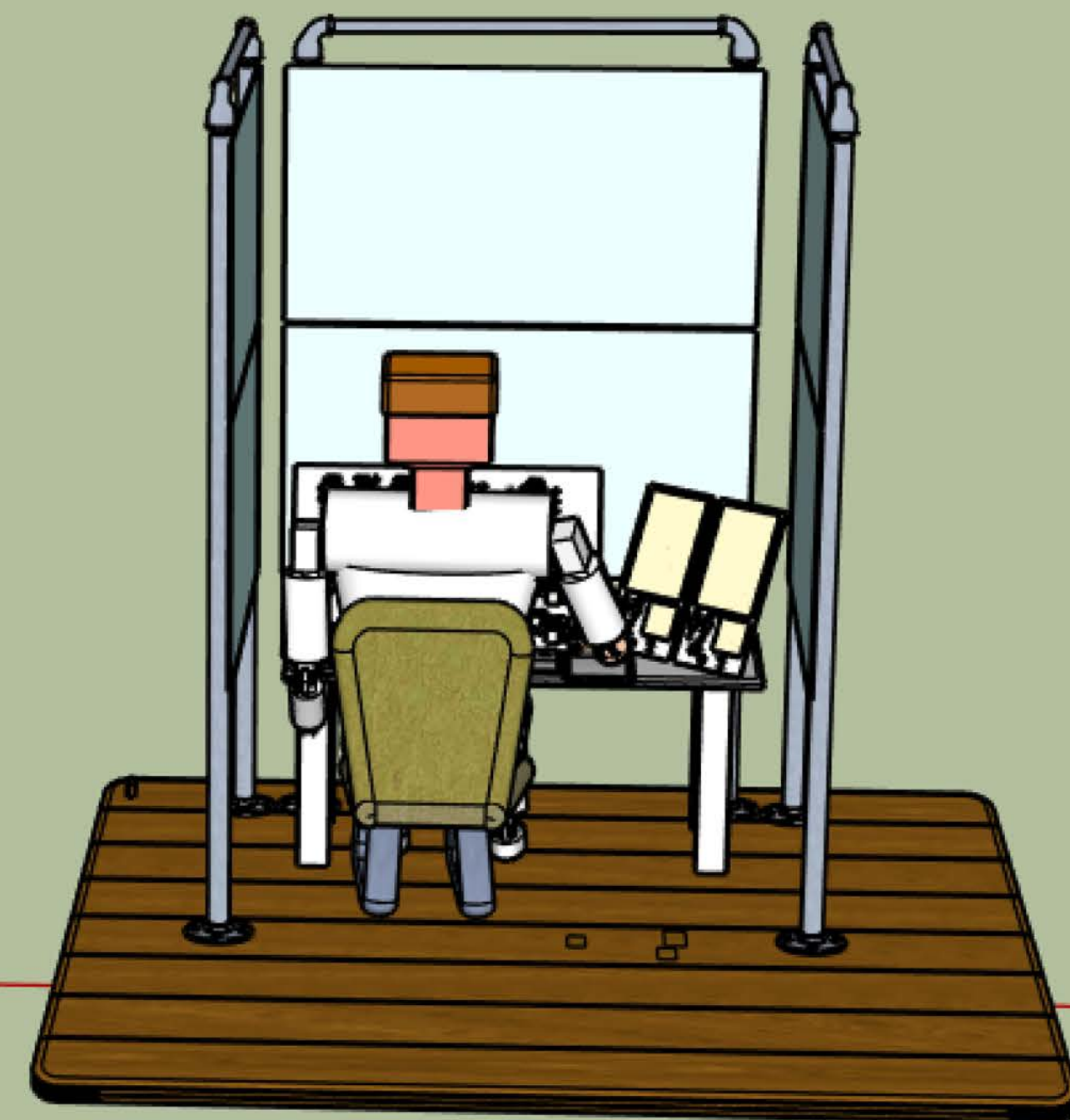
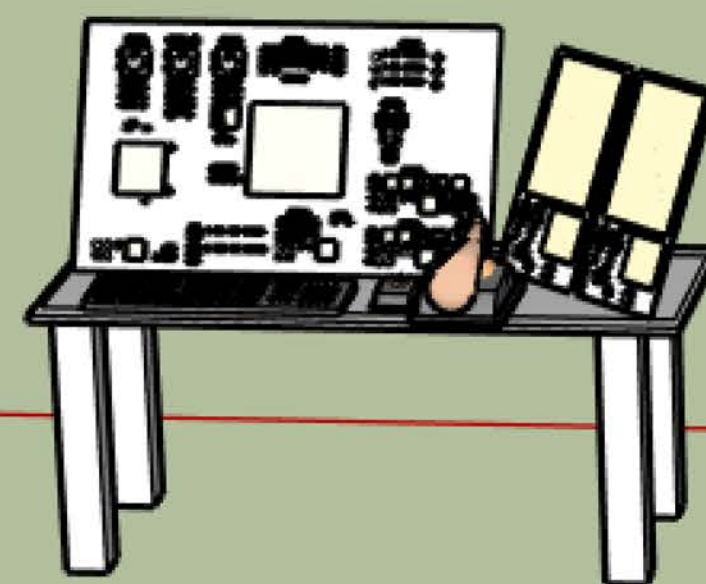
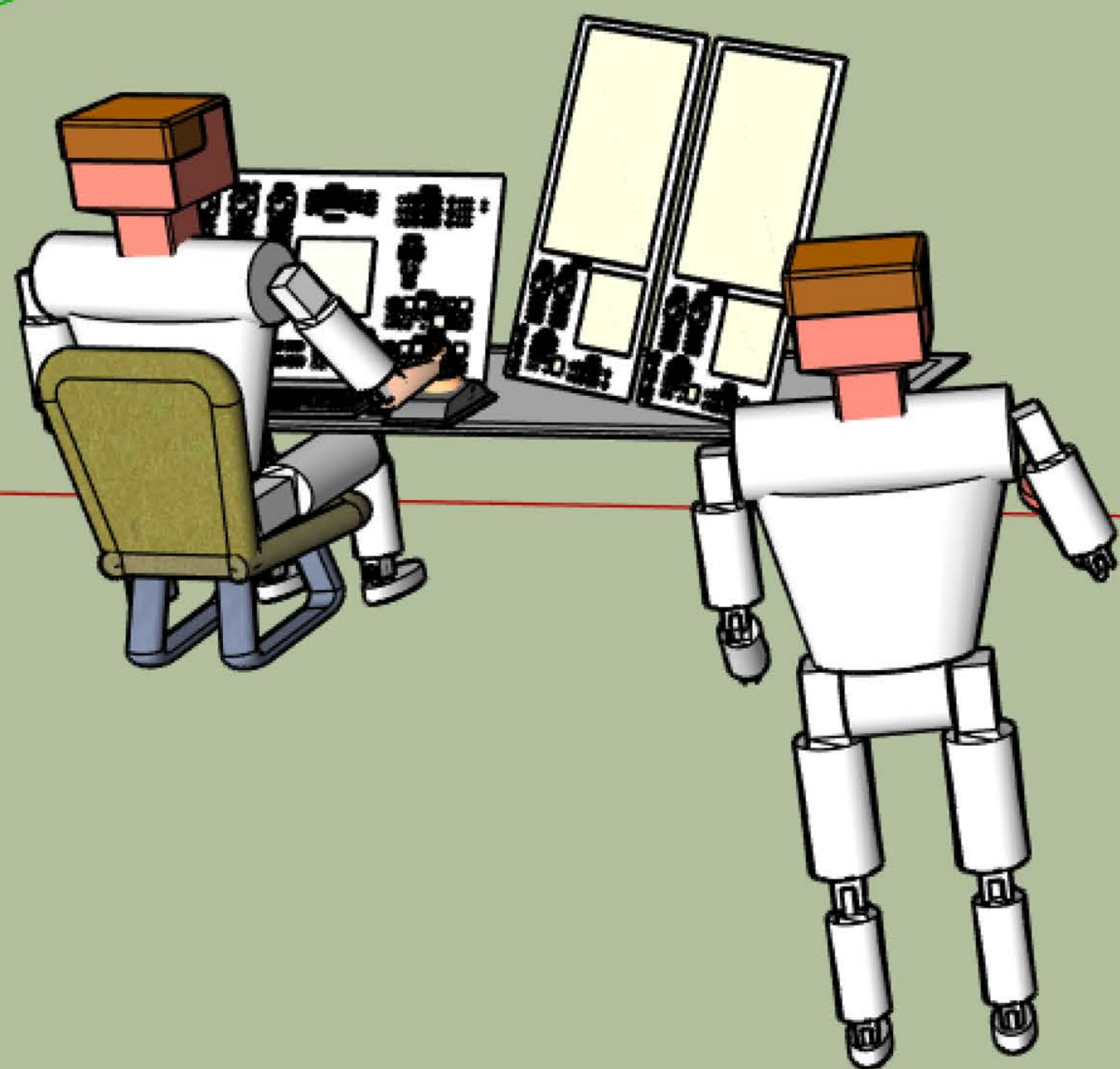
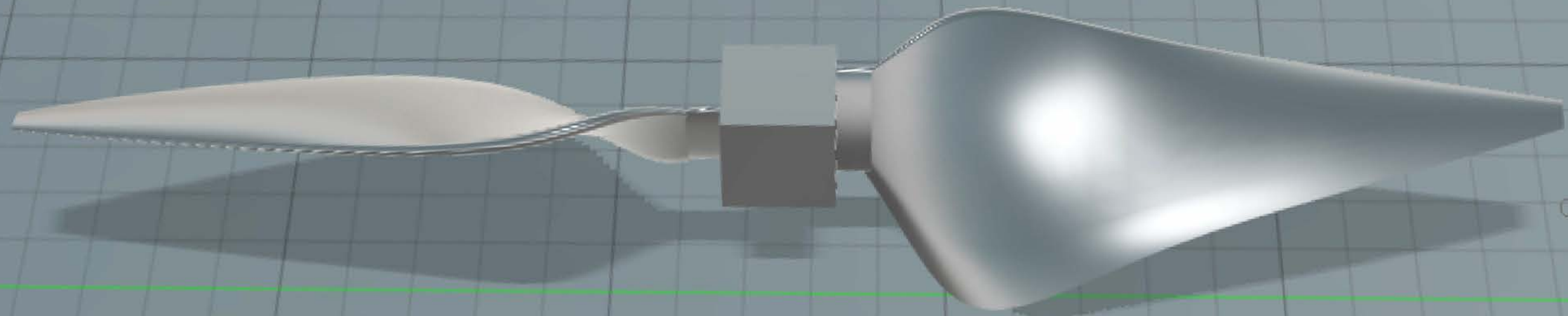






Click and drag

Propeller Geometry.

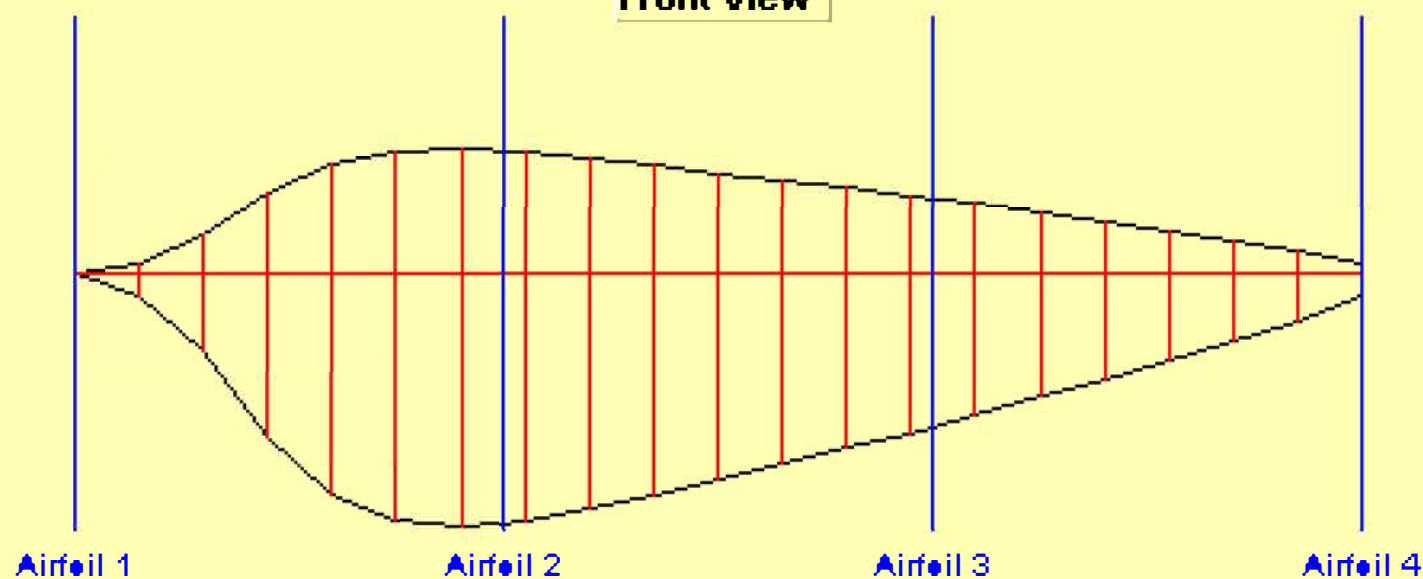
r/R	c/R	β	H/D	r	c	H	t	Airfoil
[-]	[-]	[°]	[-]	[mm]	[mm]	[mm]	[mm]	[-]
0.0000	0.0342	39.9	0.0	0.0	18.2	0.0	0.9	Flat Plate
0.0500	0.1462	30.4	0.9	26.7	78.0	99.7	4.0	interpolated
0.1000	0.2533	69.9	0.9	53.3	137.8	915.8	7.0	interpolated
0.1500	0.3703	59.4	0.8	80.0	197.5	850.0	10.0	interpolated
0.2000	0.4090	51.4	0.8	106.7	218.2	839.7	11.1	interpolated
0.2500	0.4052	45.2	0.8	133.3	216.1	843.7	11.0	interpolated
0.3000	0.3829	40.4	0.8	160.0	204.2	855.7	10.4	interpolated

show:

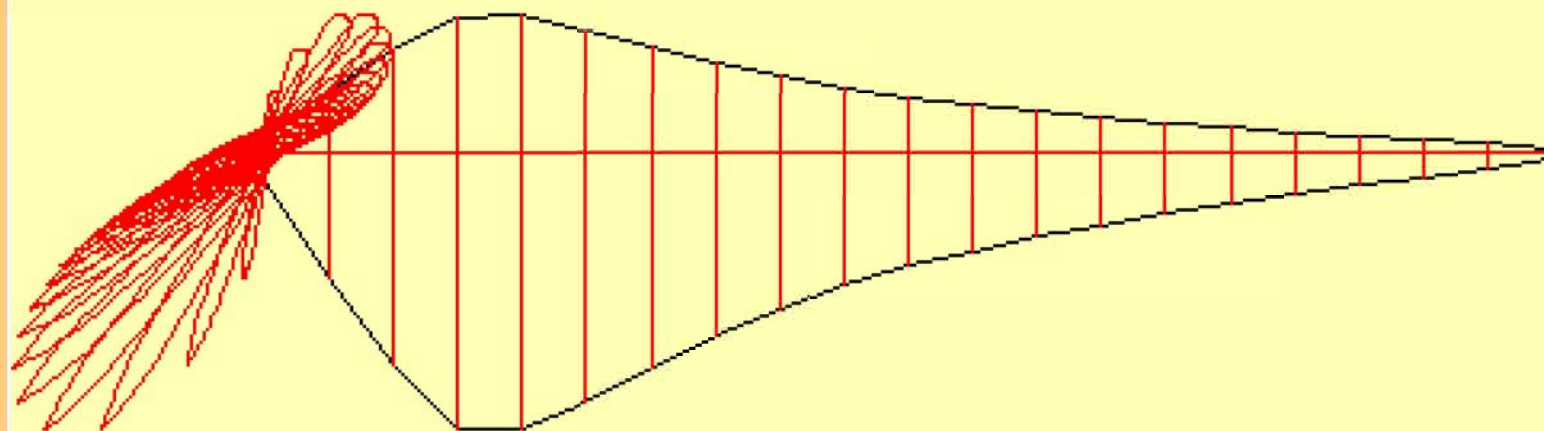
Views

Pitch/Diameter

Front View



Side View



Copy Text

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acascoutperformancedatacomp

mcFarlaneaviation.com/media/documents/acascoutperformancedatacomparison.pdf

acascoutperformancedatacomparison.pdf 1 / 1 85%

World's Largest MT-Propeller Distributor

ACA Scout Performance Specifications
2-blade & 3-blade propellers and O-360 engine.

Take-off Distance at gross weight, 1000' MSL, 55 degrees F.

- Original Hartzell 76" 447 feet
- MT 2 Blade 83" 342 feet [105' shorter than Hartzell]
- MT 3 Blade 78" 330 feet [117' shorter than Hartzell]

Take-off over 50' obstacle

- Original Hartzell 76" 701 feet
- MT 2 Blade 83" 510 feet [191' shorter than Hartzell]
- MT 3 Blade 78" 483 feet [218' shorter than Hartzell]

Aircraft Rate of Climb 1000' MSL at gross weight and 55F

- Original Hartzell 76" 998 FPM
- MT 2 Blade 83" 1201 FPM
- MT 3 Blade 78" 1285 FPM

Propeller Weights w/spinner

- Original Hartzell 76" 64 pounds
- MT 2 Blade 83" 45 pounds
- MT 3-Blade 78" 54 pounds

Propeller Static Thrust@ 1000msl & 55F

- Original Hartzell 76" 675 pounds
- MT 2 Blade 83" 790 pounds
- MT 3 Blade 78" 810 pounds

RPM Restriction or Reduction

- Original Hartzell YES
- MT 2 or 3-Blade NO

Blade Life Limit

- Original Hartzell YES
- MT 2 or 3-Blade NO

Blade Water Erosion Protection

- Original Hartzell NO
- MT 2 or 3-Blade YES

To learn more about this prop
866-717-1117
www.Flight-Resource.com

For other products
800-544-8594
www.McFarlaneAviation.com

mt-propeller

cessna185-2-3b-performancetests

mcFarlaneaviation.com/media/documents/cessna185-2-3b-performancetestresults.pdf

cessna185-2-3b-performancetestresults.pdf 1 / 1 85%

Flight-Resource
A Division of **McFarlane**

World's Largest MT-Propeller Distributor

MT Propeller Performance Test Results
Comparing
83" 2 & 3-Blade 'Expedition' Series Props
Test Plane: Cessna 185F w/ IO-520-D

Propellers Tested:

- MT 83" 2 blade 'Expedition' Series Composite Propeller
- MT 83" 3 blade 'Expedition' Series Composite Propeller
- McCaughey D3A3C401 86" 3 blade aluminum propeller
- Hartzell F8468A-6R 82" 3 blade aluminum propeller

Weight:

- MT 2-blade w/spinner 45 pounds
- MT 3-blade w/spinner 56 pounds
- McCaughey 3-blade w/spinner 78 pounds
- Hartzell 3-blade w/spinner 82 pounds

Static Thrust:

- MT 3-blade 1190 pounds @2700rpm
- MT 2-blade 1135 pounds @2700 rpm
- McCaughey 3-blade 1110 pounds @2600rpm (1090@2700)
- Hartzell 3-blade 1055 pounds @2700 rpm

Take-off distance over 50' obstacle:

- MT 3-blade 1297 feet
- MT 2-blade 1352 feet
- McCaughey 3-blade 1389 feet
- Hartzell 3-blade 1425 feet

Climb performance: (Sea level 80F)

- MT 3-blade 1136 fpm
- MT 2-blade 1097 fpm
- McCaughey 3-blade 1080 fpm
- Hartzell 3-blade 950 fpm

Cruise performance: (8000 feet 22"mp & 2400 rpm)

- MT 2-blade 150 knots TAS
- MT 3-blade 146 knots TAS
- Hartzell 144 knots TAS
- McCaughey 143 knots TAS

NOTE: No motor mount change required with the MT!

mt-propeller

82JX blade

sensenich.com/wp-content/uploads/2018/01/Specification_Sheets_82JX_series_1505307750.pdf

82JX blade 1 / 1 83%

82JX Series Blades
High Performance, Low Noise
Propeller Systems For Use On Reduced Engines

The 82JX Series of blades is an Xtra-wide blade for automotive engines with high ratio reduction units. Designed using completely new airfoil technology, these propellers have the optimum thickness ratio to assure you a high performance propeller.

Designed primarily for high ratio reduction units the 82JX Series has the bulldozer type push you are looking for from a Xtra-wide propeller. Coupled with our new V Hub, this propeller is a breeze to install and adjust pitch.

Recommended Combinations:

- 300 to 500 HP w/ 2.3 & Higher Reduction 2 Blade 78" - 82"
- 475 to 650 HP w/ 2.3 & Higher Reduction GSO 480 - 540, 340+ HP 3 Blade 80" - 82"
- 650 to 1000+ HP w/ 2.3 & Higher Reduction 4 Blade 80" - 82"
- 800 to 1000+ HP w/ 1.3 & Higher Reduction 5 Blade 80" - 82"

*These are recommendations only
Your application may differ

- Carbon Fiber Construction
- 14 Inch Wide Blade
- 350 - 500+ Horsepower
- 2450 Maximum RPM
- Reduction Applications Only

SENENICH

J Series Blade Page 091317

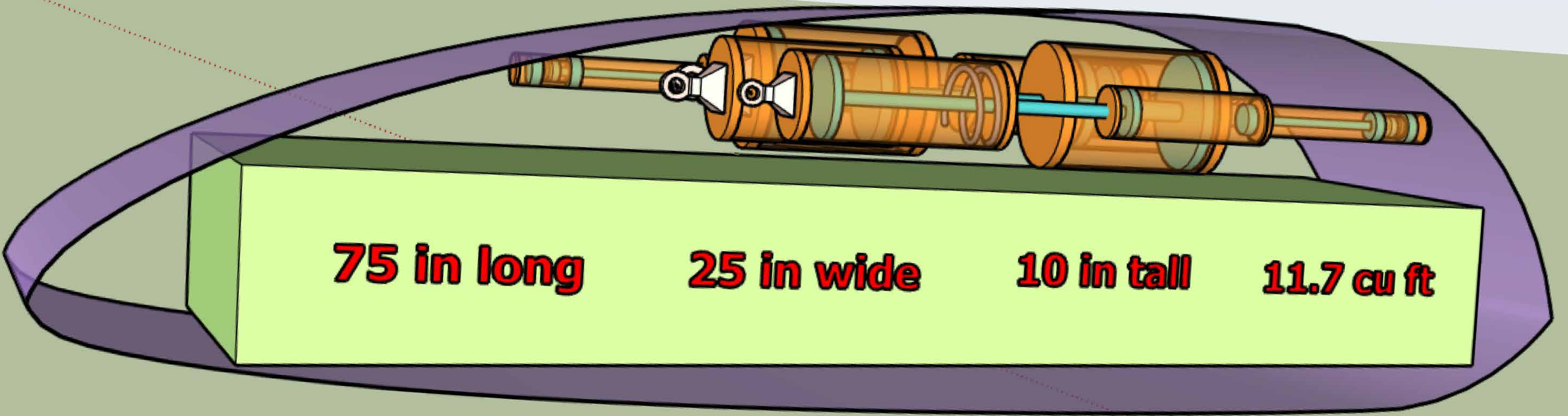
sensenich.com/wp-content/uploads/2018/01/Application_Guides_J-Series_Applications_1506346486.pdf

J Series Blade Page 091317 1 / 1 83%

J-Series Blade Chart

Model	Description
L70JM	67"-70" propeller for most 4cyl A/C and OD Small Block V8 applications up to 200hp. 70J has a 10" maximum width, LH rotation only.
L72JN	68"-72" faster propeller for 4, 6, and 8cyl applications up to 350hp. 72JN has a 8.5" maximum width, LH rotation only.
L72JM	68"-72" propeller for 4, 6, and 8cyl applications up to 350hp. 72JM has a 11" maximum width, LH rotation only.
L72JW	68"-72" propeller for 6, and 8cyl applications up to 350hp. 72JW has a 12" maximum width, LH rotation only.
L76JW	74"-76" propeller for 6, and 8cyl applications up to 400hp. 76JW has a 12" maximum width, LH rotation only.
L80JW	76"-80" propeller for Auto & A/C Engines with 1.8-2.3 reductions up to 500+hp. 80JW has a 12" maximum width, LH rotation only.
L&R82JR	78"-82" propeller for Auto Engines with 2.0 and higher reductions up to 800+hp. 82JR has a 13" maximum width, and is available in LH & RH rotation.
L&R82JX	78"-82" propeller for Auto Engines with 2.3 and higher reductions up to 1000+hp. 82JX has a 14" maximum width, and is available in LH & RH rotation.

***PLEASE NOTE, J-SERIES BLADES WILL ONLY MOUNT IN CURRENT "V" SERIES HUBS PRODUCED BY SENSENICH AND WHIRLWIND BRAND "AB" SERIES HUBS**

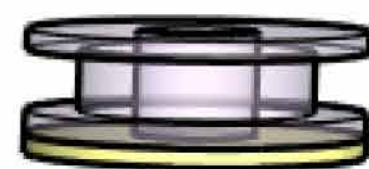
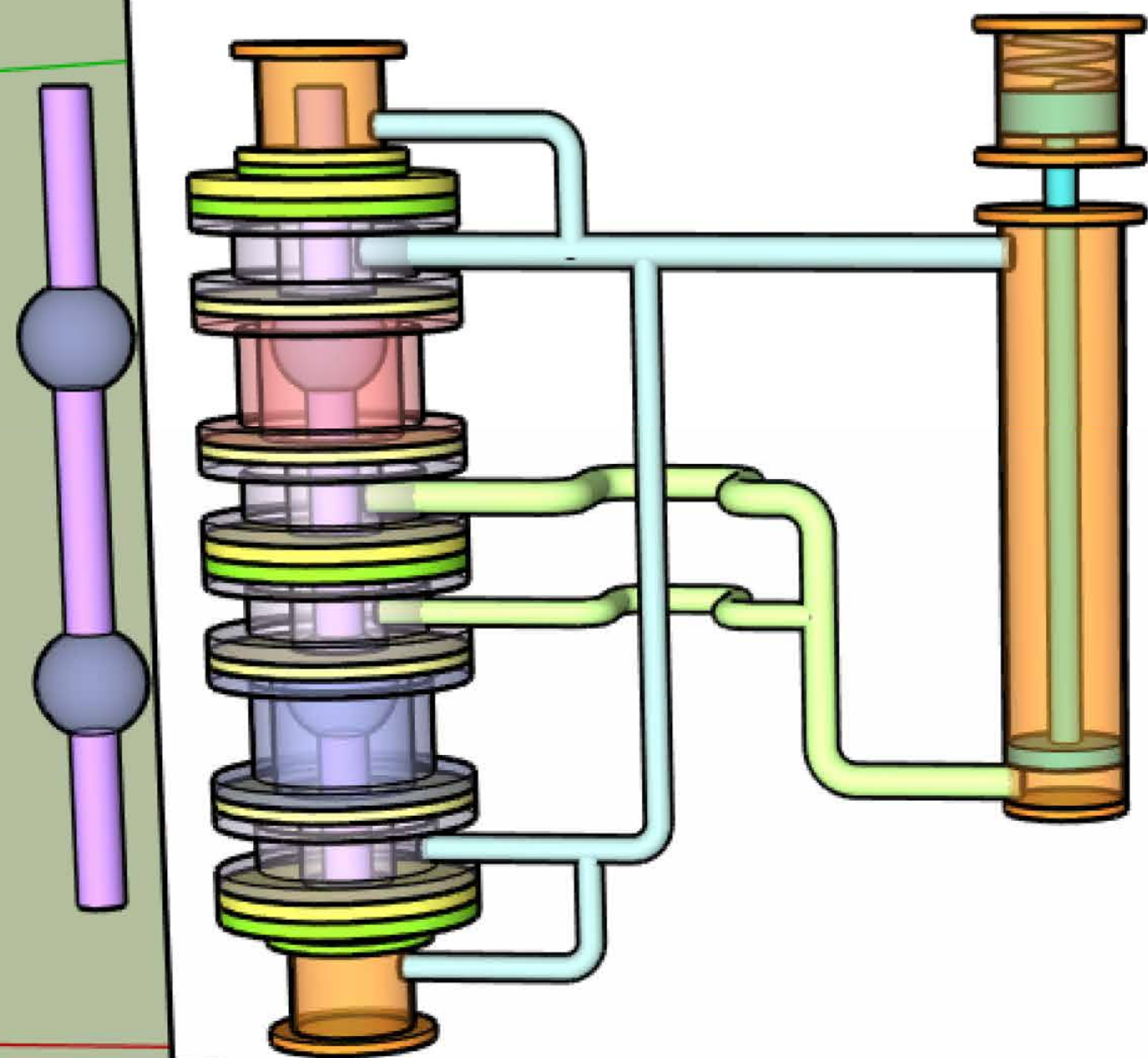


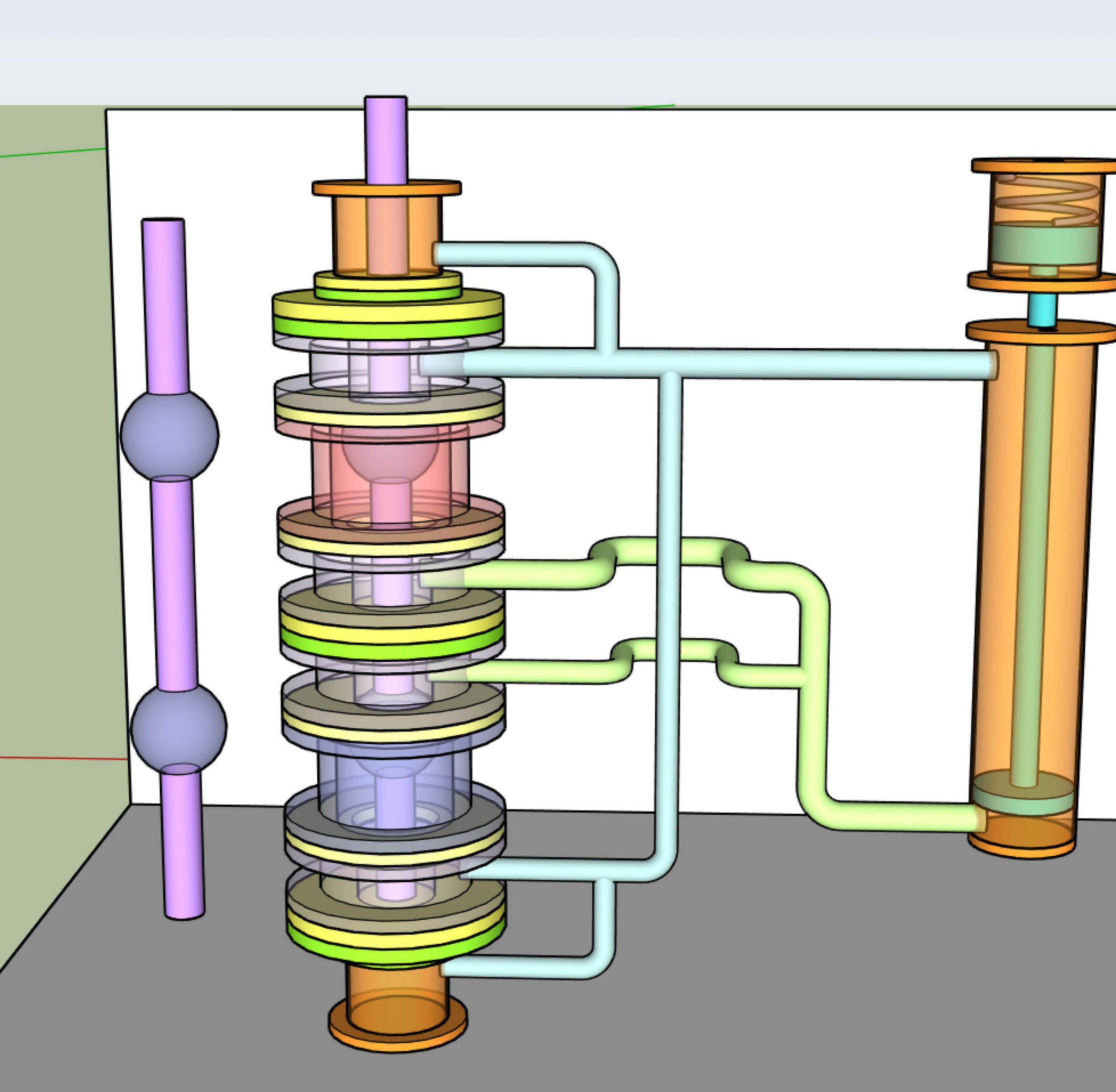
75 in long

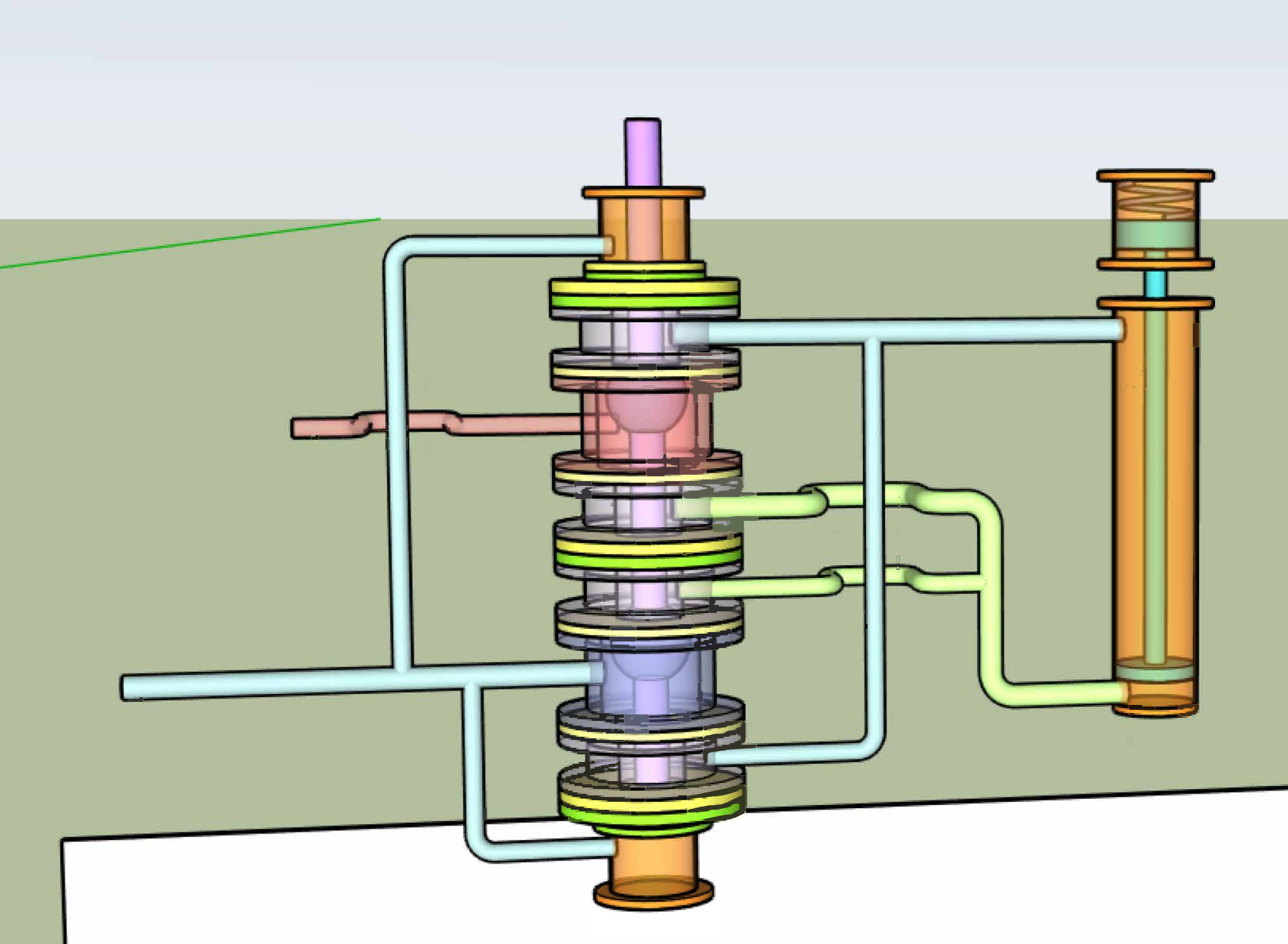
25 in wide

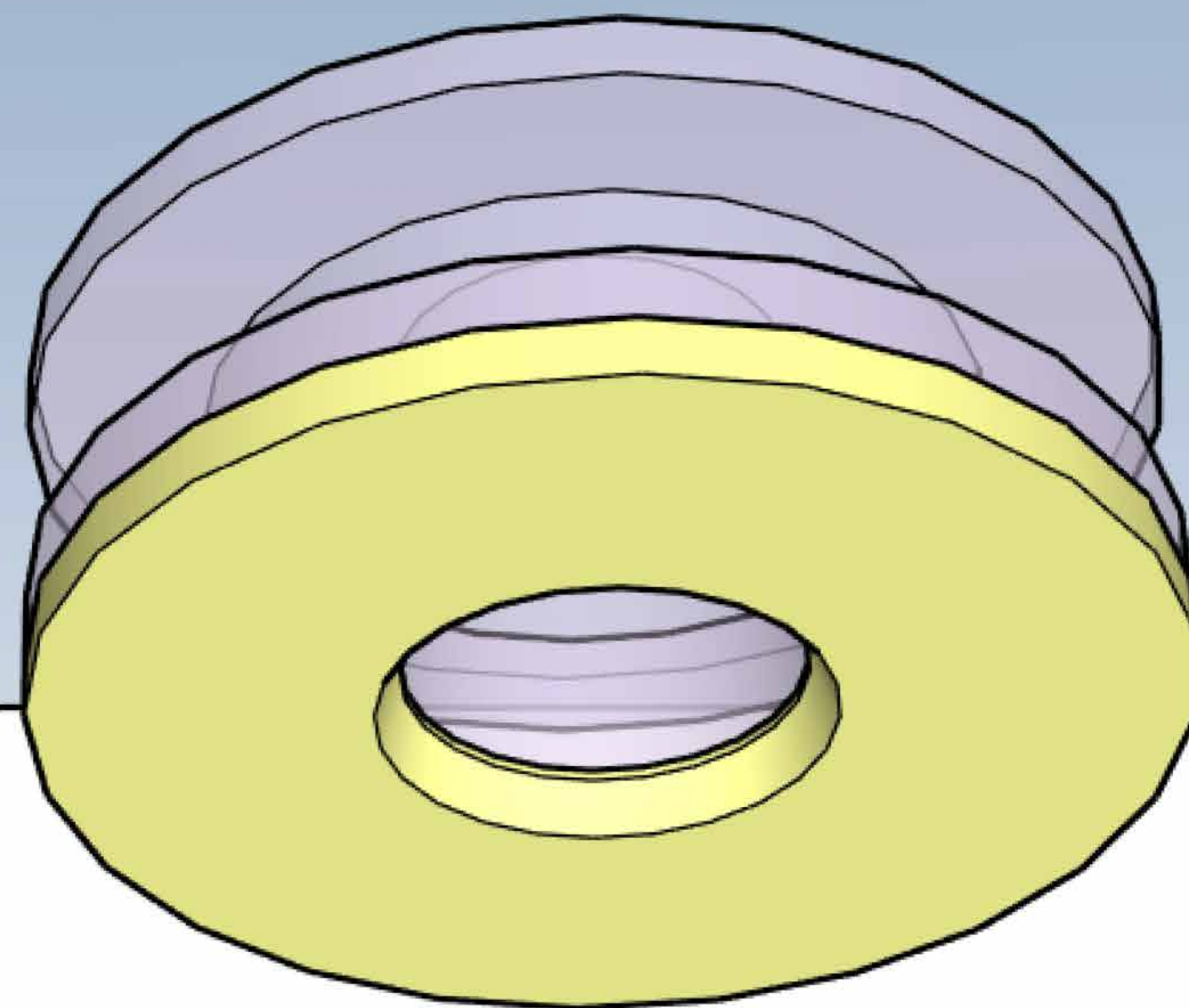
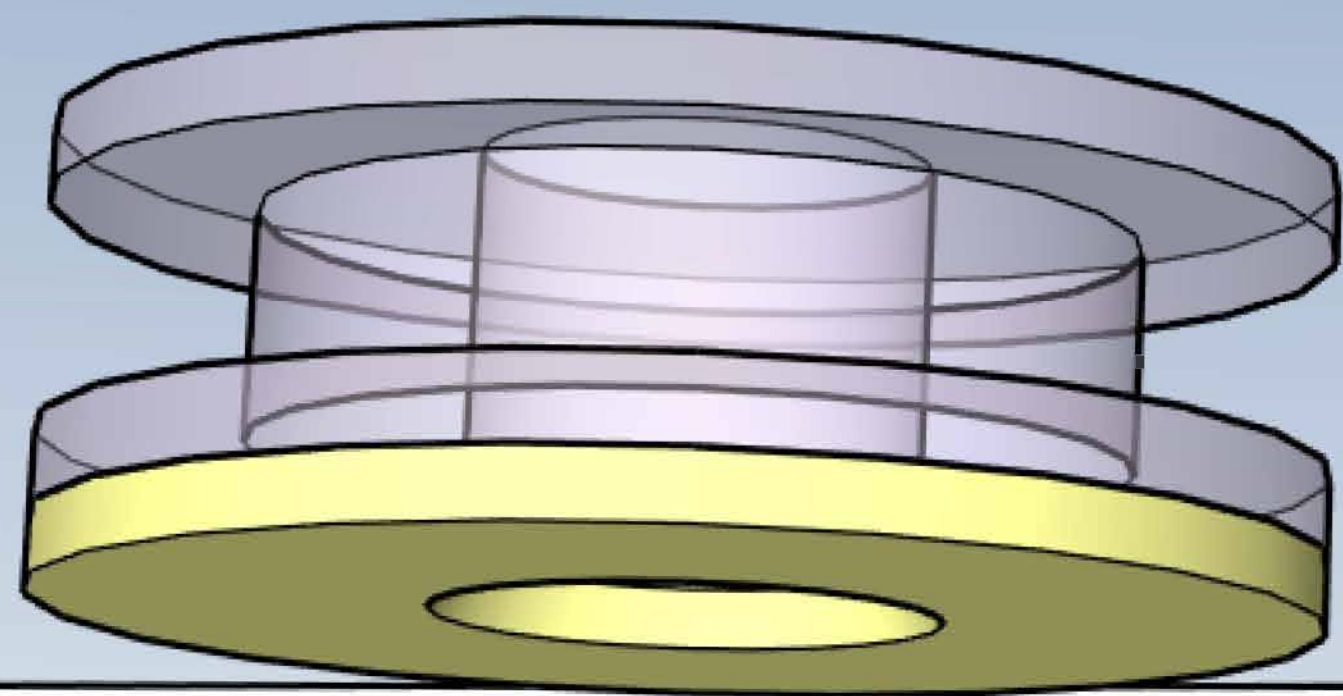
10 in tall

11.7 cu ft

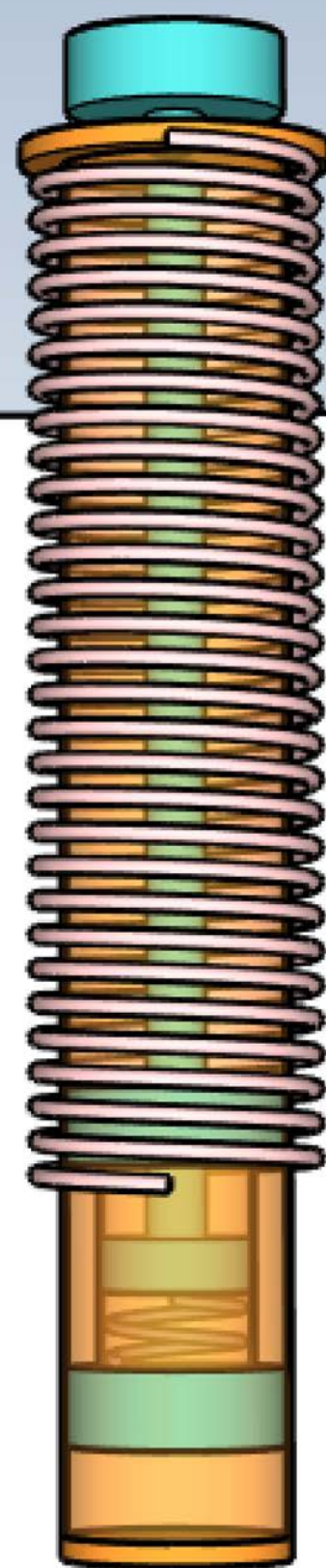
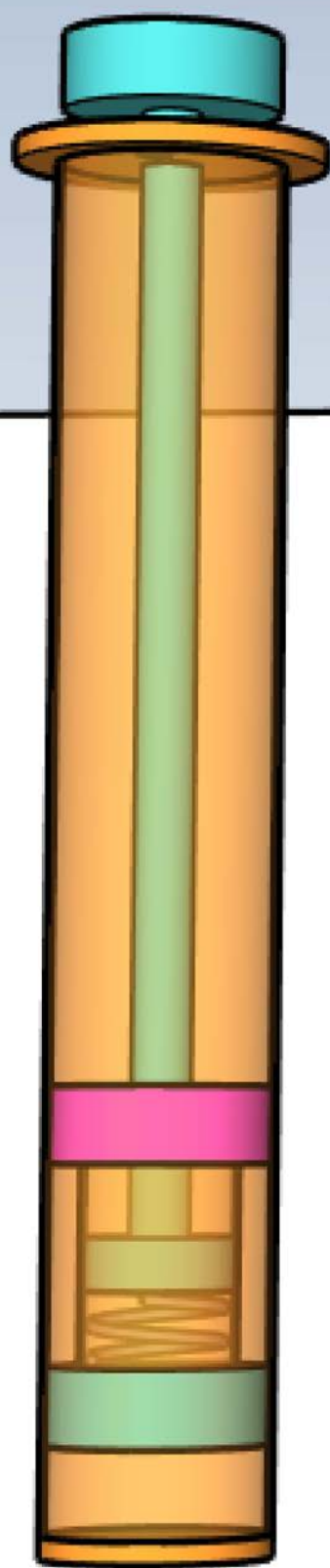


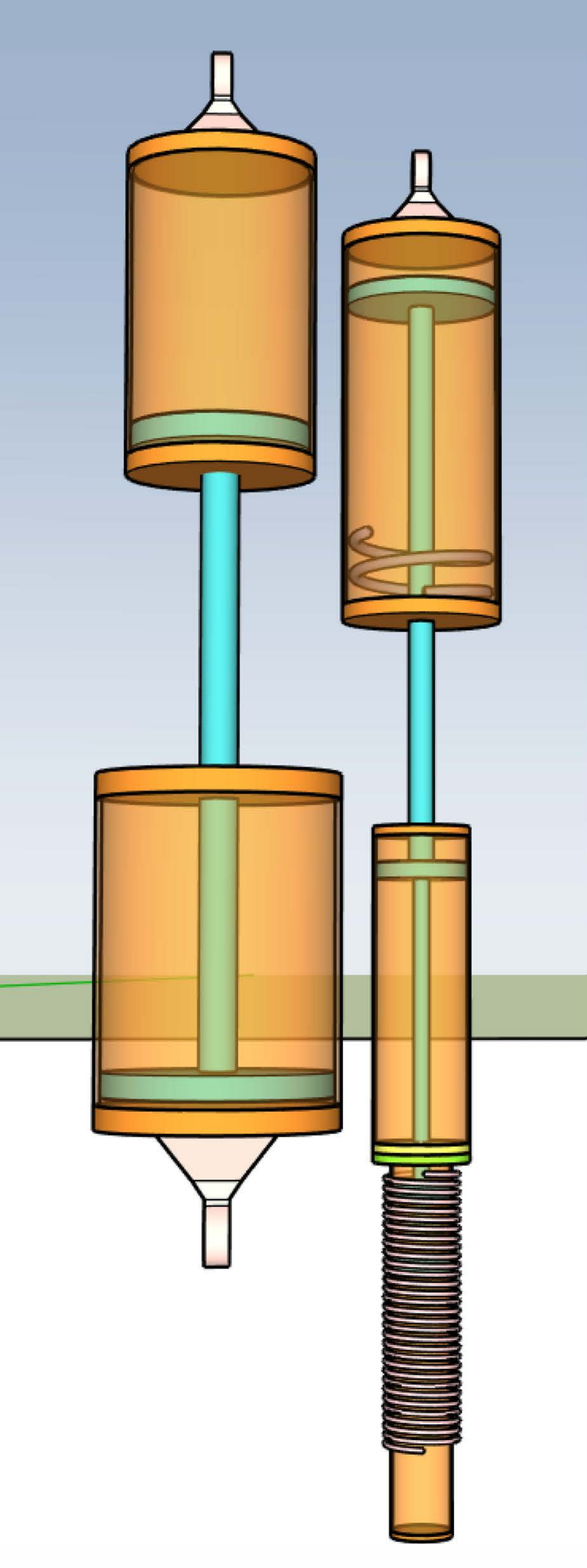


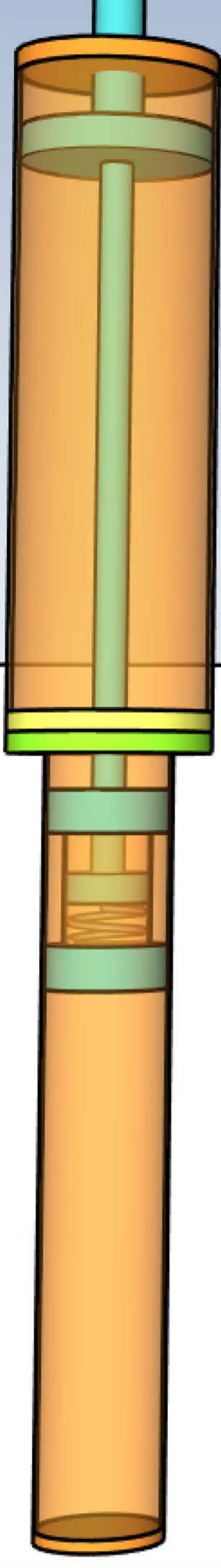




Click and drag to select a new capture area







42 inch blade for the small cargo p

FileEditViewH1B I S G ...

r/R	c/R	?	H/D	r	c	H	t	Airfoil
[-]	[-]	[°]	[-]	[mm]	[mm]	[mm]	[mm]	[-]
0.0000	0.0342	89.9	0.0	0.0	18.3	0.0	1.0	Flat Plate, Re=100,000
0.0500	0.1462	80.4	0.9	26.7	78.0	990.7	4.2	interpolated
0.1000	0.2583	69.9	0.9	53.3	137.8	915.8	7.4	interpolated
0.1500	0.3703	59.4	0.8	80.0	197.5	850.0	10.7	interpolated
0.2000	0.4090	51.4	0.8	106.7	218.1	839.7	11.8	interpolated
0.2500	0.4052	45.2	0.8	133.3	216.2	843.7	11.7	interpolated
0.3000	0.3829	40.4	0.8	160.0	204.3	855.7	11.0	interpolated
0.3500	0.3541	36.6	0.8	186.7	188.9	871.2	10.8	Flat Plate, Re=500,000
0.4000	0.3248	33.6	0.8	213.4	173.2	890.7	11.7	interpolated
0.4500	0.2960	31.1	0.9	240.0	157.9	909.8	12.3	interpolated
0.5000	0.2695	29.1	0.9	266.7	143.8	932.7	12.7	interpolated
0.5500	0.2453	27.4	0.9	293.4	130.9	955.5	12.9	interpolated
0.6000	0.2230	26.0	0.9	320.0	118.9	980.8	13.0	interpolated
0.6500	0.2021	24.7	0.9	346.7	107.8	1002.0	12.9	Clark Y, Re=25,000
0.7000	0.1779	23.6	1.0	373.4	94.9	1024.9	11.7	interpolated
0.7500	0.1531	22.7	1.0	400.1	81.7	1051.5	10.0	interpolated
0.8000	0.1304	21.8	1.0	426.7	69.5	1072.4	8.5	interpolated
0.8500	0.1076	21.1	1.0	453.4	57.4	1099.2	7.1	interpolated
0.9000	0.0825	20.4	1.1	480.1	44.0	1121.8	5.4	interpolated
0.9500	0.0573	19.8	1.1	506.7	30.6	1146.3	3.8	interpolated
1.0000	0.0272	19.3	1.1	533.4	14.5	1173.7	1.8	Clark Y, Re=100,000

Ln 24, Col 11.326 charactersPlain text100%Windows (CRLF)ANSI

JavaProp

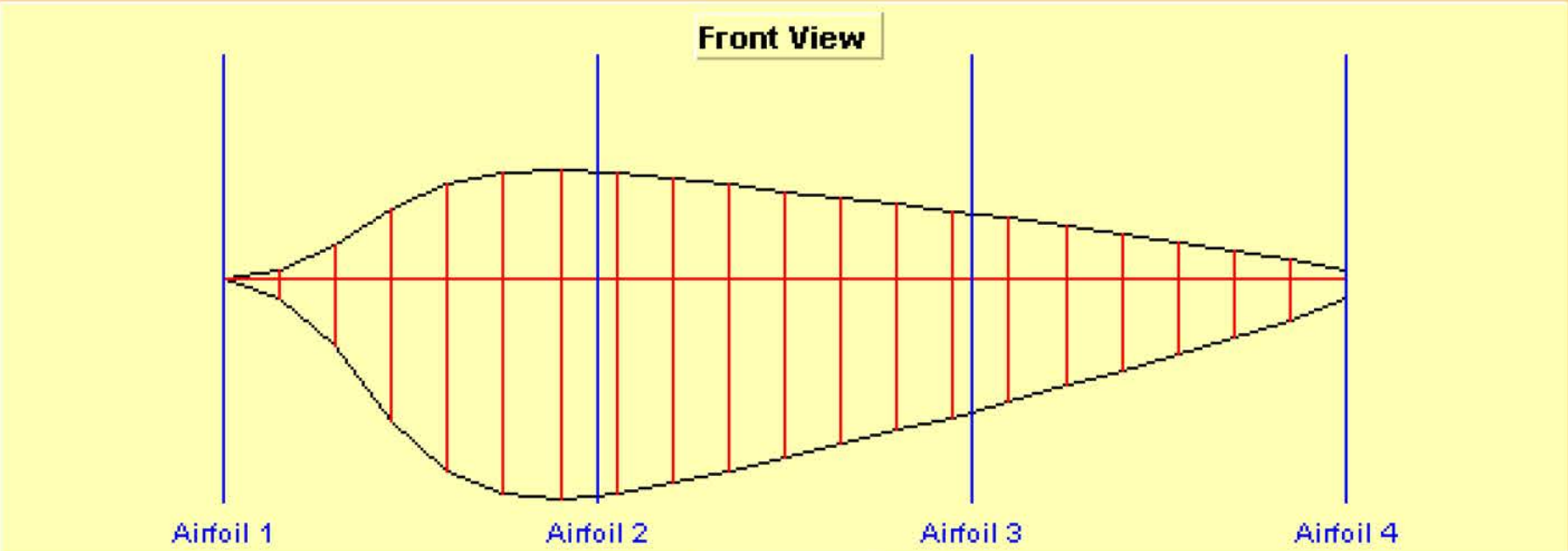
DesignAirfoilsGeometryModifyMulti AnalysisSingle AnalysisFlow FieldOptions

Propeller Geometry.

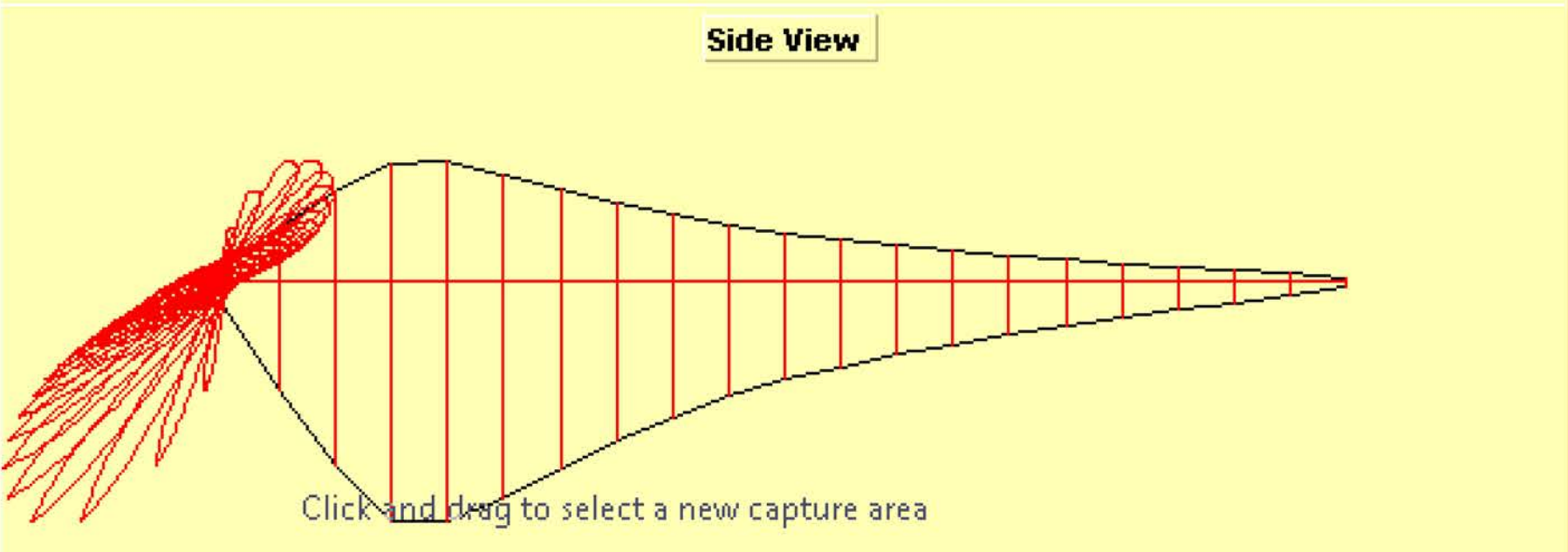
0.6000	0.2230	26.0	0.9	320.0	118.9	980.8	12.8	interpo
0.6500	0.2021	24.7	0.9	346.7	107.8	1002.0	12.7	Clark Y
0.7000	0.1779	23.6	1.0	373.4	94.9	1024.9	11.5	interpo
0.7500	0.1531	22.7	1.0	400.1	81.7	1051.5	9.9	interpo
0.8000	0.1304	21.8	1.0	426.7	69.6	1072.4	8.5	interpo
0.8500	0.1076	21.1	1.0	453.4	57.4	1099.2	7.0	interpo
0.9000	0.0825	20.4	1.1	480.1	44.0	1121.8	5.4	interpo
0.9500	0.0573	19.8	1.1	506.7	30.6	1146.3	3.7	interpo
1.0000	0.0272	19.3	1.1	533.4	14.5	1173.7	1.8	Clark Y

show:ViewsPitch/Diameter

Front View



Side View



Click and drag to select a new capture area

Copy TextCopy (HTML)Print...Save...Import...

Ready

Enter Design Parameters and press the 'Design It!' button.

Propeller Name:

Number of Blades B:

2

[-]

Revolutions per minute rpm:

1200

[1/min]

Diameter D:

1.0668

[m]

Spinner Dia. Dsp:

0.000

[m]

Velocity v:

60.000

[m/s]

Thrust T:

348.18

[N]

shroud chord:

60.000

[-]

shroud angle:

60.000

[°]

☐ shrouded rotor

☐ square tip

☐ open hub

Wind turbine			
$v/(nD)$	2.812	$v/(\Omega R)$	0.895
Efficiency η	5.343 %	loading	low
Thrust T	-319.97 N	Ct	-0.5058
Power P	-6,298.03 W	Cp	-0.4666
Torque Q	-50.12 Nm	Cs	3.2752
β at 75%R	22.7°	Pitch H	1.05 m

Remark: The RPM setting is also used for Analysis page.

Design It!

Copy Text

Copy (HTML)

Propeller Off-Design Analysis for full v/nD range.

v	Cs	Tc	Pc	η	η^*	stalled	v	rpm	Power	Thrust	Torque
	[-]	[-]	[-]	[%]	[%]	[%]	[m/s]	[1/min]	[MW]	[N]	[Nm]
205	0.000051	9.999999	9.999999	0.00	0.00	43.00 !	0.00	2547	0.0114	348.18	42.67
731	0.161249	9.999999	9.999999	13.38	29.47	100.00 !	4.52	2541	0.0118	348.18	44.17
449	0.325596	7.764099	9.999999	27.89	49.71	43.00 !	9.07	2549	0.0113	348.18	42.39
145	0.486521	3.326250	8.407627	39.56	63.95	25.00	13.85	2597	0.0122	348.18	44.83
021	0.650344	1.799201	3.502228	51.37	73.73	0.00	18.83	2648	0.0128	348.18	46.03
350	0.816051	1.047176	1.759116	59.53	81.19	0.00	24.68	2777	0.0144	348.18	49.65
069	0.996666	0.599037	0.932170	64.26	87.35	0.00	32.64	3059	0.0177	348.18	55.20

show:

Coefficients Cp, Ct

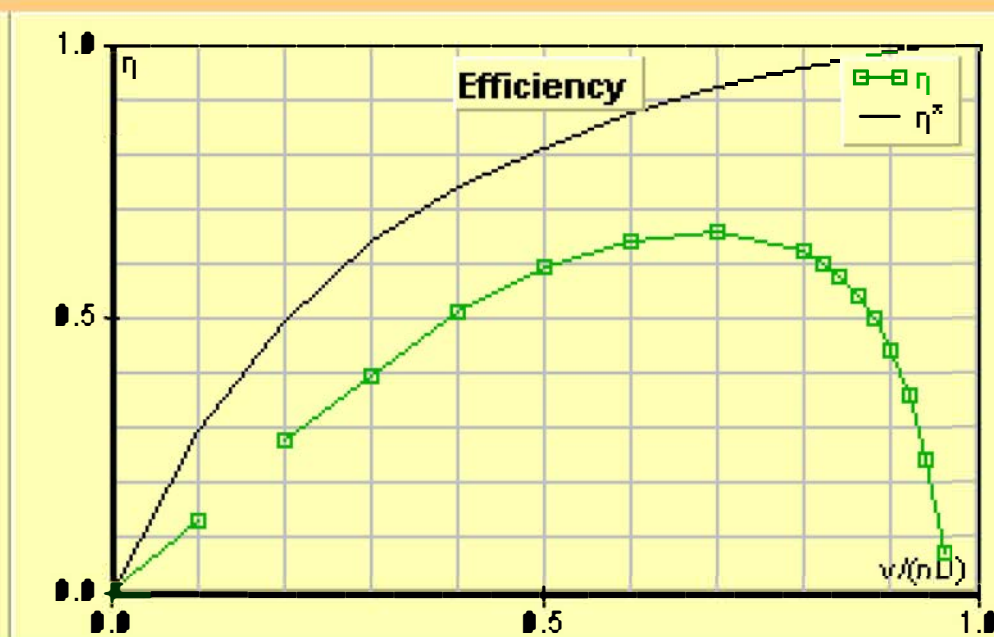
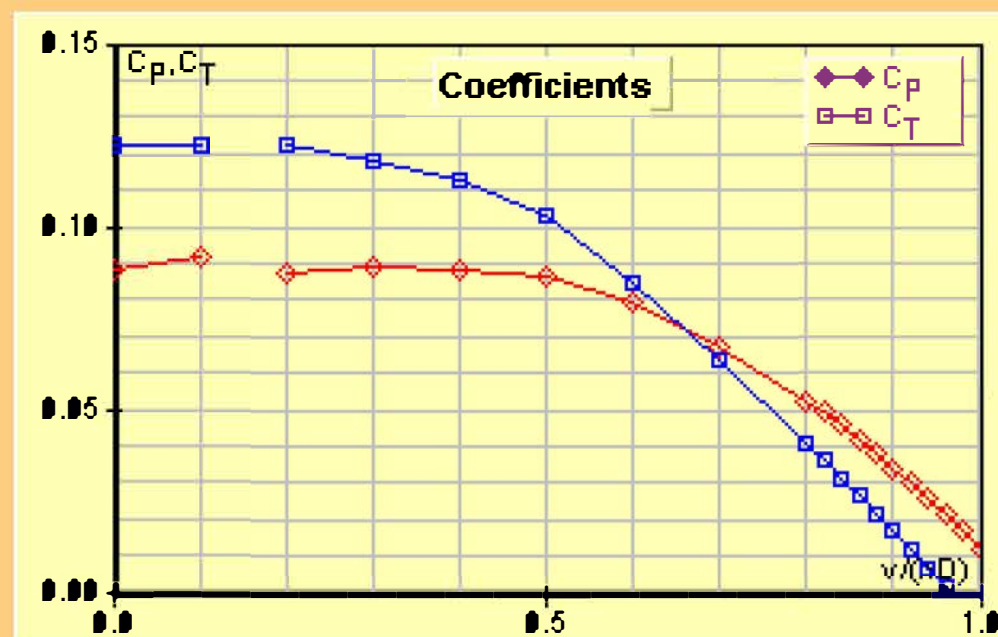
Coefficients Pc, Tc

Thrust

Power

rpm

Torque

☐ Add to existing plots

Analysis with T=prescribed



(Results are valid for B, rpm, D, rho from Design card)

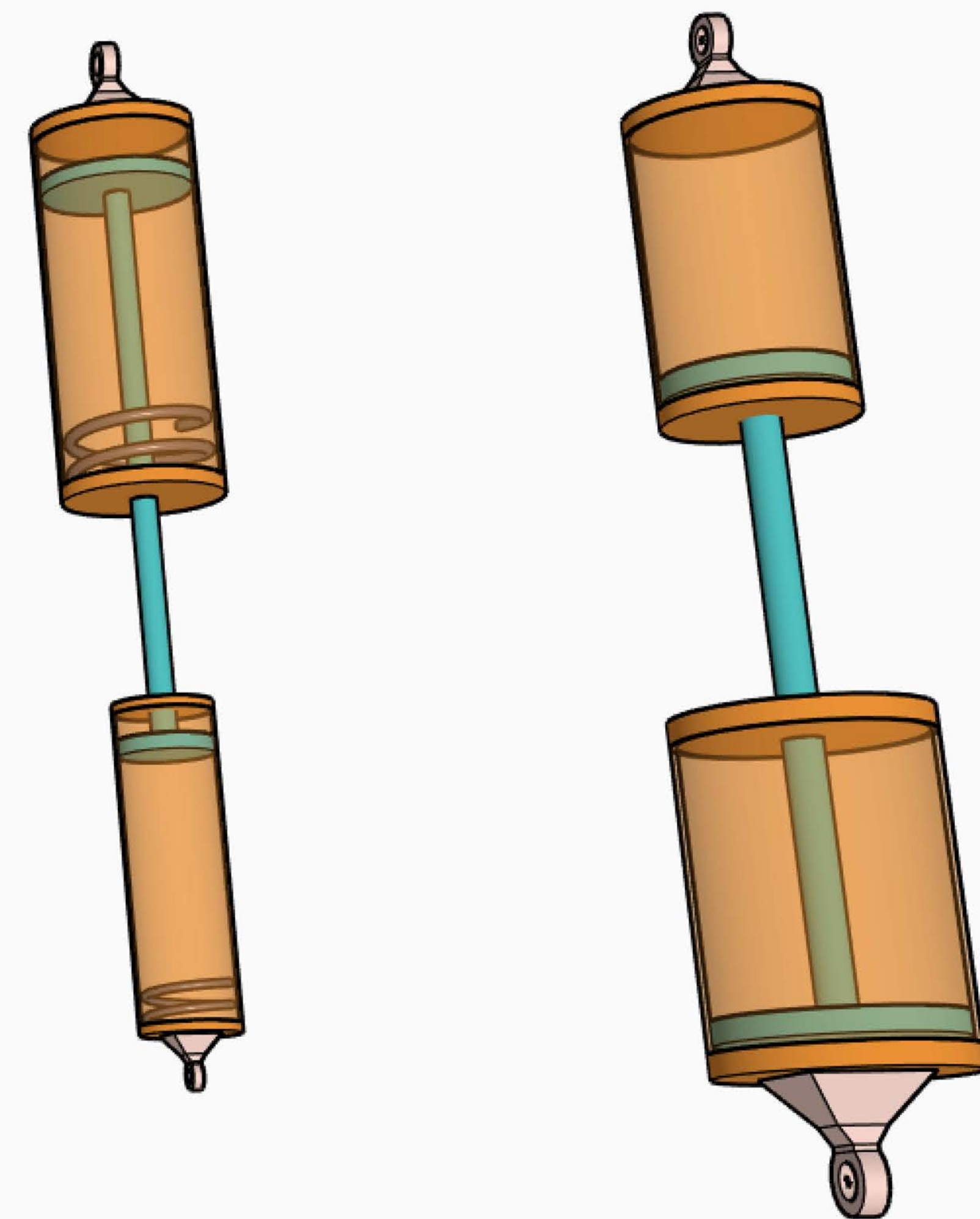
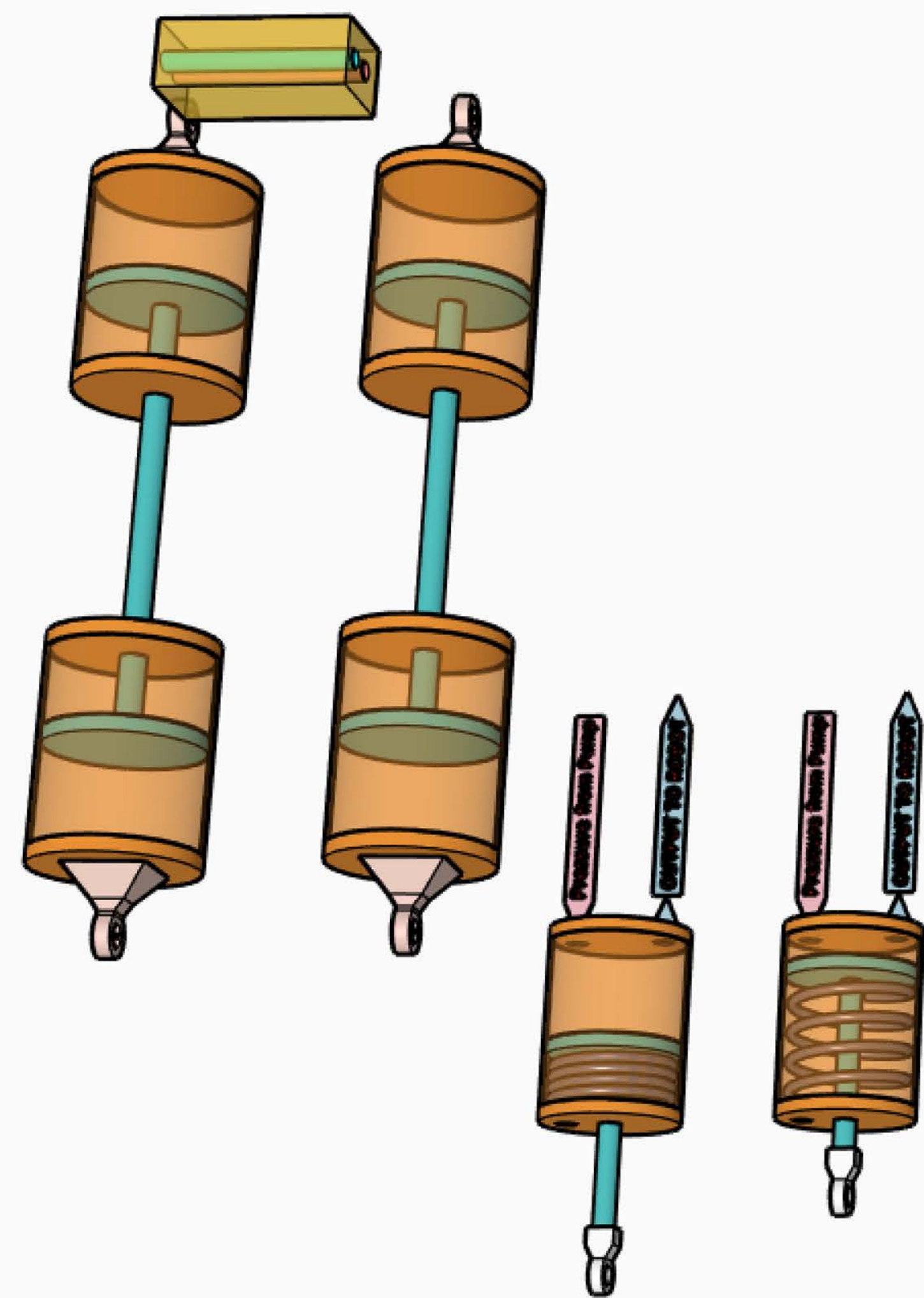
Analyze!

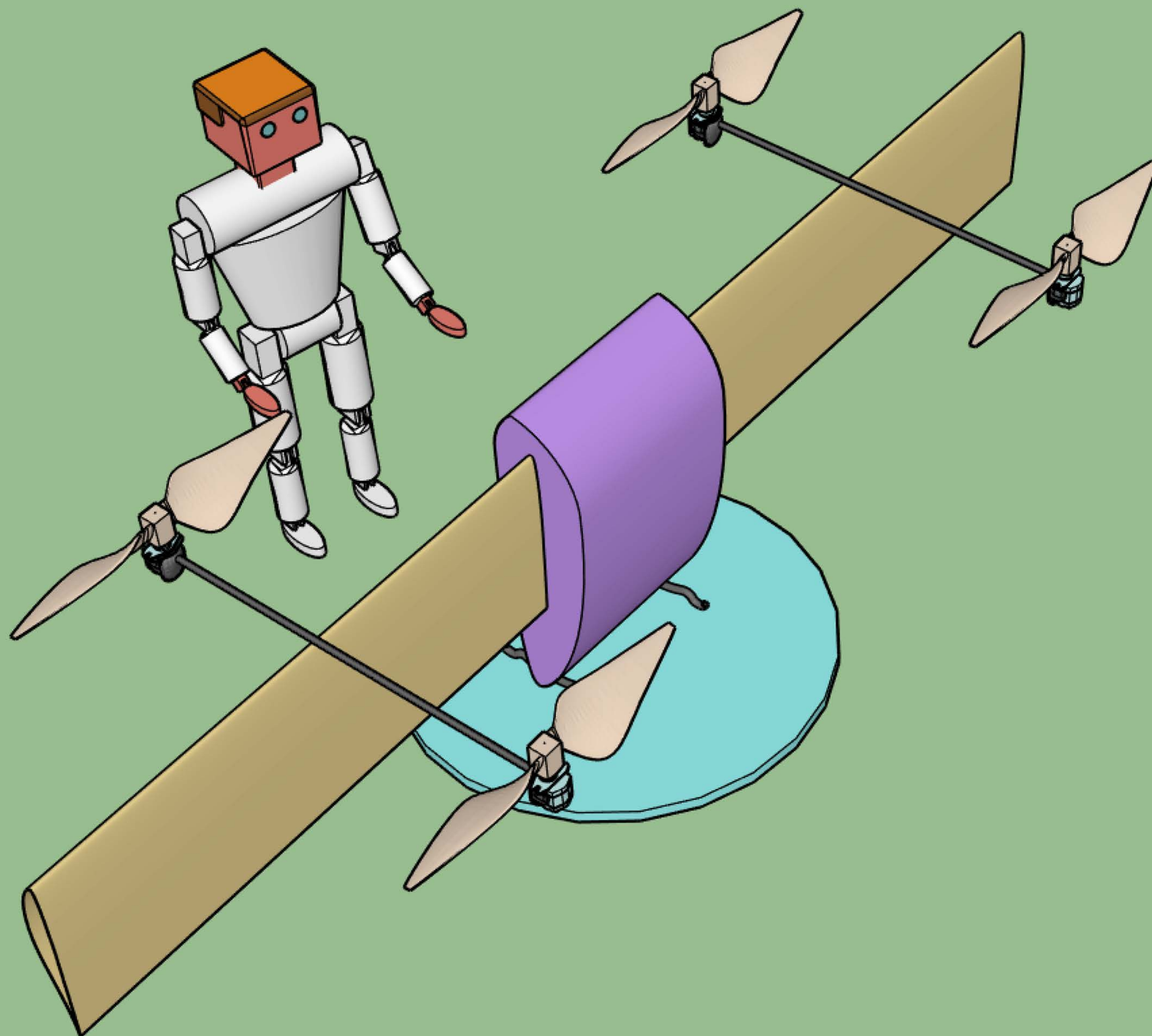
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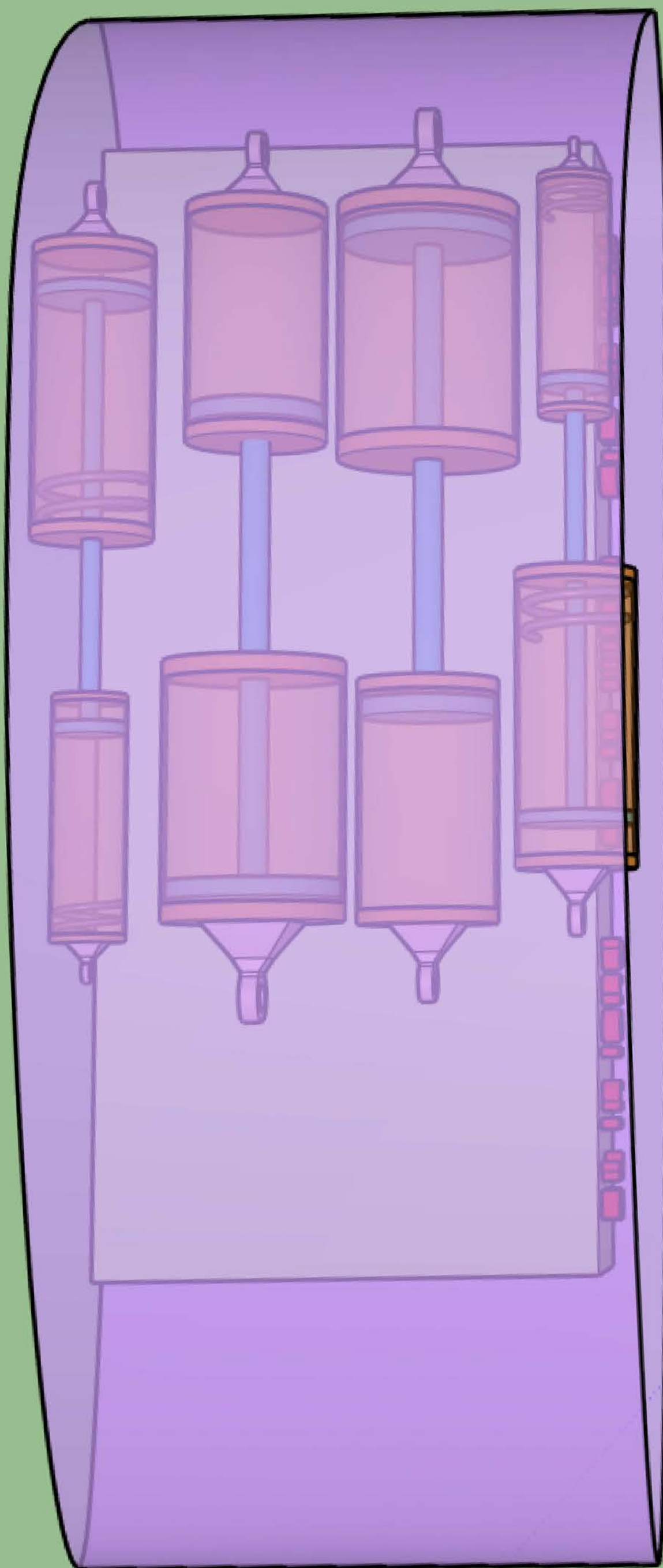
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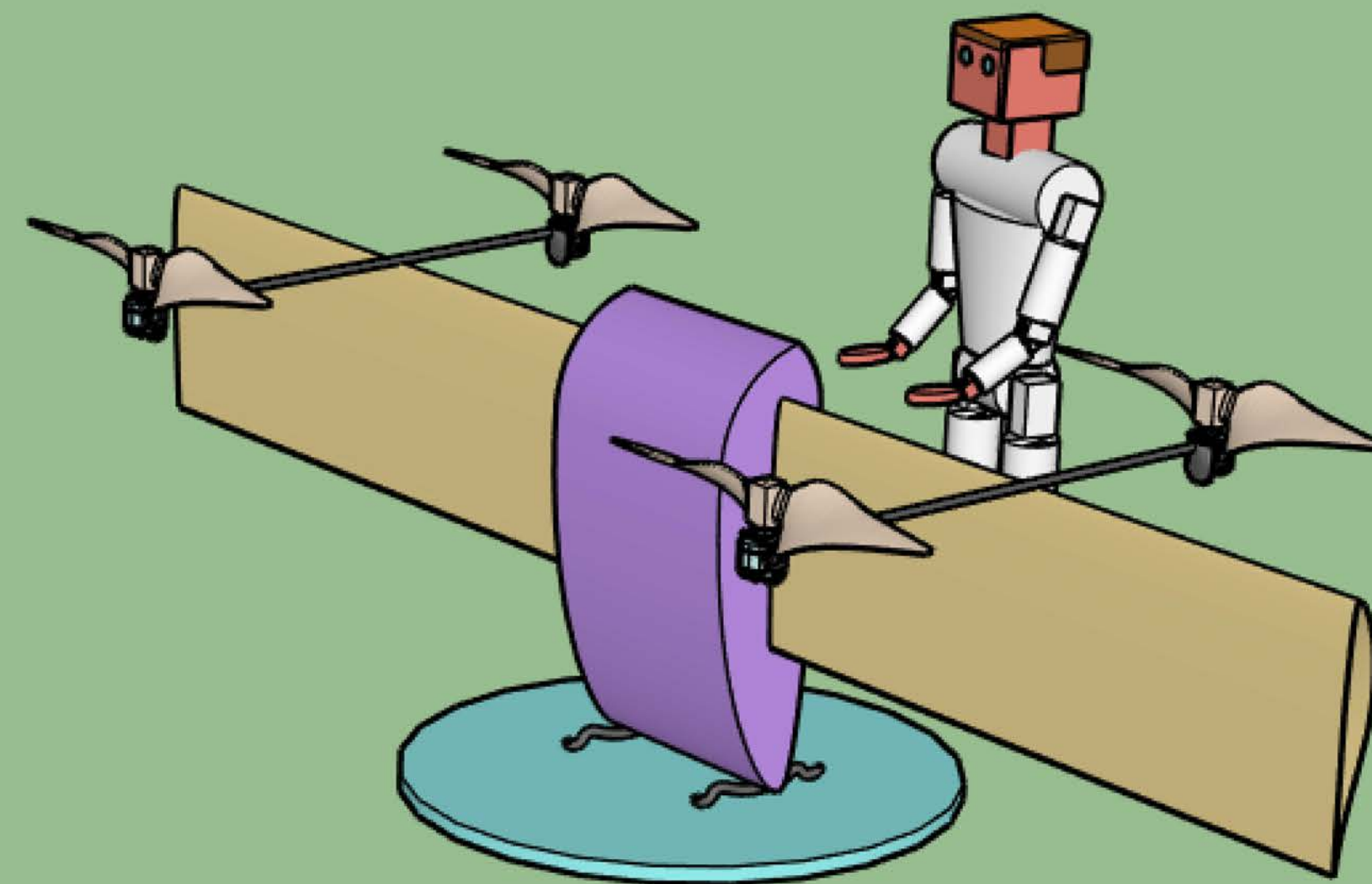
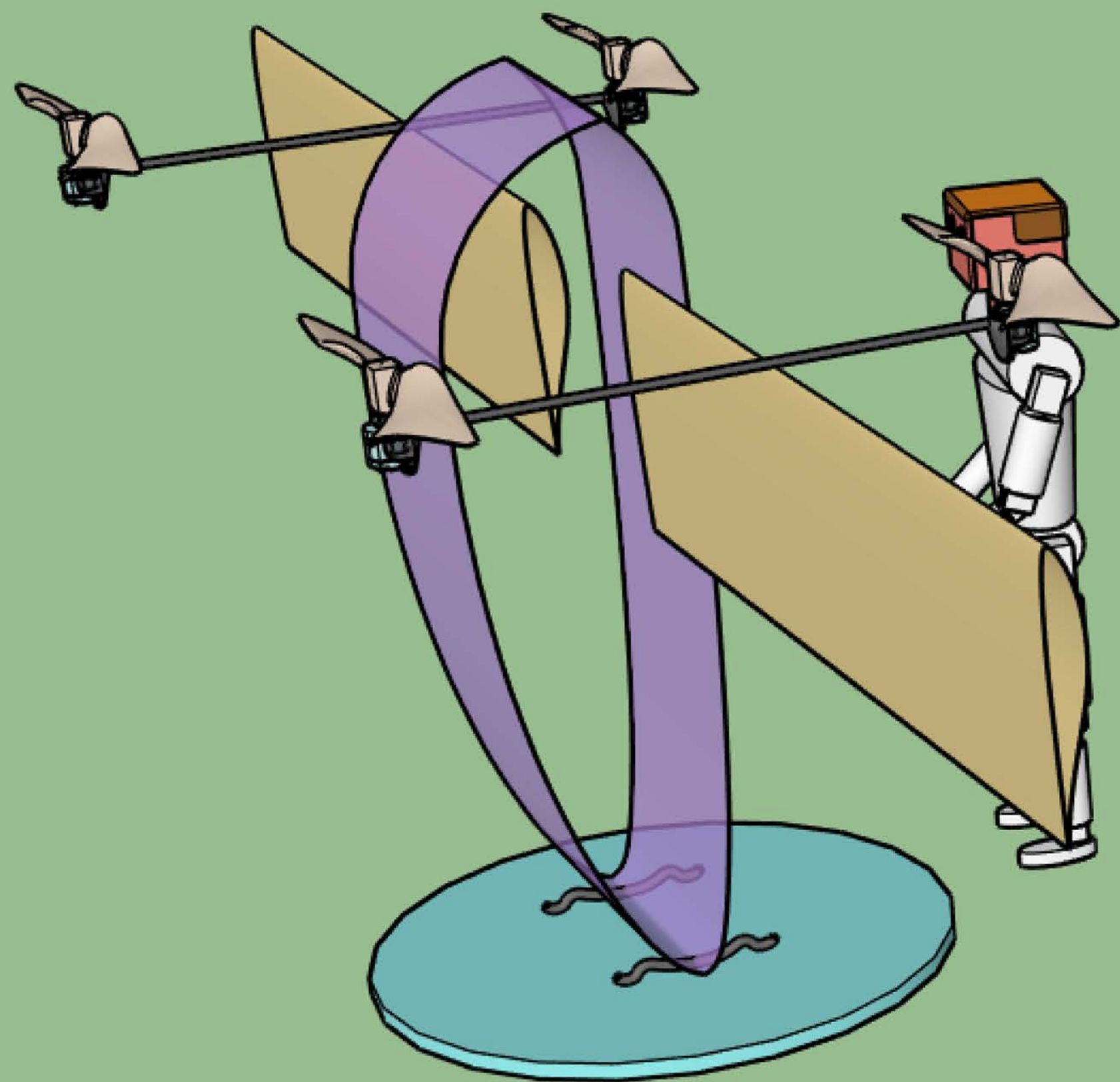
Print...

Save...









Click and drag to select a new capture area

