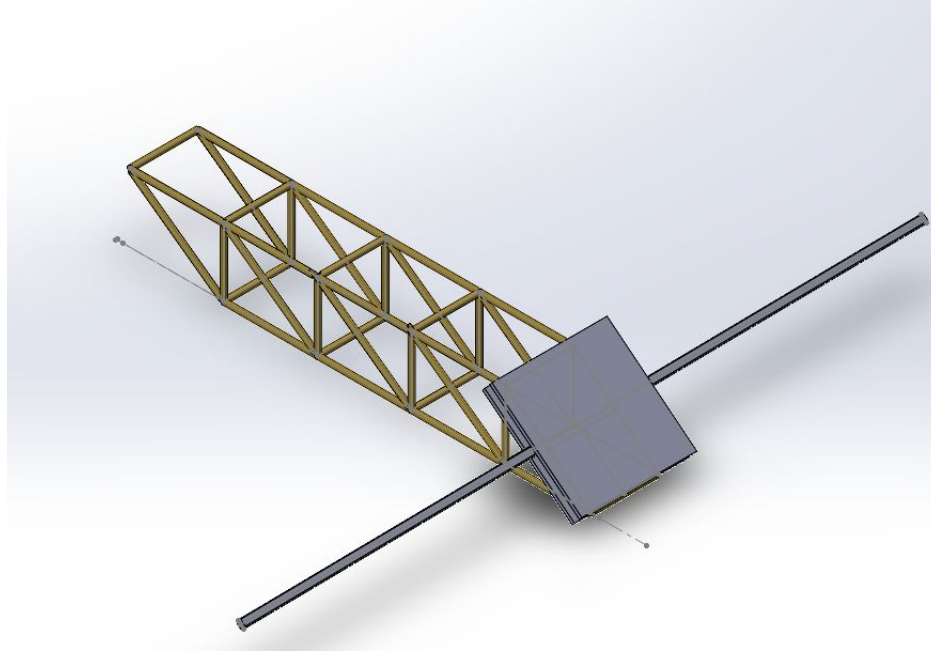


MSE 312 Design Pitch

By Lab 2 Group 4

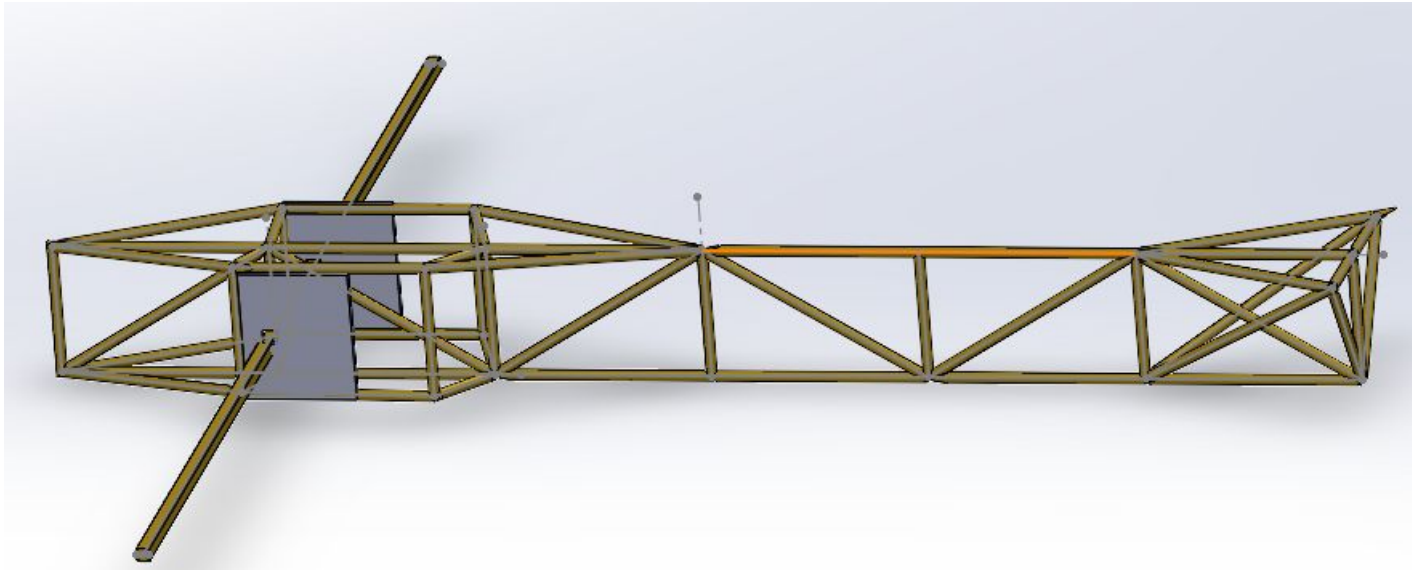
Initial Designs/Concepts

Concept A:



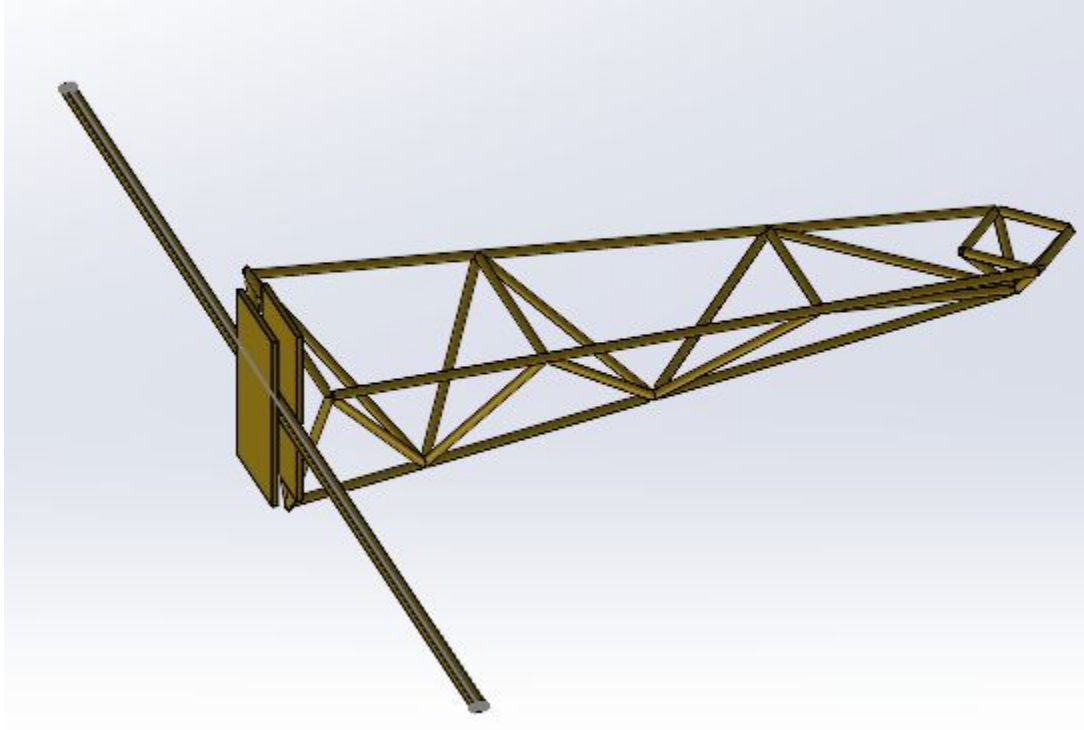
Initial Designs/Concepts

Concept B:



Initial Designs/Concepts

Concept C:

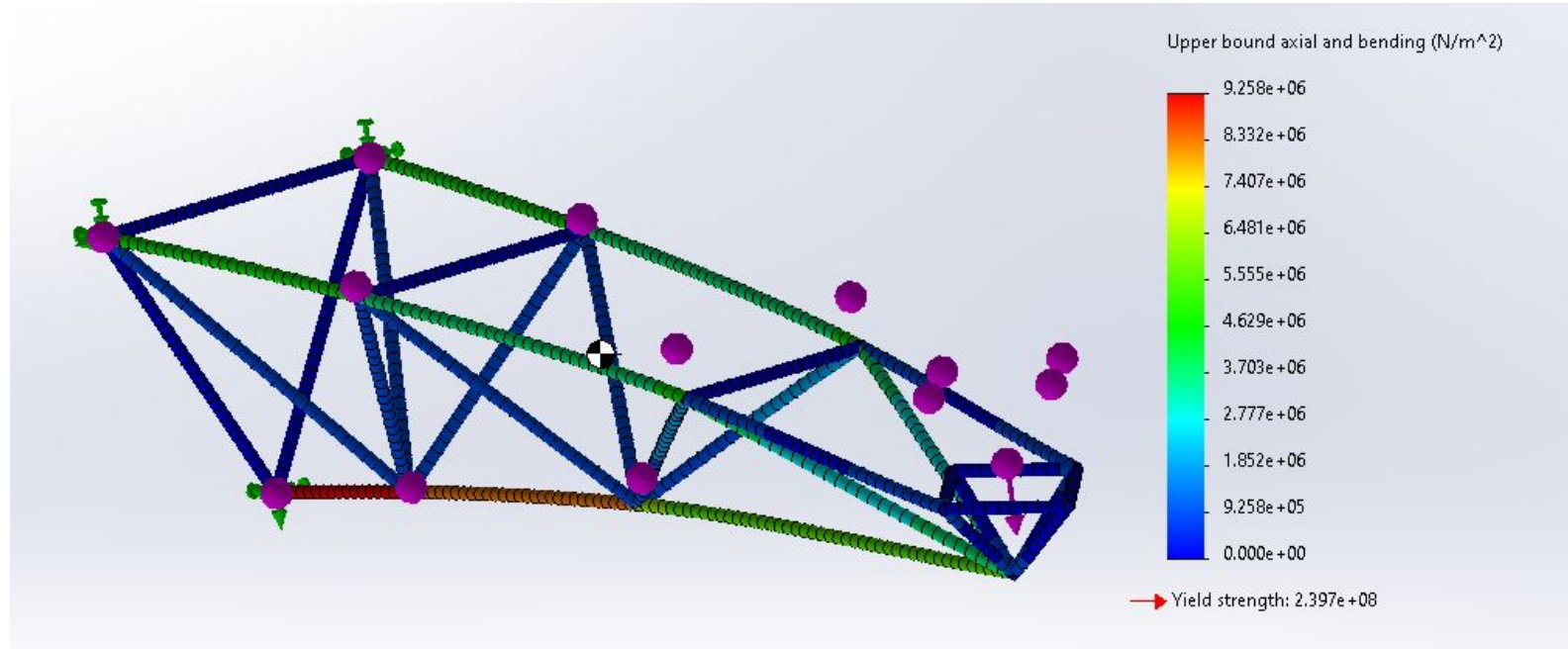


Deciding Factors

		A		B		C	
Criteria	Weight	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Inertia	5	3	15	5	25	3	15
Deflection	5	4	20	1	5	5	25
Brass Used	3	3	9	2	6	5	15
Simplicity	2	4	8	2	4	4	8
Assembly	3	3	9	1	3	3	9
Total			61		43		72

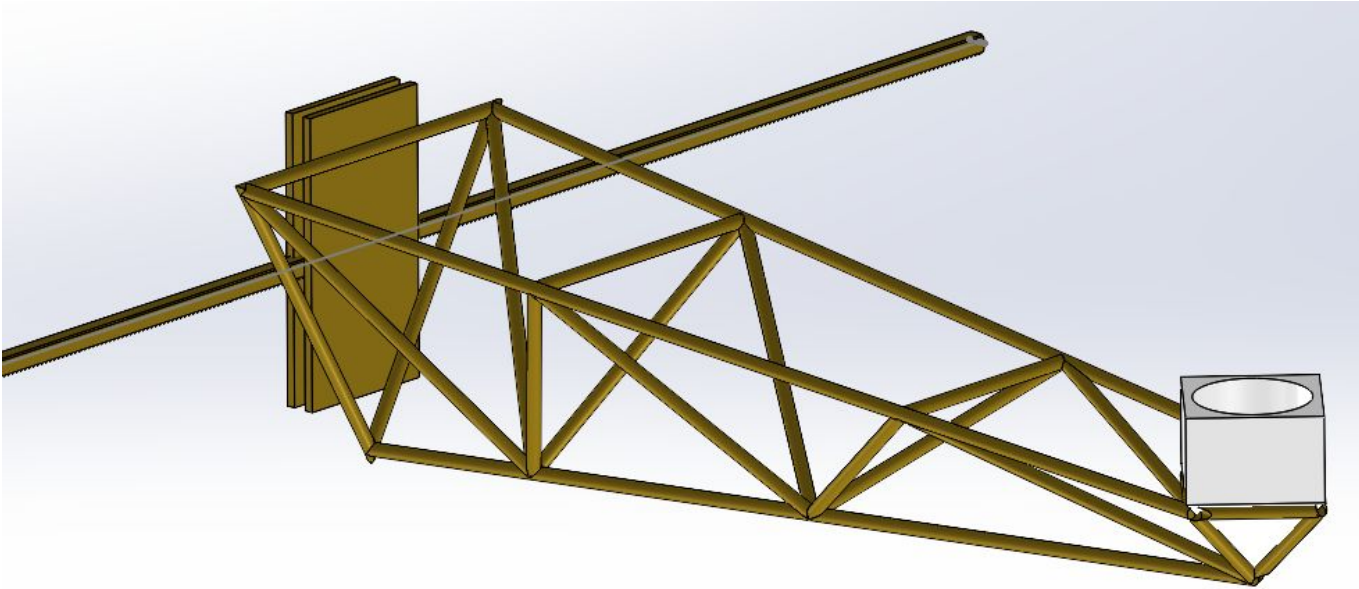
Deciding Factors

Concept 3 Stress test results: $I_{XX} = 863931.63$



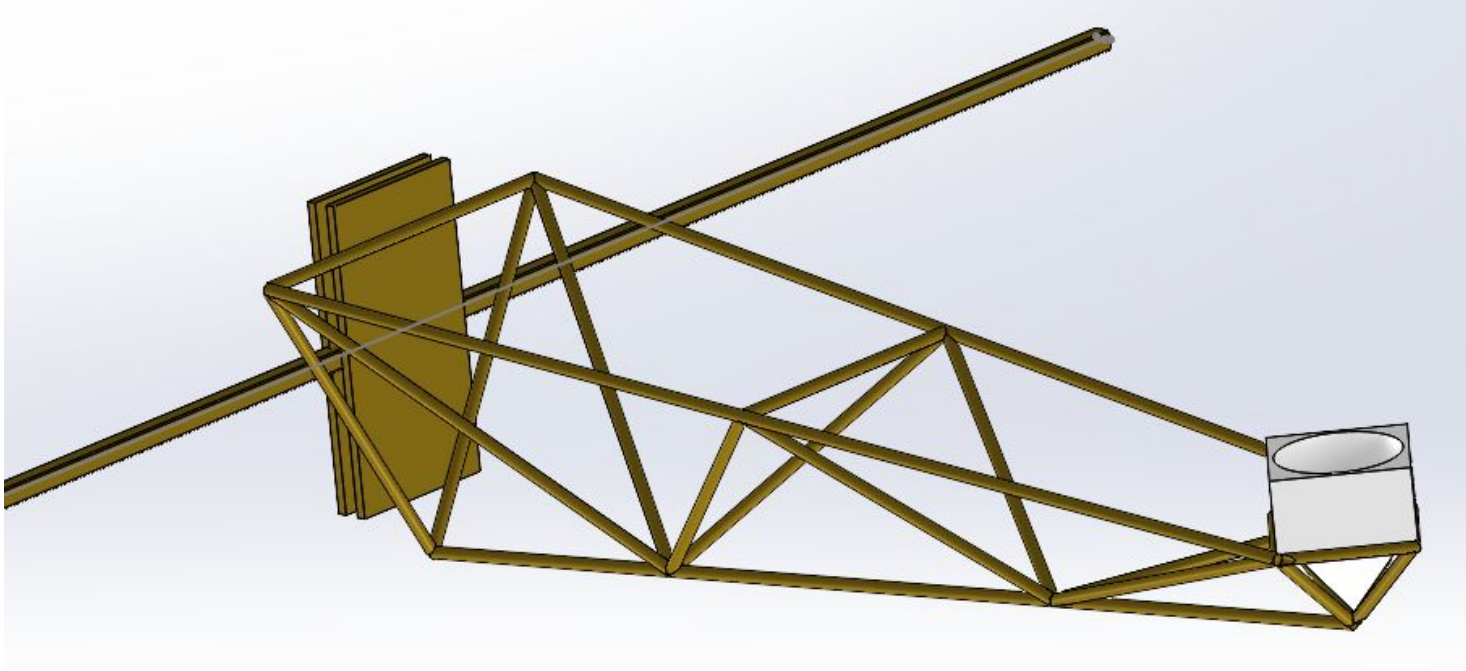
Evolution of Our Design (Design 3)

$$I_{xx} = 1186087.83$$

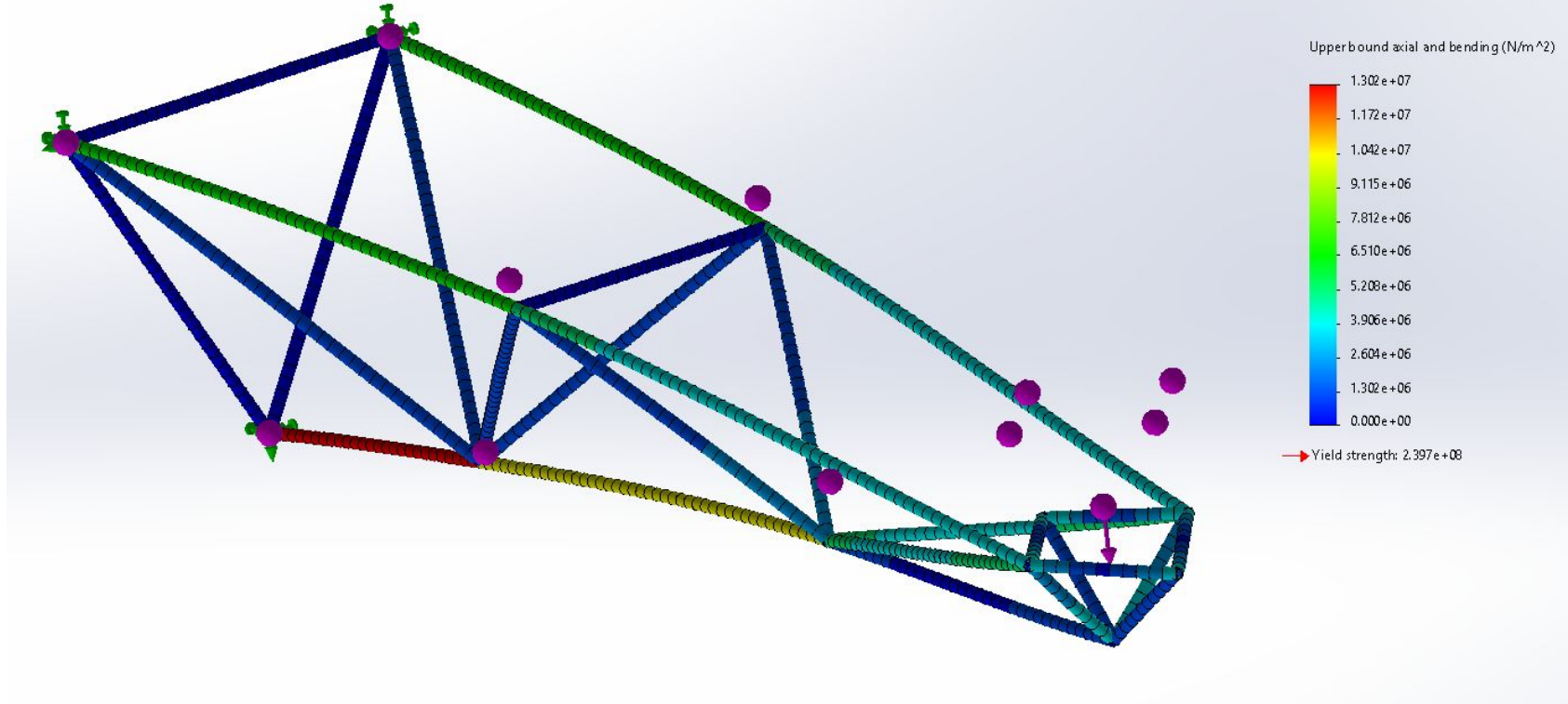


Evolution of Our Design (Design 3)

$$I_{xx} = 817863.68$$

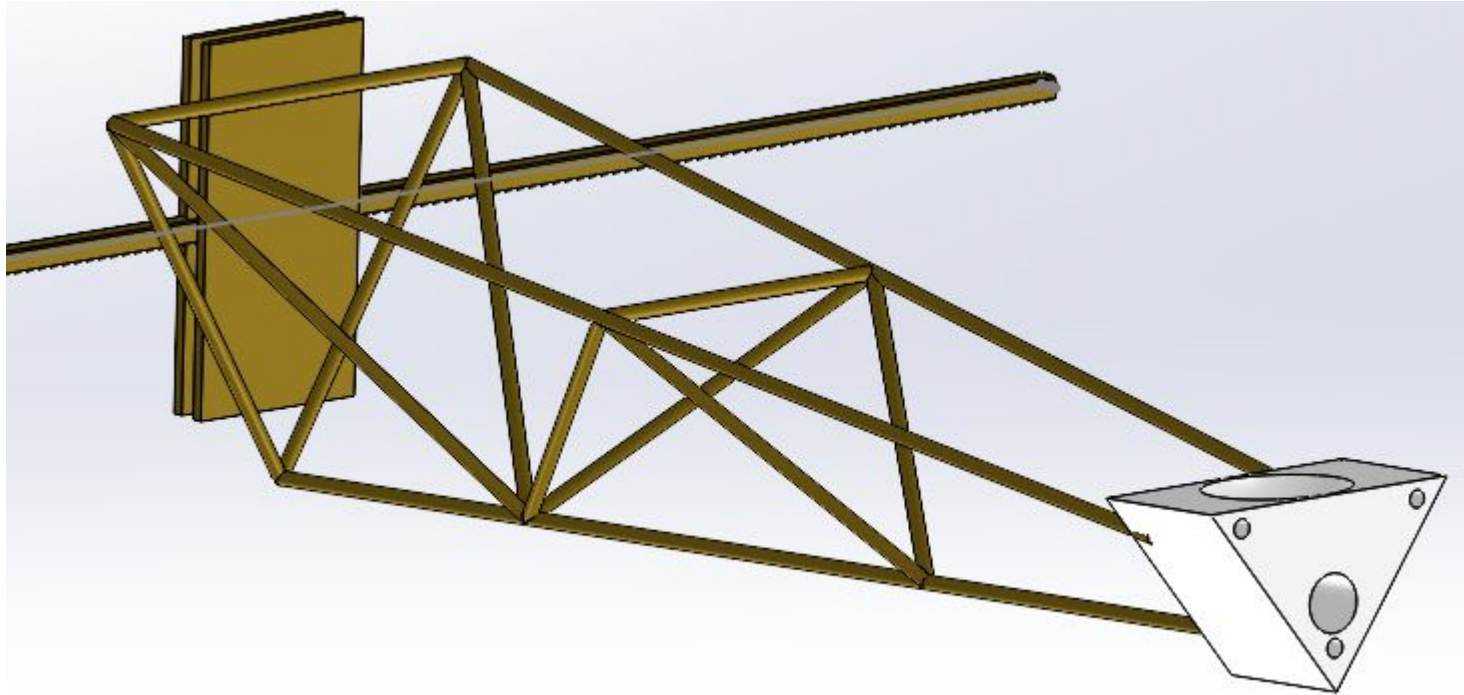


Evolution of Our Design (Design 3)

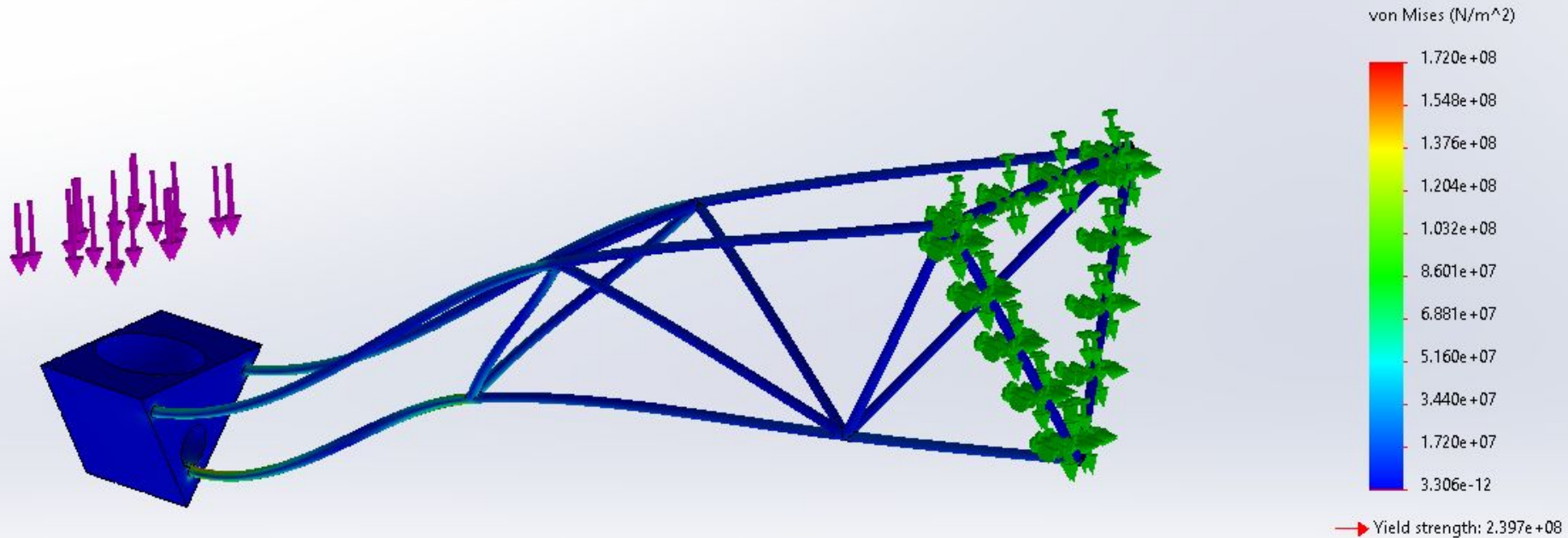


Final Design

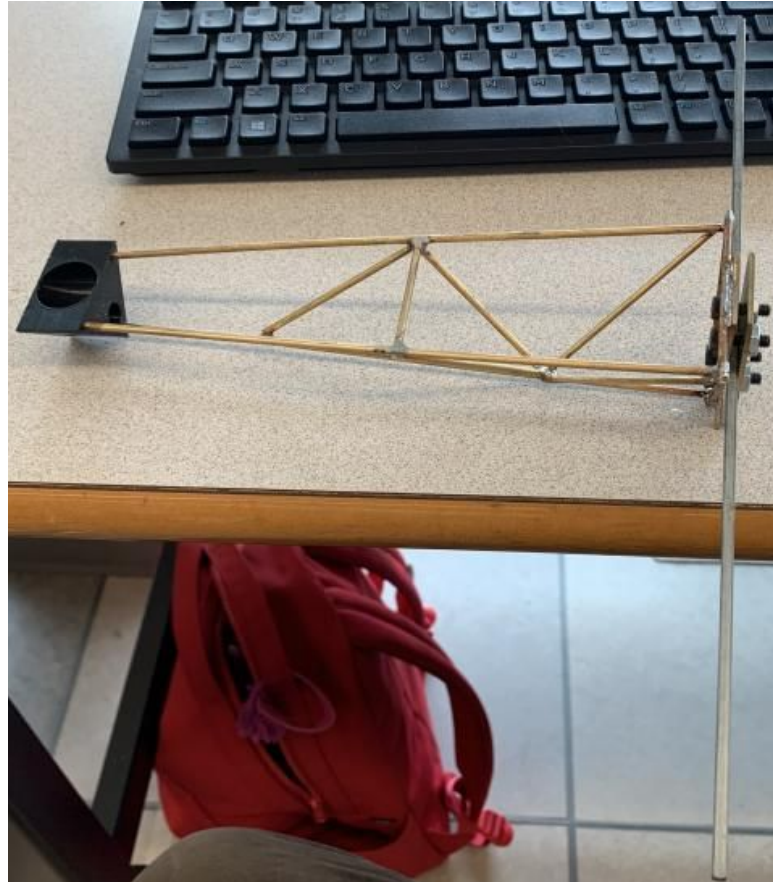
$$I_{xx} = 703555.67 \text{ g/mm}^2$$



Final Design



Final Design



Questions?

Deciding Factors

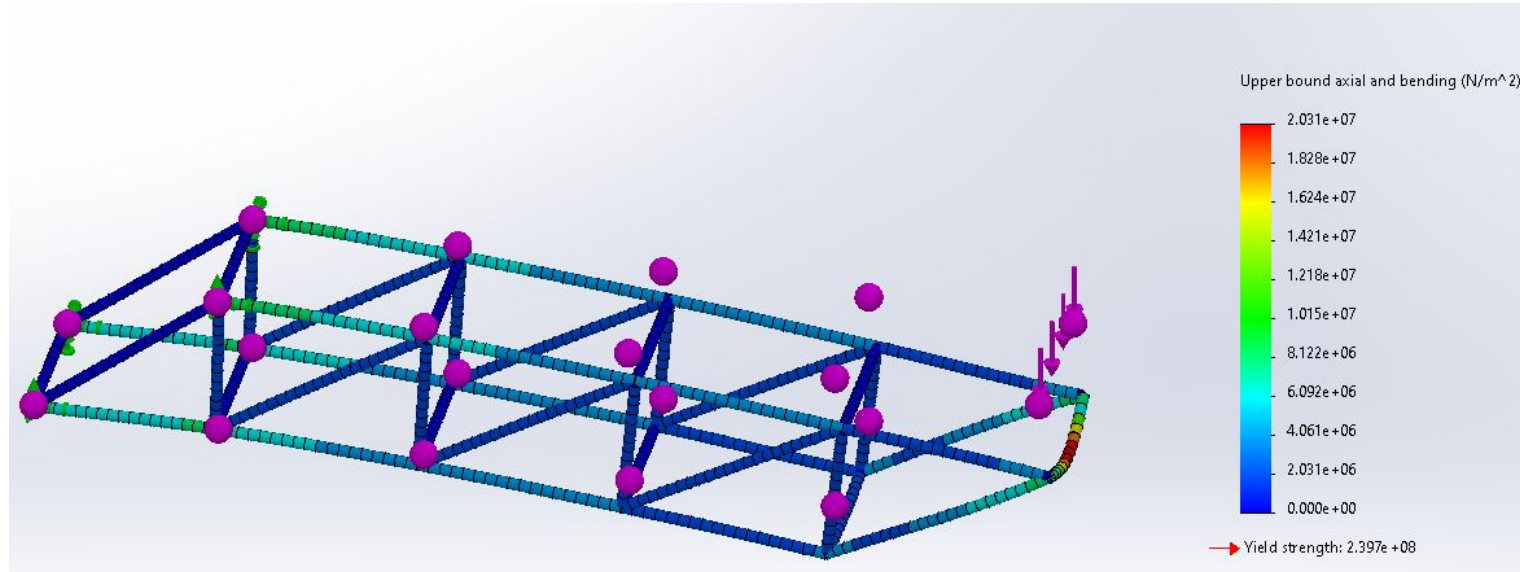
Concept 1: $I_{xx} = 667309.93$

Concept 2: $I_{xx} = 1768559.97$

Concept 3: $I_{xx} = 863931.63$

Deciding Factors

Concept 1 Stress test results:



Deciding Factors

Concept 2 Stress test results:

