

4

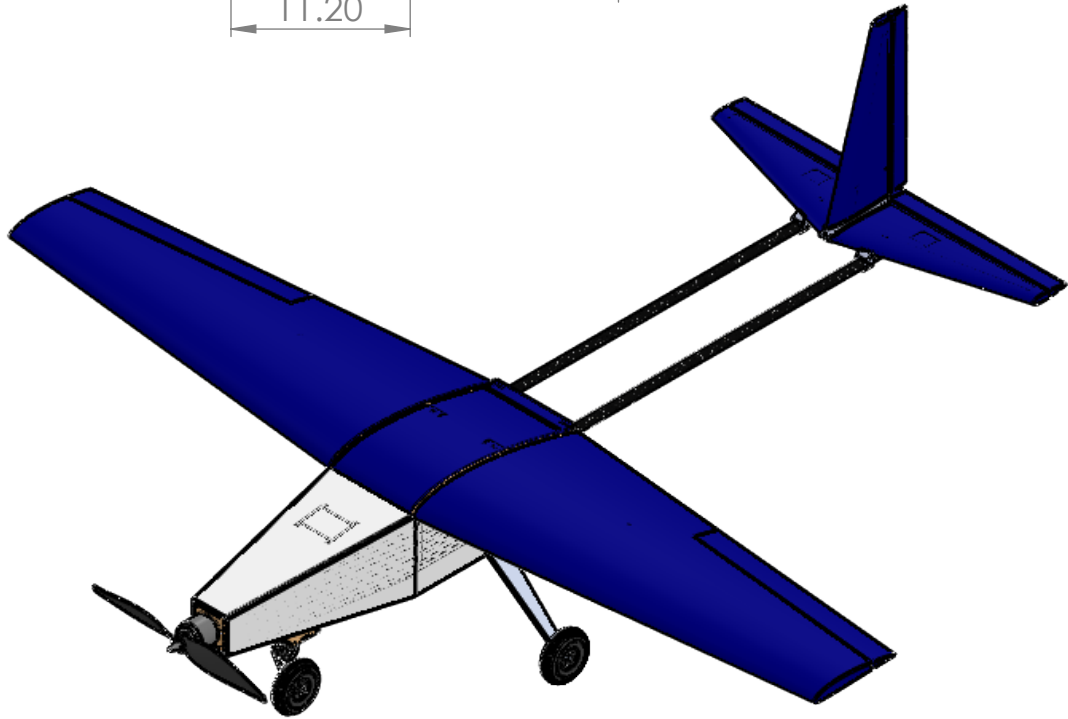
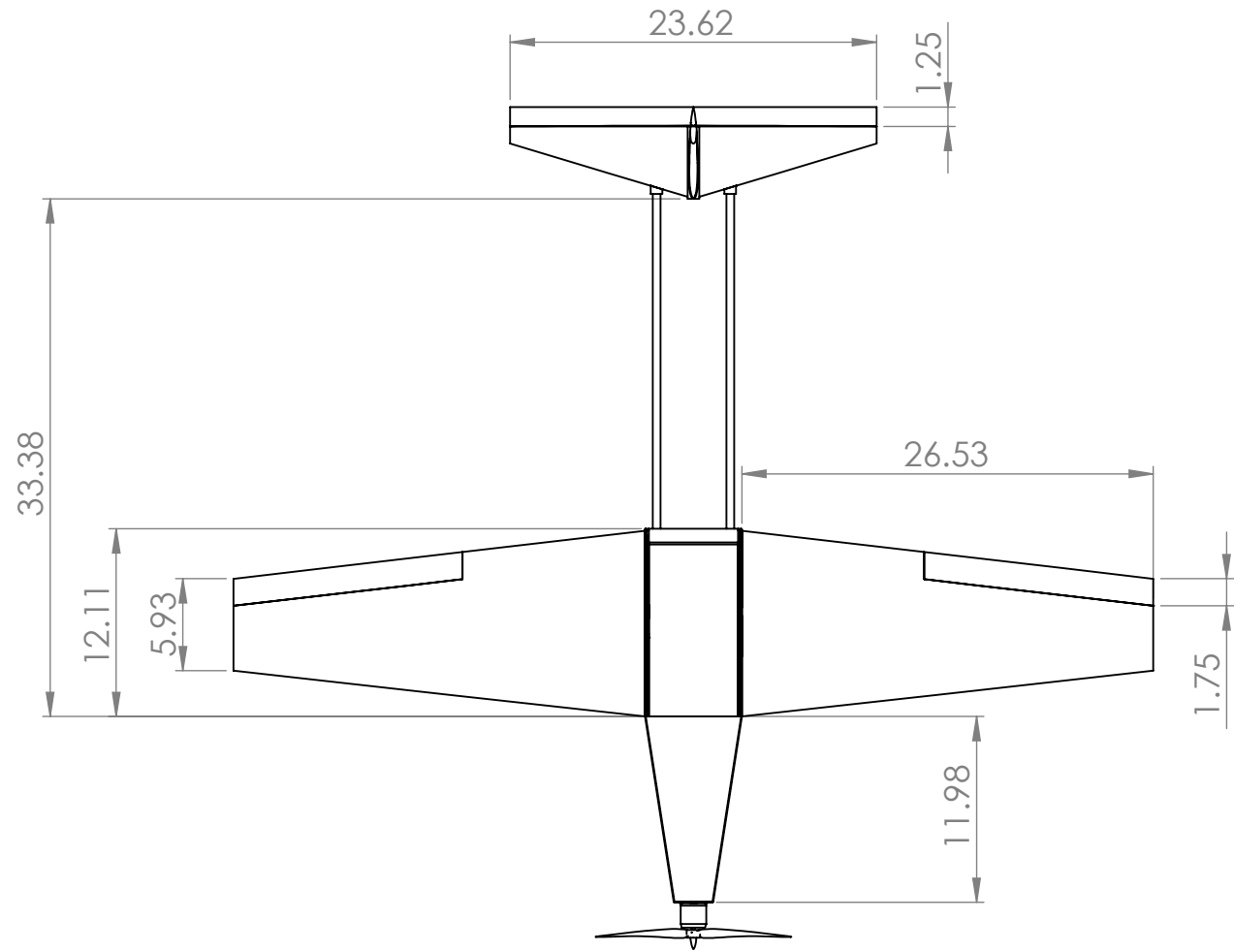
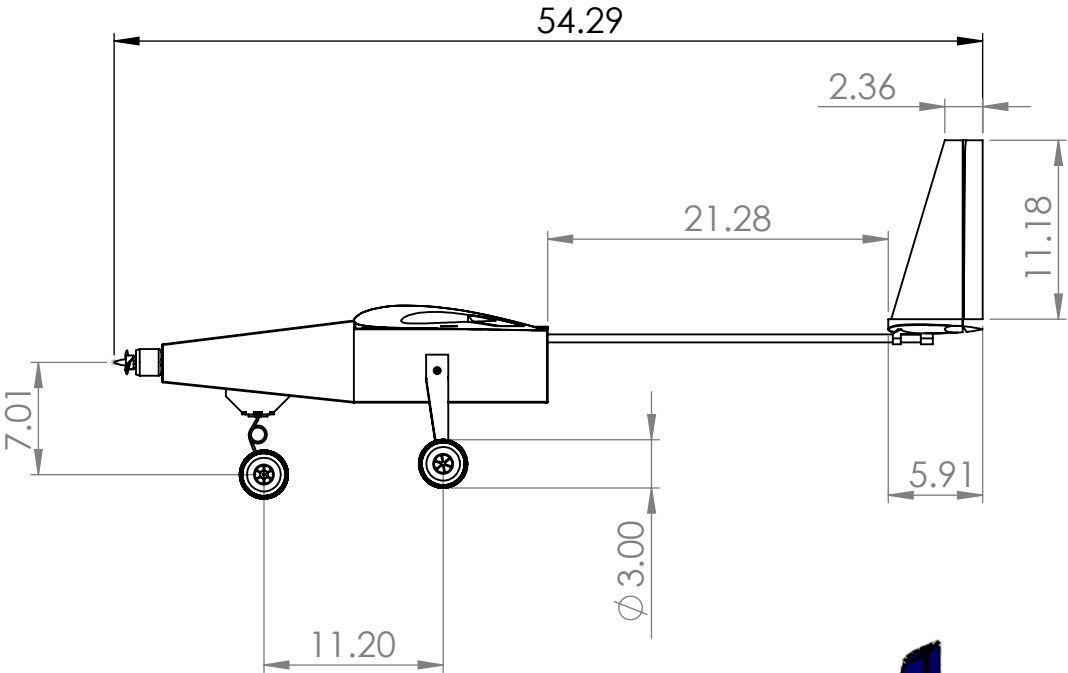
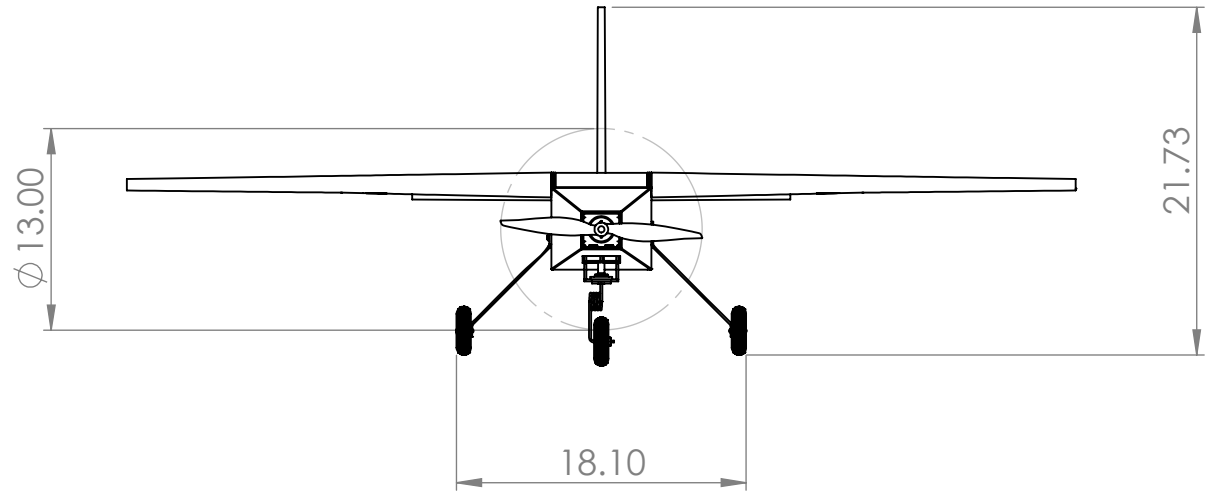
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2

1

B

B



A

A

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DRAWN	DD	2/12/21	TITLE: Brigham Young University AIAA Design/Build/Fly - 2021		
CHECKED					
ENG APPR.					
MFG APPR.					
Q.A.					
COMMENTS:			SIZE B	DWG. NO. Assembly Drawing 1	REV 1
			SCALE: 1:12	Drawing Package	SHEET 1 OF 3

4

3

2

1

4

3

2

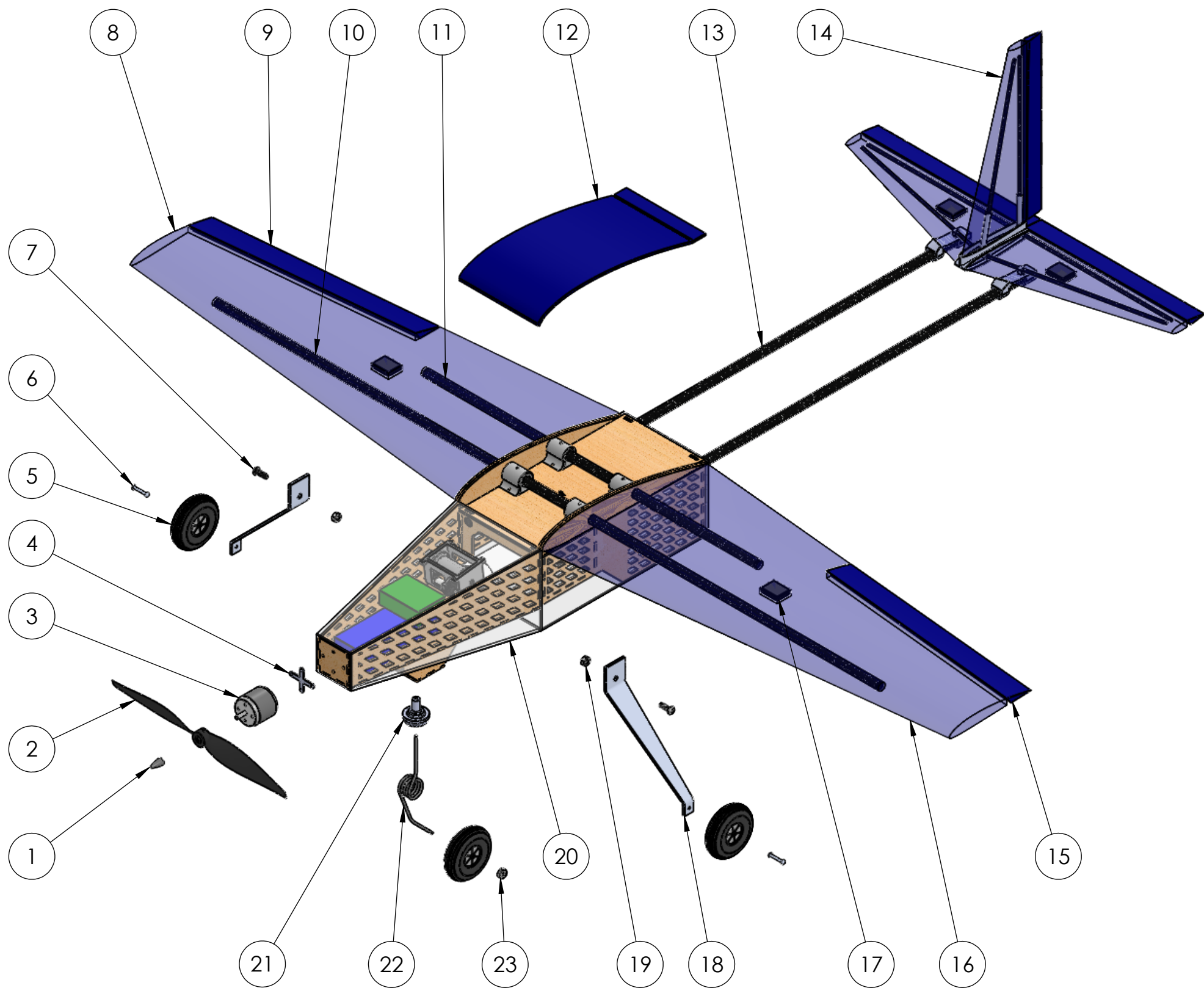
1

B

B

A

A



ITEM NO.	COMPONENT	DESCRIPTION	QTY.
1	Nosecone	Plastic	1
2	Propeller	Plastic	1
3	Motor	Miscellaneous	1
20	Fuselage Cover	Foam	1
5	Wheel	Plastic	3
6	Axel	Aluminium	2
7	Button Hex Screw	Stainless Steel	2
9	Right Wing Aileron	Foam	1
11	Rear Wing Spar	Carbon Fiber	1
8	Right Wing	Foam	1
12	Wing Center Cover	Plastic	1
14	Tail Assembly	Miscellaneous	1
15	Left Wing Aileron	Foam	1
16	Left Wing	Foam	1
18	Landing Gear Bracket	Aluminium	1
21	Nose Gear Mount	Plastic	1
22	Spring	Aluminium	1
4	Motor Mount Bracket	Aluminium	1
13	Boom	Carbon Fiber	2
10	Front Wing Spar	Carbon Fiber	1
19	Hex Nut	Steel	2
23	Set Screw Mount	Steel	1
17	Servo Motor	Miscellaneous	4

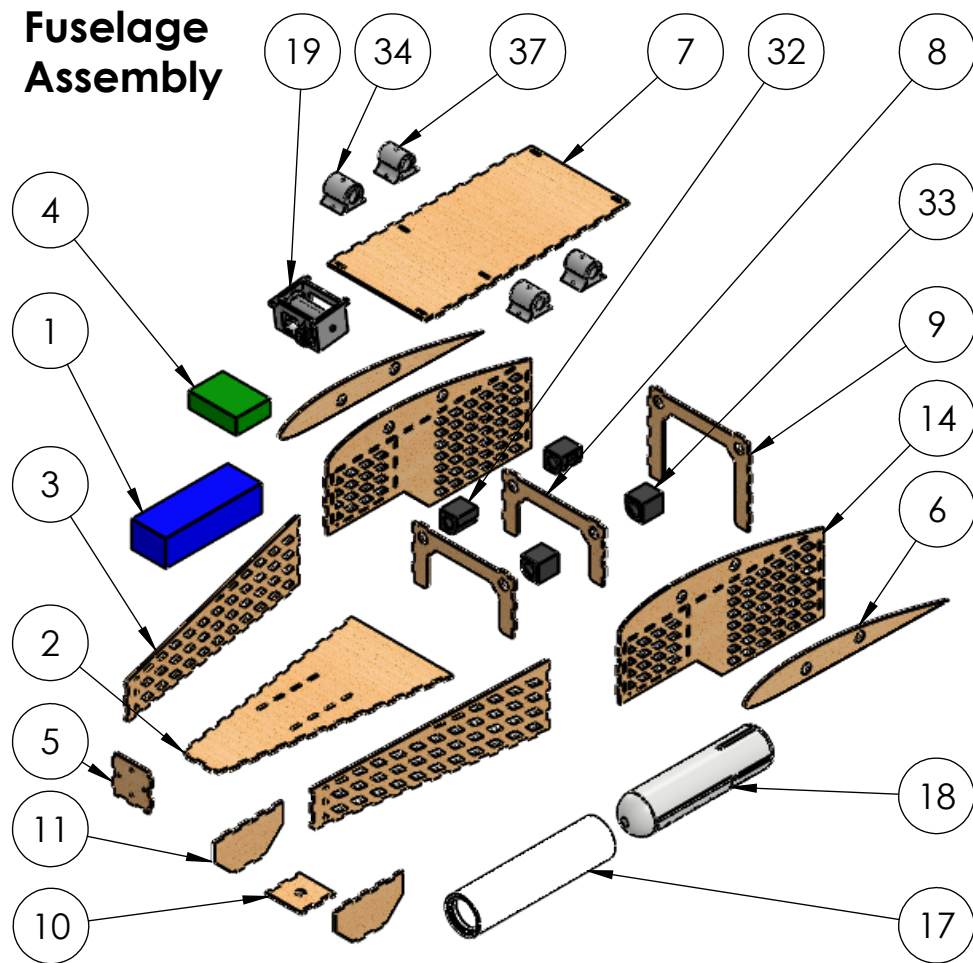
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CHECKED			Brigham Young University AIAA Design/Build/Fly - 2021	
ENG APPR.				
MFG APPR.				
Q.A.				
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			DWG. NO.	
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3

2

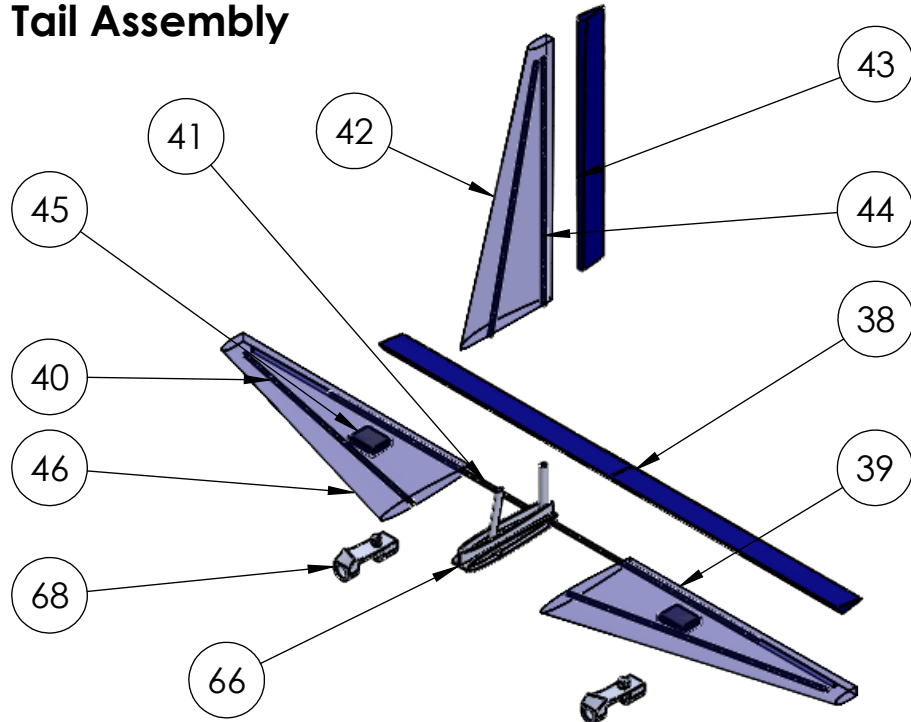
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Fuselage Assembly



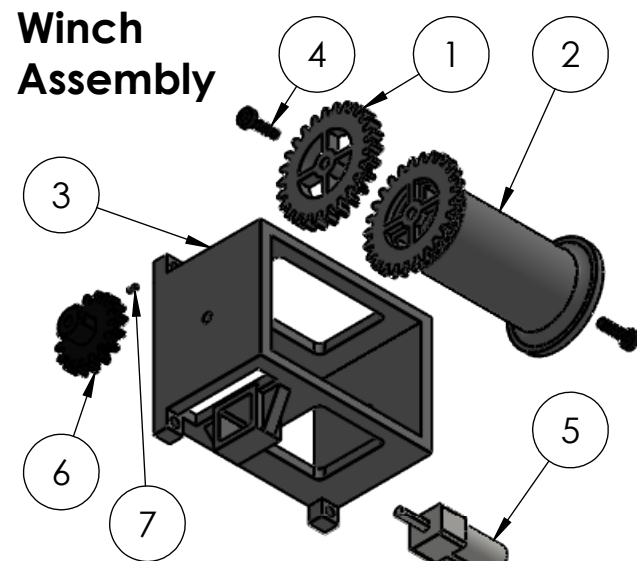
ITEM NO.	COMPONENT	DESCRIPTION	QTY.
1	Battery	Miscellaneous	1
2	Box Bottom	Balsa Wood	1
3	Box Side Wall	Balsa Wood	2
4	ESC	Miscellaneous	1
5	Firewall	Balsa Wood	1
6	Fuselage Wing Mount	Balsa Wood	2
7	Fuselage Top	Balsa Wood	1
8	Interior Wall 1	Balsa Wood	2
9	Interior Wall 2	Balsa Wood	1
10	Landing Gear Box	Balsa Wood	1
11	Landing Gear Mount	Balsa Wood	2
14	Fuselage Side	Balsa Wood	2
17	Shipping Container	PVC	1
18	Spring Pod Assembly	Miscellaneous	1
19	Winch Assembly	Plastic	1
32	Boom Support 1	Plastic	2
33	Boom Support 2	Plastic	2
34	Main Spar Mount	Plastic	2
37	Secondary Spar Mount	Plastic	2

Tail Assembly



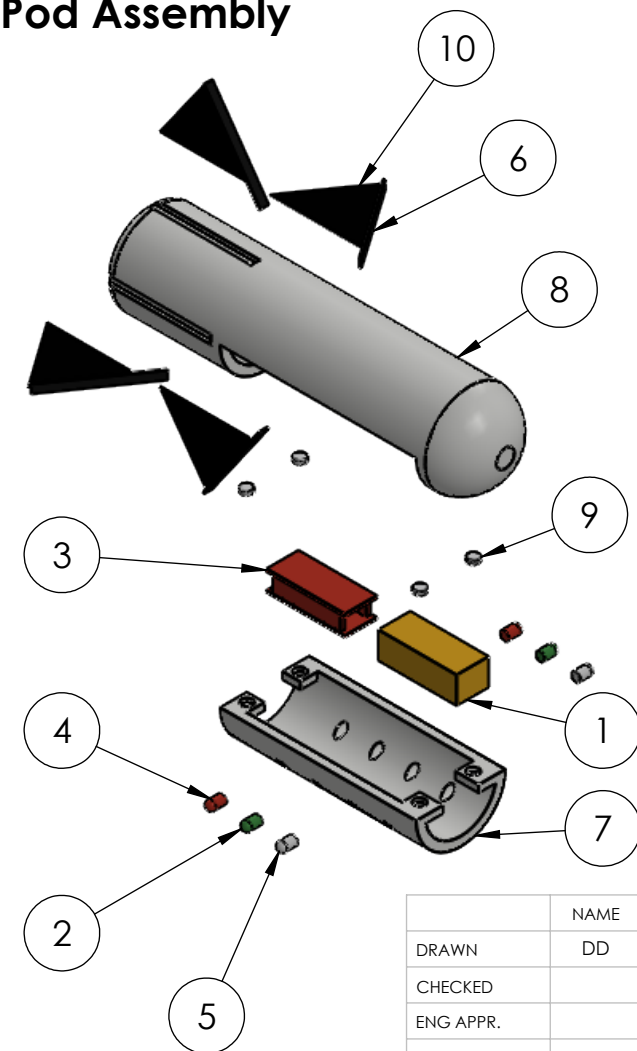
ITEM NO.	COMPONENT	DESCRIPTION	QTY.
38	Horizontal Stabilizer	Foam	1
39	Left Tail	Foam	1
40	Main Tail Spar	Carbon Fiber	3
41	Secondary Tail Spar	Carbon Fiber	1
42	Vertical Tail	Foam	1
43	Vertical Stabilizer	Foam	1
44	Vertical Tail Spar	Carbon Fiber	1
45	Servo Motor	Miscellaneous	4
46	Right Tail	Foam	1
66	Tail Attachment	Plastic	1
68	Boom Attachment	Plastic	2

Winch Assembly



ITEM NO.	COMPONENT	DESCRIPTION	QTY.
1	Spur Gear	26 Teeth	1
2	Winch	Plastic	1
3	Winch Housing	Plastic	1
4	Socket Screw	Steel	2
5	Geared Motor	Misc.	1
6	Spur Gear	16 Teeth	1
7	Set Screw	M1.6x0.35	1

Pod Assembly



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2S 350mah Lipo	Misc.	1
2	Green LED	LED	2
3	PCB	Misc.	1
4	Red LED	LED	2
5	White LED	LED	2
6	Spring Rod	Plastic	4
7	Pod Bay	PVC	1
8	Main Pod Housing	PVC	1
9	6mm Magnet	Neodymium	4
10	Stabilizer	Fabric	4

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CHECKED			Brigham Young University	
ENG APPR.			AIAA Design/Build/Fly - 2021	
MFG APPR.			SIZE DWG. NO. REV	
Q.A.			B Subassemblies 1	
COMMENTS:			SCALE: 1:8 Design Package SHEET 3 OF 3	