

220 Mhz 7 element home made beam

By WT2TT



This antenna was design by a friend of mine Tom WT2TT

I built mine to his speciation, a great working beam..

The elements were just a little long than needed So, I trimmed them to size I needed.

I first cut off the tops of the two folded dipoles that were hooked together, leaving the back one as a split dipole for the **driven element. The forward one made as the first director.**

Reflector 26 inches

Driven element 24 1/2 inches

Director (all of them) 24 inches.

Spacing from reflector to driven " 11 inches equals .2 wavelength

All other spacing 9 3/4 inches between elements (metal to metal) equals .18 wavelength.

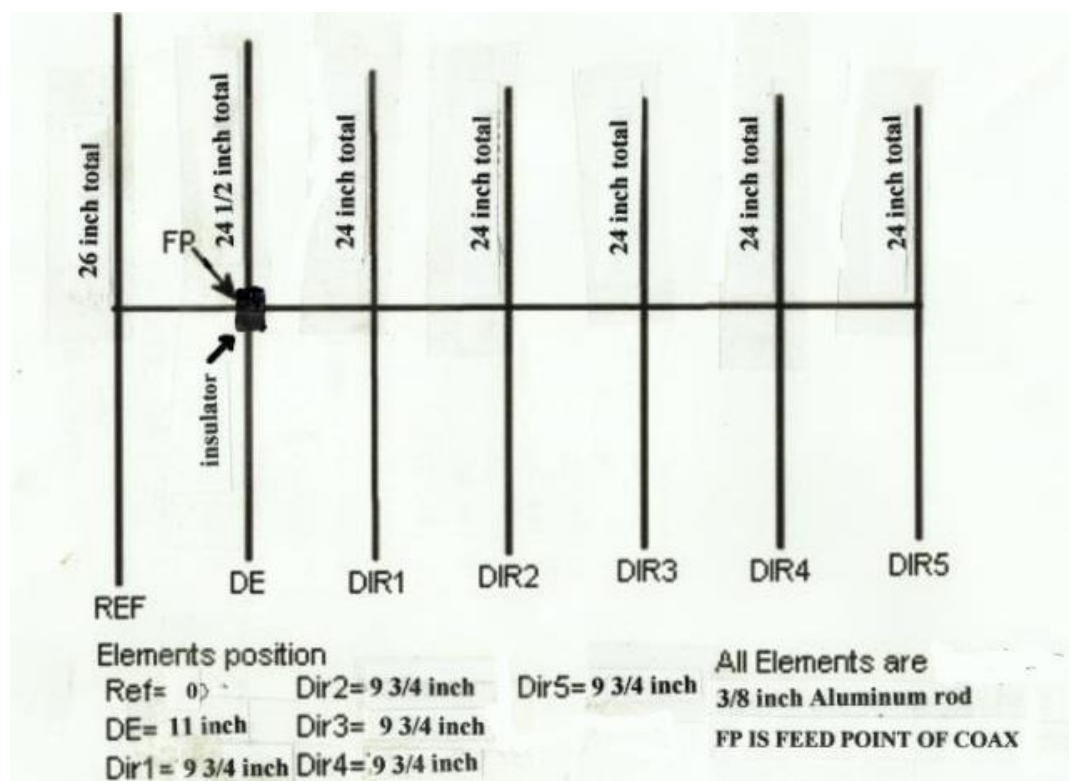
Supposed to be best gain and f/b. Will be sort of high Q, so bandwidth is less. But don't need that much bandwidth on that band. Most of the repeaters are around 223 to 224 MHz.

****the elements were riveted to the clamps and the clamps to the boom. I removed all the rivets and replaced with 1/4 20 or 10-32 machine screws/washers and nuts . In effect, put the antenna all back together again with the dimensions needed.**

I drilled new holes thru the boom to get the new spacing of all the elements. This luckily came out well that could fit from end to end a total of 7 elements.

I feed the driven direct with coax, yielding a 1.2 to 1 SWR.

(foot note) If for some reason a element is to short a cheap curtain rod 3/8 inch will work ,
just a few dollars.

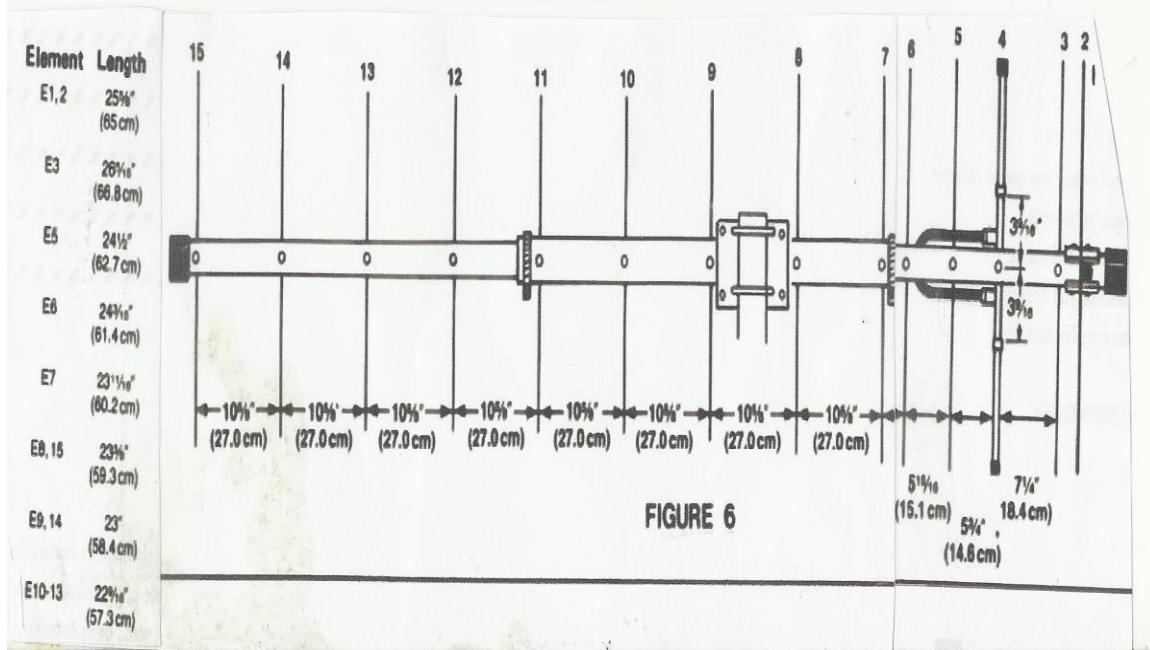


220 Mhz 10 element home made beam

**The 7 element work great , I found some more material
and made the antenna into a 10 element**



**THIS IS A 15 ELEMENT I ONLY USED TEN ELEMENT
DIDN'T HAVE ANY MORE BOOM ANTENNA WORKS GREAT**



**HERE IS THE 15 ELEMENT PLUS 6 ELEMENT BACK DOOR, THE BEAM IS
REALLY TIGHT NOW ABOUT 15 DEG AND I LOOSE PERSON WHOM I'M
TALKING TO....**



**HERE ARE SOME OF THE MOUNTING POINT I USED OR MADE WITH WHAT I
HAD TO WORK WITH, PLUS HOW THE COAX IS CONNECTED.**













