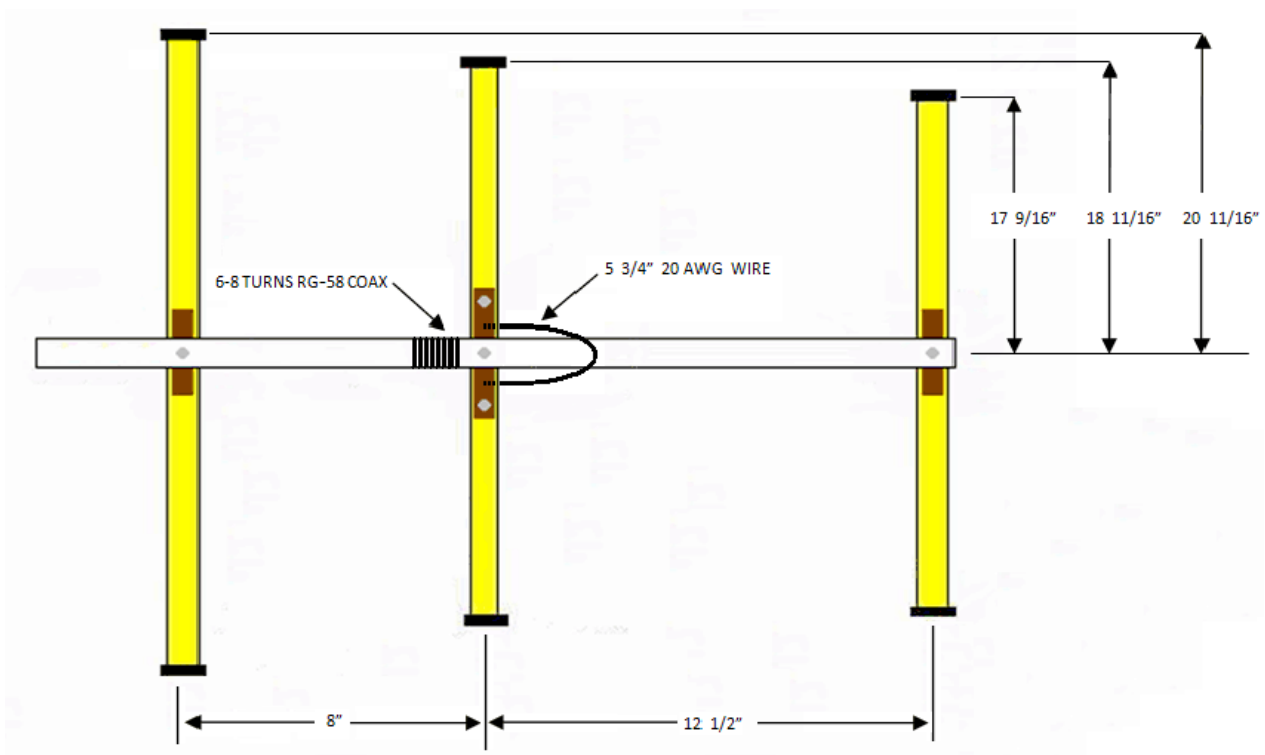


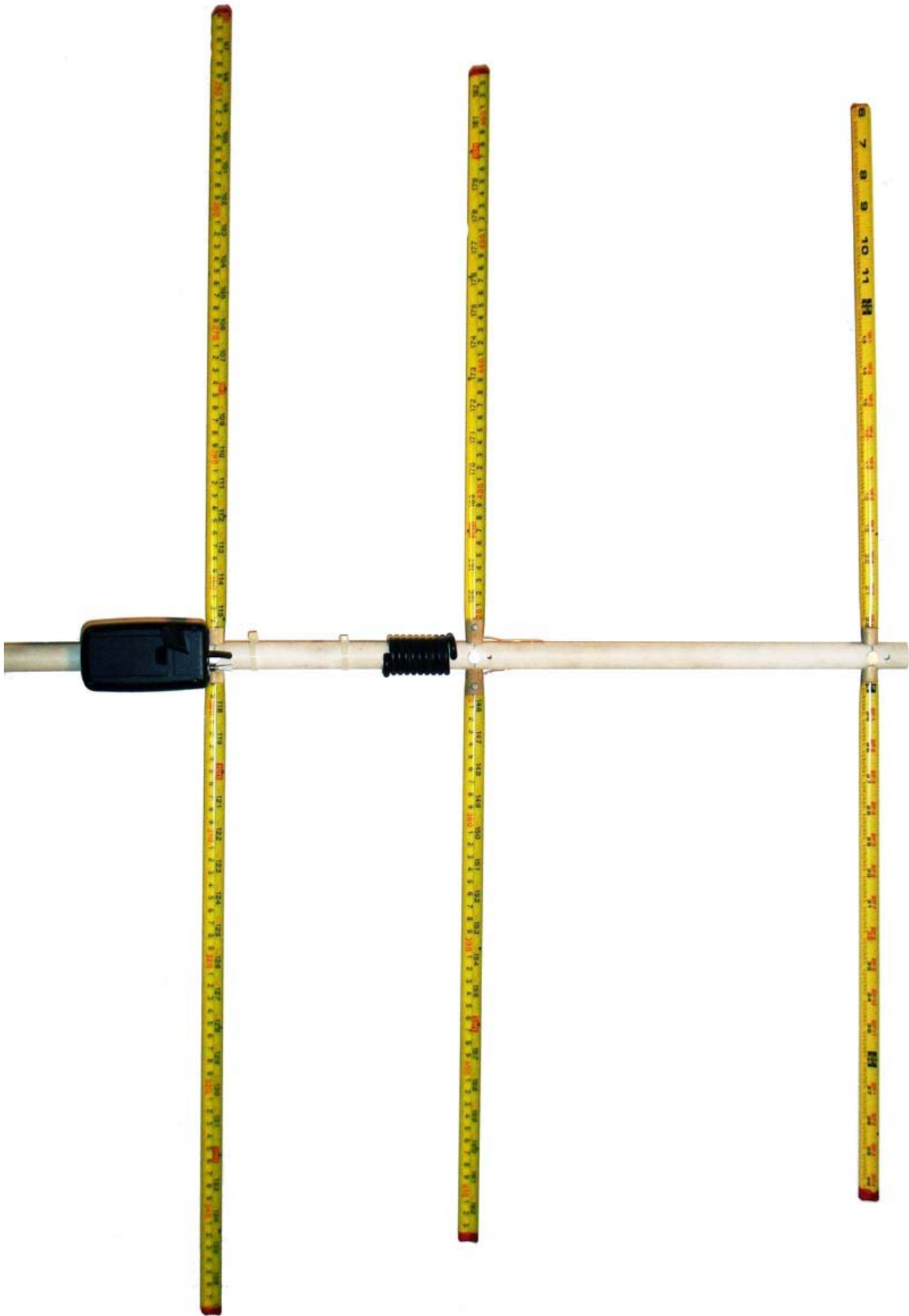
SARC Tape Measure Beam Project

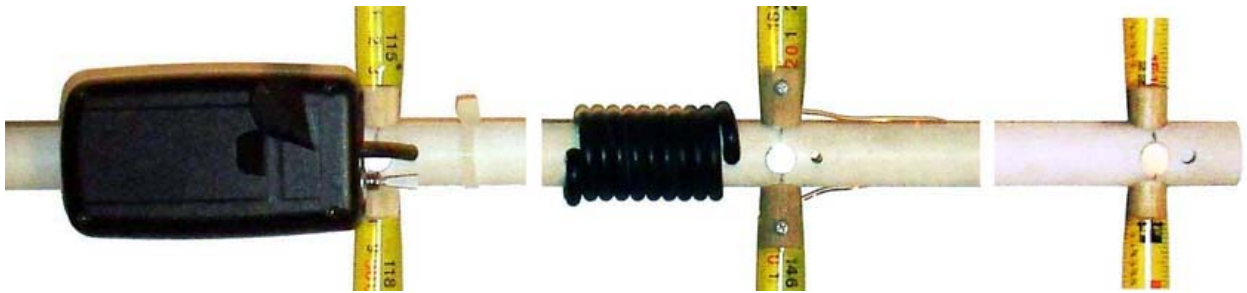
This project is adapted from a design by Joe Leggio WB2HOL at http://home.att.net/~jleggio/projects/rdf/tape_bm.htm.

The dimensions are approximately the same as the original, but the construction is different. Half inch PVC is used for the boom, but no PVC fittings are used. Half inch dowel sections are used with screws to hold the tape measure section in place. The holes are drilled in the boom to result in a snug press fit. The 6-8 turns of coax provide a current choke (balun). This helps correct a skewed pattern that can result otherwise.

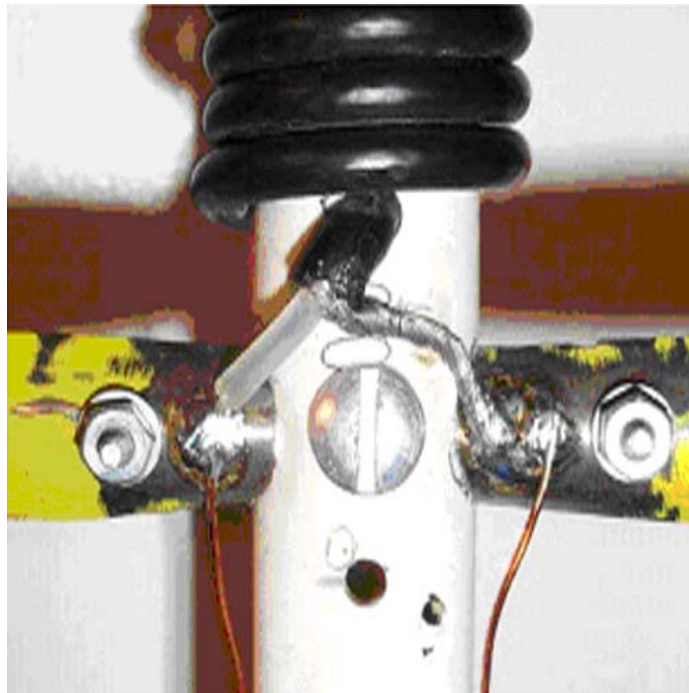


Below is the finished antenna with an offset attenuator mounted on the end of the boom. The edges of the antenna are dipped in a plastic compound meant to provide a covering for hand tools. This is highly recommended since the thin metal edges are sharp. The offset attenuator is available in kit form from Marvin Johnston KE6HTS <http://www.west.net/~marvin/k0ov.htm>.





Close-up (shortened) of the individual sections.



As shown in this close-up of the underside of the boom, the hairpin match and the coax are simply soldered to the steel tape. The tape is cut in the center and there is no electrical connectivity between the two halves of the driven element. Each half is held in place by a screw and a wedge fit between the dowel and the PVC pipe.