The World's Best Antennas (in practice)

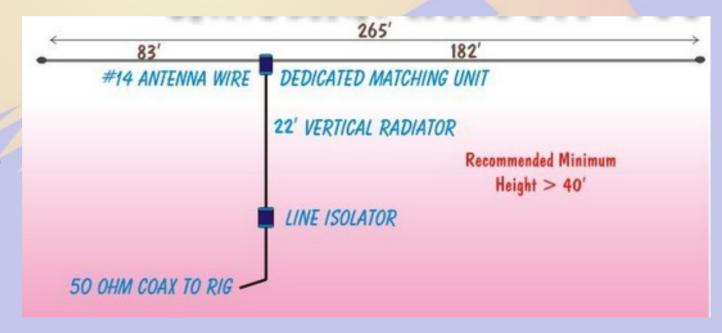
Willem AC0KQ RMHAM University March 8, 2025

HF Antennas I like

- Carolina Windom 160 all band HF
- X dipole (80m and 60m NVIS dipoles)
- Random Wire
- G5RV 80-10m
- Off Center Fed (OCF)
- End fed
- Whip (Hustler, Hamstick, Miracle Ducker, ...)

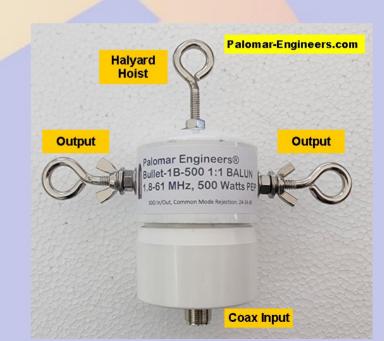
Carolina Windom 160

- All bands 160,80,40,20,17,15,12,10,6
- 265' long with 22' vertical radiator
- 4:1 balun
- Needs tuner
- Needs tower



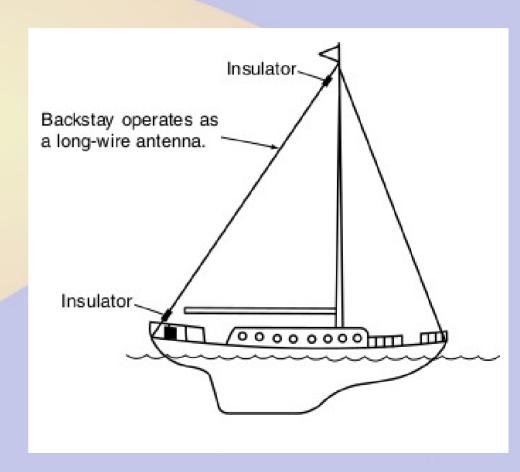
80m/60m X dipole (NVIS)

- 80m dipole east-west (60' per leg)
- 60m dipole north-south (43'6" per leg)
- Palomar Bullet current balun
 1:1 500W 1.8-51 MHz
- Installed at ~20' agl
- Works OK without balun



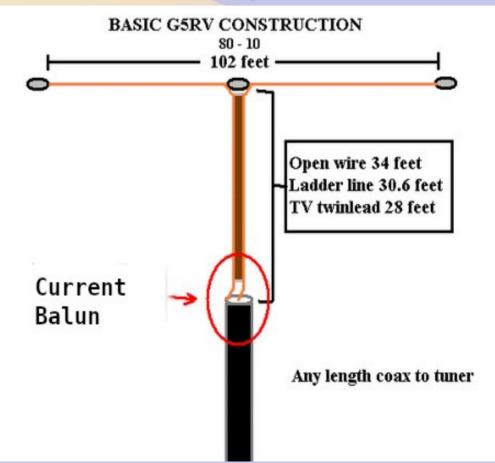
Tuner & Random Wire

- End fed fixed space
 - ICOM AT-140/AT-180
 - Yaesu FC-40
 - SGC 235
- All bands
 - CC EOC
 - Trailer



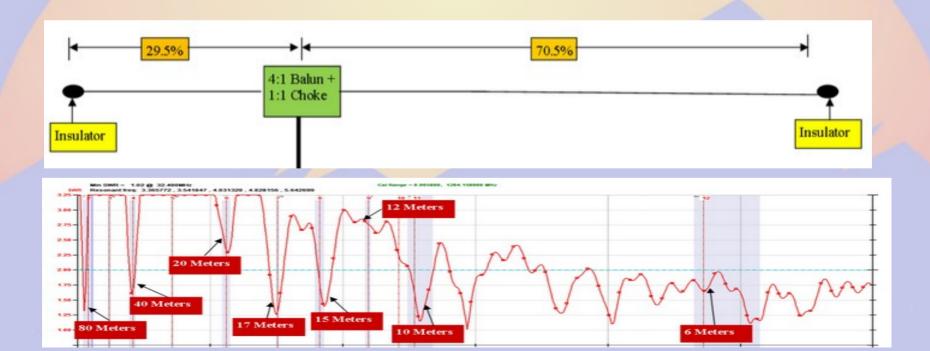
G5RV (ZS6BKW et al)

- Almost dipole 80-10m
 - Jr 40-10
 - Max 160-10
- Balun helps
- Tuner needed for most bands except 20m



Off Center Fed Dipole

- Convenient for asymmetric geometries
 - Various ratios but generally 4:1 balun and tuner



End Fed Half wave

- Often monoband with balun no tuner required
- Baluns 9:1 or 49:1 depending on design
- Chameleon EMCOMM

Whips

- Hustler
- "Hamstick"
 - Single band
 - Jumpered
- Miracle Ducker

