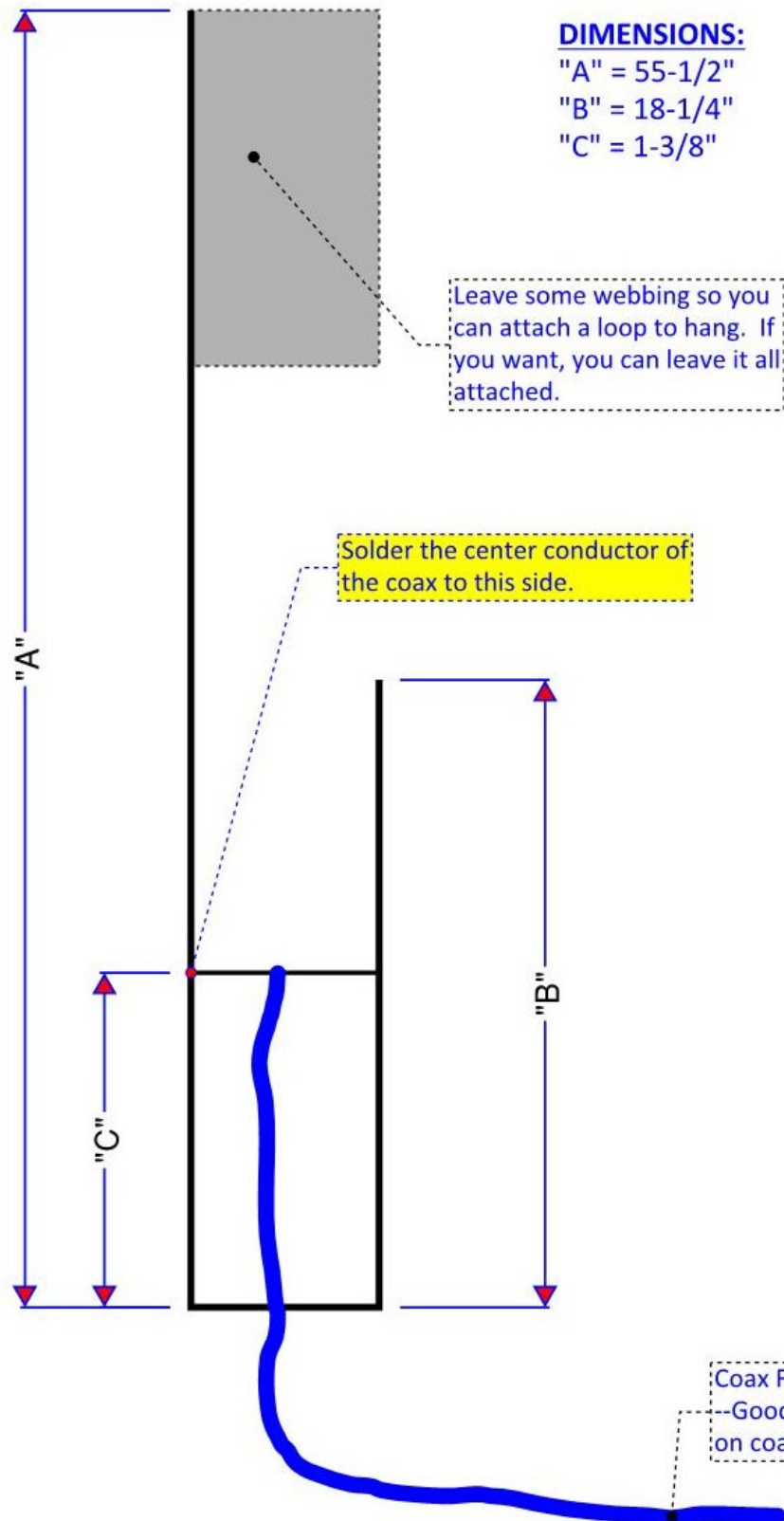




TECHNICIAN CLASS



2m Ladder Line J-Pole Antenna



MATERIALS:

- 1) 58 inches 450 Ohm Ladder Line Antenna Feedline
- 2) 3'-3" RG-58 A/U Coax Cable
- 3) 1 each, PL-259 Crimp Connector

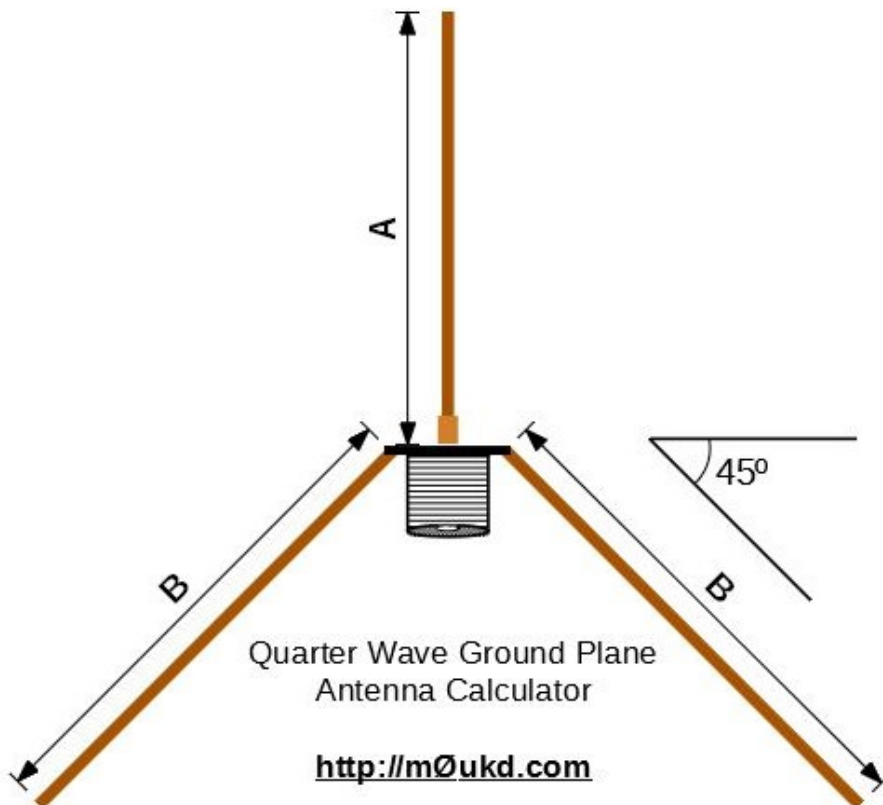
INSTRUCTIONS:

- 1) Cut Ladder line to 58"
- 2) Pick an end with the least webbing
- 3) Strip wire at the bottom and solder the bottom.
- 4) Measure up from the bottom the "C" distance and mark with a pen.
- 5) Strip wire and web about a 1/4" above and below mark.
- 6) Strip coax and separate shield & center wire.
- 7) Solder center wire to the "A" leg.
- 8) Solder shield to the "B" Leg.
- 9) Clip the "B" leg and remove remaining wire.
- 10) Use antenna analyzer to check SWR.
- 11) Trim A leg until less than 2.0 across entire 2m band



TECHNICIAN CLASS

2m 1/4 Wave Ground Plane Antenna



1/4 WAVE GROUND PLANE ANTENNA CALCULATOR

Quarter Wave Ground Plane Antenna Calculator	
Frequency	<input style="width: 90%;" type="text" value="146"/> MHz
Velocity Factor (see text*)	<input style="width: 90%;" type="text" value="0.95"/> vf
Give me the results in...	<input type="radio"/> mm (MilliMetres) <input type="radio"/> cm (Centimetres) <input type="radio"/> m (Metres) <input checked="" type="radio"/> in (Inches) <input type="radio"/> ft (Feet)
<input type="button" value="Calculate My Quarter Wave!"/>	
A. Vertical Monopole Radiating Element $(\lambda * 0.25) * vf$	19.21 inches
B. Radials $(\lambda * 0.28) * vf$	21.52 inches
Actual wavelength	80.90 in
<input type="button" value="Clear Form"/>	



TECHNICIAN CLASS

2m 1/4 Wave Ground Plane Antenna



INSTRUCTIONS:

- 1) Cut 12 ga. Bare wire into five (5) pieces with the following lengths:
- 2) 1 each 20 inches (A)
- 3) 4 each 22 inches (B)
- 4) Using the "A" piece, i.e. 20" long piece, file the end so that it will fit into the center conductor
- 5) Once the "A" piece fits, solder it.
- 6) Using needle nose pliers, create a loop at the end of the "B" pieces and attach to the SO-239 with the #6 bolt, nut, and washer.
- 7) Tighten nut with pliers

MATERIALS:

- 1) 1 each SO-239 Chassis Mount
- 2) 9 ft, 12 ga Copper Wire
- 3) 4 each, #6 x 1/2" Bolt
- 4) 4 each, #6 Washer
- 5) 4 each, #6 Nut