This describes the truss configuration that weighs 6.92 lbs and safety factor of 2.0.

Table 1 Node locations

Node #	Top beams node locations (ft)	Bottom beam node locations (ft)
0 (Tip)	0	0
1	2.4000	5.0400
2	6.1400	7.4614
3	8.5696	9.8827
4	10.9992	12.3041
5	13.4287	14.7255
6	15.8583	17.1468
7	18.2879	19.5682
8 (Center)	20.7175	21.3682

The two top beams should have nodes marked at the lengths in the first column in table 1 and the bottom beam should have nodes marked at the lengths in the second column. The dimensions of the tubes are listed in table 2

Table 2 Tube sizes

	Tube diameter (in)	Wall thickness (in)	Color
Main spars	¾	0.030	Red
Supporting members (side face)	0.30	0.030	Blue
top members (top face)	0.40	0.030	Green

The members should be connected in the manner displayed in figures 1 and 2 where the main spars, the end triangles, and the first supporting member are all made from the 3/4” tubes.

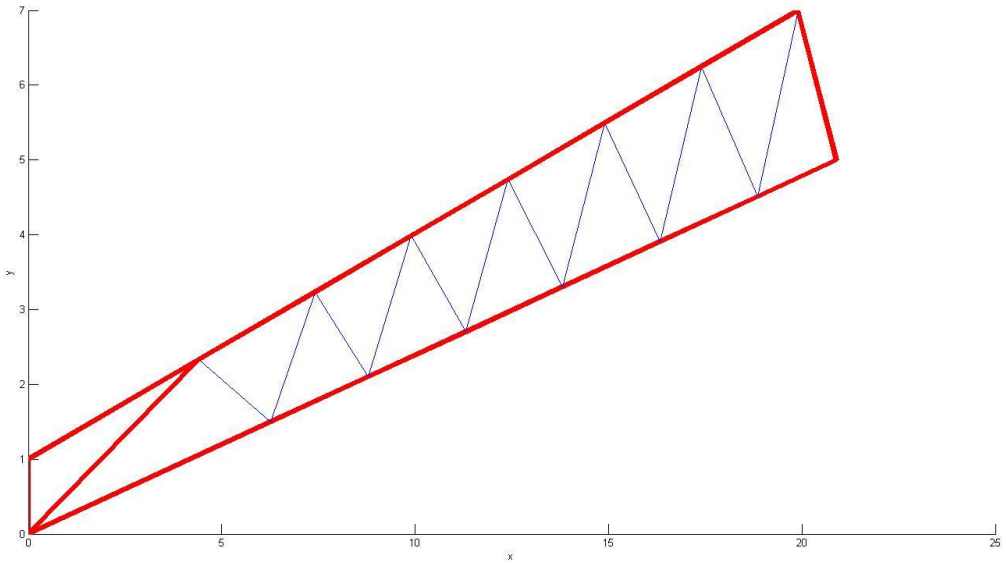

Figure 1 Side View

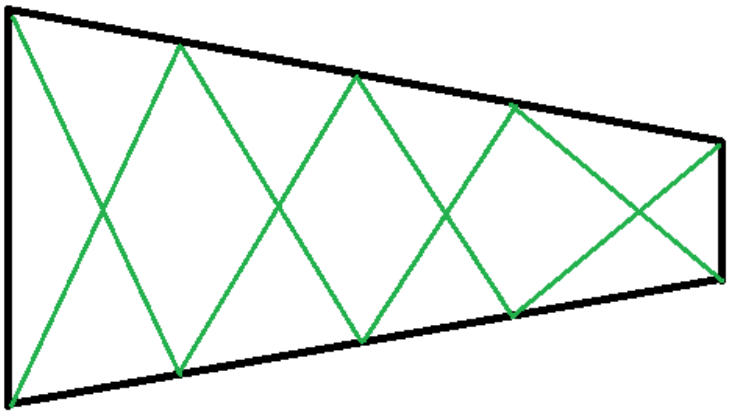

Figure 2 Top View (not to scale)