



AMATEUR RADIO SERVING THE PUBLIC

# CMRA Newsletter

P.O. Box 283 Columbia, MO 65205

July 1990

**President** Jesse Bowen, WMØY  
**Vice-President** Mike Harmon, WBØLDJ  
**Recording Secretary** Roger Young, NØJZC  
**Corresponding Secretary** Dale Huffington, AEØS  
**Treasurer** Earl Felten, KFØGE  
**Board Member-at-Large** Don Blenden, NUØT

**WDØDVG**  
**Repeater**  
**146.16/.76**  
Antenna atop  
Paquin Towers  
at 1023 ft. ASL

## June Meeting

The meeting was called to order at 7:00 P.M. by President Jesse Bowen, WMØY. Roger Young, NØJZC, read the minutes of the April meeting which were approved. Treasurer Earl Felton, KFØGE, reported on the past month, including the hamfest. His report was received with enthusiasm.

**Repeater** Mike Baker, NØLBA, reported that the ATV repeater is now on line. The digit "9" is now working on the autopatch. Mike also recommended purchase of an interface board to increase the -76 repeater's capabilities. (See comments elsewhere in newsletter). He reminded members of the need for proper net procedures during weather emergencies. It is important to use terms accurately and cautiously. Just using the term "toronado" can set off a spate of calls to Police operators when they can least afford the time. Making general observations about the weather or becoming excited during potential crisis situations takes up air time which may be needed for fast, clear information exchange. John Darby, KSØI, has donated 7/8 inch hardline for the repeater. Jesse, WMØY, called for a vote of thanks from the membership.

Jesse, WMØY, called for a vote of thanks to Hamfest 90 chair Ben Smith, WØPCK, and his committee, and all volunteer workers and helpers. He hoped that the club members who attended and enjoyed the Hamfest, but did not help out, will be able to help next year. Jesse asked for volunteers for next year's hamfest committee. Doug Turner, NØIKD, John Turner, NDØN, Roger

Young, NØJZC, and Jesse Bowen, WMØY, agreed to serve. John Turner, NDØN, reported that 55 exam elements were administered at the hamfest, with 32 passed, 23 failed, 17 upgrades and 1 new novice. The over-all pass rate was 58%.

## Public Service

Ann Guptil, WBØTEG, asked for volunteers to provide communications at the cross country horse trials on July 8th. Jesse, WMØY, asked for volunteers to help with the MS bike races on September 8 and 9. If interested, please contact them.

**Program** John Turner, NDØN, and Ann Guptil, WBØTEG, led the membership through traffic handling procedures for phone and CW on the high frequency bands and on 2 meter packet. John challenged the group to try their hands at originating some traffic on the next Wednesday evening CMRA net. He explained clearly what the terms and procedures are for, and how the system works. Ann explained how the packet networks allow us to start a message on its way through the local packet BBS station and how it is guided through digipeating techniques to its destination. They made a very complex subject clear and interesting.

**Membership** An application from Jae H. Kim, N2KQU/AE will be voted on at the July meeting.

**VEC Exams** following the June meeting, there were five candidates taking exams under the VE program. Eight elements were taken, four were passed, and two candidates upgraded.

Doug Turner, NØIKD, is now an Advanced Class licensee and Terry Huskey, KBØGZR, is now a General Class licensee. Congratulations to them for their achievements. Volunteer Examiners were John Turner, NDØN, Dewey Bennet, WMØH, and Jesse Bowen, WMØY.

The CMRA will offer ARRL/VEC exams for all written elements following the July Meeting at the Boone Electric Coop. If you have questions about study materials or how to get started, call John Turner, NDØN (657-2391) or Jesse Bowen, WMØY (474-7674).

**CMEN Report** In June, the Central Missouri Emergency Net held 4 sessions. The net meets every Wednesday at 9 pm on 146.16/76 to handle traffic and practice. Net manager is Ben Smith, KØPCK. All hams are welcome.

## July Meeting

The next club meeting will be on July 10 at 7:00 in the Community Meeting Room of the Boone County Electric Cooperative, 1413 Rangeline Road.

The CMRA Newsletter is published monthly by the Central Missouri Radio Association. To be included in the mailing list or to submit informational, editorial, or technical articles, contact Dale Huffington, AEØS, at 2709 Cimarron Drive, Columbia MO 65203 (875-6170). Equipment ads by individuals can be included on a space-available basis.



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## Repeater Improvements...The

Technical Committee has investigated ways to solve several of the problems with our present repeater controller and ways to provide options for growth as new needs and opportunities occur. Mike Baker, NØLBA, has investigated cost-effective options. The unit which will do the best job of interfacing with our present equipment and providing most of our present needs and likely growth possibilities is a computer interface board.

This board will give us a new software level (3.42 to 3.5) and will add 500 words to the repeater's vocabulary. It will provide two RS232C serial ports, two more Touchtone receivers, an intensive on-line "help" function for controllers, and a program for IBM/PC Compatible computers which will print out programming sheets. Access to repeater functions is controlled. Repeater users, repeater operators, and the repeater controller or programmer can each have access to the repeater functions needed.

At present, the capabilities of our repeater controller are underused because of the difficulty of programming it. All programming is trial-and-error, with the instructions fed to the controller by individual touch-tone commands. It can take twenty-five tones to set up our present two tone "weather alert" beep, for instance. If a wrong tone is punched in, anywhere in the sequence, the only way to find out is to activate the command and see if it works, and then to re-enter the whole sequence until it is right. The instructions for doing the programming are long and complex, so doing a new program is time-consuming and difficult.

With the Interface board, and a telephone modem which Mike, NØLBA, will donate, our repeater programmer or control operators could use an IMB-PC

compatible to access the repeater via telephone. They can type commands quickly, seeing them on the screen, verifying them with a print out, and -if needed- calling up the on-line help functions to solve programming problems. With this board and the larger vocabulary it would be possible for us to quickly program the repeater to replace the present two tone weather alert beep with a voice announcement covering a wide range of specific conditions: from alerts, warnings, and emergencies, through thunderstorms, toronados, and so forth. A St.Louis repeater with the same controller we have and this interface board recently handled an emergency by programming in instructions for hams in the response group to report in to the EOC. The larger vocabulary would cut down the number of calls on the repeater and to the EOC asking what the specific weather condition is. (The present control via touch tone pads will continue to be available.)

The interface board will also permit us to continue to use the phone patch while Ann, WBØTEG is changing the programming. At present, whenever she needs to change the programming, the patch is down, as several of us have discovered. Occasionally the patch is in demand for the same reason the controller instructions need to be updated.

This Interface Board also provides for future growth. The second RS232C port will allow for connection to a packet TNC. This capability, should we decide in future years to add it, would permit programming to be done by a packet station on the control link. It would also permit us to leave messages in one mode and pick them up in another: we could use the voice channel to leave a message which could be picked up by the other ham over the

telephone or by packet, as well as by the regular voice channel. Better programin access also would permit us to have better security over the use of the phone patch. If someone repeatedly used the phone patch for a call not allowed under F.C.C. regulations, for instance, we would be able to recover the last number dialed, identify it, and even could "lock out" that number on the repeater's patch.

Another use of the repeater's increased accessability and vocabulary is made by another St. Louis repeater club. When they have a new member, the repeater is programmed for several days to announce the new member's name and call with a "welcome" message. The repeater can also be programmed to limit messages to specific periods, so that heavily used "drive time" periods have only a brief courtesy beep.

Since Mike obtained the price quote, several weeks before the meeting, the price has increased to \$500.00. However, that would be the total expense for these functions: the board and its accompanying backplate fit into the existing controller, and all plugs or other interface devices are already in place. No new phone line is needed; the modem will be donated to the Club.

At the July club meeting, a motion to purchase the Interface board will be on the agenda. Please come prepared to discuss what we should do and vote on the motion. In the mean time, Mike, Ann, and the club's control operators are available on the repeater for more information.





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**Field Day** Activity started at 1 p.m. on June 23 and went steadily through the night until late afternoon on the 24th at the Rockbridge State Park site. A phone station, a QRP CW station, and, on Sunday, a 10 meter novice station were operated on battery power. Participation was excellent, and guests, including a friendly early morning visit from a patrol car, were welcomed.

**President's Corner** Field Day is supposedly a test of our ability to set up portable communications centers under adverse conditions using emergency power. On June 23 and 24, those goals were sometimes hard to keep in mind. First, there was the awful Field Day weather. As most people associated with Field Day the last few years know, mild (even cool) temperatures and a pleasant breeze seemed strange. Then, there were all the people who showed up as a further distraction - over thirty club members by my count, plus all the family members at the Saturday afternoon picnic. It was hard to fully appreciate the adverse conditions with so much radio talk, eating, and general merriment. Many of the newer club members seemed to lose all perspective on how tough Field Day really is in their excitement at working the pileups for the first time. The phone station was especially busy, and there were even some CQs heard coming from the phone tent. Ann's (WBØTEG) tent, by the way, turned out to be quite a useful refuge in the early hours of Sunday morning - it was the warmest area around! Was this really the last weekend in June?

The CW station was also manned continuously and its operators were able to experience at least some share of good, old-fashioned Field Day adversity - too many stations on the air!

Well, a QRP operation should expect some frustration, and as John, NDØN, described it, it's the old QRP dilemma: either conditions are poor and no one can hear you, or conditions are good and so many other stations are on, no one can hear you.

Well, we have a few memories of this year's struggles to help us steel ourselves for next year: Earl, KFØGE, bundled up in a jacket, a blanket, and a (crinkly) tarp to keep warm; your President tempting fate by climbing trees to put up yet another antenna Sunday morning; and the sight of seven hams trying to make a 10 meter dipole (sounds like the beginning of an old joke). Next year, I'm sure things will be back to normal to provide us the adversity we need to really appreciate Field Day. One thing we shouldn't change, though. It's hard to imagine what a total disaster this year's effort would have been without Mike (NØLBA) Baker's sun coffee - not coffee made by the sun, but coffee as hot as the sun!

**Wanted:** a used 2 meter HT. Contact Don Barnhart, WBØZFE.

**Acknowledgement:** Ken Hegstad, KØOUD, donated a textbook for the club's library: Communication Electronics, by Robert L. Schrader.