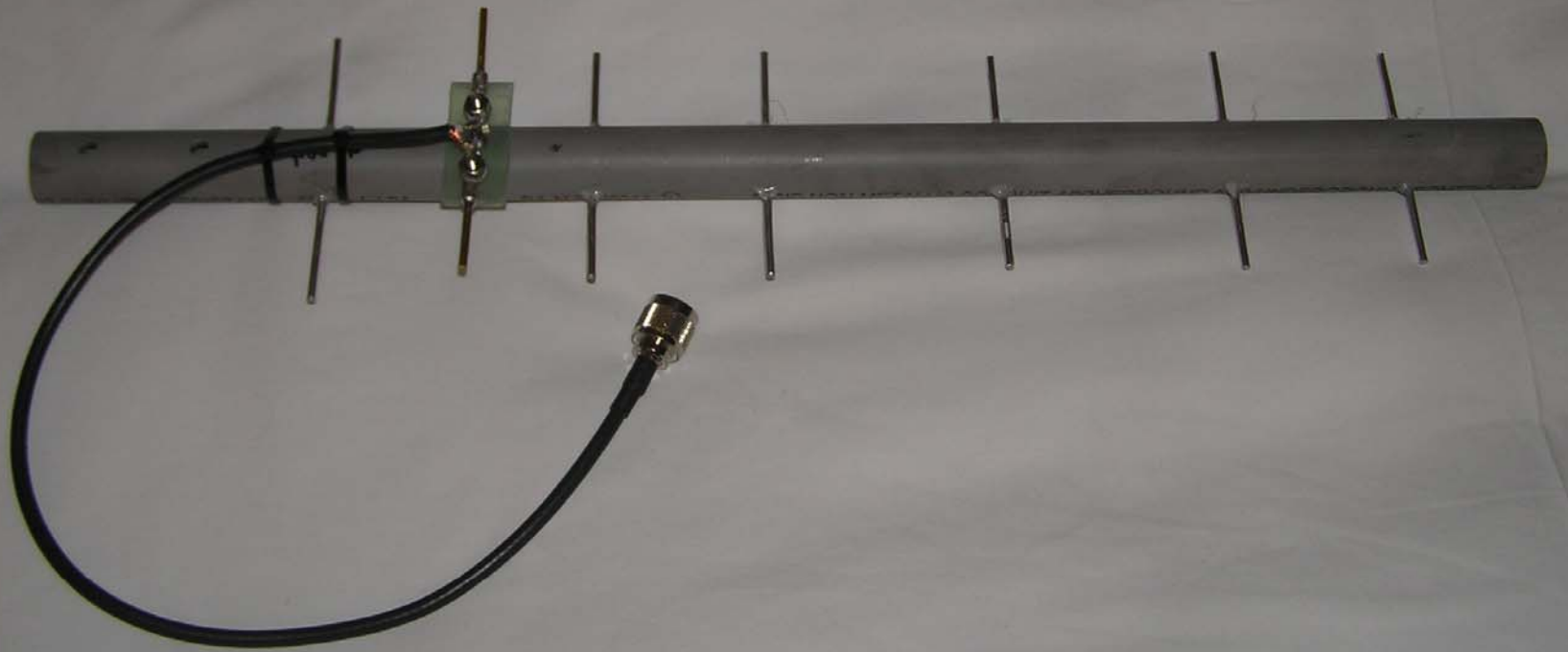


# Direct Feed Yagi Designs

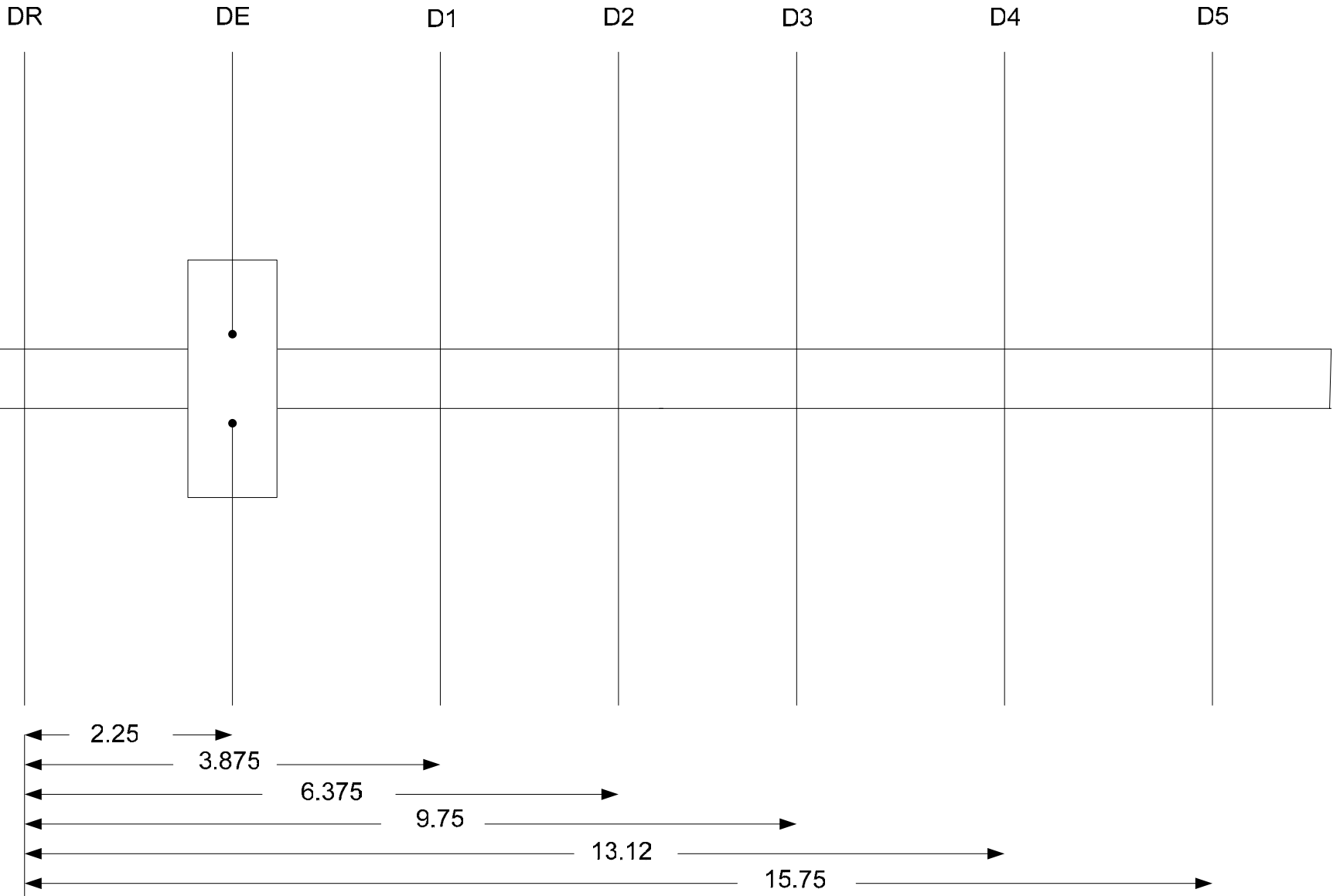
Extracted from work by W5TX

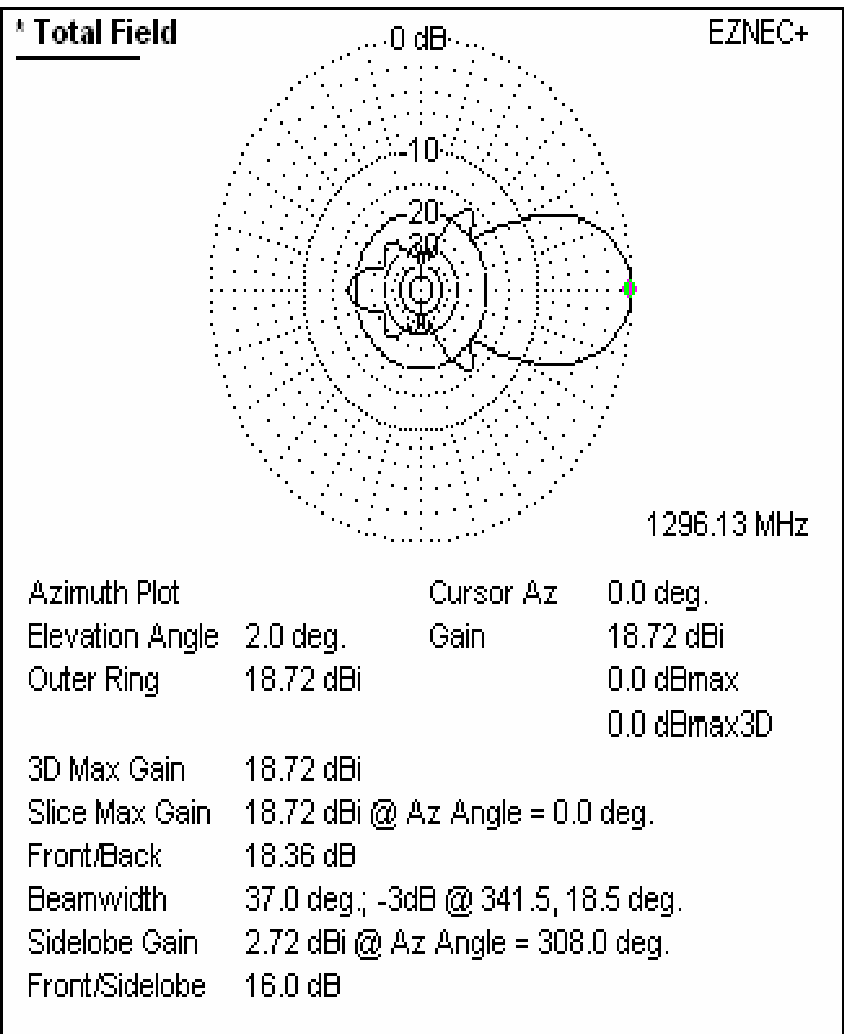
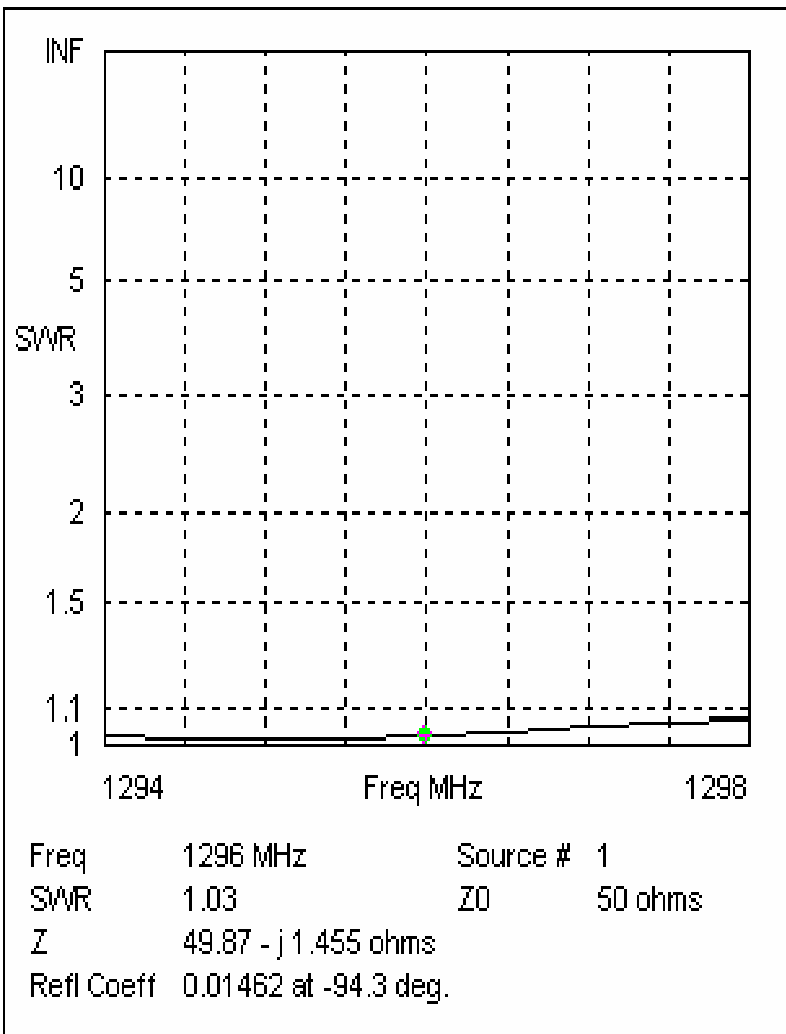


# 1296 Mhz 7 Element Yagi

This is a 1296 Mhz 7 element yagi designed for the weak signal Area of the 1296 Mhz band. The element diameter is 0.25 inches (1/8"). Performance data for height of 5 feet.

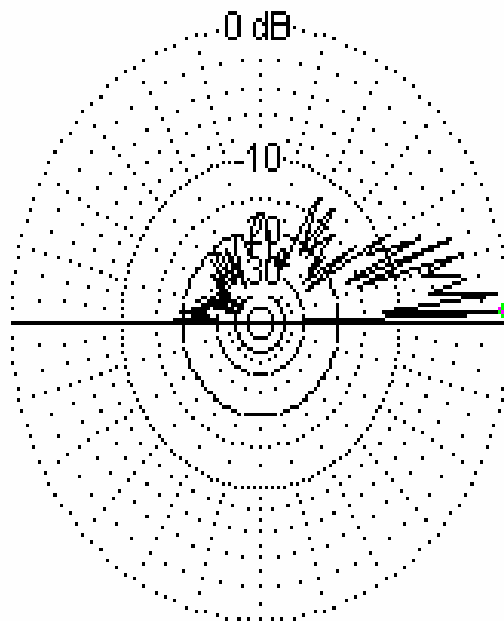
DR=2.26	0.0000
DE=2.10	S1=2.25
D1=1.92	S2=3.875
D2=1.91	S3=6.375
D3=1.81	S4=9.75
D4=1.88	S5=13.12
D5=1.82	S6=15.75





**Total Field**

EZNEC+



1296.13 MHz

Elevation Plot		Cursor Elev	2.0 deg.
Azimuth Angle	0.0 deg.	Gain	18.72 dBi
Outer Ring	18.72 dBi		0.0 dBmax
			0.0 dBmax3D
3D Max Gain	18.72 dBi		
Slice Max Gain	18.72 dBi @ Elev Angle = 2.0 deg.		
Beamwidth	0.6 deg.; -3dB @ 1.9, 2.5 deg.		
Sidelobe Gain	17.76 dBi @ Elev Angle = 6.0 deg.		
Front/Sidelobe	0.96 dB		

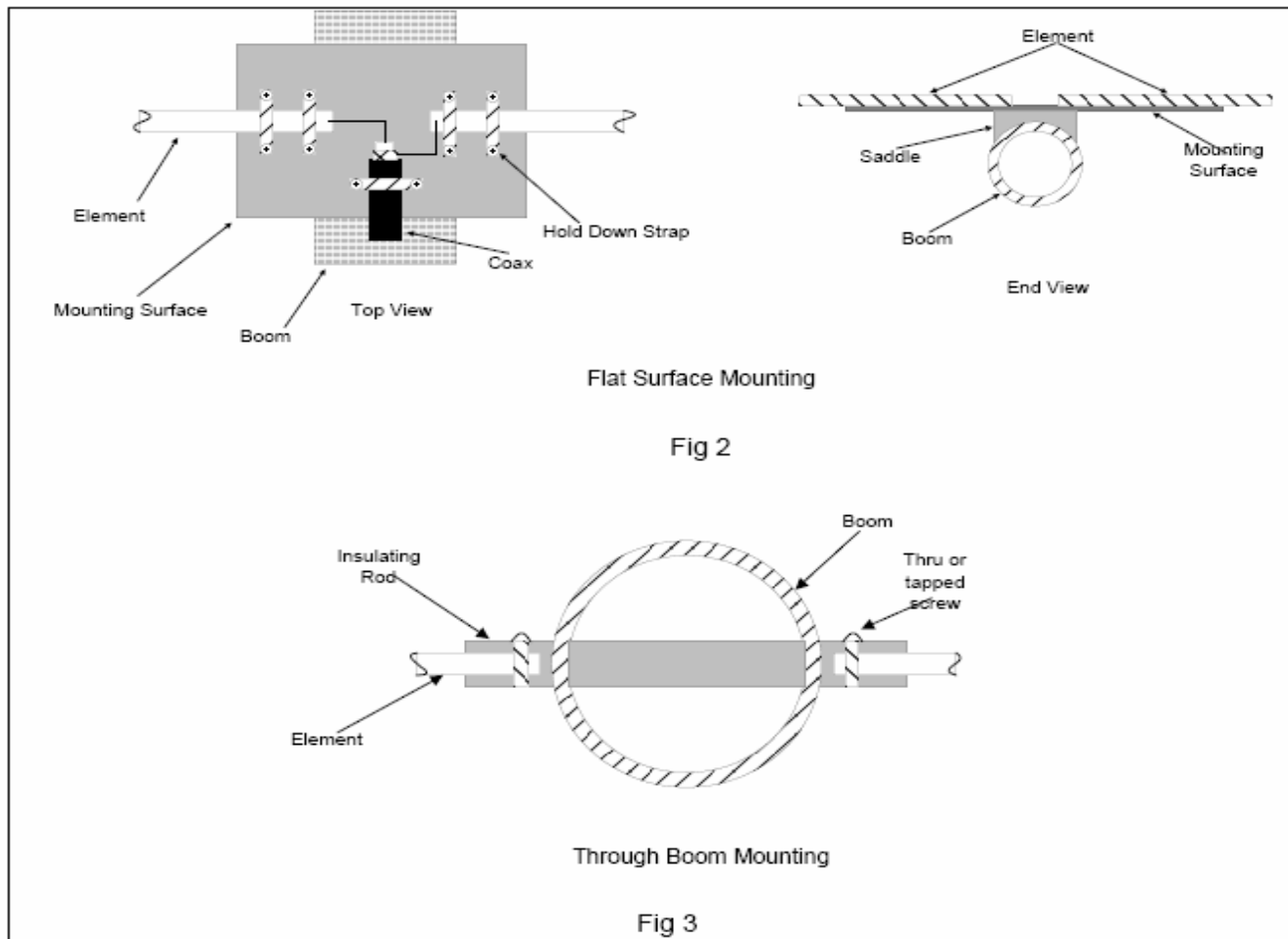


Figure 2 details the feedpoint construction when using a flat mounting plate of insulating material. Small wire clamps hold the half element pieces in place. Attachment of the coax feed can be made to the clamps where screwed down or if the element material is sufficiently large, it can be mounted with screws directly and the coax can be attached at the hold down screws. The element can also be tapped and the feedline attached at those points.

Figure 3 shows an alternate method of feeding the split driven element. An insulated rod can be drilled and the element inserted and attached by screws. The insulated rod is inserted through the boom and the feedline is then attached to the element securing screw.