

A Clothesline Dipole

Reel out your dipole and reel in the signals!

By Ig J. Galgan, WA2VIA

932 Throgmorton Ave
Bronx, NY 10465

Apartment-dwelling hams face a challenge when it comes to installing an antenna. I live on the second floor of a two-family house and thought I'd be able to put a vertical antenna on the roof or use a window-mounted antenna. But after checking with the landlord, those ideas went out the window.

Determined to get on the air, I made a simple 15-meter dipole and installed it indoors. It worked out fine, except I had TVI, stereo RFI and telephone RFI. RF was everywhere in the apartment! That meant if I wanted to get on the air, I could do so only late at night, or very early in the morning. That would never do! I wanted to work DX! I couldn't work 15-meter DX during those hours! I needed a simple, unobtrusive outdoor antenna. I asked my wife if she had any ideas. "You're always telling me how innovative hams are," she replied. "I'm sure if you think about it long enough, you'll come up with something."

One day, my wife asked me to fix the clothesline—the line had come off the pulley. Then it hit me! Why not use the clothesline to support my antenna? The clothesline was high enough and long enough to accommodate a 15- or 20-meter dipole! I kissed and hugged my wife, who thought that after all the years of solder-

ing, the solder fumes had finally gotten to me. (Yes, I did read NU1N's article...)¹

Removing my indoor 15-meter dipole, I clipped it to the clothesline with clothespins and ran the feed line out the window. (Another idea that went out the window... this time intentionally.) Would it work, I wondered? Would I still be plagued with RFI problems?

I turned on my Heath HW-101. Signals were coming in clear and strong; a big improvement over the indoor dipole. Now for the test... I sent out a CQ. A station in Florida came back to me on the first call! My signal report was 599. We exchanged information about our rigs and antennas. When I described my antenna, the operator at the other end said he'd heard of just about every type of antenna, but never a clothesline dipole! He thought it was a novel idea. On top of that, my RFI problems were gone!

Try It Yourself

Constructing a clothesline dipole is easy. Keep the antenna as light as possible. My dipole is constructed from inexpensive and readily available 18-gauge speaker wire.

¹B. Bergeron, "Making Soldering Safer," *QST*, Mar 1991, pp 28-30.

Cut the wire to a length equal to one leg of the dipole. ($234 + f(\text{MHz})$.) Pull apart the two strands of wire, and both legs of the dipole wind up being the same length. I made the dipole's center insulator from a piece of 1/8-inch-thick plexiglass and mounted a phono jack on the insulator. One leg of the dipole is soldered to the center conductor of the phono jack and the other to the shell. The antenna end of the feed line (RG-58 coax) has a phono plug on it. (You may want to use an SO-239 and PL-259 or BNC connectors instead.) The plug-and-jack arrangement makes it easy to change dipoles, use the same feed line, and reel in the dipole when you're finished using it.

To use the antenna, simply clip it to the clothesline with plastic or wooden clothespins. (Make sure the clothesline you're using doesn't contain wire.) Attach the feed line, reel out the antenna and reel in the signals!

RF burns are nasty, so a word of caution is in order: If your dipole isn't out of reach of passersby, make certain someone knows (especially your family) that while you're transmitting they shouldn't go near or touch the clothesline or antenna. Be especially careful if there are children playing in the area.

Summary

I've used the clothesline dipole for many years and worked many stations, always receiving good signal reports, along with many comments about my clothesline antenna. I also made and used clothesline dipoles for 10 and 20 meters. They, too, worked out great. This antenna setup has solved all of my operating problems—except one: I can't get on the air on laundry day... Lessee... where was that ad for clothes dryers?

Ig Galgan earned his Novice license in 1967. He presently holds a General class license and is working toward his Advanced ticket.

Interested in electronics since high school, Ig is a builder and experimenter. He worked for Heathkit Electronic Centers in Sales and Service for fifteen years and says, "I can't even begin to tell you how many kits I built—computers, TVs, stereos, test equipment and Amateur Radio gear—for myself and for store demos."

A Northeast Regional Manager for Zenith Data Systems Customer Service Division for four and a half years, Ig is presently a PC consultant.

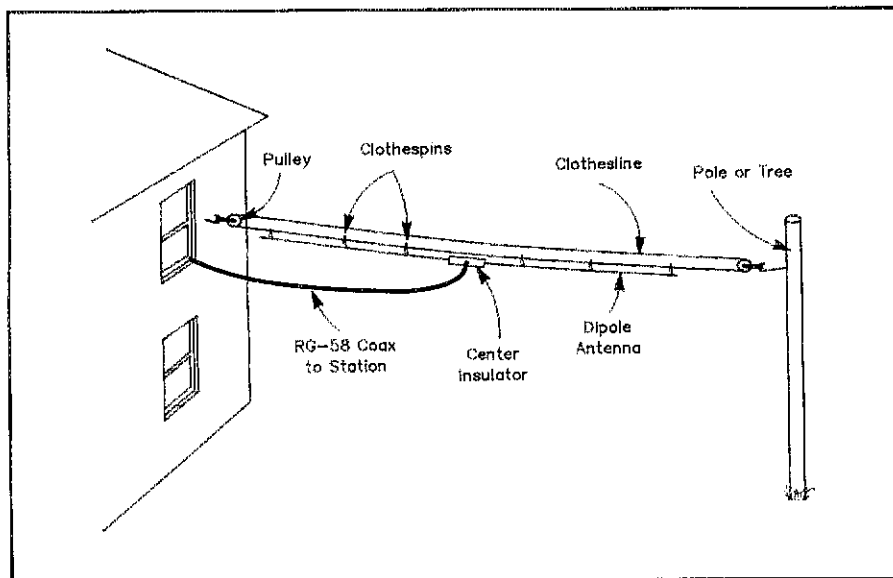


Fig 1—Here's how to rig up a clothesline dipole. A lightweight dipole is simply pinned to the clothesline. Make sure the clothesline you use doesn't contain wire.