 80 meter "Big Ear" for the 1985-86 season.

A basic Big Ear consists of the following:

- a. One 400 foot piece of wire (size not critical)
- b. One 200-600 ohm resistor (2 watt)
- c. One ground rod
- d. Some trees or other simplistic 6' - 10' supports
- e. A piece of coax
- f. Some inexpensive electric fence post insulators.

It doesn't take much to support Big Ear. Almost any object will do as long as it insulates the wire from ground and it's in the direction you want. Keep the height from 6 to 10 feet above ground. If the ten foot level is exceeded the overall noise level will increase. If you go lower than 6 feet you may hang your neighbors. At the farthest end terminate the wire to ground with your 200-600 ohm resistor.

At the shack end use a simple piece of coax to feed your receiver. (see Figure 1.). This is not an optimum "Big Ear" but it should increase your receiver performance immensely in the direction of the wire. If you want a more general receive pattern, you can unterminate the wire by removing the resistor. A simple circuit can be used to lift the resistor out of the circuit (figure 2.). In this case, you simply run some 12 volt DC power down the wire which trips the relay and puts the resistor in the circuit when wanted. With the resistor in, the antenna will provide "enhanced" signals in the direction of the end of the wire. With the resistor out, the wire acts as an omni-directional low noise receive-only antenna.

#### IMPROVED BIG EAR

There are several ways to improve the Big Ear. Some can be added later, some you may want to consider ahead of planned construction time.

- A. Length: There are many who say that a full wave (528 feet) multiple improves gain. The calculated two wave model for 80 is only slightly longer than the 400 foot starter; however, it may be enough to put you out of your space limits.

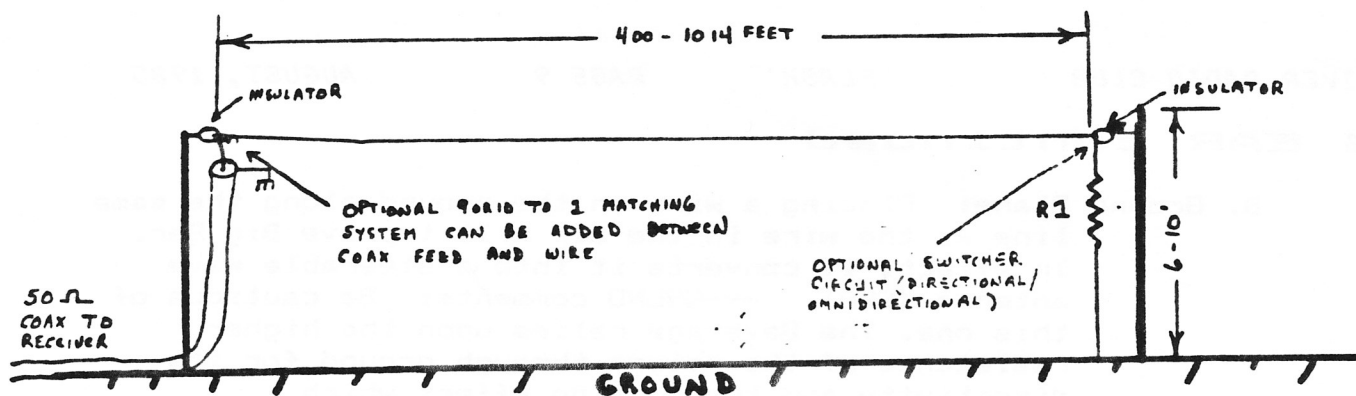
**BIG EAR continued**

- B. Ground Plane: Placing a wire on the ground along the same line as the wire in the air will improve Big Ear. In effect, it converts it into a steerable wave antenna (SWA). ---WBLND comments: Be cautious of this one. The Beverage relies upon the higher resistance of the return through ground for its directivity and the phasing effect which reduces the high angle component of the received signal--they don't work as well over highly conductive soil--so you may wish to delay application of a GP.
- C. Receiver Matching: Termination impedance of the Big Ear is 400 to 600 ohms vs. the 50 ohms your receiver likes to see. Details for construction of a 9:1 Balun are shown at Figure 3. W0AR calculates the loss due to mismatch without the Balun as 59 dB. That's about 9 S-units.
- D. Receiver Protection: Another WBLND addition; be sure to ground the receiving antenna during transmit or use a protective device such as that offered by Design Electronics Ohio. The Receiver Guard 2000 is available from KN8Z, 4925 South Hamilton Rd., Groveport, Ohio 43125. This point is especially important with radios such as the TS-830 and TS-930 which offer a separate path for receive antennas.
- E. Multiple "Big Ears" : If you have the space, you can always run more than one of these critters in the directions of major ham populations.

The improved signal to noise ratio of a Big Ear will amaze you, especially if you are using a vertical for transmit. If you are using a changeover switch to put the beverage in the line for receive on an operator option basis it's probably a good idea to get a few extra resistors because you will likely transmit with the Rx antenna and zap them and your Balun. It would be far better to find a way to avoid the possibility! (Here at WBLND we don't have the space for a Beverage; however, my neighbors have kindly planted some ornamental pear trees along the street which are now tall enough to keep a wire over their driveways. You too may be able to sneak one up, at least for contest weekends.)



**BIG EAR continued**



**FIG 1**

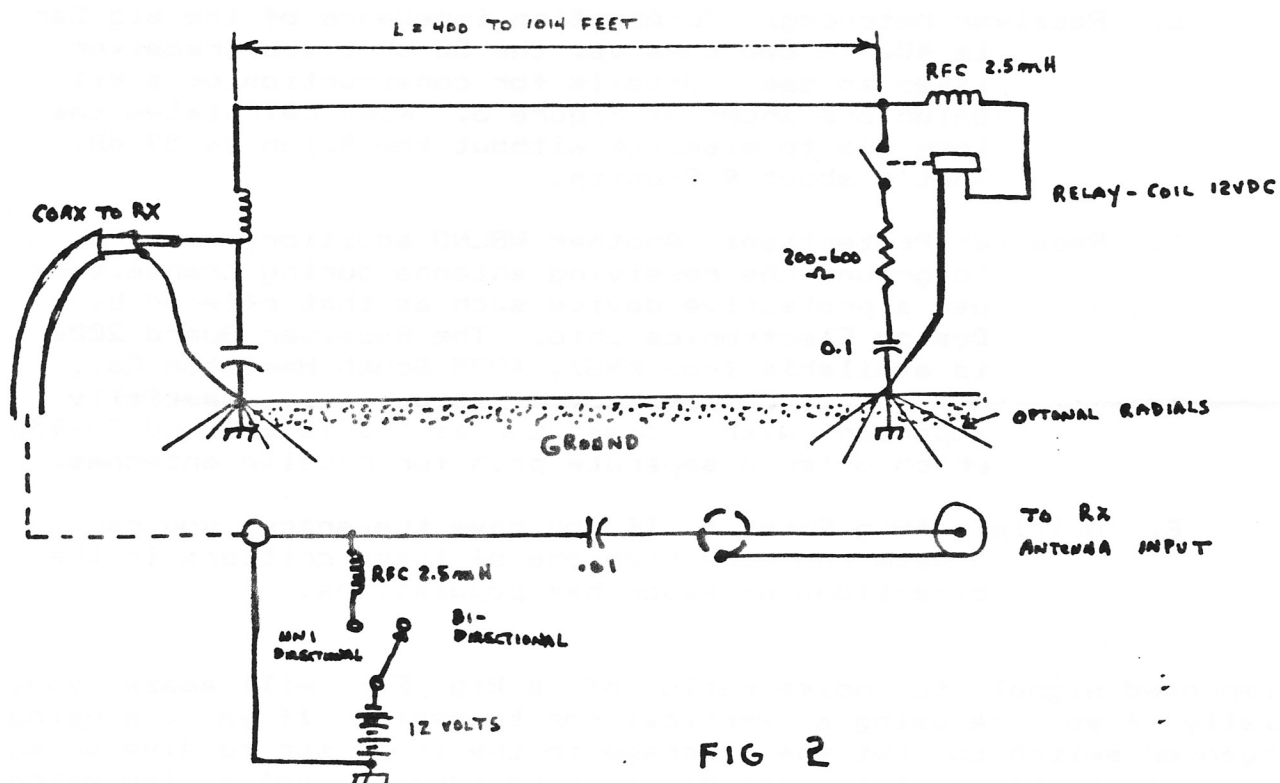


FIG 2

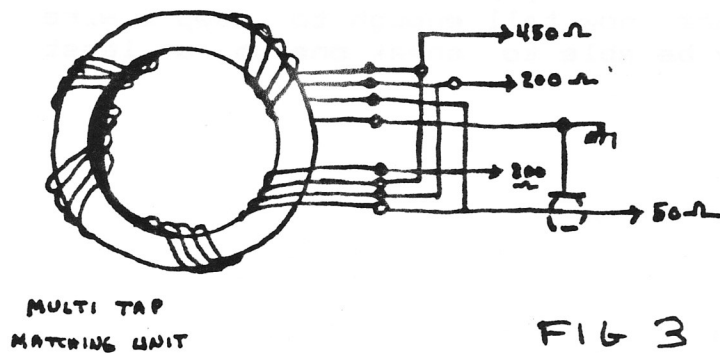
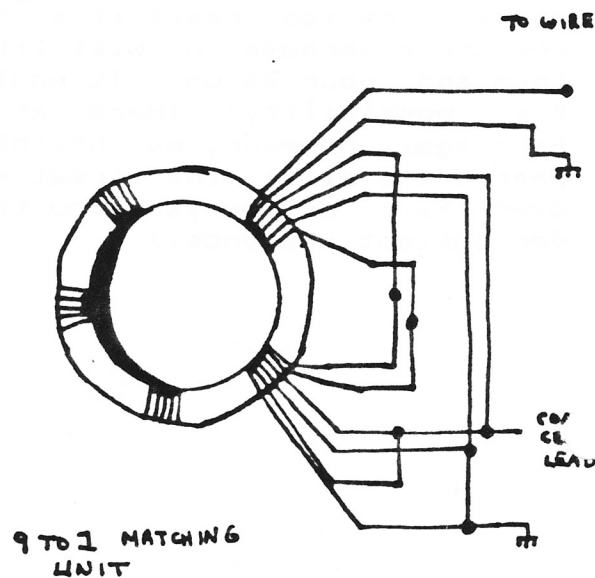


FIG 3



**DEPARTMENT OF PISCINE PHILOSOPHY** continued

Since everyone has a 2 meter FM radio of some kind, this would seem to be the logical band to use for the packet links. We need to set up a series of propagation experiments to see if it is going to be possible to establish the 2 meter links between the multi stations. This technique has some really exciting possibilities and I feel we should pursue it seriously.

There is good news and bad news about the 1986 Dayton suite, according to N8DET. The good news is that the Stouffer's folks know a lot about how the suites will be handled. The bad news is that everything they know is wrong. The Stouffer's folks adamantly insist the only person they will deal with is last year's Hamvention General Chairman. This gentleman has assured me personally that he has nothing whatever to do with suites or anything of the kind. I am in the process of trying to get some more intelligence on the situation from the locals here. Stay tuned.

Also regarding the suite, ADBC suggests that we might want to put together a continuously running slide show of MRRC member's stations. This sounds good to me and I just happen to work with a guy who does this kind of thing a lot. He has even indicated he might be able to record a narrative track synchronized with the slides. It ain't KCDXC, but it ain't a bad start. If you're interested in such a show let me know and start getting together a few slides.

It's time to wrap this sucker up and go to press! I'll see everybody on 3825 Monday nights. Remember the CQWW challenge and plan accordingly.

**MRRC SCOTCH AND SCATTER SOCIETY**

The MRRC/Cleveland Scotch and Scatter Society FD entry (NBAA) had a great time. Operators were NBAA, KBAZ, KBNZ, W8KIC AND W8HSK. Operations were from the Case western Reserve Farm (tnx to W8KIC) on a hilltop that must be seen to be believed. Friday evening antenna erection was done with the help of K8MR, using his trusty bow, and a cooperative aluminum ladder. We put up a 40 meter double extended zepp in record time for us--about one and one half hours. We also put up a 20 meter ground plane that wasn't worth the effort because we didn't use it at all.

All operating was done from a motor home owned by W8KGE ( KBNZ'S Dad). It had it's own built in 3 kw generator that ran off the Rv gas tank, non-stop all weekend. Two TS-830's handled the RF chores. Best rates were an 80 hour by KBNZ on 80 meters at 0200Z and a 114 hour on 75 meters by KBAZ.

The total of 1523 Qs broke out at 896 (61 rate) for code and 627 (90 rate) on SSB. A fun time was had by all due to the ease of set-up and take down. We even found time to cut guy wire for the new KBAZ super station. We are all looking forward to next year. Ron Harps, KBNZ

## MRRRC AREA VICE PRESIDENTS

NORTHEAST OHIO-----JIM STAHL, KBMR  
FINDLAY/TOLEDO-----BILL KELSEY, NSET  
SOUTHWEST OHIO/NORTHERN KY---JEFF CLARKE, KU9E  
SOUTHERN MICHIGAN---DAVE PRUETT, K8CC  
COLUMBUS/CENTRAL OHIO---JOE WARDEN, W8LNO  
WESTERN PENNSYLVANIA----TIM DUFFY, K3LR



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