

**Notes:**

**Apex Angles, Leg Lengths** (wave lengths) and **Front Terminations** are specified by Edmund A. Laport's research and are independent of design frequency.

All other dimensions are calculated.  
A velocity Factor of 0.99 is assumed.

Predicted Gain: 27 dBd per CATJ  
Computer Modeling indicates about 18 dBi  
Forward Horizontal Beam Width: 11°  
Forward Vertical Beam Width: 6°

Active elements are virtually co-planar – insulate at all three crossing points

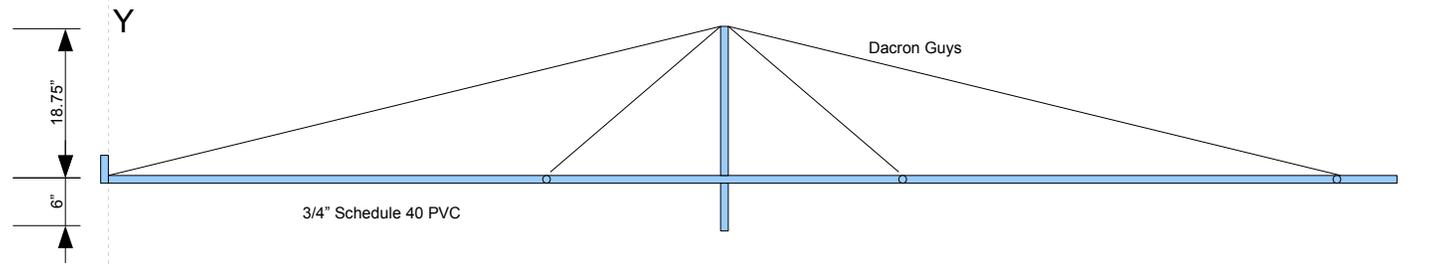
**Laport Rhombic**  
Design Frequency: 665 MHz (UHF-46)  
Based on information published in CATJ,  
October 1976

6/72011

Scale: 1" = 2λ

By: TAJ

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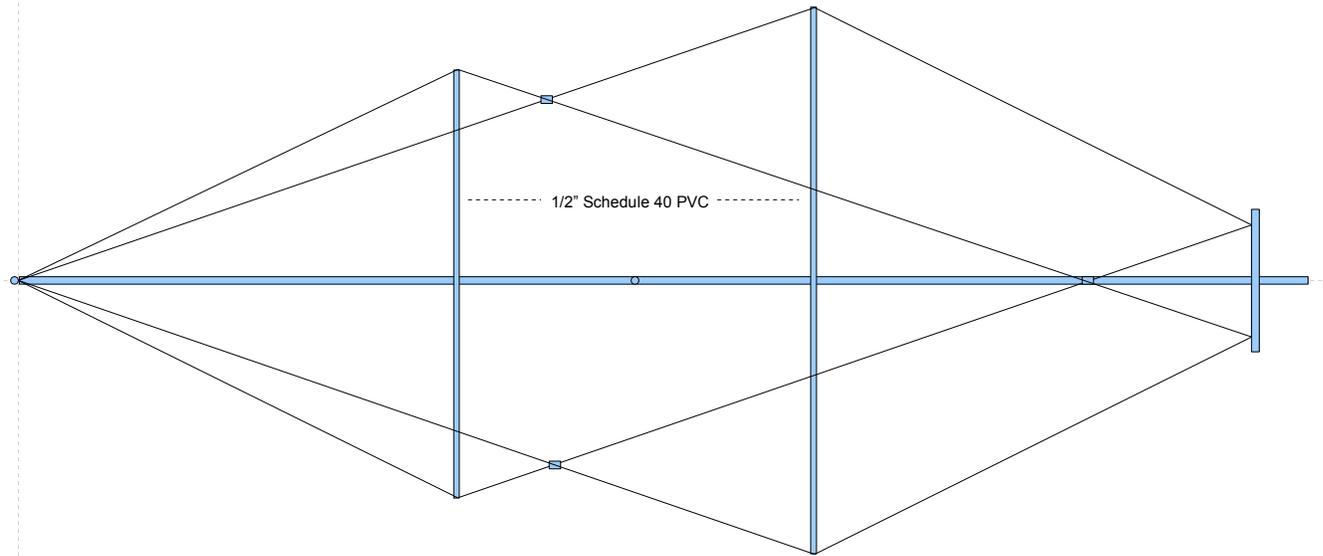
Feed Point  
 $X, Y = 0, 0$   
 $330\Omega$

Side (Rear)  
 $X, Y = 55.228", 27.056"$

Side (Front)  
 $X, Y = 99.773", 34.063"$

Front  
 $X, Y = 155.001", 7.007"$

X



**Notes:**

Boom and spreaders are constructed from off the shelf Schedule 40 PVC pipe and fittings.

Active elements are virtually co-planar – insulate at all three crossing points

**Laport Rhombic**  
 Design Frequency: 665 MHz (UHF-46)  
 Based on information published in CATJ,  
 October 1976

Scale: 1:24

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