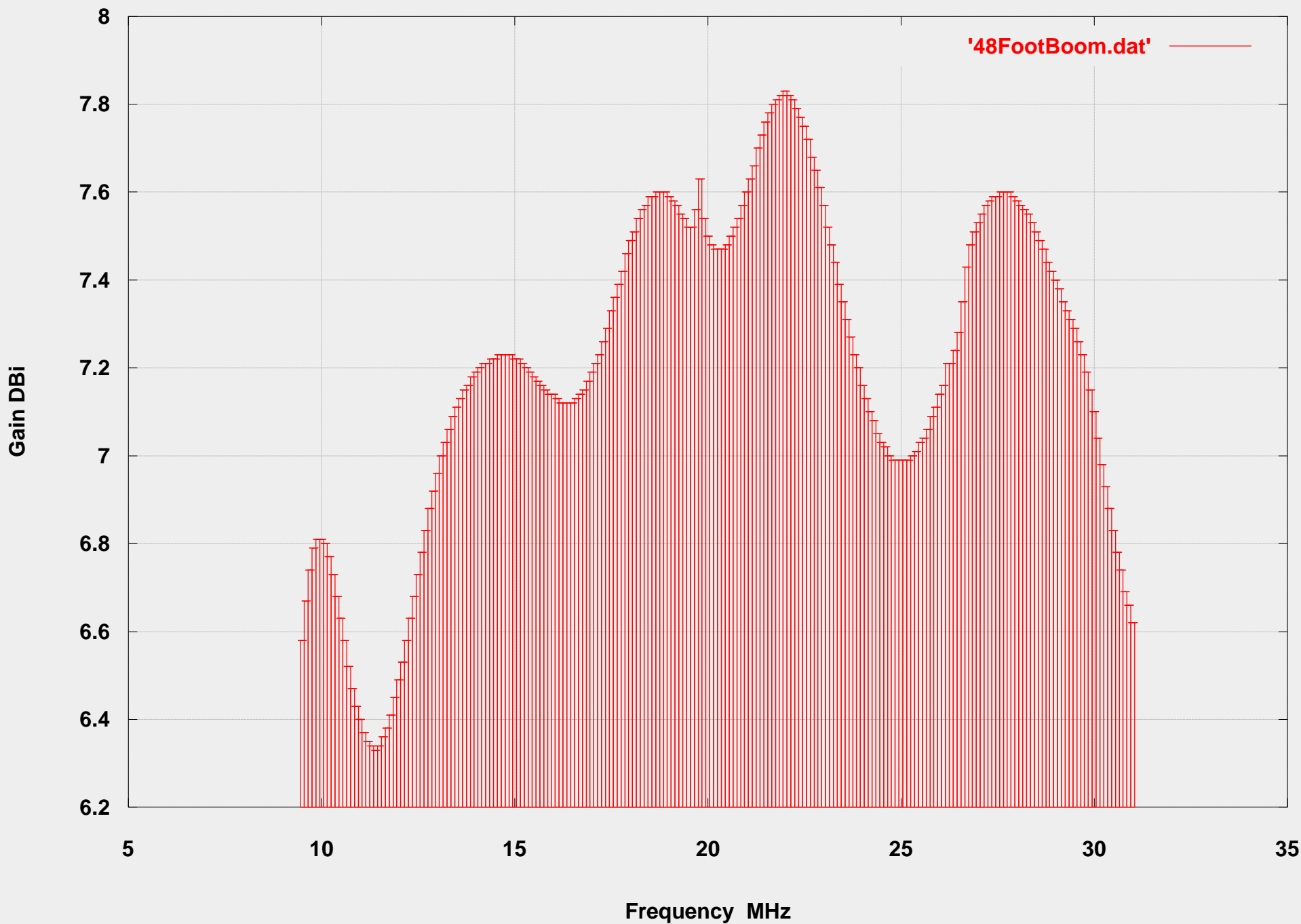
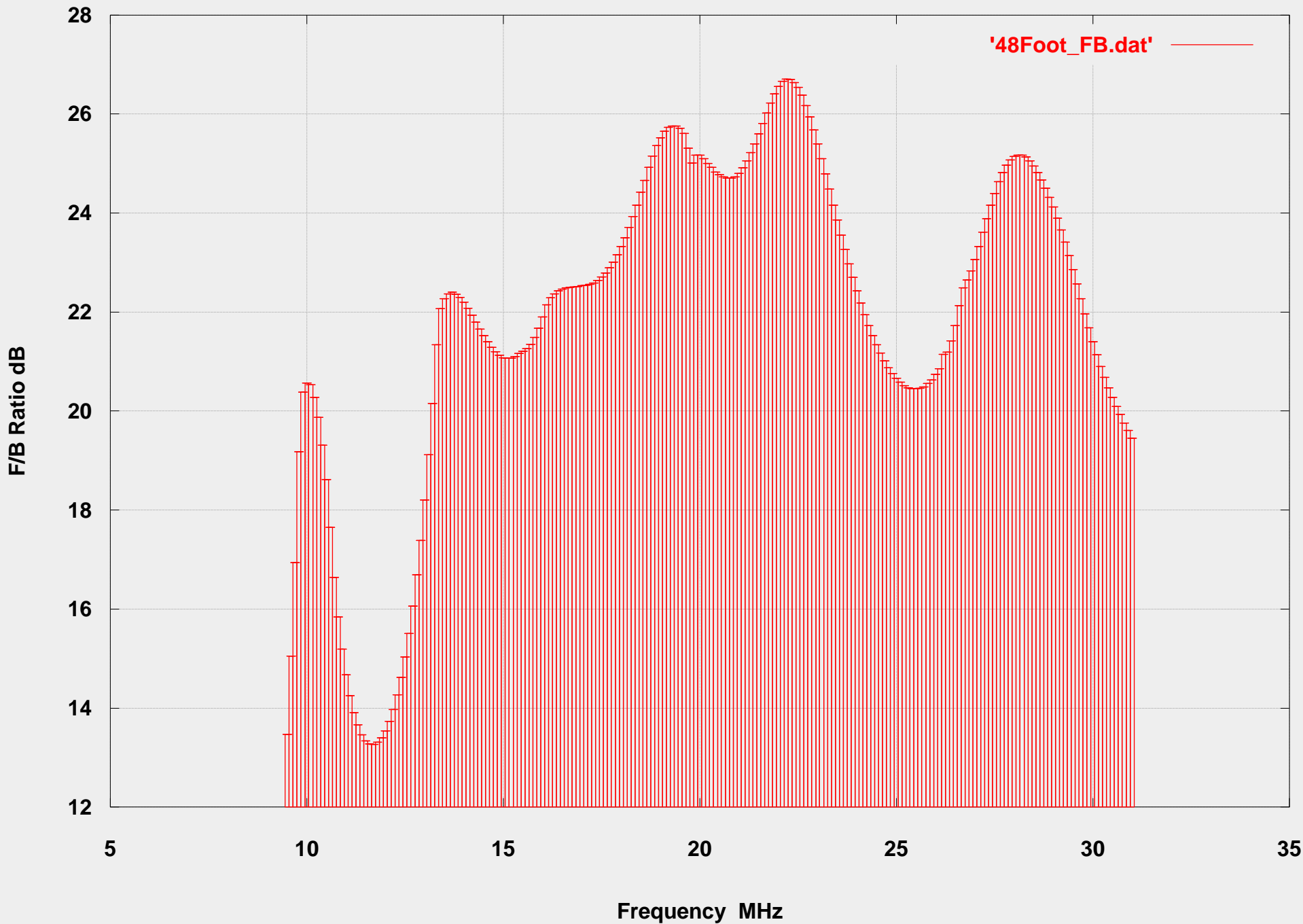


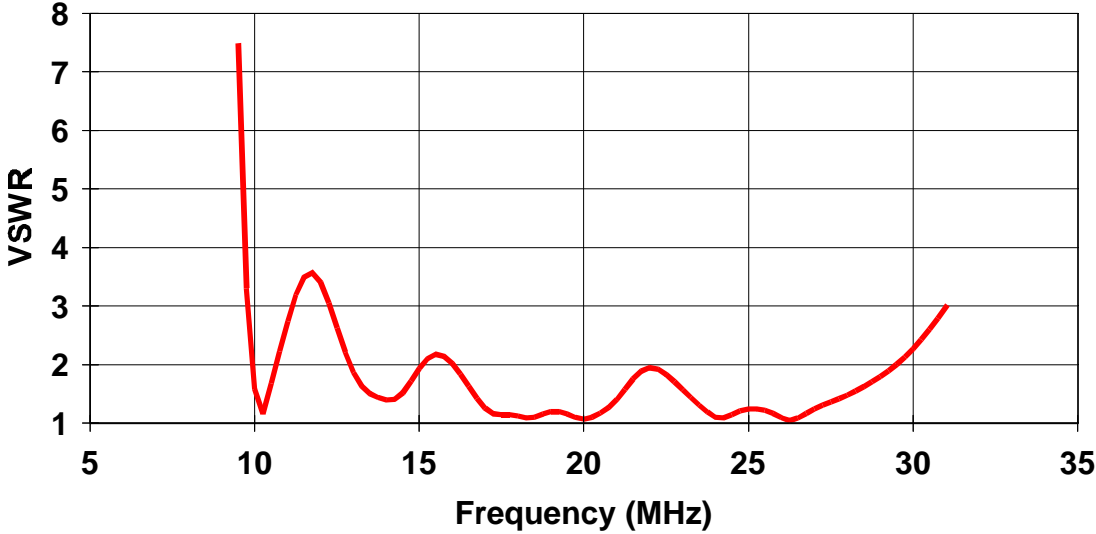
Forward Gain 15 Element 10-30 MHz Log Periodic Antenna



Front to Back Ratio 15 Element 10-30 MHz Log Periodic Antenna



VSWR vs Frequency



— Source: Tag 15, Segment 325; Char. Imped: 200; File: new48b.inp

Aluminum tubing construction lengths for 10-30 MHz log periodic antenna

ELEMENT SPACING ON BOOM ELEMENT RESONANCE HALF ELEMENT TUBING SIZES, inches

Rev. A 7/23/2002 Corrected tubing diameter and lengths on 10 MHz elements.

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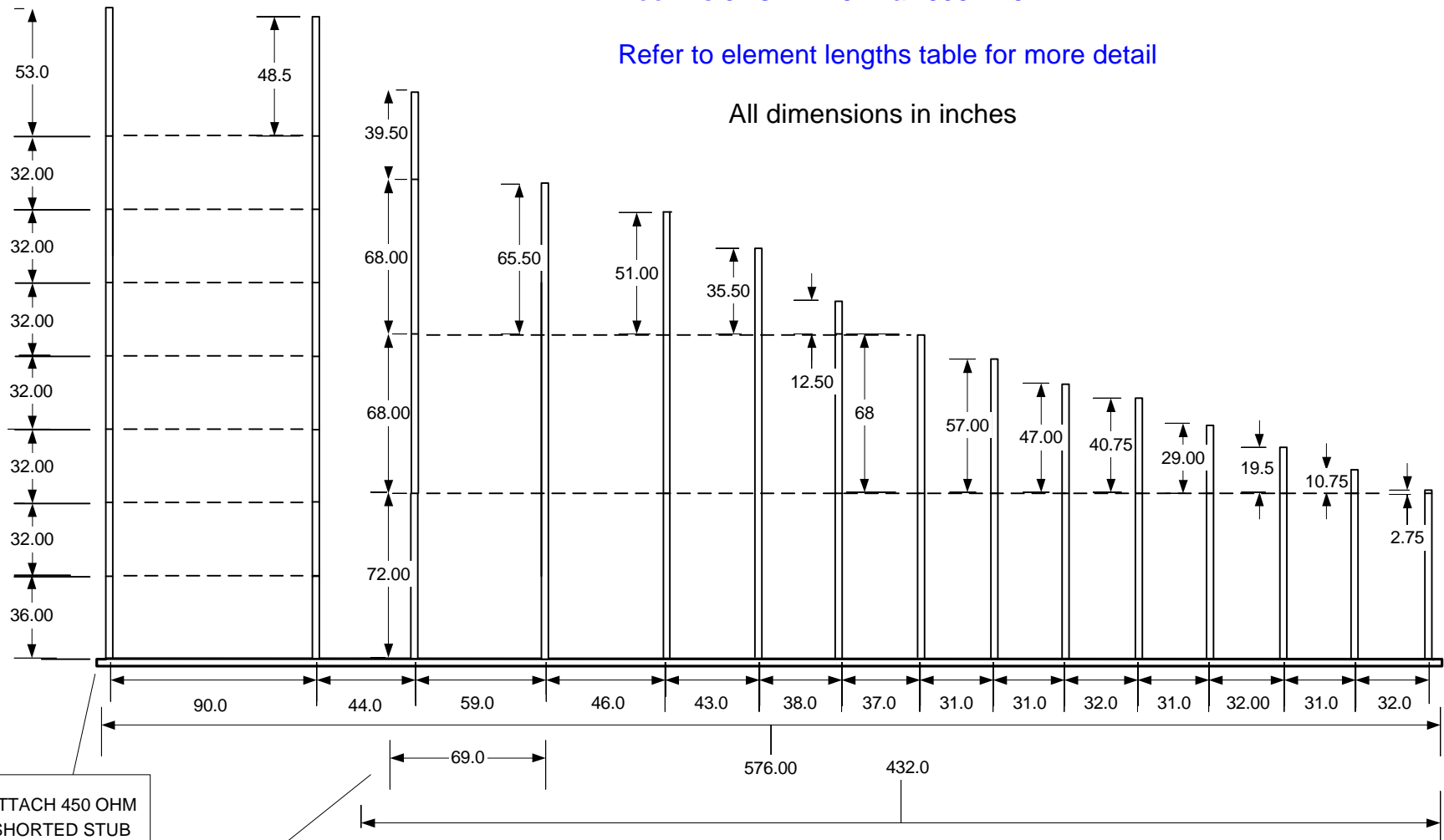
0"	10.33 MHz 78 mph Wind survival calculation	2.000 x .058 x 36 1.875 x .058 x 32 1.750 x .058 x 32 1.625 x .058 x 32 1.500 x .058 x 32 1.375 x .058 x 32 1.250 x .058 x 32 1.125 x .058 x 53.0
90"	10.48 MHz 79 mph	2.000 x .058 x 36 1.875 x .058 x 32 1.750 x .058 x 32 1.625 x .058 x 32 1.500 x .058 x 32 1.375 x .058 x 32 1.250 x .058 x 32 1.125 x .058 x 48.5
134" 144" for 14-30 MHz version only	11.69 70 mph	1.000 x .116 x 72 .875 x .058 x 68 .750 x .058 x 68 .625 x .058 x 39.5
193"	14.0 MHz 84 mph	1.000 x .116 x 72 .875 x .058 x 68 .750 x .058 x 65.5
239"	15.05 MHz 69 mph	1.000 x .058 x 72 .875 x .058 x 68 .750 x .058 x 51
282"	16.35 MHz 74 mph	1.000 x .058 x 72 .875 x .058 x 68 .750 x .058 x 35.5
318"	18.7 MHz 84 mph	1.000 x .058 x 72 .875 x .058 x 68 .750 x .058 x 12.5
355"	20.3 MHz 90 mph	1.000 x .058 x 72 .875 x .058 x 68
386"	22.0 MHz 97 mph	1.000 x .058 x 72 .875 x .058 x 57
417"	23.85 105 mph	1.000 x .058 x 72 .875 x .058 x 47
449"	25.15 MHz 111 mph	1.000 x .058 x 72 .875 x .058 x 40.75
480"	28.0 MHz 123 mph	1.000 x .058 x 72 .875 x .058 x 29

512"	30.85 134 mph	1.000 x .058 x 72 .875 x .058 x 19.5
543"	34.0 MHz 147 mph	1.000 x .058 x 72 .875 x .058 x 10.75
575"	37.5 MHz 161 mph	1.000 x .058 x 72 .875 x .058 x 2.75

All elements are .058" thick wall 6063-T832 aluminum
 Telescoping elements have 4" overlap
 Boom is 3" OD .116" wall 6061-T6

Refer to element lengths table for more detail

All dimensions in inches



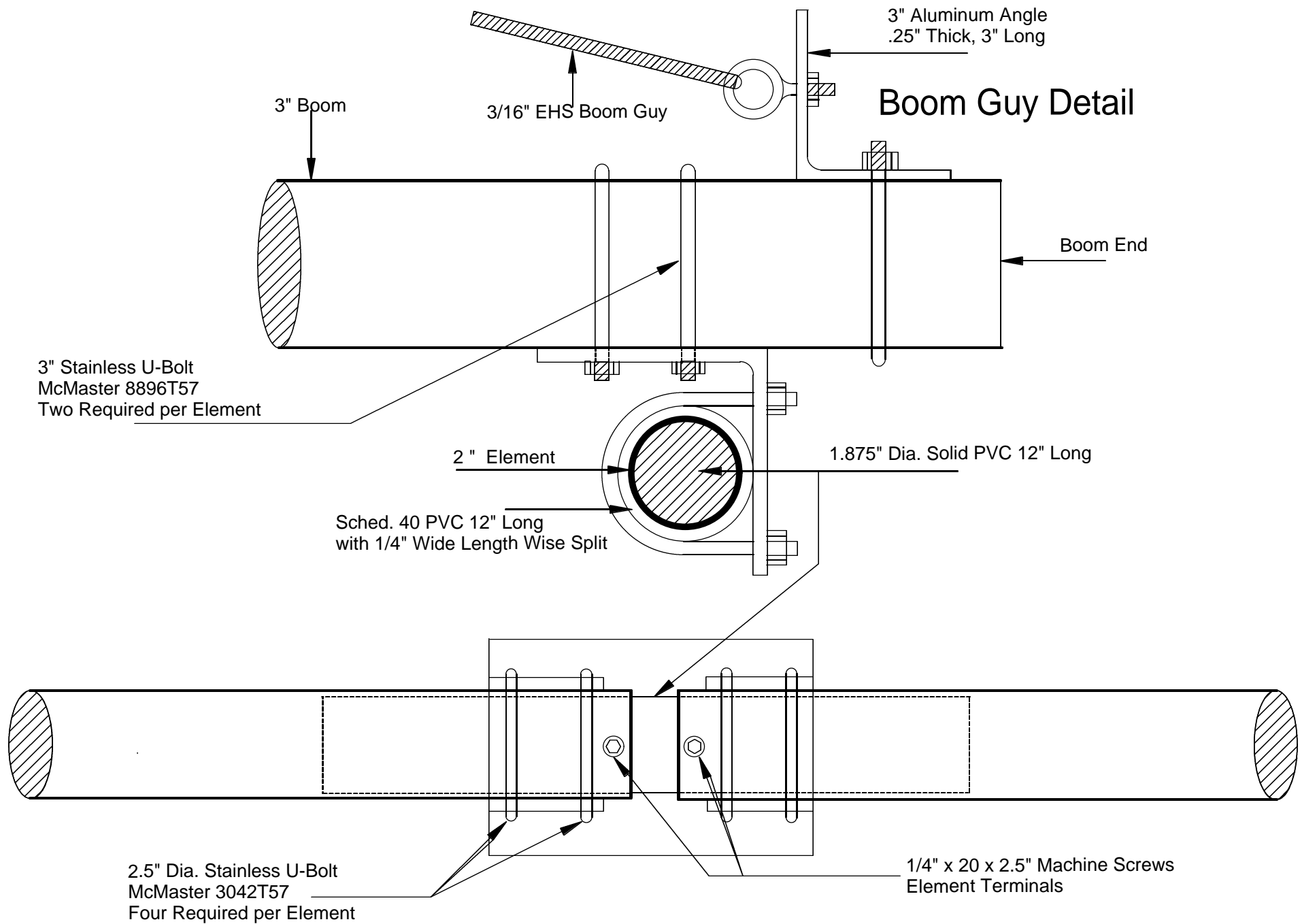
ANTENNA
 FEEDPOINT
 USE 4:1 BALUN

ATTACH 450 OHM
 SHORTED STUB
 TO THIS ELEMENT

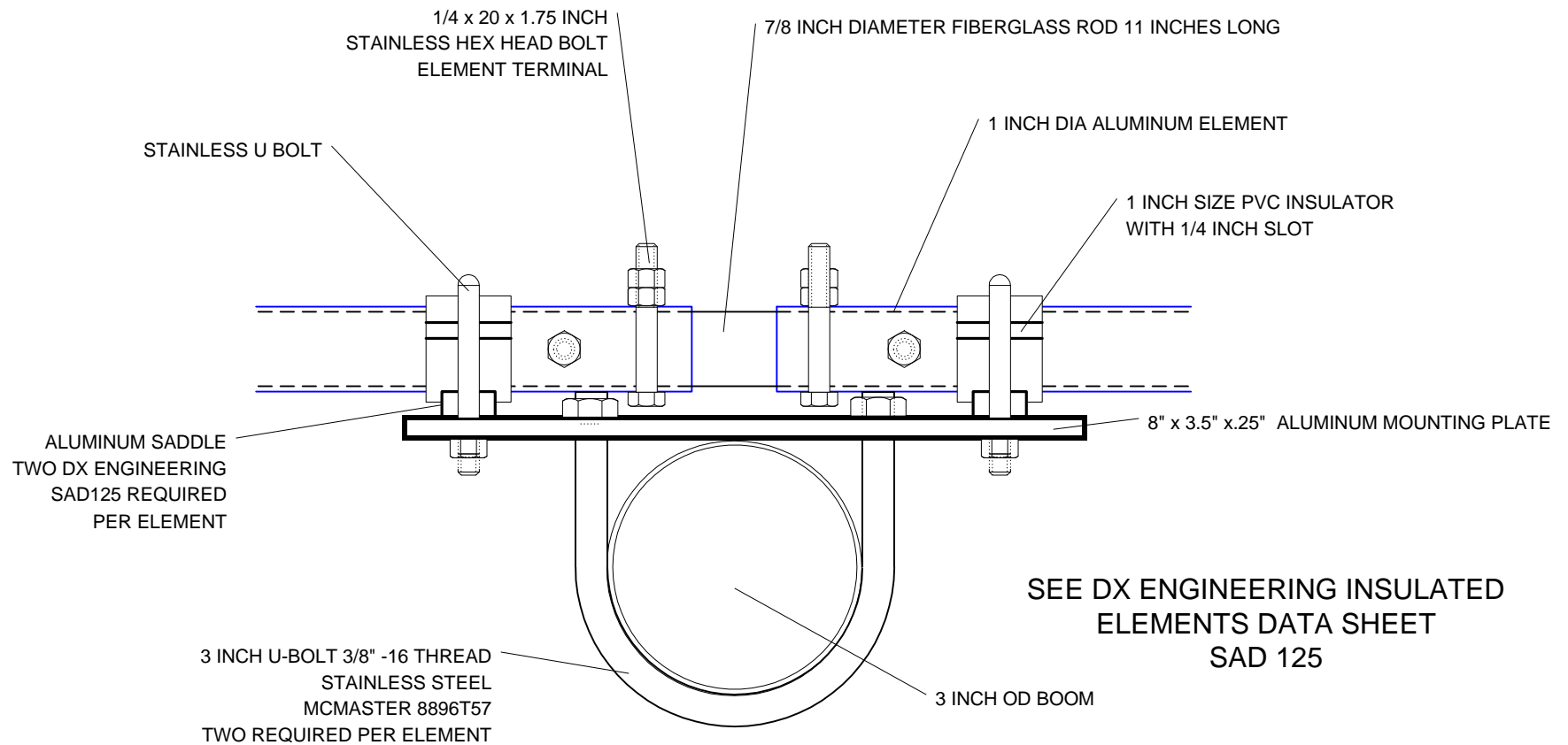
USE 69 INCH
 SPACING WHEN
 BUILDING 14-30
 MHZ VERSION

10-30 MHZ 15 ELEMENT LOG PERIODIC LAYOUT

K8CU
 Oct. 11, 1994
 Revised July 26, 2002



Log Periodic Element Center for 10 Mhz elements

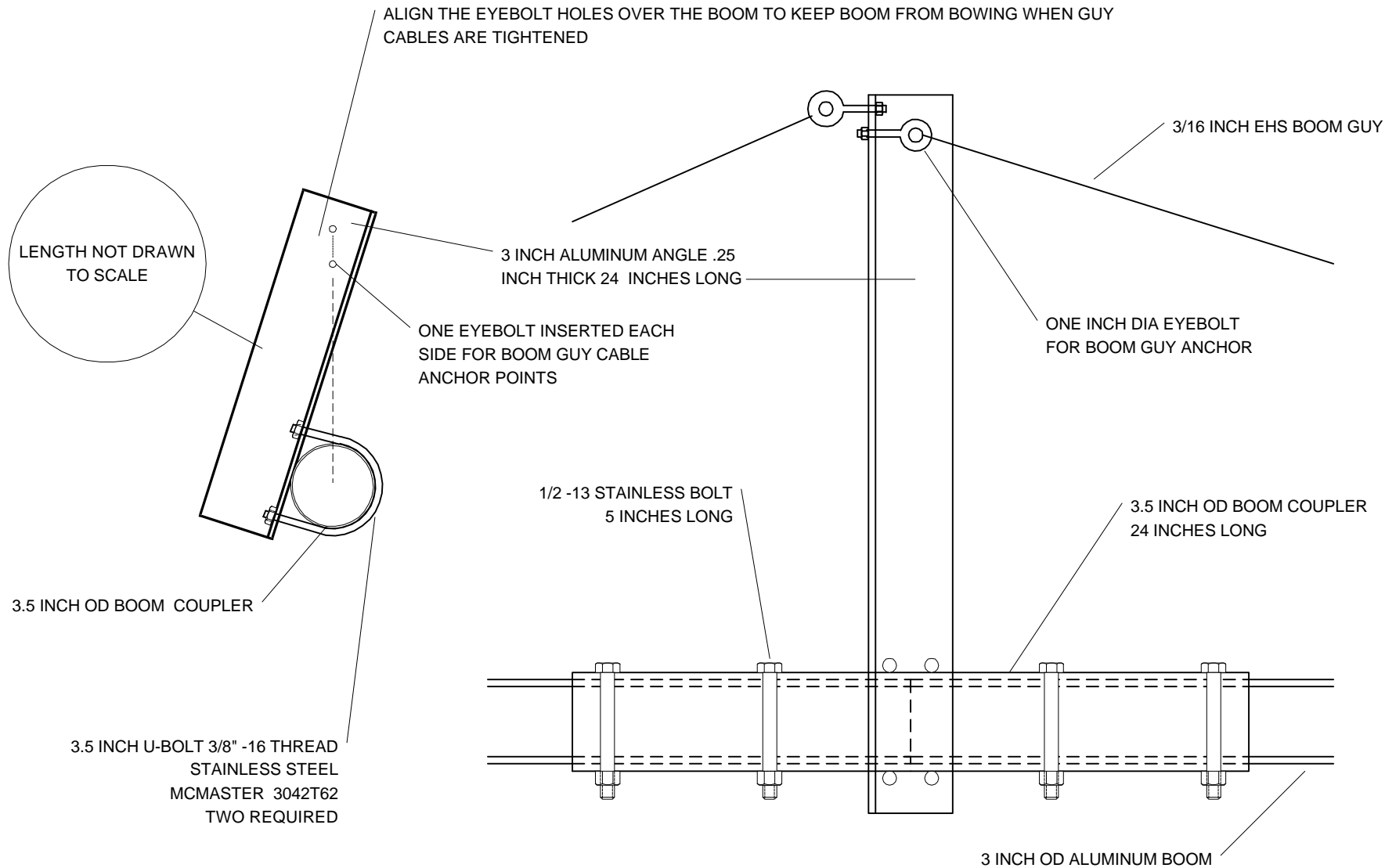


LOG PERIODIC ELEMENT CENTER for 14-30 MHZ

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REVISED

11/29/2001



LOG PERIODIC VERTICAL BOOM SUPPORT AND BOOM COUPLER

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