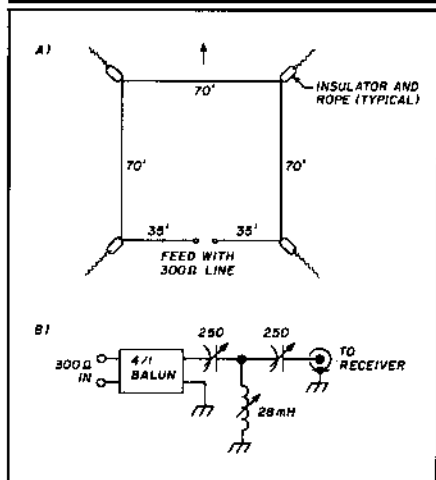


FIGURE 2

Receiving loop of KD0SO for 160 meters. Height of loop above ground is 10 feet. Illustration (A) is view from above. Illustration (B) shows 4:1 balun and antenna tuner.

The low-level loop for reception

One of the problems in working DX on 160 meters is the high level of background noise. Many DXers have found they can't use their transmitting antenna for reception — the noise level is overpowering. Paul McClure, KD0SO, met this problem head on and evolved a horizontal receiving loop (fig. 2) that provides good signal-to-noise ratio. The loop's signal pickup isn't as good as that of a larger antenna, but noise drops off sharply. By adjusting audio gain of the receiver, you can bring the resulting signal up to the original level. Paul says that, out of the noise, he can pull weak signals that didn't seem to exist under normal circumstances. He says the antenna is comparable to a good Beverage wire. The loop, however, takes up less space and there are no terminating resistors to replace after a thunderstorm!

The above-ground height of the loop is about 10 feet. It's fed with a random length of 300-ohm ribbon line. Paul twists the line to balance it to ground. He has a twist about every 8 inches or so in a line nearly 100 feet long. The line is fed through a 4:1 balun and a simple antenna tuner to

provide a 50-ohm termination for the receiver.

Two radials need