

Published by Iowa City Amateur Radio Club and Univ. of Iowa Amateur Radio Club.

Editor -- Bill Bonney Special Bob Lucas WAGDXZ for his help Iowa City Amateur Radio Club Officers:
President -- George Carsner WØPPF
Vice President -- Jerry Cooper WBØPLZ
Secy-Treasurer -- Lou Facto WAØQD8
Activities Chmn -- Luke Van Orden WBØQFQ

Do it yourself antennas

DesTim Daniels

One must remember Cw, Ce, Re the efficiency of an antenna system goes up as the radiation resistance of the antenna is increased.

For a ground plane antenna, only three or four radials are recommended for a single-band antenna. On page 601 of the 1973 ARRL Handbook, there is a note to the effect that no matter the height of a ground plane's radial system with respect to ground, the antenna will still produce a low angle of radiation. But the Handbook says that for the antenna to be a true ground plane the radials should be at least a quarter-wave above ground. In speaking of multi-band ground plane on the same page, the Handbook says that sgain the radials, four of them, should be a quarter wavelength of the lowest frequency.

For ground-mounted verticals, the feed-line which is usually coax has to be below the radial plane. That means that it will usually be buried in the ground. I found out that regular RG58 will

very soon be contaminated by the ground chemestry and will like a bottomless pit for act RF. WBOOUP suggests burying plastic water pipe and PVC running weather-proof coax You like RG213 through it. might as well use largercapacity coax. There is no use being limited in power level by what feed line is in ground. It is very interesting trying to persuade RG213 to go through an elbow in plastic water pipe. At each end of my run of pipe I used two 45 degree elbows. I ran some bare #18 copper through the pipe sections as I put them together, and was able to fasten one end of that wire to the coax and pull it through the elbos and the 40' of pipe. If something goes wrong, aluminum ground wire #12 or #14 gauge can bail you out sometimes.

If I write any more it will become obvious that I dont know any more, and the rag will run out of paper. Verticles are nice because you don't have to wait for them to turn. There are more QRN problems... but if you are calling CQ for example, you dont't have to figure out

where to point. And if you have a sked with a guy in Montanna you are usually called by a guy in New Jersey.

That makes life more interesting.

Gary, KOGVB, has a new Info-Tech keyboard and is working great amounts of DX-CW with it.

The keyboard converts a CW signal into a visual character on it's video screen, so when a QSO is received, you just read it off the screen.

Transmitting is done by typing a message on the keyboard, then it is stored until released and then the machine sends it out over the air as CW! Two ops. using these can run a CW QSO at up to 80 WPM by merely typing and reading off a TV monitor.

The operation is very similiar to RTTY.

Gary is also now KOGVB/D.T. as he recently passed his advanced test, Congratulations Gary!

Anyone interested in a 220 Mhz. repeater?

WOFTM in C.R. is looking for members for a new repeater group, to use a planned 220 FM machine.

If you are interested, contact WOFTM, Chuck Fenwick, or Bob WAODXZ for further info.

Craig Fastenow, formerly KOUJJ, is now sporting a new 1X2 call, KOCF. Congrats to Craig.

Some modifications have been made to our repeater, such as the new frequencys-- 146.25/85.

Also the net had a check in on 3/1/77 from WAOXTL in PEORIA



FOR SALE:

Halicrafters transmitter

HT-37

Antenna switch

2 Antennas with 3coax

Accecories.

Call Cody Vincent WBOVWZ at 351-5967

WAODXZ is looking for an 11 el 2 meter beam for oscar and FM use. Has anyone got one availible?

WNOPYI is looking for a VFO compatible with a Heathkit DX-40 transmitter and/or current novice band crystals Ph- 351-8073.

If you have something (radio-wise) to buy, sell, or trade, send or otherwise get to me a written copy of your add by the last Friday of the month and it will go into the next issue of the rag. If recieved later it will go into a later issue of the rag.

If you have an article that you would like to see published in the Rag, contact me at 351-8073 so we can make arrangements. --Bill Bonney-ED.