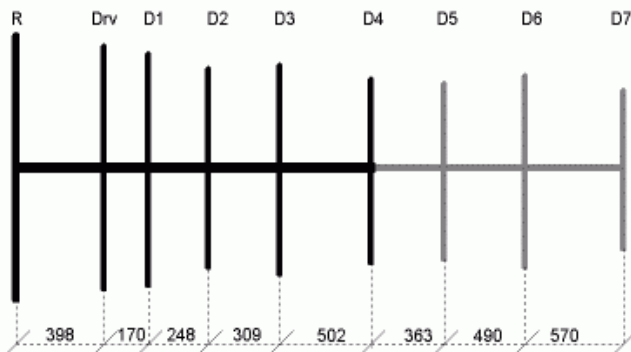


Optimized 6/9-ELEMENT VHF YAGI de ON6MU

Fig.1: Top view



Element	Length	Prog. Spacing
Reflector	1014	0
Driver	980	398
Director 1	946	568
Director 2	882	816
Director 3	904	1125
Director 4	876	1627
(Director 5	870	1990)
(Director 6	900	2480)
(Director 7	830	3050)

Boom +- 20 x 20 mm.

Aluminum tubing for all elements and 10mm. thickness except for the reflector that's 12mm. thickness.

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

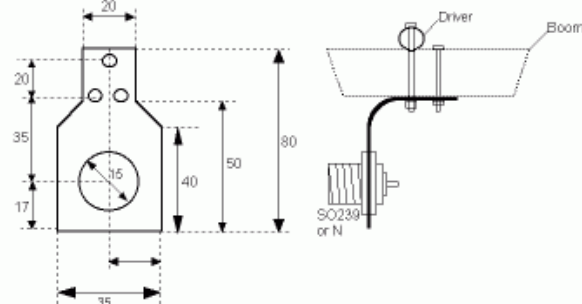
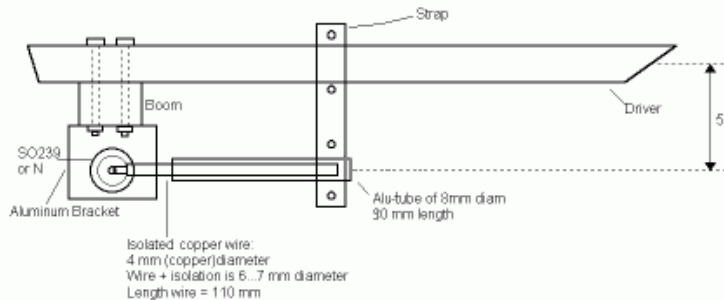


Fig.3: GAMMA MATCH with concentric tubing



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.

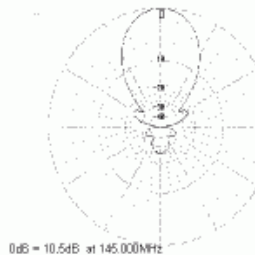
Fig.5: Antenna pattern 6-element



Specifications 6-element

Forward Gain	= 8.5 dBd
Front-to-Rear ratio	= 26 dB
SWR on 145 MHz	= 1
SWR on 144 & 146 MHz	= 1.2
Ver.-plane pattern	= 53°
Hor.-plane pattern	= 42°
Max. bandwidth	= 4MHz

Fig.6: Antenna pattern 9-element



Specifications 9-element

Forward Gain	= 10.5dBd
Front-to-Rear ratio	= 26 dB
SWR on 145 MHz	= 1
SWR on 144 & 146 MHz	= 1.2
Ver.-plane pattern	= 40°
Hor.-plane pattern	= 34°
Max. bandwidth	= 4MHz

Fig.4: Aluminum Strap

