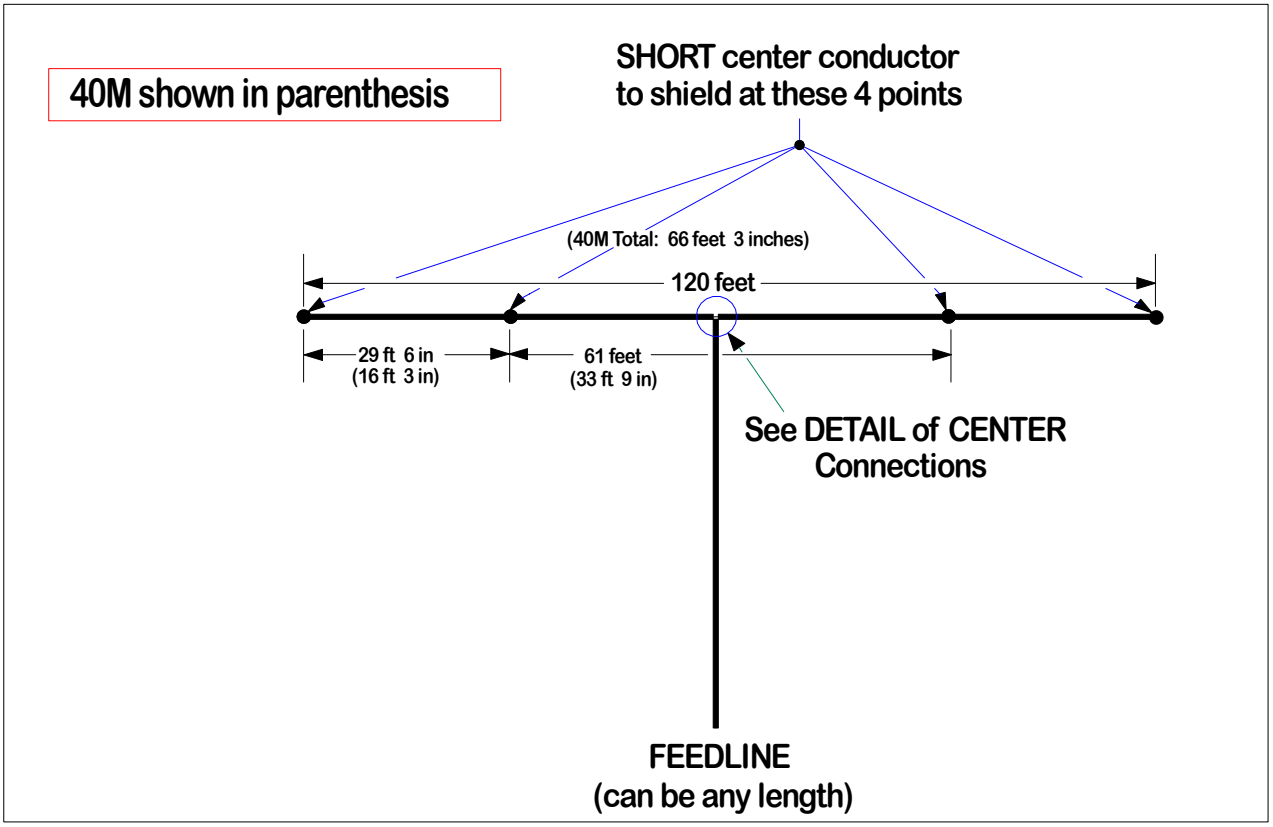
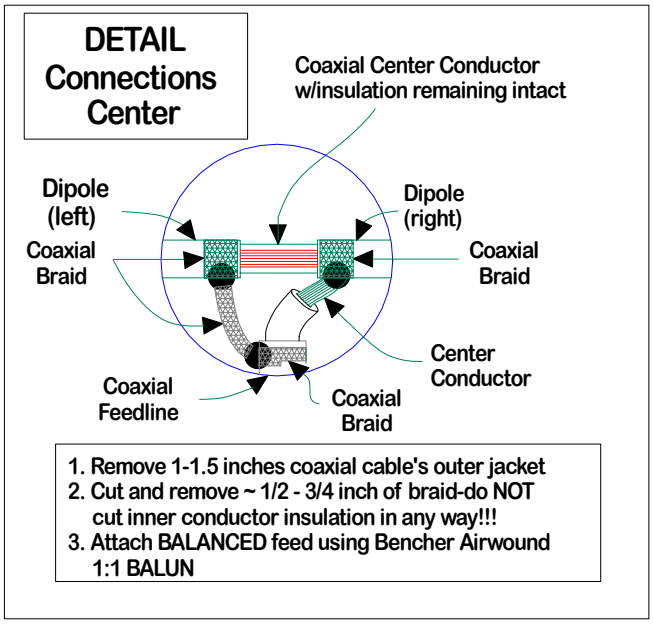
The WA4EZN DOUBLE BAZOOKA Coaxial Antenna



This antenna was described on the air to me by Lucky, WA4EZN many years ago. I have enjoyed the use of several of them over the years. THIS Bazooka design is not really all that broadbanded... but it is a VERY quiet antenna, and does quite well out to 1000 miles even when mounted @ 15/20 ft and interspersed through the trees!



NOTES:

1. All RG-58 or RG-8X-incl. feedline
2. Note that feedpoint is BALANCED, so a balun should be useful in obtaining an undistorted radiation pattern.
3. The antenna WILL need pruning. Every one of these I have made, using this formula, has been LOWER in frequency than I had calculated-I suspect because I have usually mounted them as an Inverted-Vee, with the ends only about 6 ft above ground. But trimming is always better than splicing!
4. To find the REAL center freq. (lowest SWR) and 3:1 endpoints, use one of the Antenna Bridges such as the AEA. You must remove (or add) 4 EQUAL PARTS ***EACH TIME*** you make a pruning change.
5. Determine ACTUAL center freq. then calculate the corresponding ***EFFECTIVE*** length. Now, since you already calculated the ***INTENDED*** length, the ***DIFFERENCE*** is how much you add or remove (effective minus intended). Take that amount, divide it by 4 (to distribute the change equally) and apply that amount to each joint. Add or remove ***EQUALLY*** on either side of the joint, which distributes the amount of the correction equally!
6. Retest until correct-or at least reasonable SWR is obtained.

AFTER final tuning:

6. Sealing ALL joints: use a layer of Coax-Seal or those great 3-M Sealing patches, followed by complete encapsulation in epoxy. You can use this method to also encapsulate a suitable eyebolt for the end-support line.

75 Meters: (3900 kHz)

T_L = 120 feet

a. Cut 1 pc. 61 ft long
b. Cut 2 pcs. 29 ft. 6 in. each

40 Meters: (7060 kHz)

T_L = 66 ft 3 in

a. Cut 1 pc. 33 ft 9 in long
b. Cut 2 pcs. 16 ft 3 in long

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Drawing by N4XY using AutoSketch v 7 computing with AMD K-7