

## SHORT TAKES

# Evans Engineering Tri-Band Portable Antenna

"Aw, geez! Are they really reviewing a ground plane antenna in *QST*?"

Yes, we are, but look closely. The Evans Engineering Model EE-3 is a ground plane unlike any other. In fact, it falls under the venerable why-didn't-I-think-of-this category of ham inventions.

Anyone can build ground planes for VHF+. I've built them from coat hangers and maybe you have, too. They are simple omnidirectional antennas that offer decent performance for their size. When used with handheld transceivers, they beat the pants off the so-called "rubber duck" antennas supplied with these radios.

What the EE-3 offers that traditional ground planes do not is easy portability. That's because the EE-3 is made of telescoping elements. The vertical element is fixed to a base that's outfitted with an SO-239 coaxial connector, but the radial elements can be removed. The EE-3 can be assembled in less than a minute (yes, I timed it) and will disassemble just as quickly, becoming a 6-inch bundle of tubes in your pocket. This antenna is intended for temporary use. You put the elements together, adjust their lengths for the desired band and tape the EE-3 to a convenient nonconductive support, or hang it from the ceiling. If you need to move, the EE-3 easily moves with you.

### But How Well Does it Work?

The EE-3 works as well as any ground plane you've probably tried, which means reasonably well. The antenna is made resonant



at 2 meters, 1.25 meters and 70 cm by simply adjusting the element lengths. I measured the SWR on all three bands and the results are shown in Figures 1 through 3 respectively.

I took an EE-3 with me on vacation last summer and used a piece of fishing line to hang it from the joists of the hotel balcony directly above ours. Performance was outstanding, aided by the height, no doubt. When it was time to leave, the EE-3 found a home in my jacket pocket faster than my wife could say, "Get that #&\*\$@ thing off the balcony!" (Well, maybe not quite that fast.)

The EE-3 seems ideal for public service applications, and it may also be a worthy candidate for apartment dwellers. Just collapse

the elements and pull up the string whenever the landlord comes knocking!

Manufacturer: Evans Engineering, 2253 Norwegian Dr, #25, Clearwater, FL 33763; [www.ee-3.com](http://www.ee-3.com). \$19.95 plus \$2.15 shipping and handling.

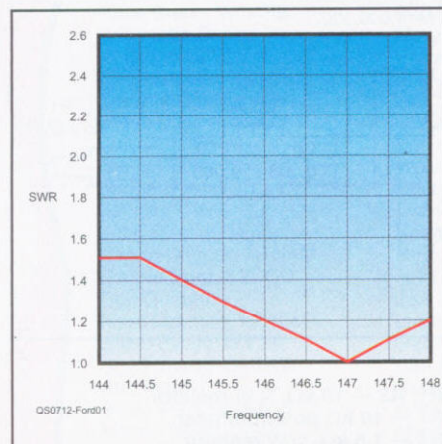


Figure 1—EE-3 2-meter SWR plot.

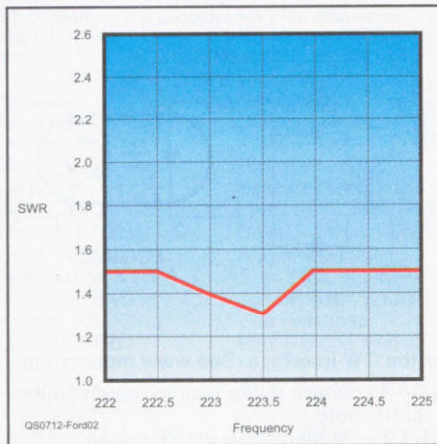


Figure 2—EE-3 1.25-meter SWR plot.

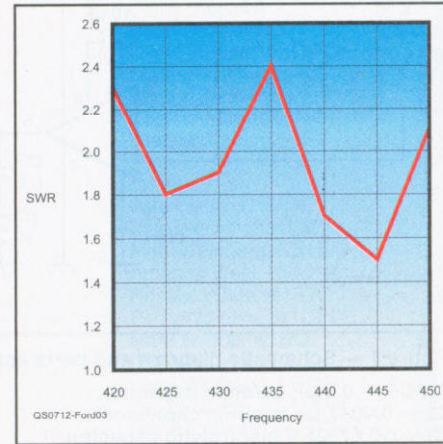


Figure 3—EE-3 70-cm SWR plot.