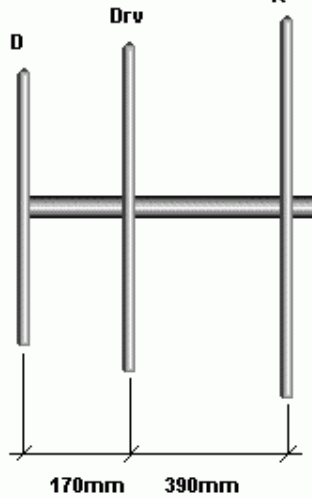


3-element VHF Yagi for 2meters

de ON6MU



Element length

R = 1010 mm

Drv = 980 mm

D = 918 mm

All tubes aluminum, copper or brass 10mm

Boom needed = 570 mm

specs

Forward Gain = 5 dBd

Front/Back ratio = 16 dB

SWR on 145 MHz = 1:1

Frequency range = 144...146 MHz

Bandwidth at 1:2 = 3 MHz

Radiation pattern

Optimized for Forward Gain

Free Space

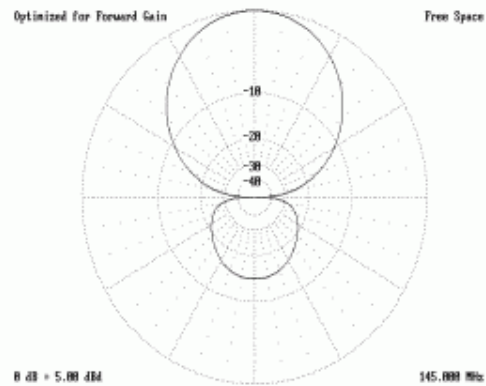


Fig.2: Example of an aluminum bracket to mount SO-239 or N on boom

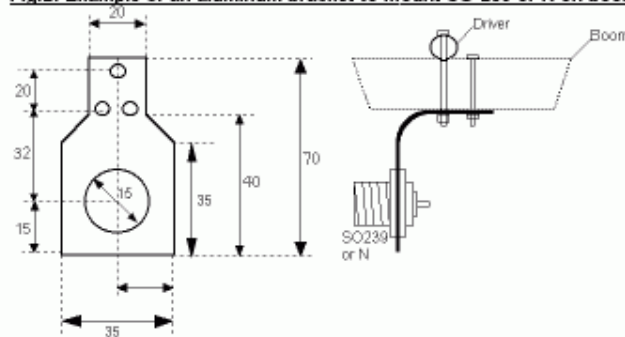
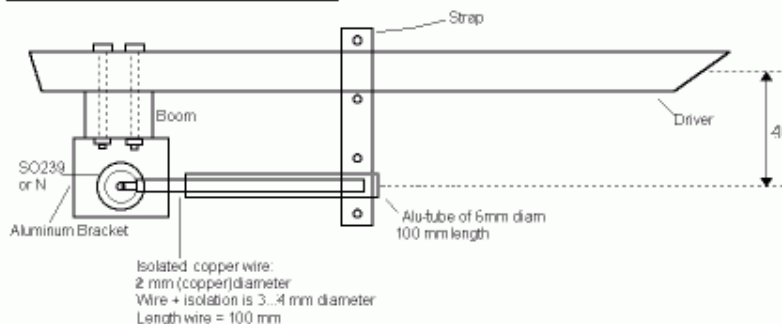
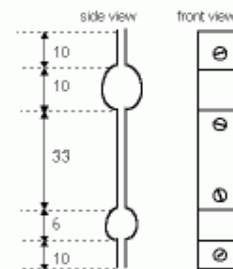


Fig.3: GAMMA MATCH with concentric tubing



Isolated copper wire:
2 mm (copper) diameter
Wire + isolation is 3.4 mm diameter
Length wire = 100 mm

Fig.4: Aluminum Strap



Notes:

All elements are connected to the boom directly (NOT isolated from the boom). You may mount them on top of the boom or through the boom.

Regulate the Gamma-match until best SWR is found on the desired center frequency by sliding the strap and/or Alu-tube.

Use some grease between all connections and seal everything up with silicone to prevent corrosion.

73" Guy, ON6MU