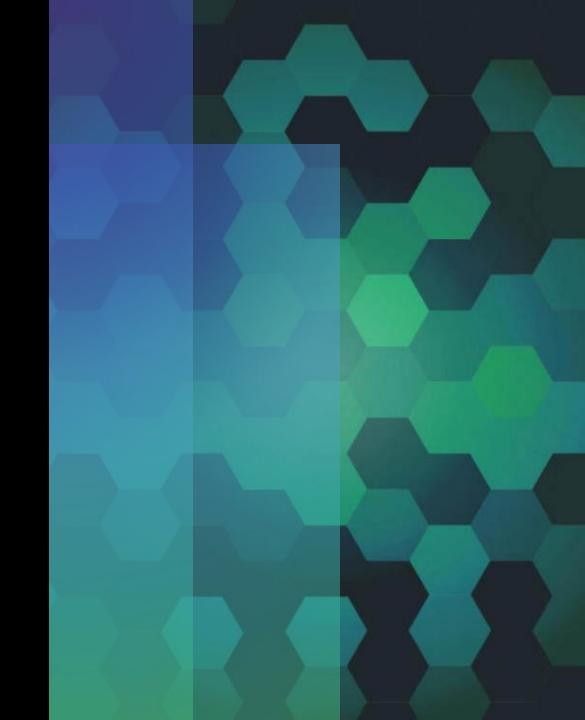
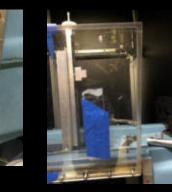
Wind Tunnel Testing Chamber Design

Petros Sklavounos







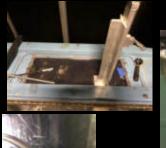






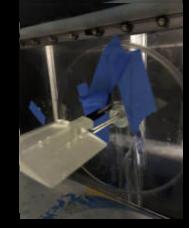


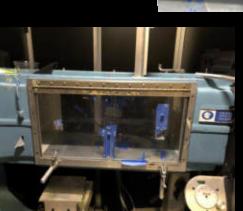








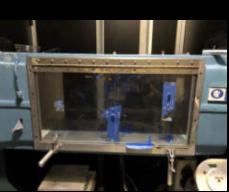


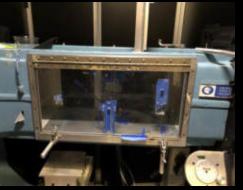




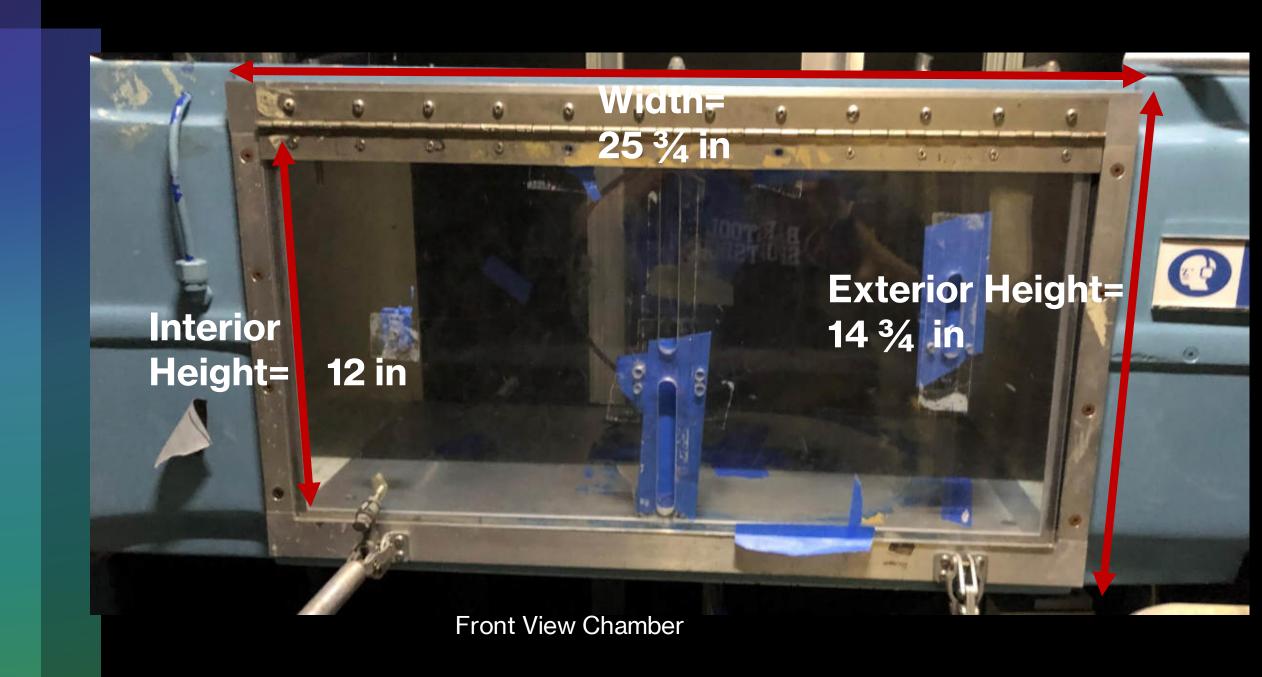


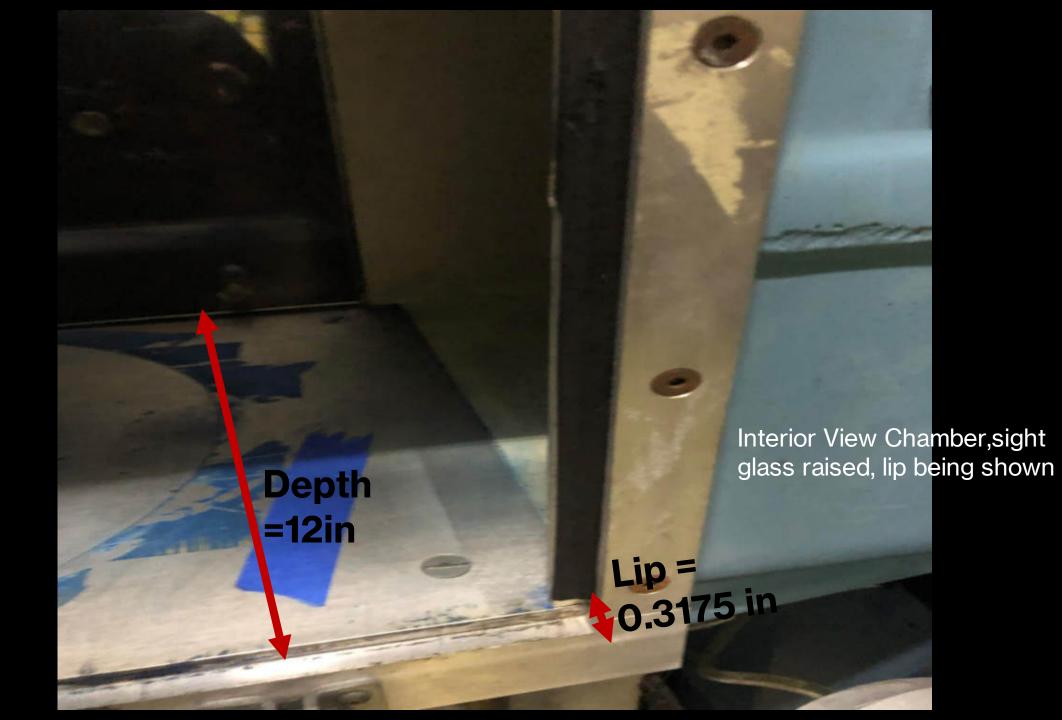






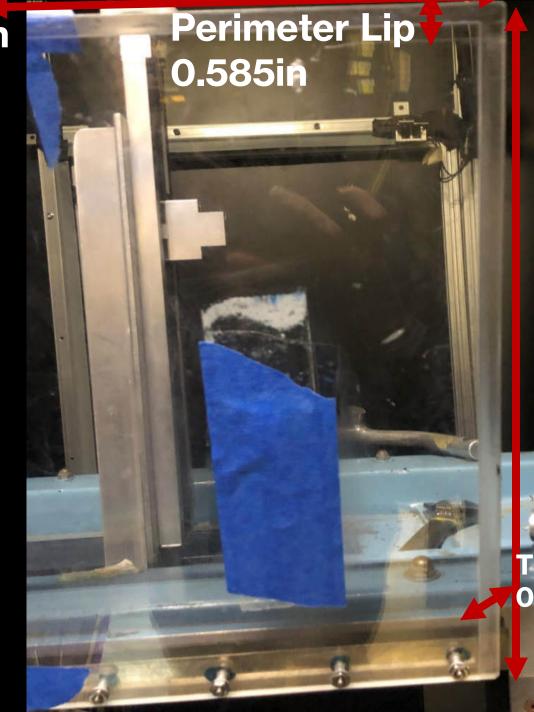
1. Current Dimensions





Width= 23 7/8 in

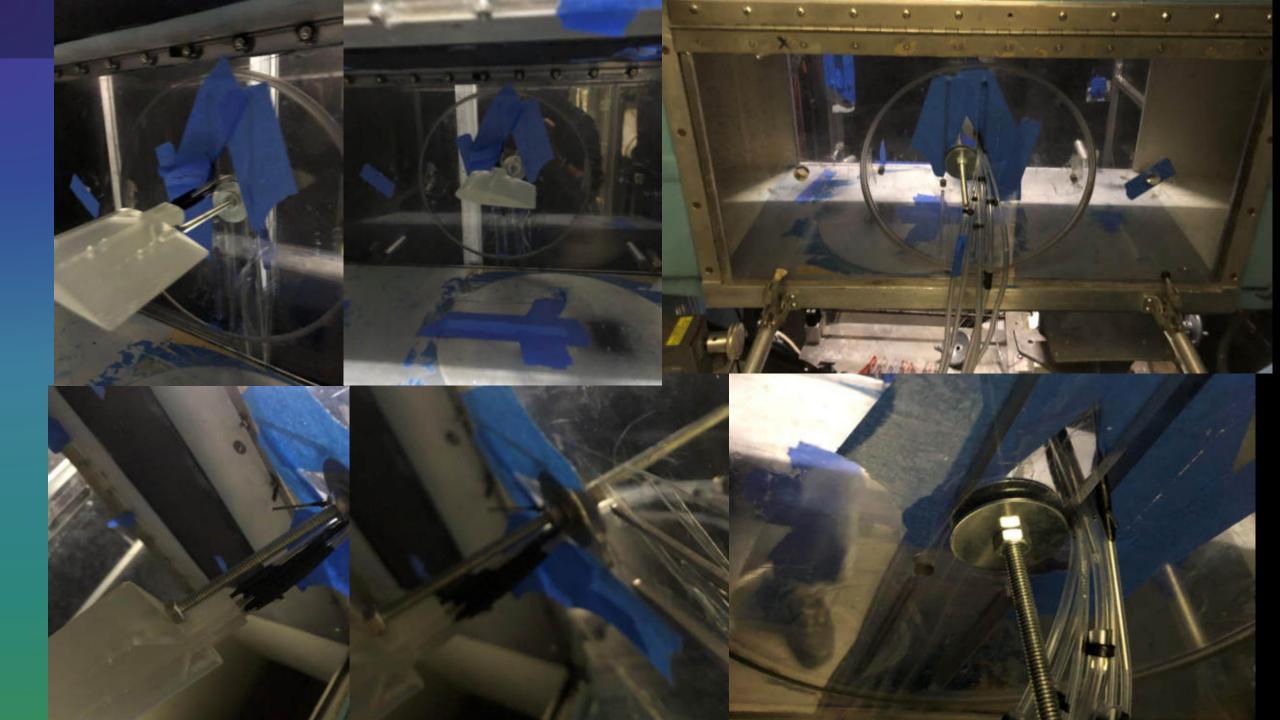
Plastic viewing glass



Length = 12 3/8in

Thickness = 0.2548 in

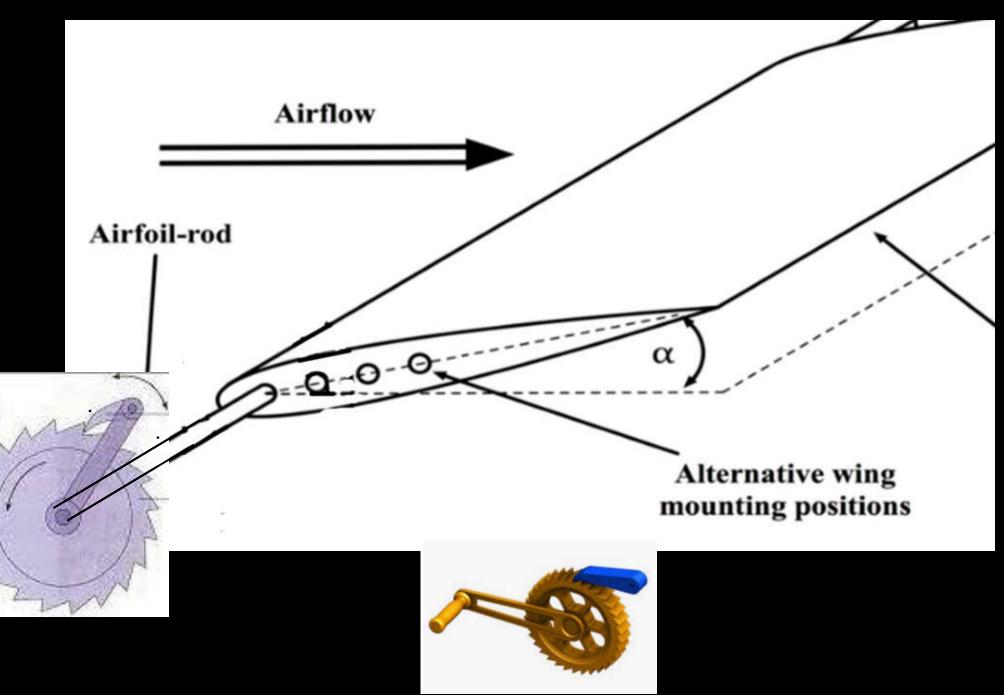
2. Current Mounting

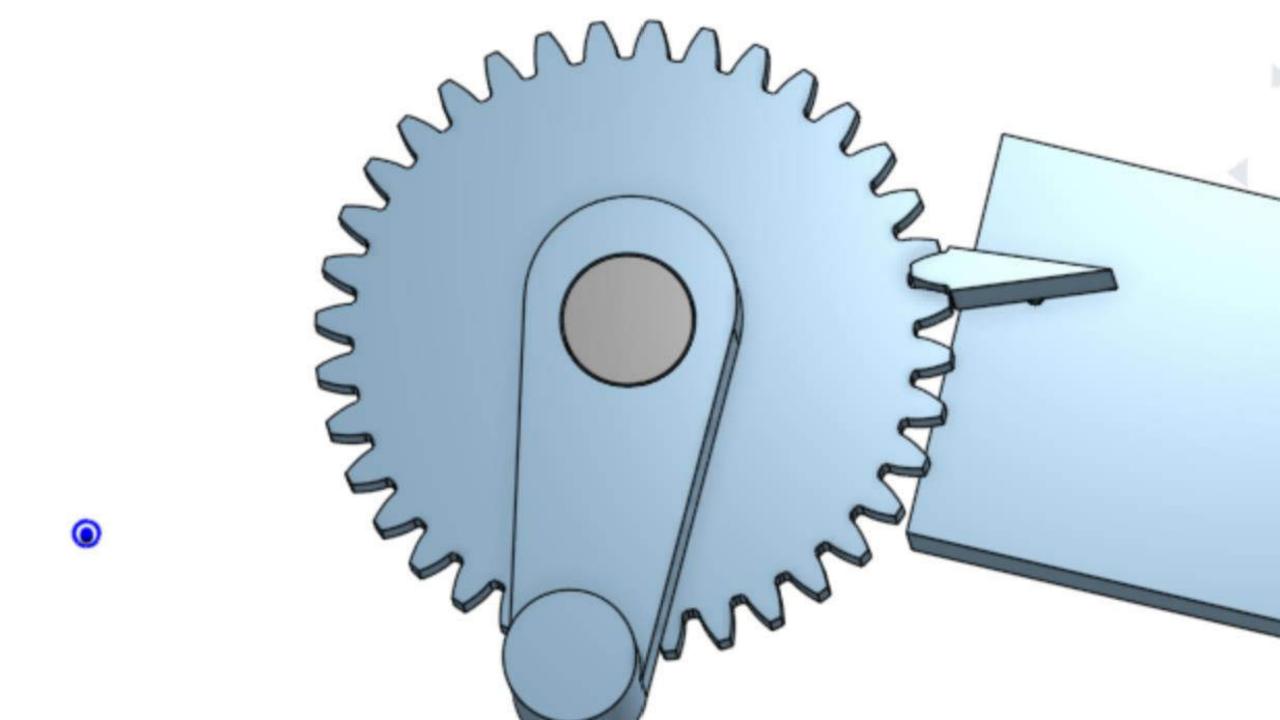


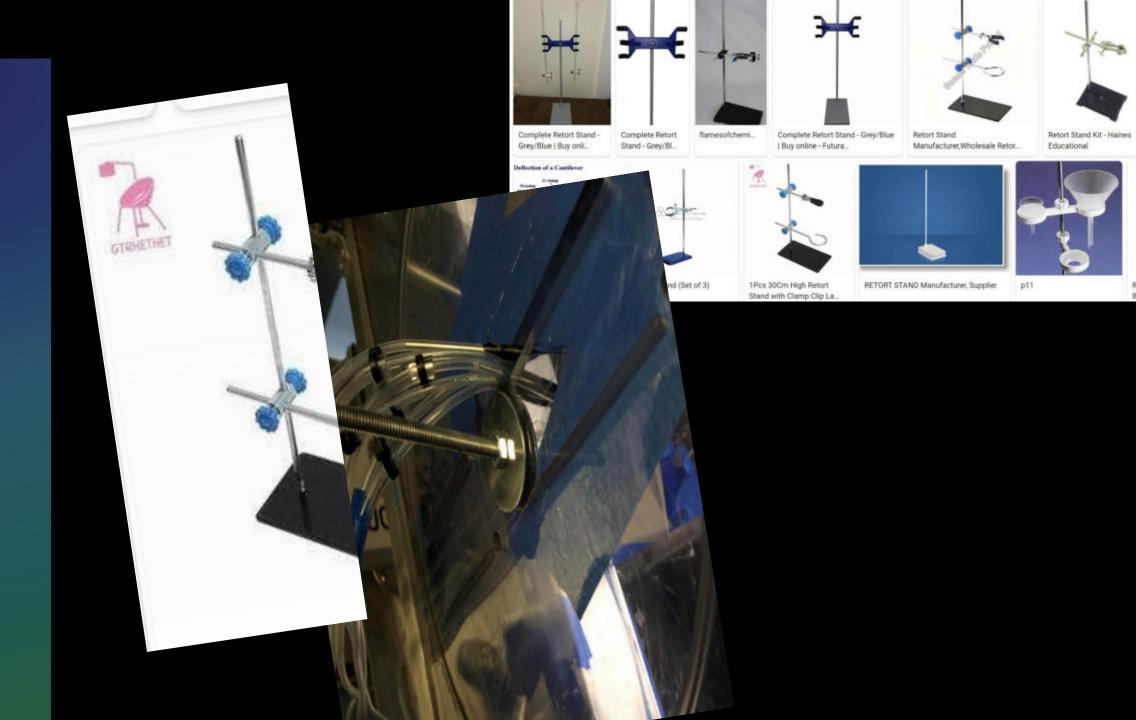
3. Mounting Ideas

Ratchet and spawl to allow for angle iteration without touching the mounted air foil.

Allows for angle measurement (each tooth is a certain fraction of a circle) -prevents movement in the opposite direction







Acid and Alkali

Mind42

RETORT STAND 20 X 1

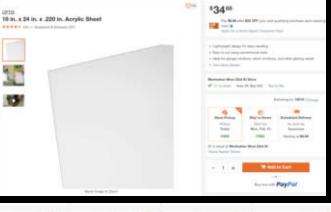
BASE 60CM ROD -_

4. Parts List

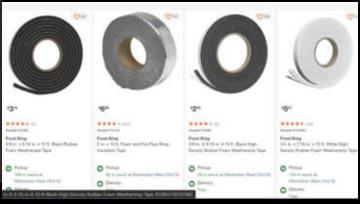
Brainstorm ideas session

Plexiglass (Acrylic sheet) 18x 24x 0.220 in from home depot for example (thickness a bit bigger)

Insulation: gun or tape or rubber







Proposed List

		erials							
	Quantity of air chambers			1					
Date	Material	Quantity	Dimensions	Thicknens	s Unit Pric	e	Tot	al Price	Link
4/7/2023	aluminium sheet	5 - 2	12" Wx 24" L	0.19"	\$	85.05	5	85.05	https://www.mcmaster.com/catalog/89015K32
4/8/2023	Plexiglass	2	24" W x 12" L	15/64"	\$	26.68	5	53.36	https://www.mcmaster.com/catalog/8560K222
4/9/2023	Vertical T-slots+shorter h	6	12"L x 1.0"W	1"	\$	12.17	5	73.02	https://www.mcmaster.com/catalog/47065T101
4/10/2023	LongHorizontal T-slots	4	24 "L x 1.0" W	1"	\$	27.44	S	109.76	McMaster-Carr
4/11/2023	Hinges+mounting	4	1" high rail		\$	19.39	S	77.56	https://www.mcmaster.com/47065T347/
4/12/2023	Toggle clamp with Handle	4			\$	63.93	S	255.72	https://www.mcmaster.com/catalog/6812N158
4/13/2023	Low carbon steel sheet to	1	24x24		5	73.72	5	73.72	https://www.mcmaster.com/catalog/6544K62
	T-Slotted FraminAngle								
4/14/2023	Bracket for 1" High Rail	- 4	for 1"		\$	17.05	5	68.20	https://www.mcmaster.com/catalog/3136N157
4/15/2023	interior bracket	4	for 1"		\$	7.92	5	31.68	https://www.mcmaster.com/catalog/47065T236
					Total prid	e	S	828.07	
					estimate with tax		5	901.49	
4/13/2023	interior I bracket	4	for 1"		\$	7.92	5	31.68	https://www.mcmaster.com/catalog/47065T236