

Up Front

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A Simple and Effective 10 Meter Radiator

John Reisenauer, HI3/KL7JR

Now that we have propagation on 10 meters back, it's time to get on the bandwagon homebrew style. A recent article in *QST* in which Bob Glorioso, W1IS, experimented with a 40 meter quarter wave vertical monopole antenna gave me the idea of building a similar antenna using mobile CB antennas.¹

I had an old 24 inch Wilson FGT-2 vertical, so I decided to start with that and just add a couple of elevated radials to keep the antenna "low key" for my "no antennas allowed" patio in the Dominican Republic. I should point out that this antenna on a 5-foot-tall mast in the sand with three or four short radials yielded me a lot of DX a few years ago from KP2-land on 15, 17 and 20 meters.

Using just a pair of radials 180° apart yields omnidirectional coverage, which is what I sought for my small space antenna. The manufacturer advertises the antenna as $\frac{5}{8}$ wavelength, so I knew I'd have to experiment with the radial lengths. The vertical radiator without a whip shows some good numbers when just used as a stand-alone vertical (27.6 MHz, SWR under 2 and an R of around 60). This just could turn out to be a good balcony antenna for those of us living in a restricted space environment. To avoid stray RF I'd recommend an air core inductor (6-8 coils of coax with a 6 inch diameter) at the feed point.

Note the old rum barrel on wheels that I used as my antenna test table. I bonded the first two metal barrel staves together and to the antenna connectors to broaden the ground plane. A metal electrical



The CB and whiskey barrel 10 meter antenna, built for low visibility, is easy to put together and gives good results for a covert radiator.

[John Reisenauer, HI3/KL7JR]

¹B. Glorioso, W1IS, "A Suspended Quarter Wave 40 Meter Wire Vertical Monopole," *QST*, Aug 2011, pp 34-36.

box on a camera tripod would also work fine as the connection point.

I started out with a pair of 102 inch long wire radials ($\frac{1}{4}$ wavelength on 10 meters), then I started chopping and taking readings with my MFJ 259B analyzer (no whip tip was used on the FGT-2, nor did I use the ground strap). After a series of trimming adjustments I found that using wire hangers with a length of 34 $\frac{1}{2}$ inches provided an excellent match in the 10 meter phone band.

On-the-air comparison with the monopole vs my loop really floored me — the monopole was an honest 2 S-units stronger on receive with all four stations (OH, IL, NJ and NC) I used for comparison.

Shuttle visit: Late last year I was given a rare opportunity to spend three hours inside the space shuttle *Atlantis*. I took a few photos of my and my dad's (AB4HQ) QSL cards in the orbiter's air lock and flight deck. I was also present for the shuttle's last launch and landing, STS-135. — *Bobby Lacey, KF4GTA*
[Courtesy Bobby Lacey, KF4GTA]



Somewhere a golf cart is missing some wheels: Sam Moore, NX5Z, of Sherman, Texas came up with a variation on a 5 band HF vertical using stackable 4 foot army fiberglass tent poles and plastic golf cart hubcaps.

[Sam Moore, NX5Z]



It's winter! My antenna farm and surrounding trees under the burden of the January 2009 ice storm that struck Northwest Arkansas. Note the tri-band Yagi, the collinear 2 m/70 cm vertical and the (then) drooping dipoles. The Yagi was ruined, but everything else is back in place. — *Bernie Skoch, K5XS*
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