

Figure 2 — A plastic pen case and some paracord will make a balanced-line support that won't detune the line and will allow it to flex in the wind. [Cameron Conover, AJ4TW, photo]

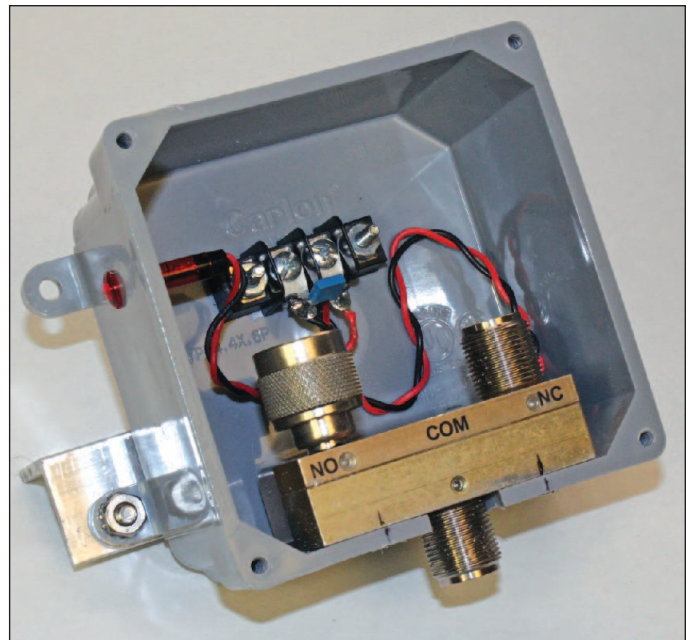


Figure 3 — The LED mounted at the upper left serves as a power-on indicator for this tower mounted antenna relay. It is visible from the ground and might save you a trip up the tower. [Al Yerger, K2ATY, photo]

I don't know how cutting this PCB material will affect the life of the blade, but the blades are inexpensive, so replacing it for the next tile job should not be a problem. — 73, *Joel Bryant, WM4P, 1542 Indiana Ave, Palm Harbor, FL 34683, wm4p@arrl.net*

Quick Soldering Gun Tip

I was doing some wire antenna work when my 1955 vintage Weller (100 W/140 W) soldering gun tip broke. I've replaced the tip many times over the decades, but this time I couldn't find a replacement tip at the regular hardware stores. A large commercial supplier wanted \$12 for a two-pack of tips, so I decided to try a homebrew solution. I snipped off a 10-inch scrap of #12 AWG residential ground wire and bent it into the shape of the broken gun tip. I pinched the tip end together to make it beefy and add mass. Finally, I made sure I inserted the nuts onto the new tip ends first, then made the right angle bends that go through the nut's side holes and snipped the ends before screwing the nuts into place. The new homebrew tip works just as well as the original and now I never have to worry about finding a replacement. — 73, *Jim Wyckoff, K3BT, 8005 Frontier Dr, Severn, MD 21144-1619, jimwyckoff@comcast.net*

Supporting Balanced Window Line

I have a long run of 450 Ω balanced line running from the house to my extended

double Zepp (EDZ) antennas. [The EDZ is a dipole-type antenna whose legs are each longer than $\frac{1}{2} \lambda$, typically 0.64λ per leg. The EDZ will radiate with a gain of 3 dBd but requires a tuner. — Ed.] The feed line needed some support to stay overhead as it crossed the backyard and out of the way of traffic. At first, I just tied a bowline knot on the end of a length of paracord to support the feed line, but I found that the knot would pinch the window sections on the feed line together — not an ideal arrangement. I came up with this simple idea to avoid that situation. I took apart an old ballpoint pen and cut the barrel section into three equal lengths. Then I ran the paracord through those three pieces before tying a bowline knot (see Figure 2). This support arrangement doesn't pinch the feed line, and allows it to move back and forth freely with the wind. — 73, *Cameron Conover, AJ4TW, 4234 Brentonshire Ln, High Point, NC 27265, aj4tw@arrl.org*

Indicator Lamps Help with Remote Troubleshooting

When constructing a device that will be mounted out of reach, it is very helpful to install one or more indicator lamps so you can see the device's status from a distance. This can be especially useful when the device is up on your tower. While building a coaxial antenna relay, I added an LED to show when power is applied to the relay coil (see Figure 3). If, at some time in the

future, I throw the switch and nothing happens, I can go outside and see if power is reaching the box or if the problem is somewhere closer to the ground. — 73, *Al Yerger, K2ATY, 1312 Union Ave, Newburgh, NY 12550-8907, k2aty@arrl.net*

More On Furnace RFI

In the September column, Tom Traugher, W0ZX, related how he solved an RFI problem with his new furnace.¹ John Majka, K9AAN, wrote in to point out that the sheet-metal motor enclosure Tom ultimately used to shield the motor might not provide adequate ventilation. John suggests that a good-quality steel screen or similar material be used and to make it as large as possible.

¹T. Traugher, W0ZX, "Cooling a Hot RFI Problem," *QST*, Sep 2015, p 64.

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