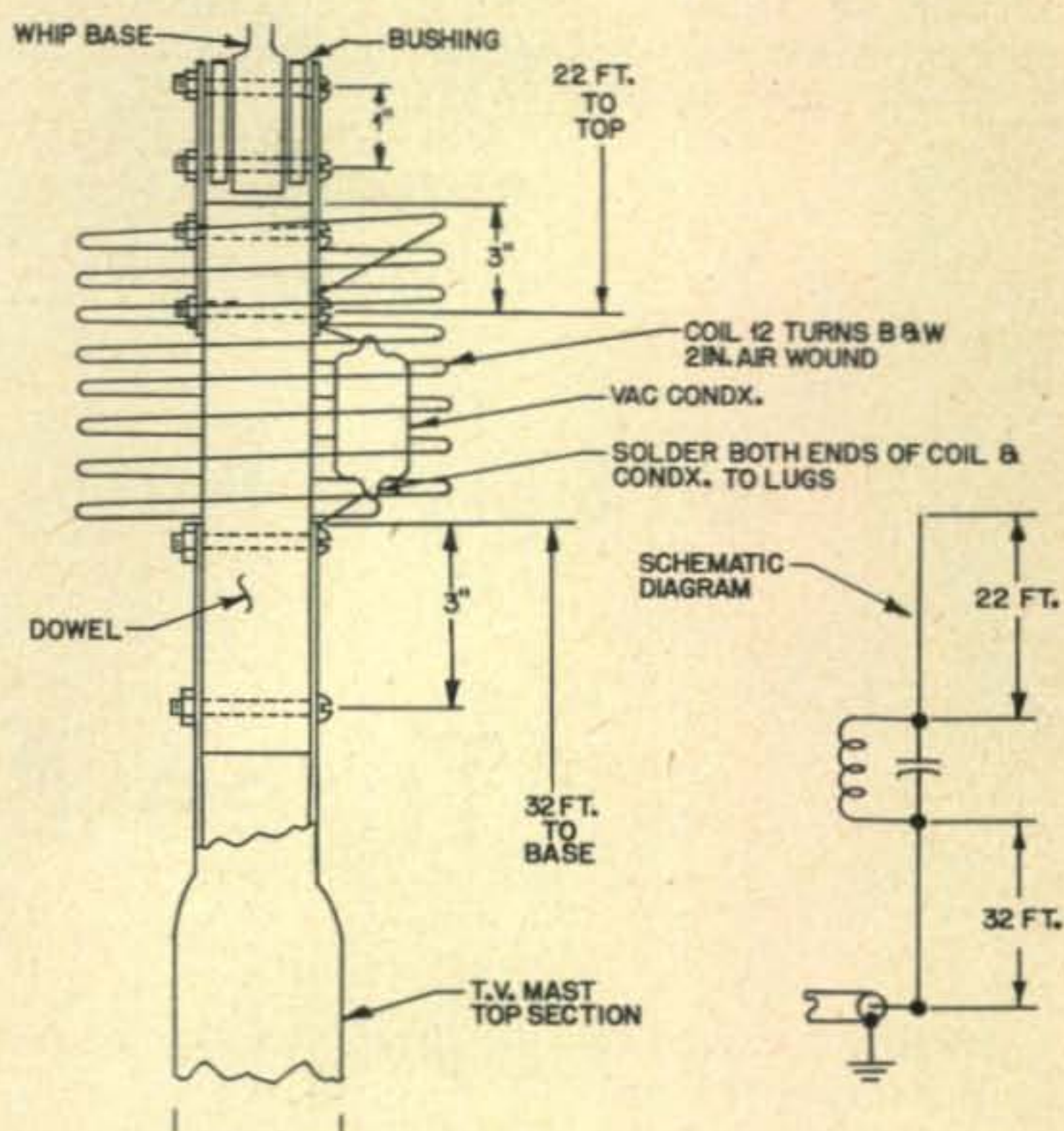


Another How-To-Do-It for
you rag chewers . . .



all-Band Vertical

Herbert W. Harmon, W6BXZ

10156 Amboy Avenue
Pacoima, California

That trap system of multi-banding beams might just be the thing I needed for an all-band vertical. Ideas like that strike now and then . . . this one kept teasing me until I gave in and tried it out.

Construction

I dug out the hack saw and a pile of old tubing, retired to the back yard, and got down to business. What I had in mind was building one half of the W3DZZ all-band antenna which was described in the March 1955 QST, and standing it on end. This meant I would end up with something about 54' high, which was within reason. The only real ingenuity was called for when it came to inserting the trap at the 32' level. This was taken care of by using a hickory dowel as an insulator and fastening the vacuum condenser (from a surplus antenna relay unit) and coil in place. The coil was made from Air Dux #1608 or B & W #3900 coil stock, about 12 turns of 2" diameter at 8 turns per inch. Cut the coil to resonate at 7200 kc.

I settled for one of those 40' TV masts from the local radio-parts house for the bottom section (with a little removed) and invested in a surplus whip antenna (comes in screw together sections) for the top twenty-two feet. So far it has remained vertical through sixty-mile winds with only one set of guy wires.

Firing Up

Once erected, I connected coax to the end, grounded the shield, and fired up on 80 meters. Glory be! It loaded just fine. Next, let's try forty. Mmmm, OK there too. Ditto for twenty, fifteen and ten. The only time I had seen loading like that was when I used a 50 ohm resistor. But was it working? Three quick QSO's on forty phone right through the early evening QRM, a few on 75 under miserable conditions, and some checks on twenty, fifteen and ten showed that it was indeed radiating all that r.f. The angle of radiation on the higher bands is somewhat higher than you would get with a beam, but this makes it possible for much better stateside contacts and is quite an advantage to rag chewers like myself.

So there you have it . . . an all-band vertical which is inexpensive to construct, easy to put up, and does a bang up job. ■