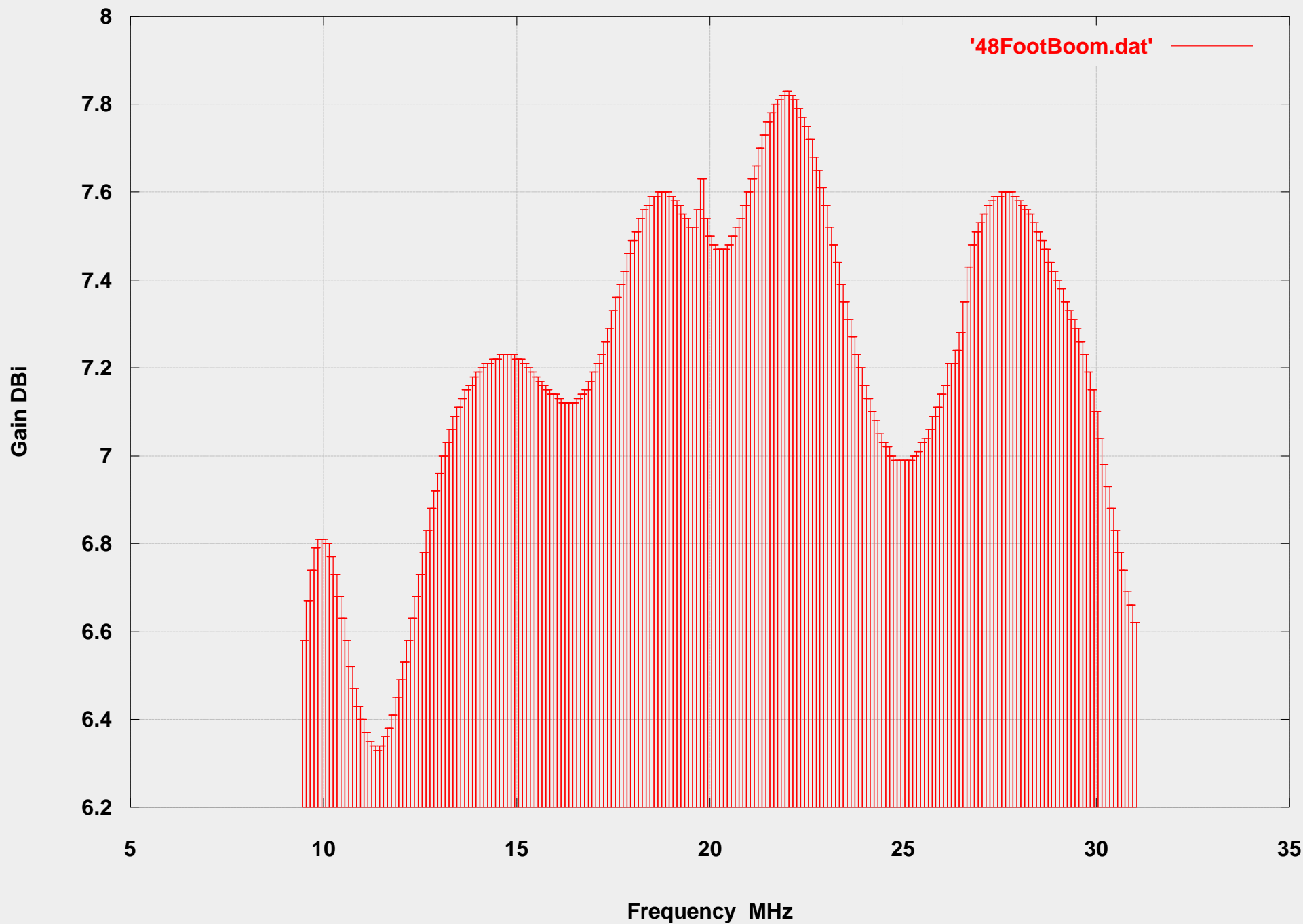
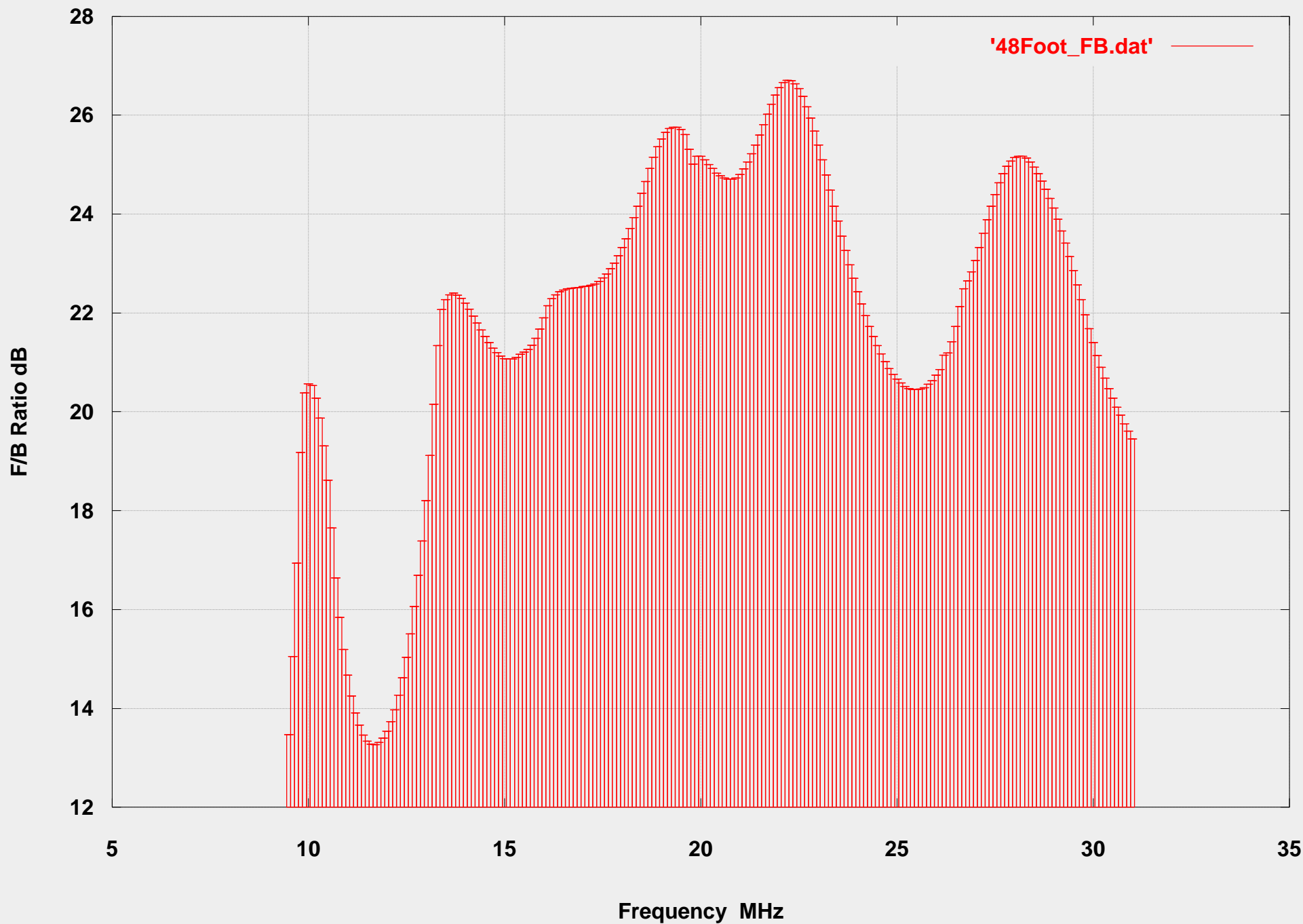


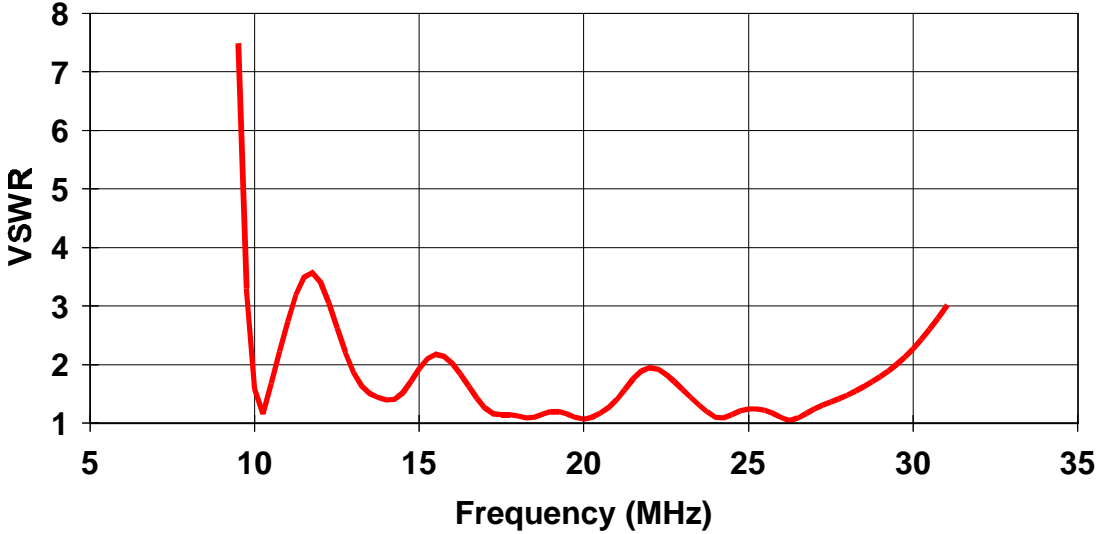
Forward Gain 15 Element 10-30 MHz Log Periodic Antenna



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.

**K8CU**

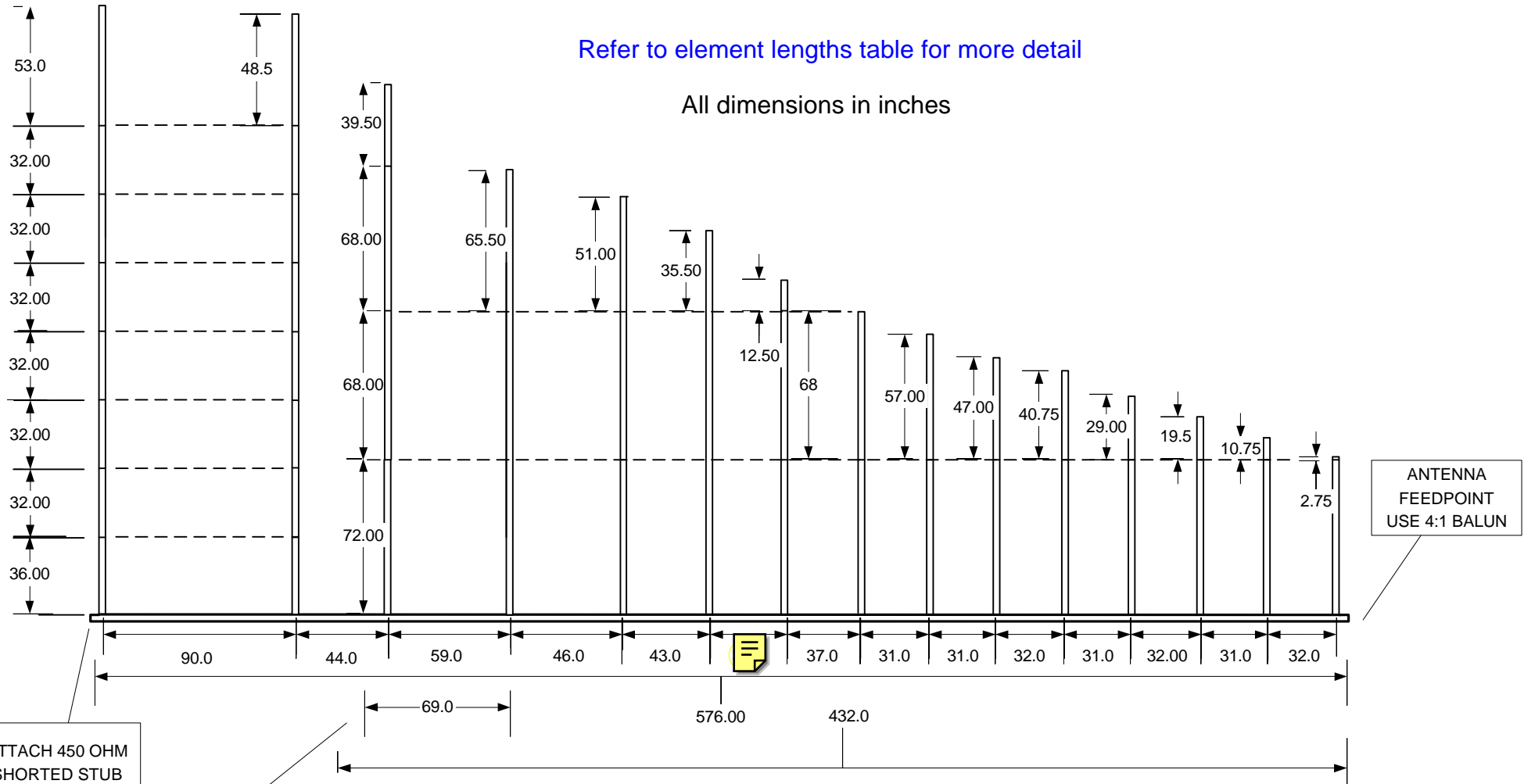
<b>0"</b>	<b>10.33 MHz</b>  <b>78 mph</b> <b>Wind survival calculation</b>	<b>2.000 x .058 x 36</b> <b>1.875 x .058 x 32</b> <b>1.750 x .058 x 32</b> <b>1.625 x .058 x 32</b> <b>1.500 x .058 x 32</b> <b>1.375 x .058 x 32</b> <b>1.250 x .058 x 32</b> <b>1.125 x .058 x 53.0</b>
<b>90"</b>	<b>10.48 MHz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

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

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



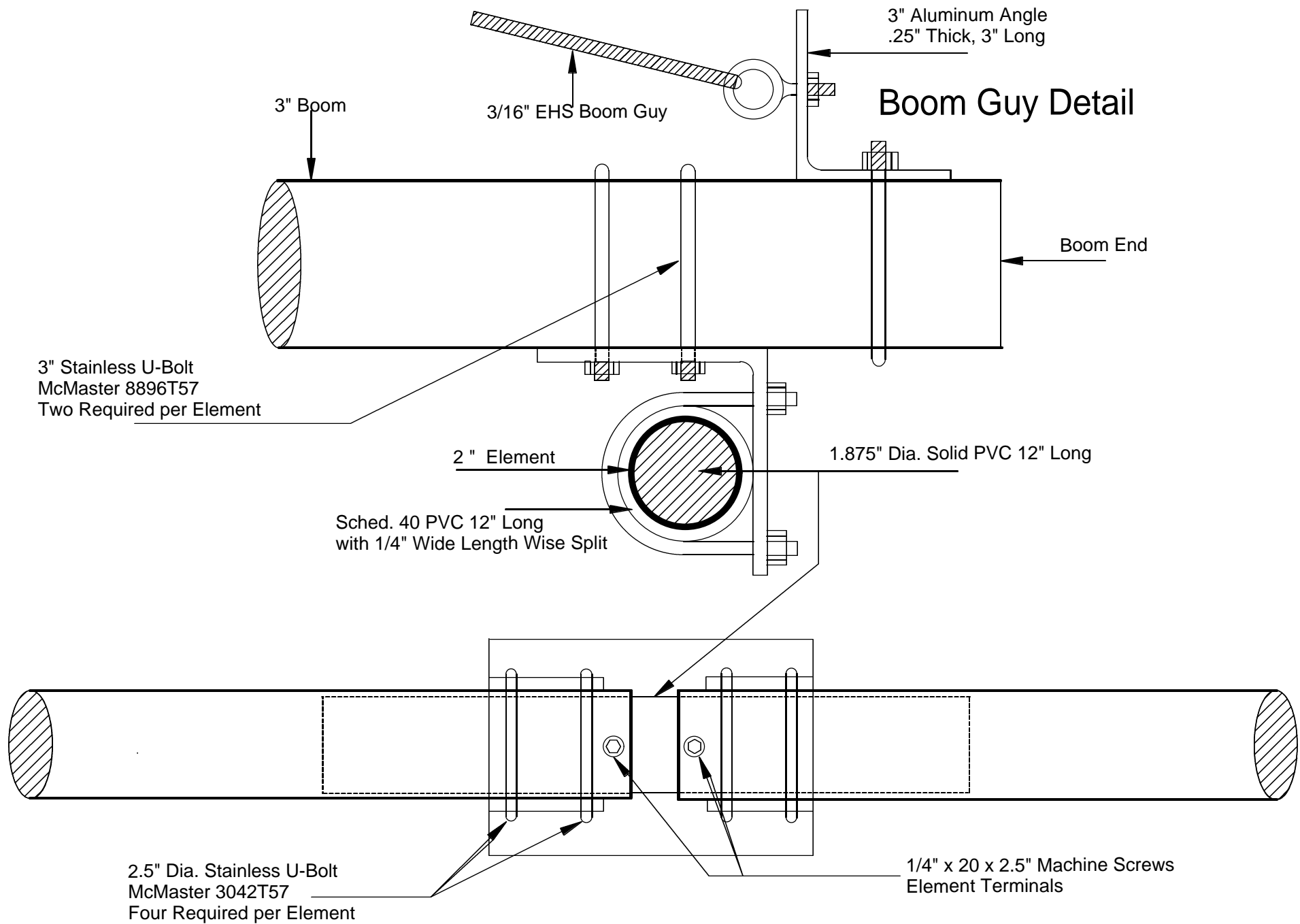
ATTACH 450 OHM  
 SHORTED STUB  
 TO THIS ELEMENT

ANTENNA  
 FEEDPOINT  
 USE 4:1 BALUN

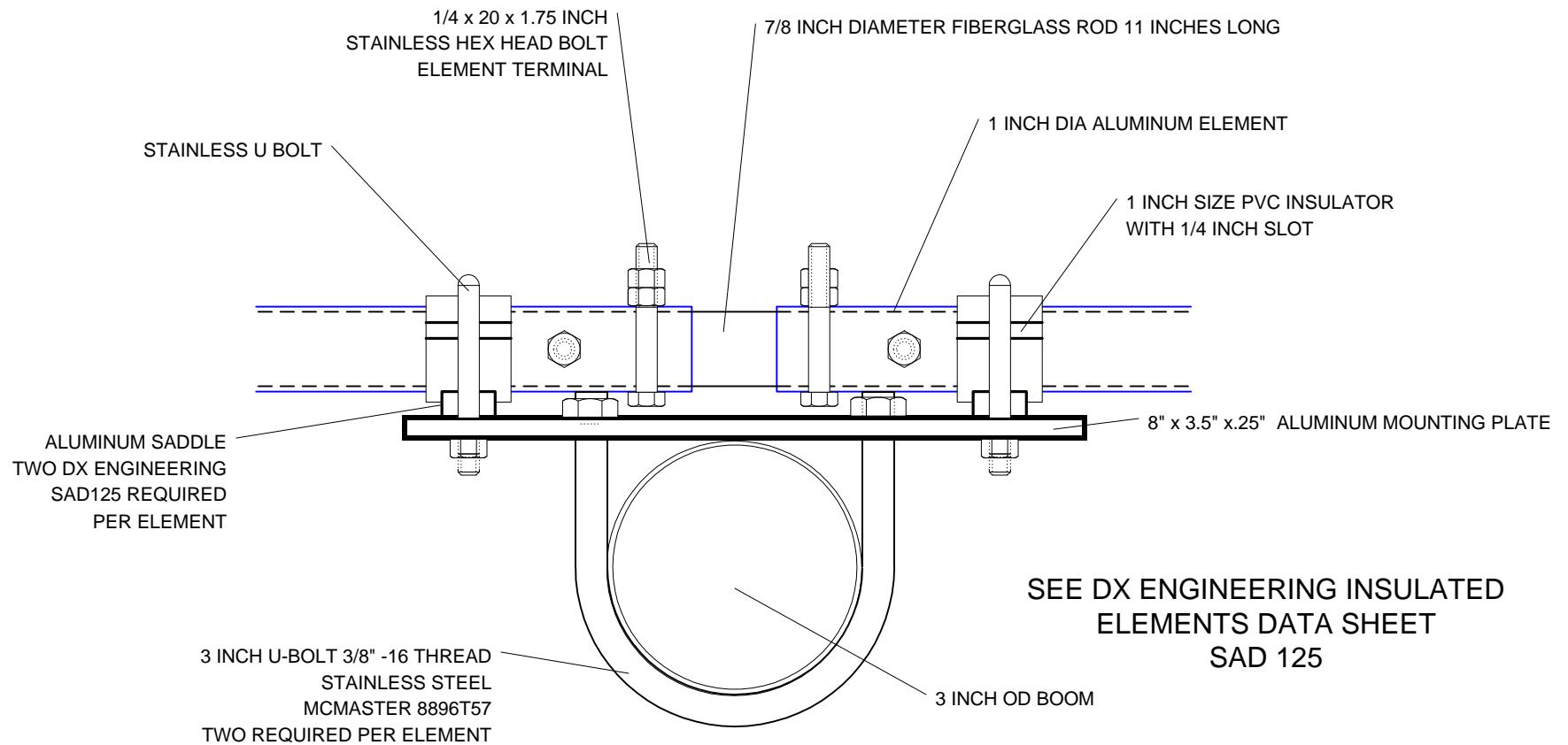
USE 69 INCH  
 SPACING WHEN  
 BUILDING 14-30  
 MHZ VERSION

# 10-30 MHZ 15 ELEMENT LOG PERIODIC LAYOUT

K8CU  
 Oct. 11, 1994  
 Revised July 26, 2002



# Log Periodic Element Center for 10 Mhz elements



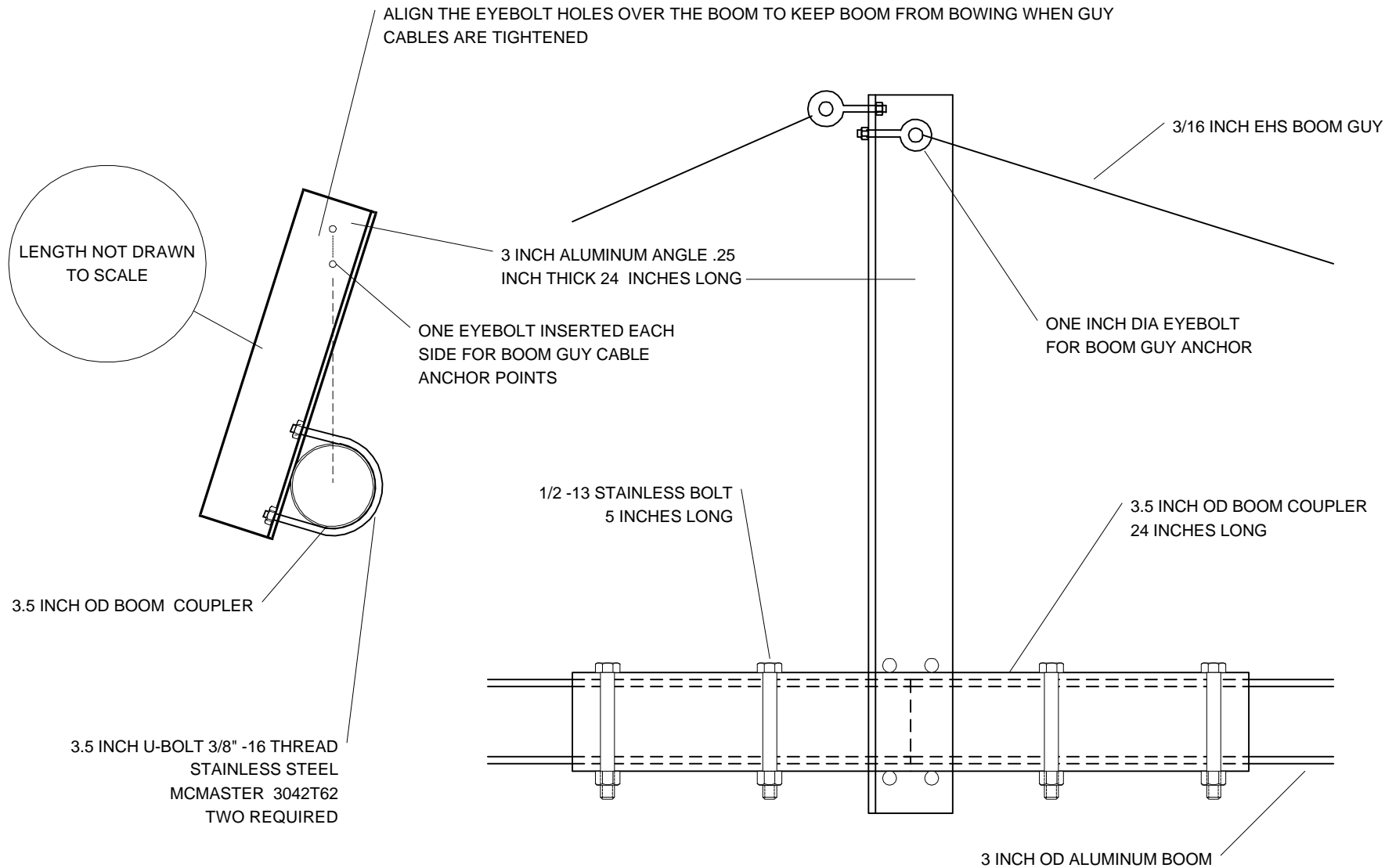
## LOG PERIODIC ELEMENT CENTER for 14-30 MHZ

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REVISED

11/29/2001





## LOG PERIODIC VERTICAL BOOM SUPPORT AND BOOM COUPLER

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REVISED

11/29/2001