

Construction of the Largest SteppIR Yagi Stack in the World at K9LTN

Presented by NØAE

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Construction of the Largest Stepped Yagi Stack in the World at K9LTN



50 Feet

Mounting Location of 4 Element SteppIR Yagi

Rohn 25

Rohn 25

NOT TO SCALE
K9LTN
Proposed Tower and
Antenna System

Rohn 45

Rohn 45

Mounting Location of 4 Element SteppIR Yagi

Mounting location of KLM 4 Element 40 M Yagi

K9LTN Assembly 2

K9LTN Assembly 4A & 4B

One of 3 guy reinforcement lines
the other 2 not shown for simplicity

66 Feet

K9LTN
Assembly 3

Rohn 65G

K9LTN Assembly 1

One of 3 guy reinforcement lines
the other 2 not shown for simplicity

5 Inch Sch 80
Pipe

Elevation Rotator

8 Inch Sch 40
Pipe

Azimuth Rotor

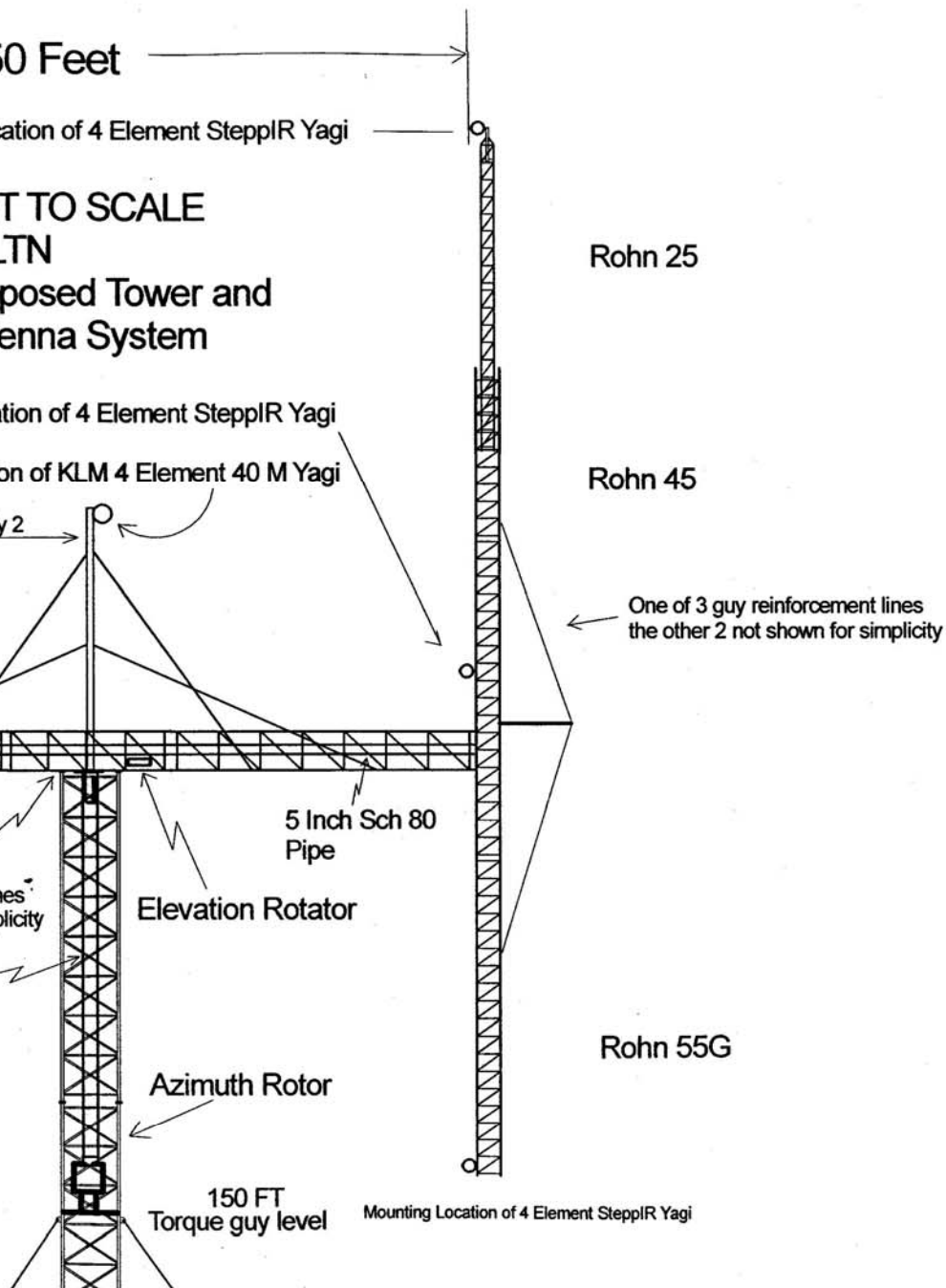
Rohn 55G

Rohn 55G

150 FT
Torque guy level

Mounting Location of 4 Element SteppIR Yagi

Mounting Location of 4 Element SteppIR Yagi















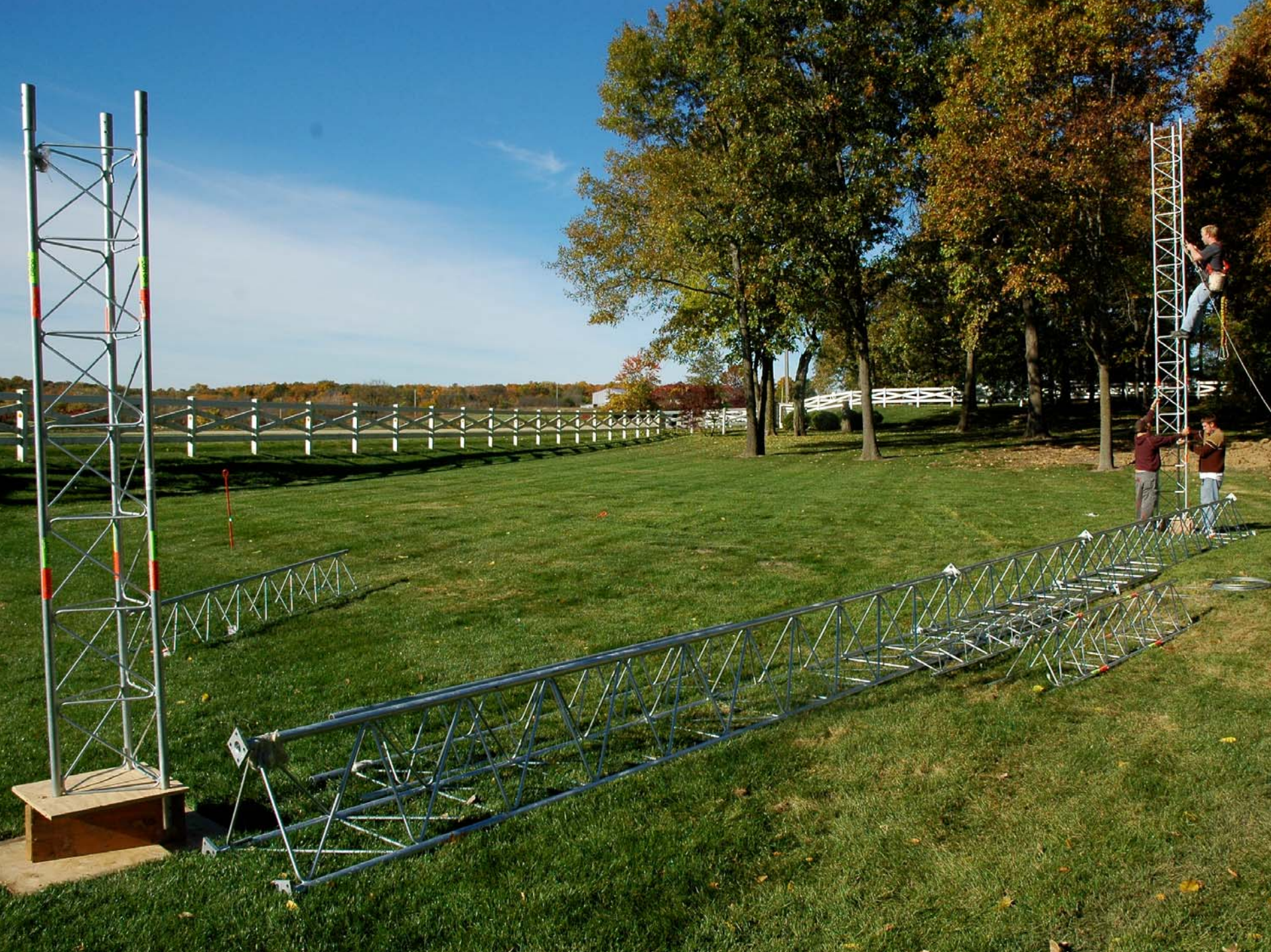
















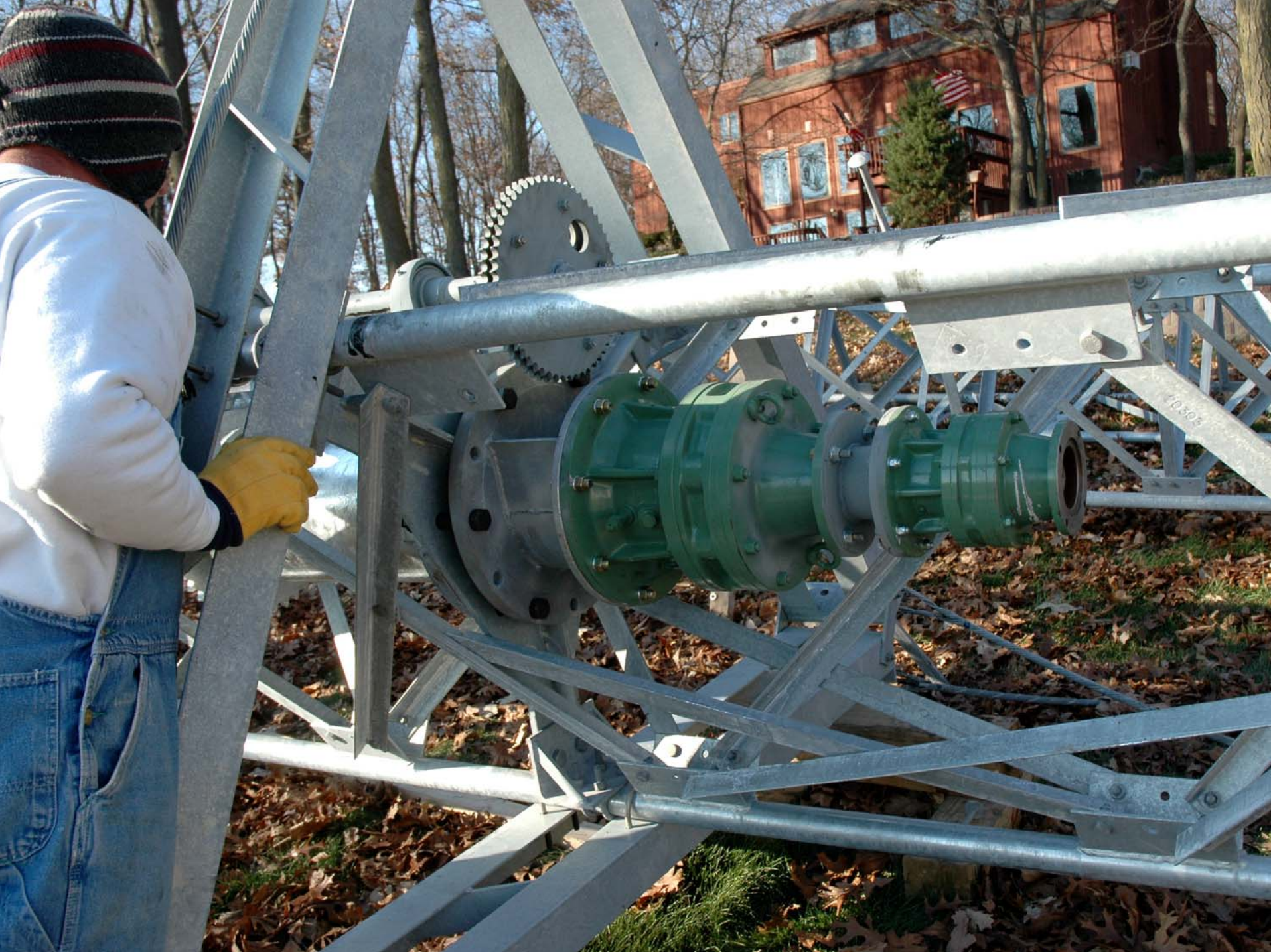






























































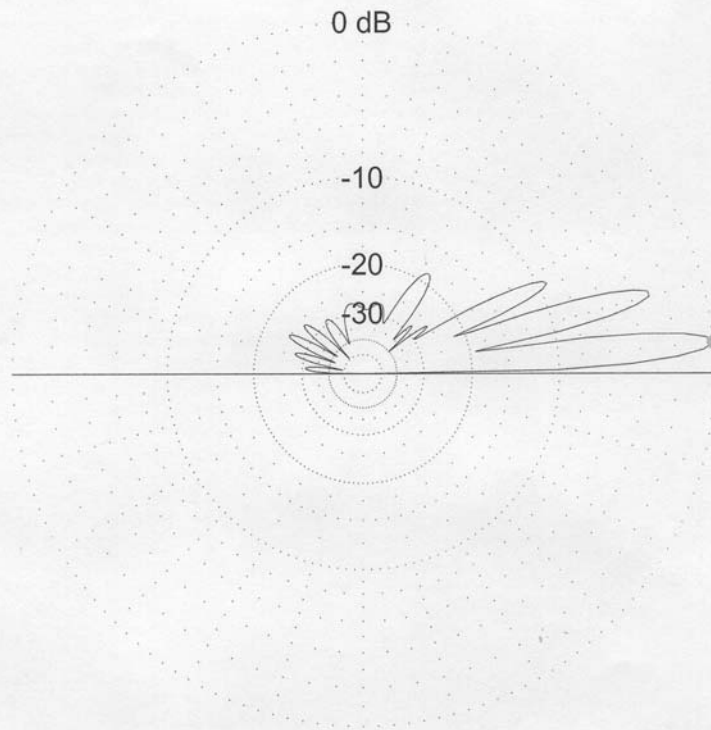








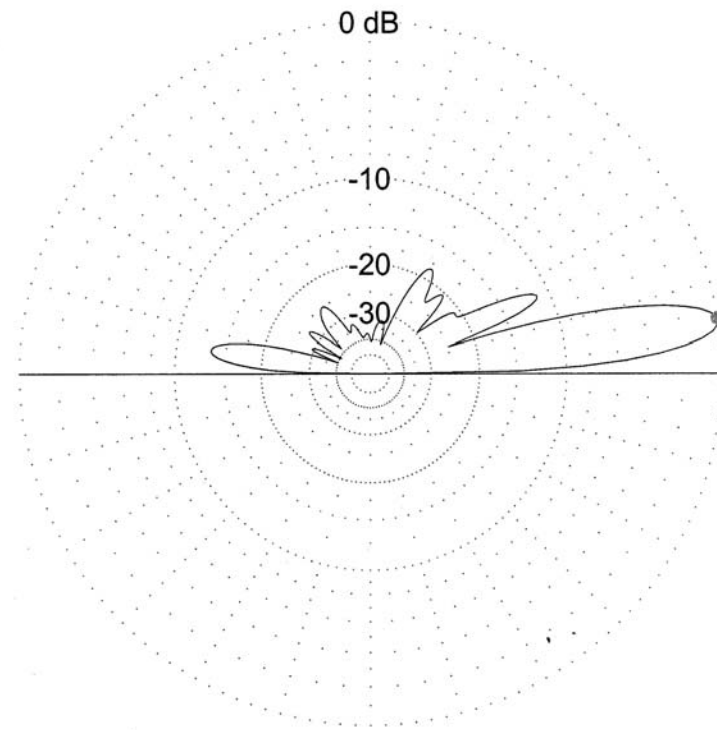




14.15 MHz

6-4 EI StepIR Yagis 20M 180ft

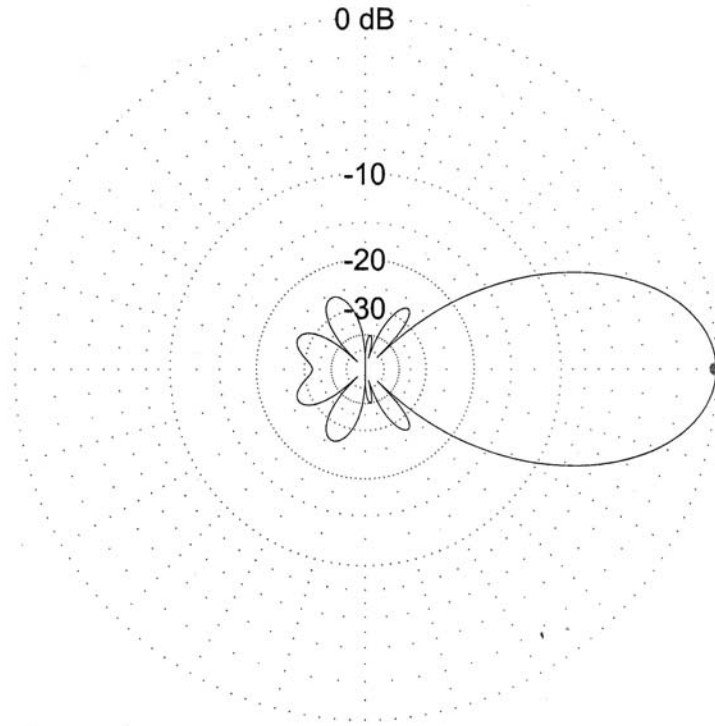
Elevation Plot		Cursor Elev	5.0 deg.
Azimuth Angle	0.0 deg.	Gain	20.87 dBi
Outer Ring	20.87 dBi		0.0 dBmax
Slice Max Gain	20.87 dBi @ Elev Angle = 5.0 deg.		
Beamwidth	5.1 deg.; -3dB @ 2.6, 7.7 deg.		
Sidelobe Gain	17.93 dBi @ Elev Angle = 15.0 deg.		
Front/Sidelobe	2.94 dB		



14.15 MHz

225ft 12 EI 20m Yagi up 180ft

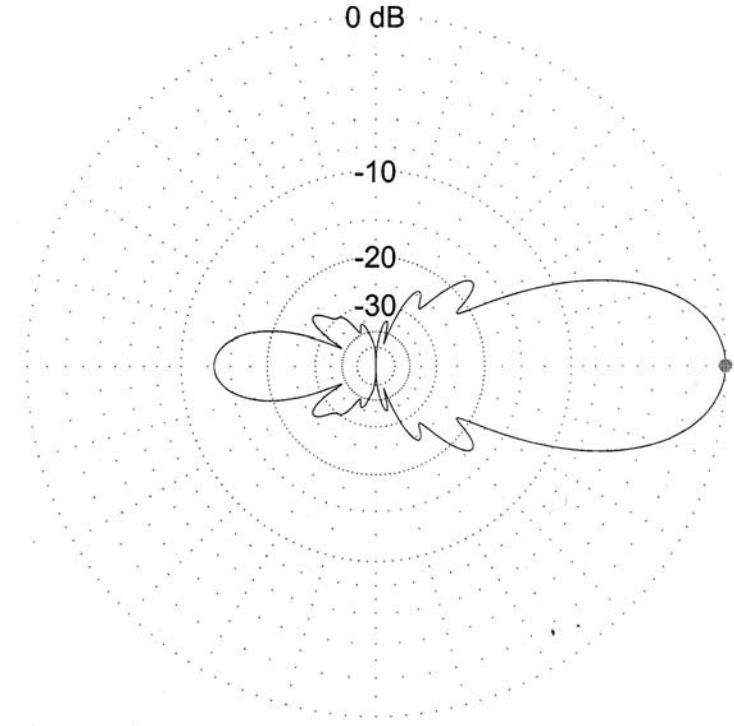
Elevation Plot		Cursor Elev	9.0 deg.
Azimuth Angle	0.0 deg.	Gain	20.57 dBi
Outer Ring	20.57 dBi		0.0 dBmax
Slice Max Gain	20.57 dBi @ Elev Angle = 9.0 deg.		
Beamwidth	9.0 deg.; -3dB @ 4.2, 13.2 deg.		
Sidelobe Gain	9.44 dBi @ Elev Angle = 25.0 deg.		
Front/Sidelobe	11.13 dB		



14.15 MHz

6-4 El StepIR Yagis 20M FreeSp

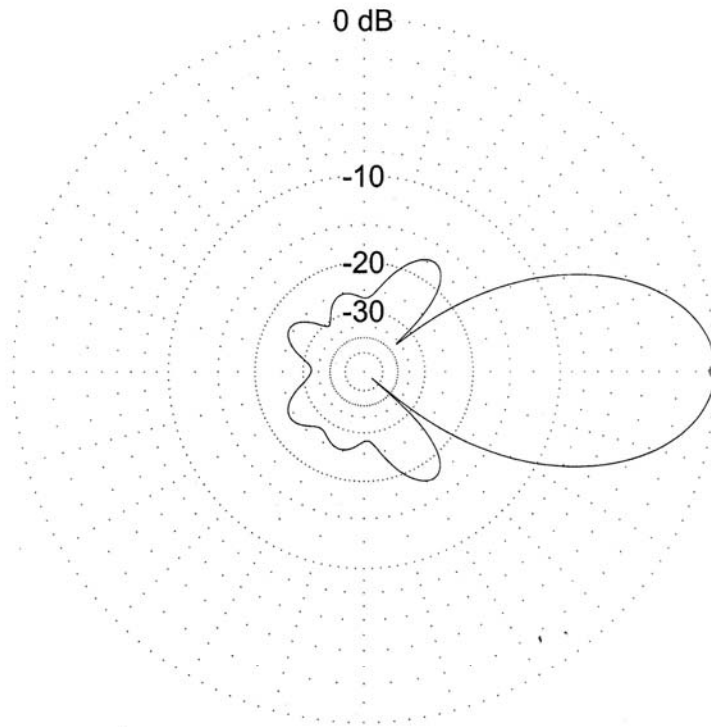
Azimuth Plot		Cursor Az	0.0 deg.
Elevation Angle	0.0 deg.	Gain	15.34 dBi
Outer Ring	15.34 dBi		0.0 dBmax
Slice Max Gain	15.34 dBi @ Az Angle = 0.0 deg.		
Front/Back	32.4 dB		
Beamwidth	32.8 deg.; -3dB @ 343.6, 16.4 deg.		
Sidelobe Gain	-10.37 dBi @ Az Angle = 245.0 deg.		
Front/Sidelobe	25.71 dB		



14.15 MHz

225ft 12 El 20m Yagi FreeSpace

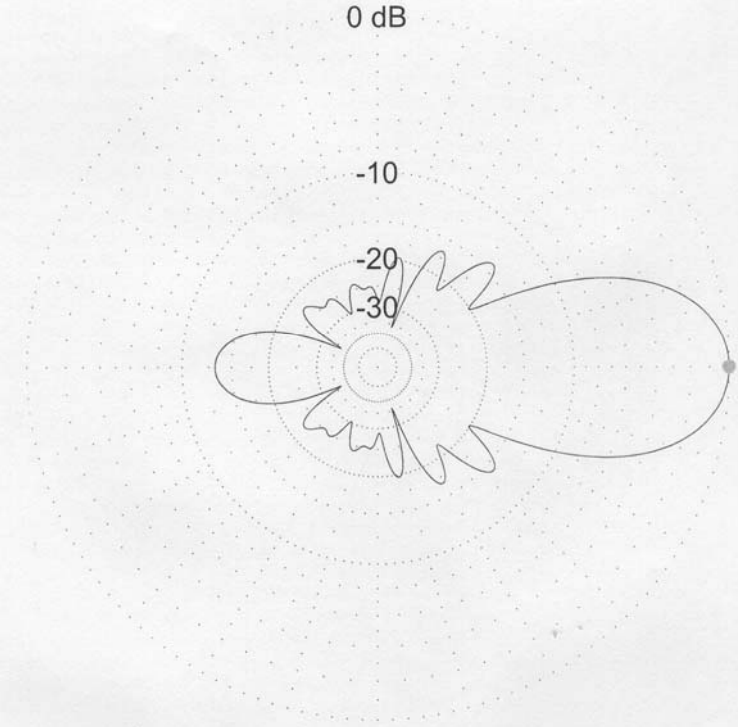
Azimuth Plot		Cursor Az	0.0 deg.
Elevation Angle	0.0 deg.	Gain	15.74 dBi
Outer Ring	15.74 dBi		0.0 dBmax
Slice Max Gain	15.74 dBi @ Az Angle = 0.0 deg.		
Front/Back	13.17 dB		
Beamwidth	30.2 deg.; -3dB @ 344.9, 15.1 deg.		
Sidelobe Gain	2.57 dBi @ Az Angle = 180.0 deg.		
Front/Sidelobe	13.17 dB		



14.15 MHz

6-4 EI StepIR Yagis 20M FreeSp

Elevation Plot		Cursor Elev	0.0 deg.
Azimuth Angle	0.0 deg.	Gain	15.34 dBi
Outer Ring	15.34 dBi		0.0 dBmax
Slice Max Gain	15.34 dBi @ Elev Angle = 0.0 deg.		
Front/Back	32.4 dB		
Beamwidth	32.8 deg.; -3dB @ 343.9, 16.7 deg.		
Sidelobe Gain	-1.71 dBi @ Elev Angle = 57.0 deg.		
Front/Sidelobe	17.05 dB		



14.15 MHz

225ft 12 EI 20m Yagi FreeSpace

Elevation Plot		Cursor Elev	0.0 deg.
Azimuth Angle	0.0 deg.	Gain	15.74 dBi
Outer Ring	15.74 dBi		0.0 dBmax
Slice Max Gain	15.74 dBi @ Elev Angle = 0.0 deg.		
Front/Back	13.17 dB		
Beamwidth	32.2 deg.; -3dB @ 343.9, 16.1 deg.		
Sidelobe Gain	2.57 dBi @ Elev Angle = 180.0 deg.		
Front/Sidelobe	13.17 dB		

73,

NØAE

K9LTN

