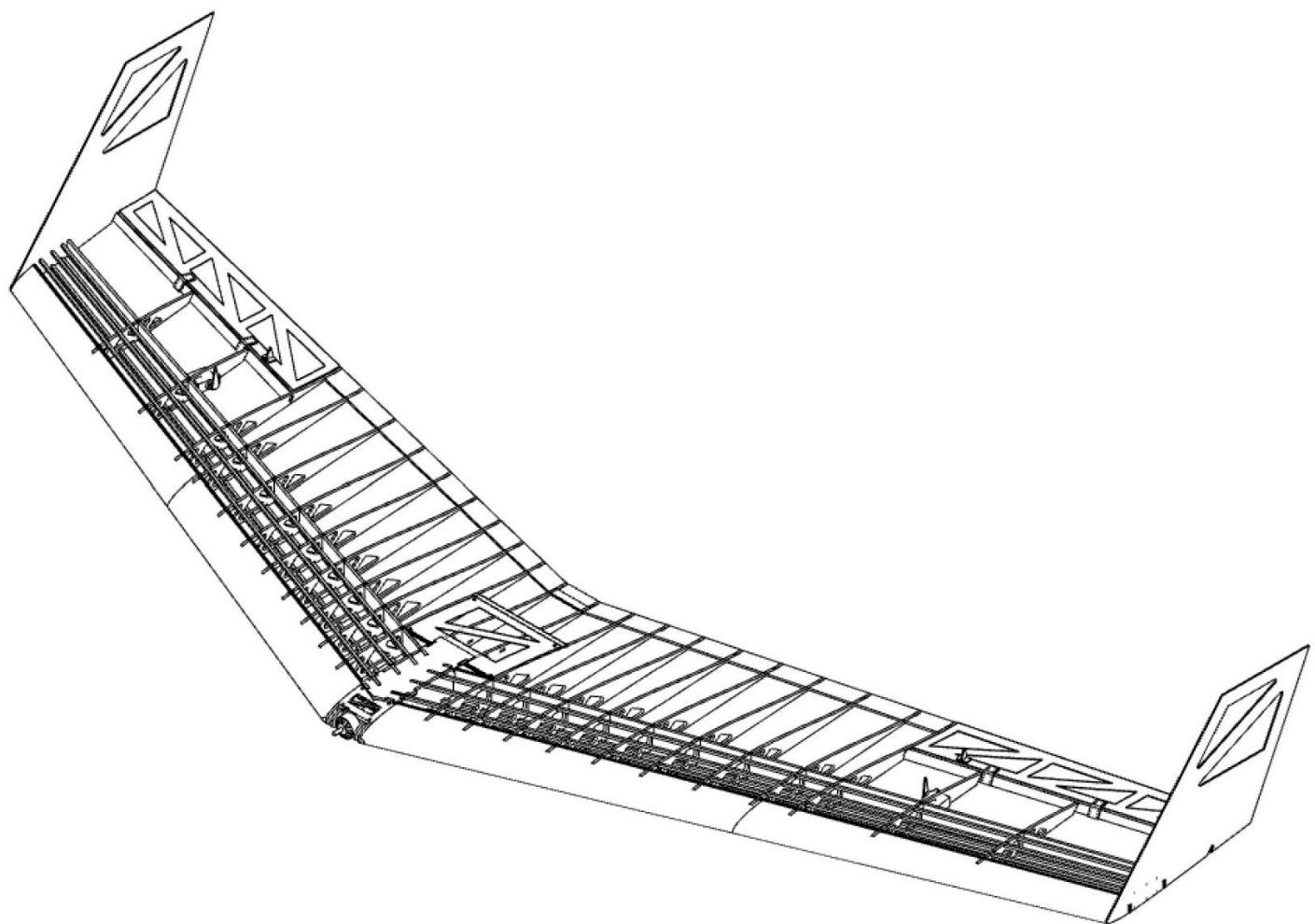


# PART CATALOG & ASSEMBLY



**AE 528/628**

**Team 8: Penny Pinchers**

Josh Richardson

Spencer Lueckenotto

Will Valentine

Zach Murdock

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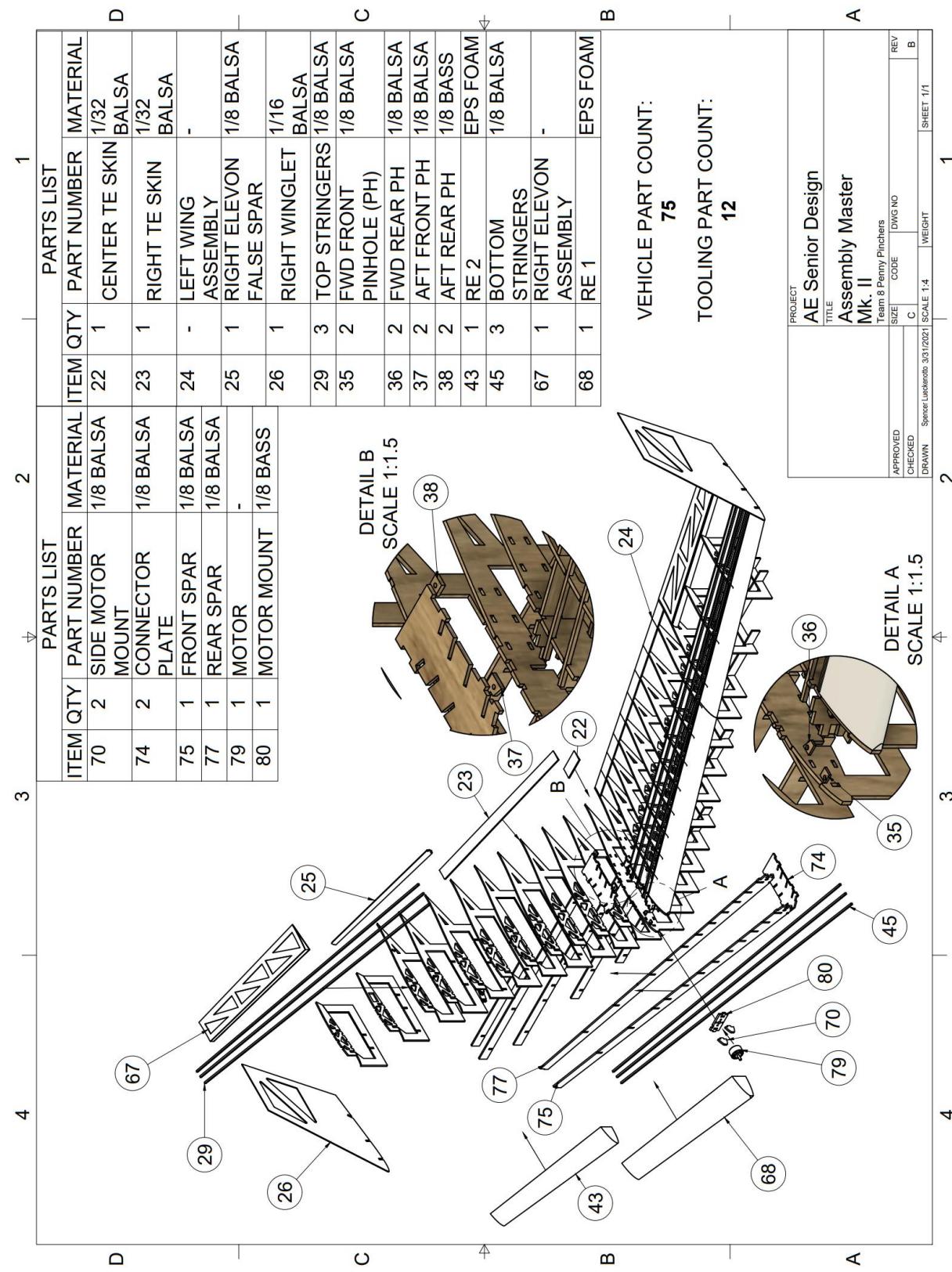
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## 1. Assembly Views

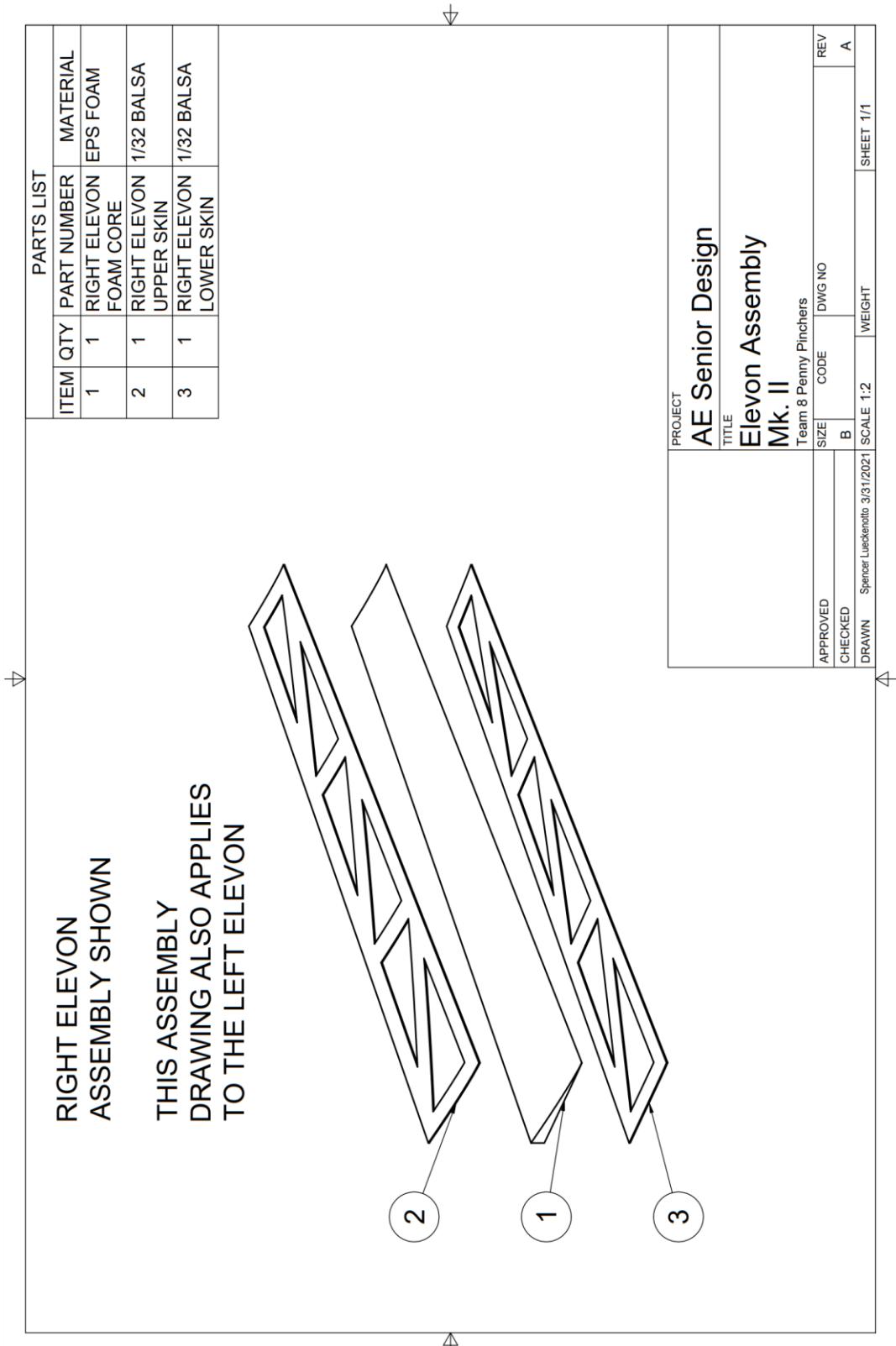
## 1.1 Assembly Master

PARTS LIST						
ITEM	QTY	PART NUMBER	MATERIAL	ITEM QTY	PART NUMBER	MATERIAL
70	2	SIDE MOTOR MOUNT	1/8 BALS A	22	1	CENTER TE SKIN BALS A
74	2	CONNECTOR PLATE	1/8 BALS A	23	1	RIGHT TE SKIN BALS A
75	1	FRONT SPAR	1/8 BALS A	24	-	LEFT WING ASSEMBLY
77	1	REAR SPAR	1/8 BALS A	25	1	RIGHT ELEVON FALSE SPAR
79	1	MOTOR	-	26	1	RIGHT WINGLET BALS A
80	1	MOTOR MOUNT	1/8 BASS	29	3	TOP STRINGERS 1/8 BALS A
				35	2	FWD FRONT PINHOLE (PH) 1/8 BALS A
DETAIL B SCALE 1:1.5						
				36	2	FWD REAR PH 1/8 BALS A
				37	2	AFT FRONT PH 1/8 BALS A
				38	2	AFT REAR PH 1/8 BASS
				43	1	RE 2 EPS FOAM
				45	3	BOTTOM STRINGERS 1/8 BALS A
				67	1	RIGHT ELEVON ASSEMBLY -
				68	1	RE 1 EPS FOAM

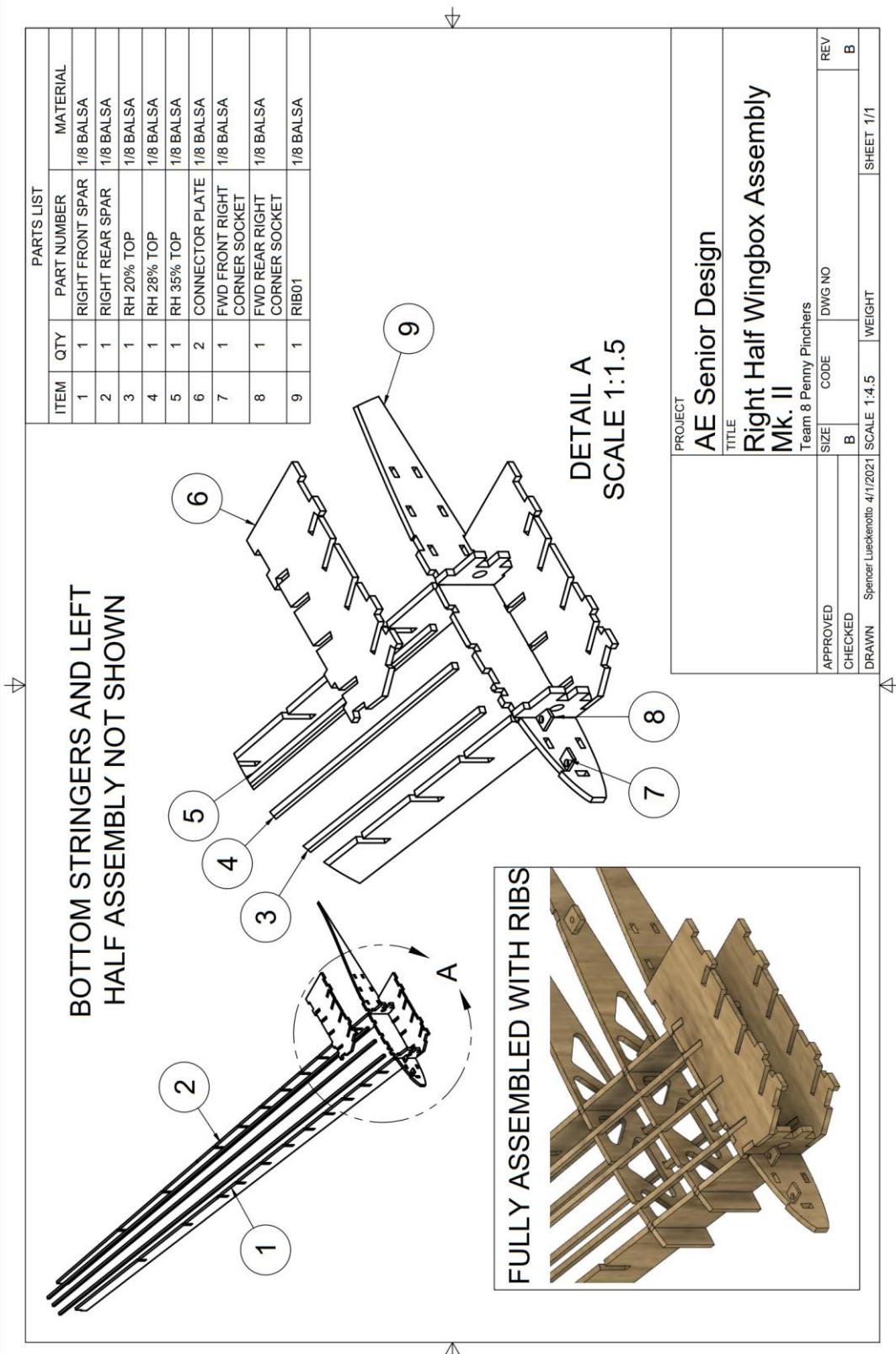


5

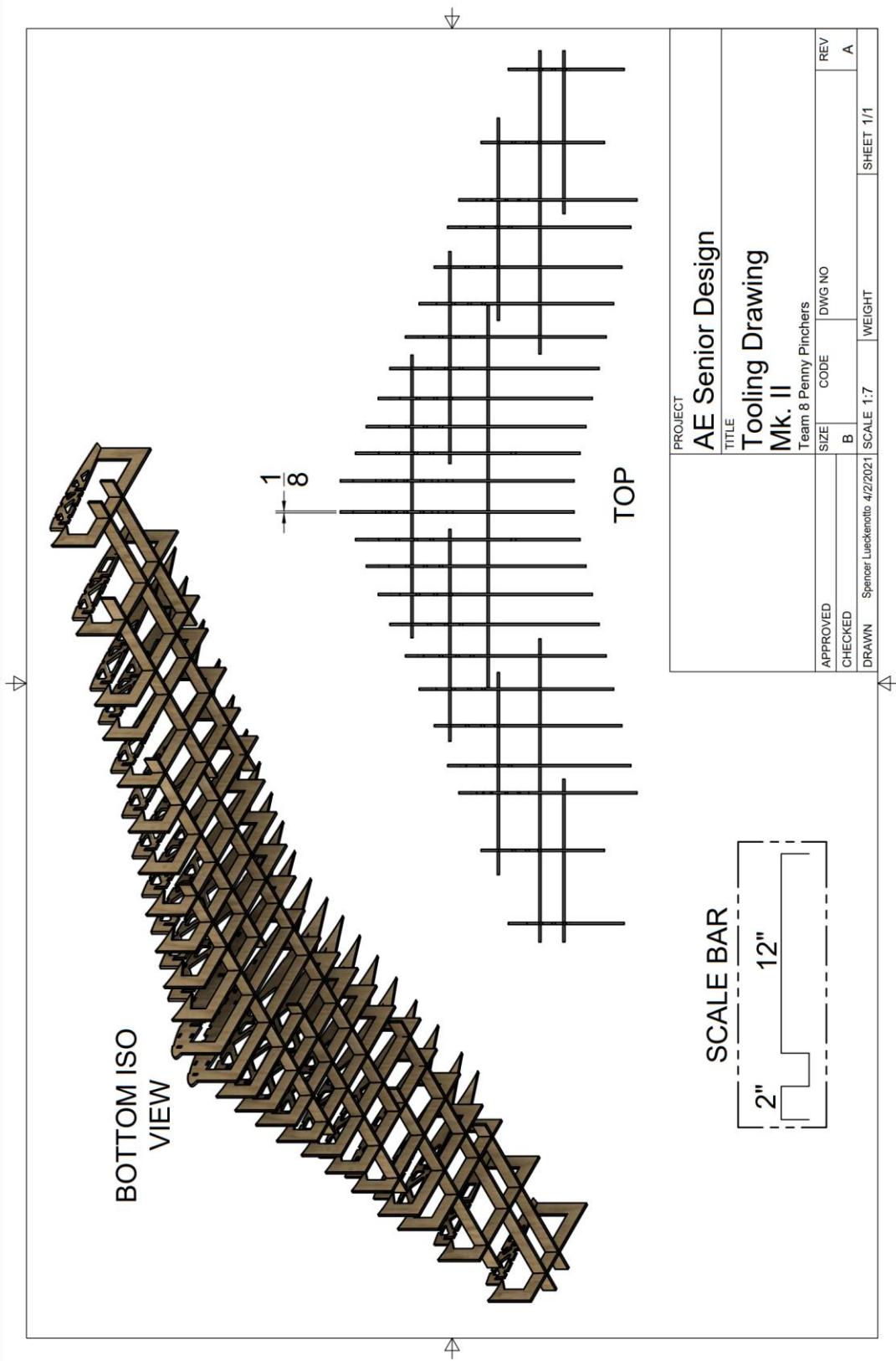
## 1.2 Elevon Assembly



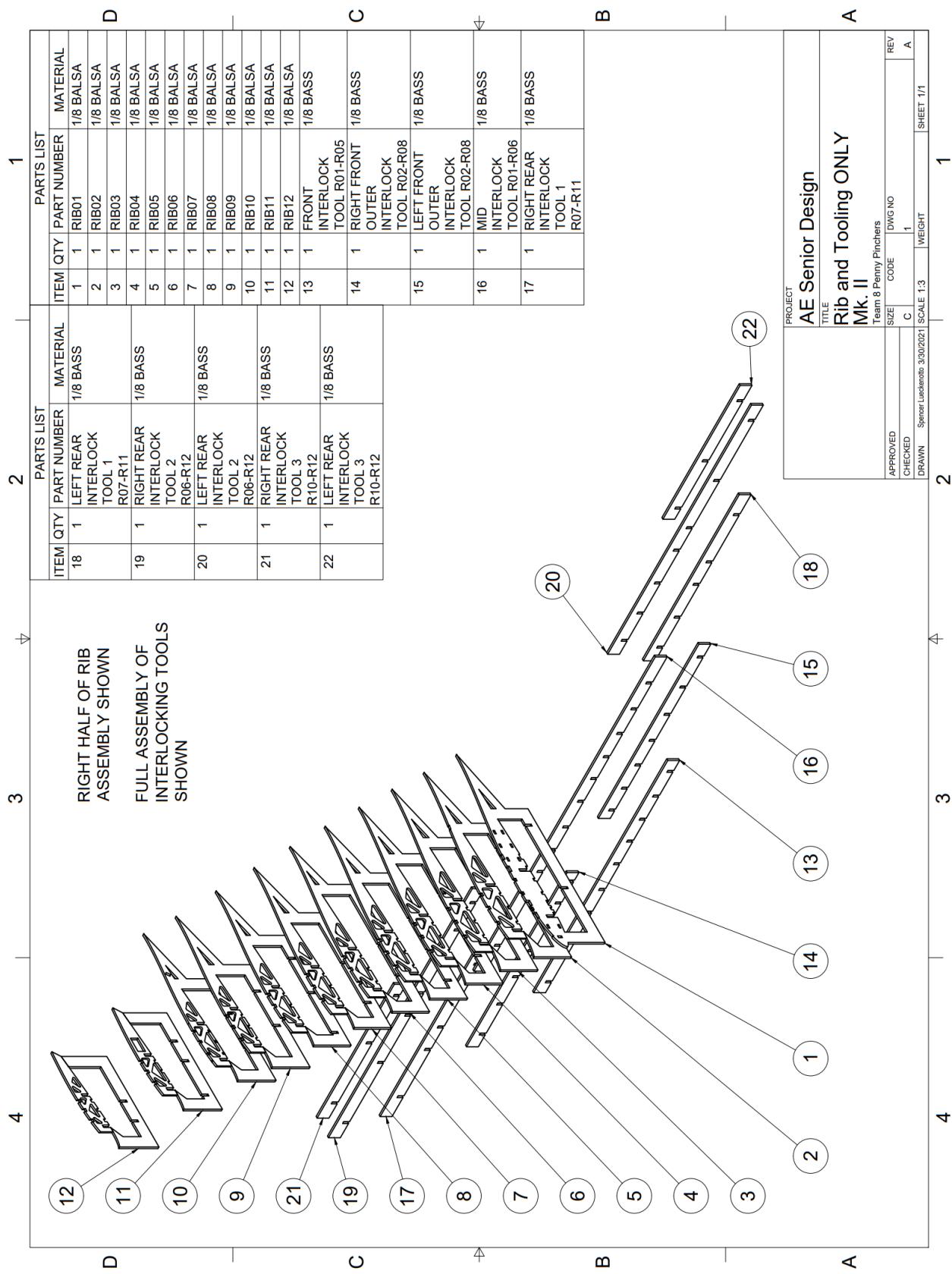
## 1.3 Wingbox Assembly



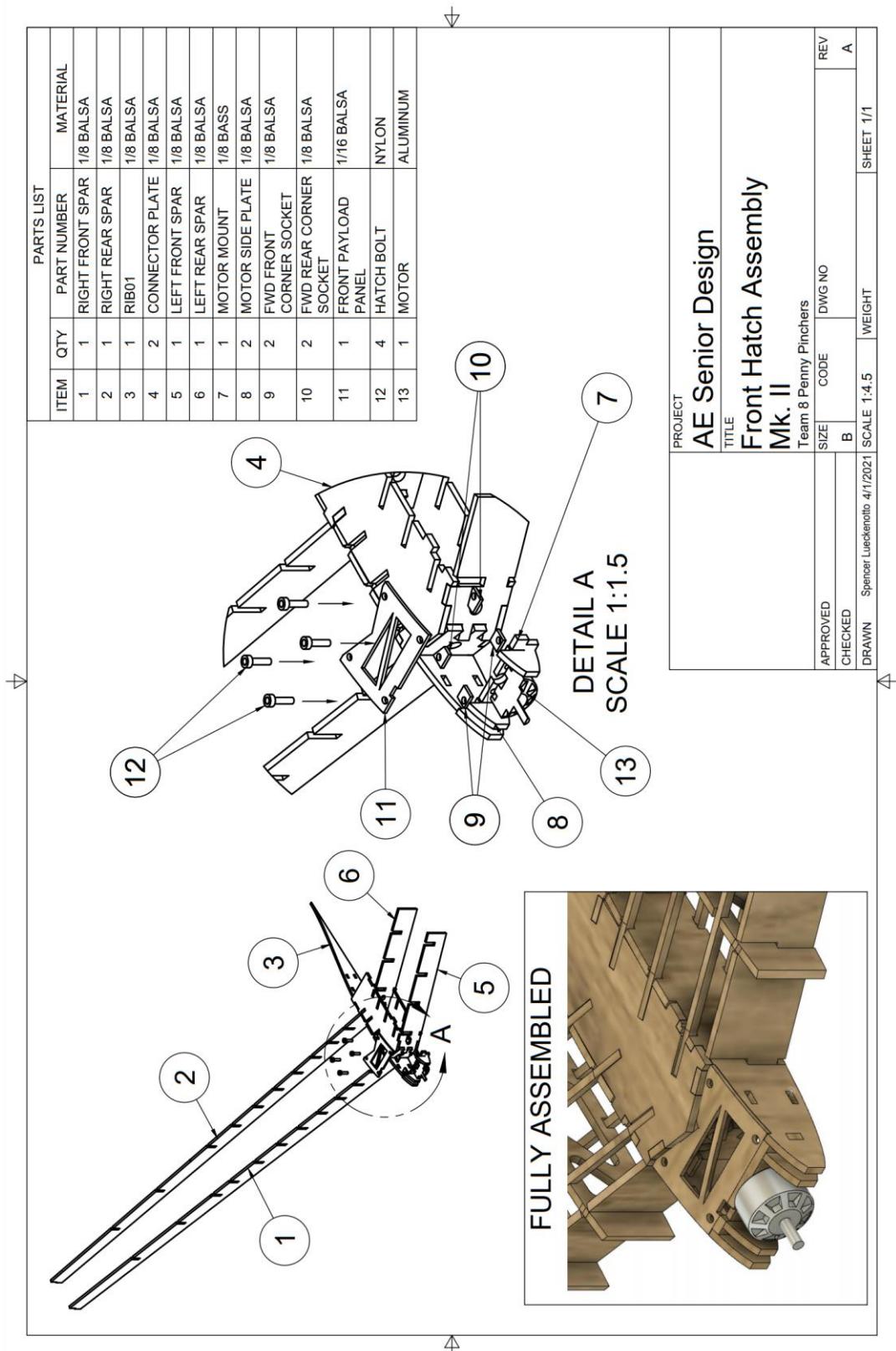
## 1.4 Tooling Drawing



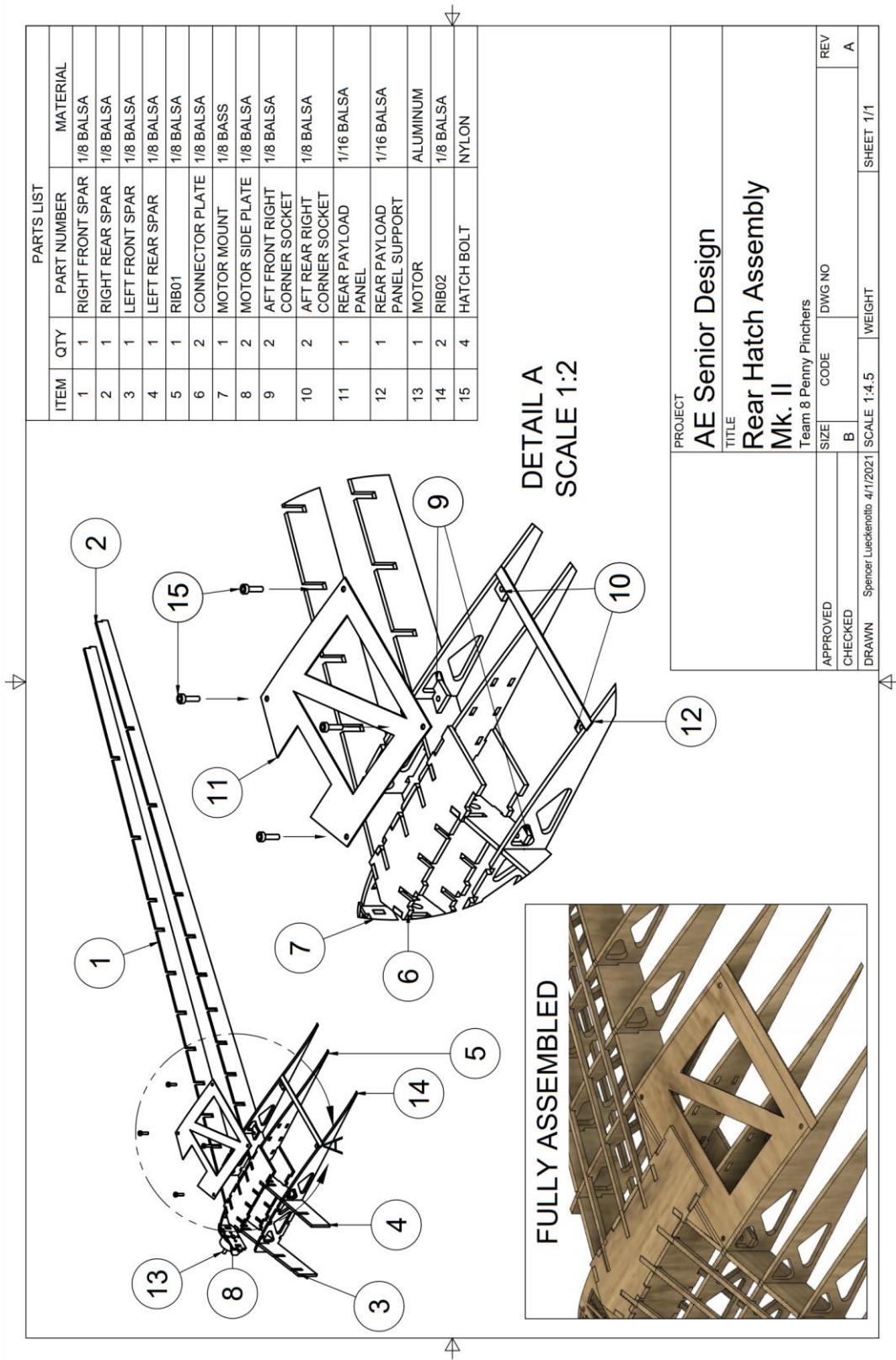
## 1.5 Ribs and Tooling Only



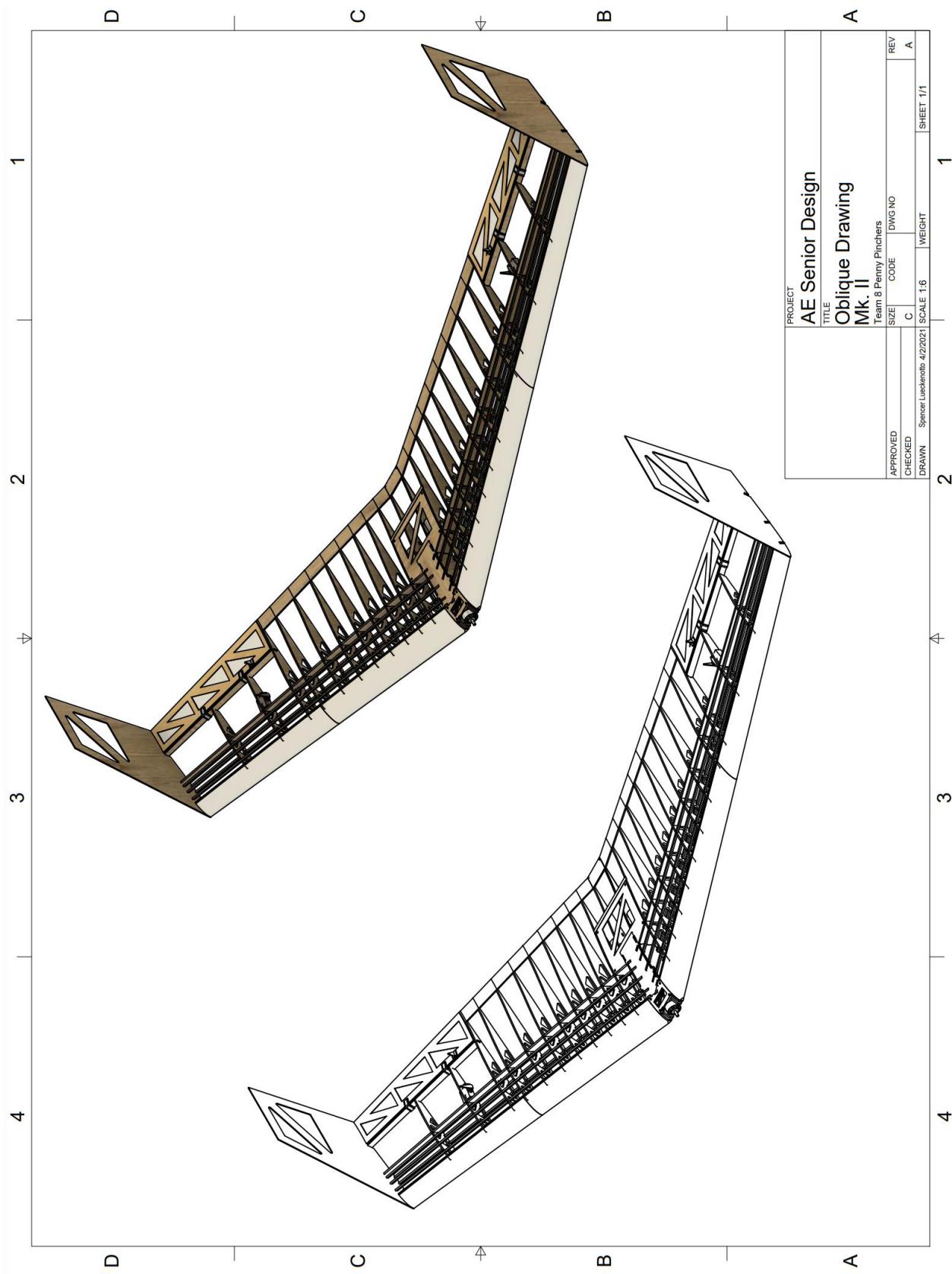
## 1.6 Front Hatch Assembly



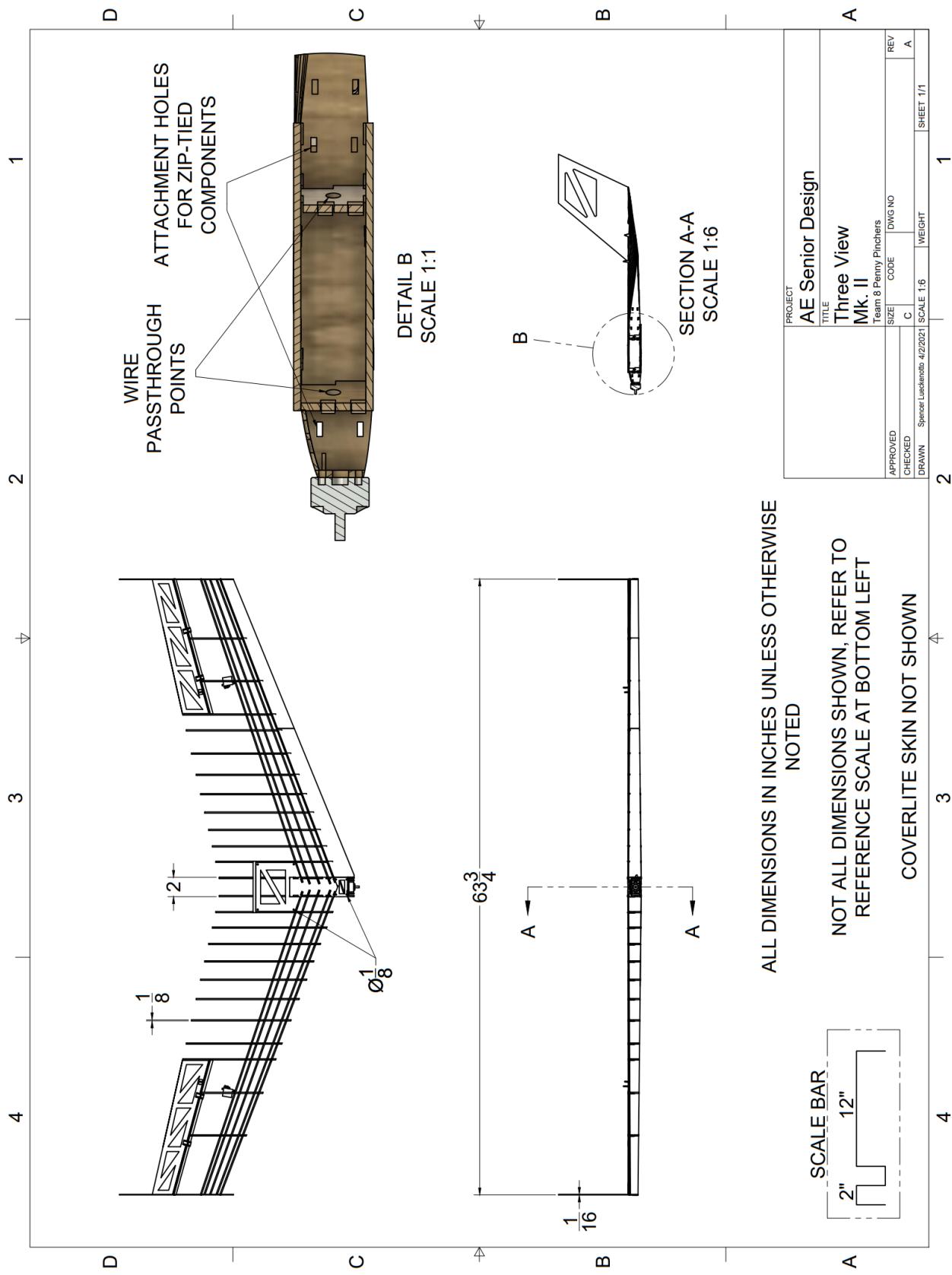
## 1.7 Rear Hatch Assembly



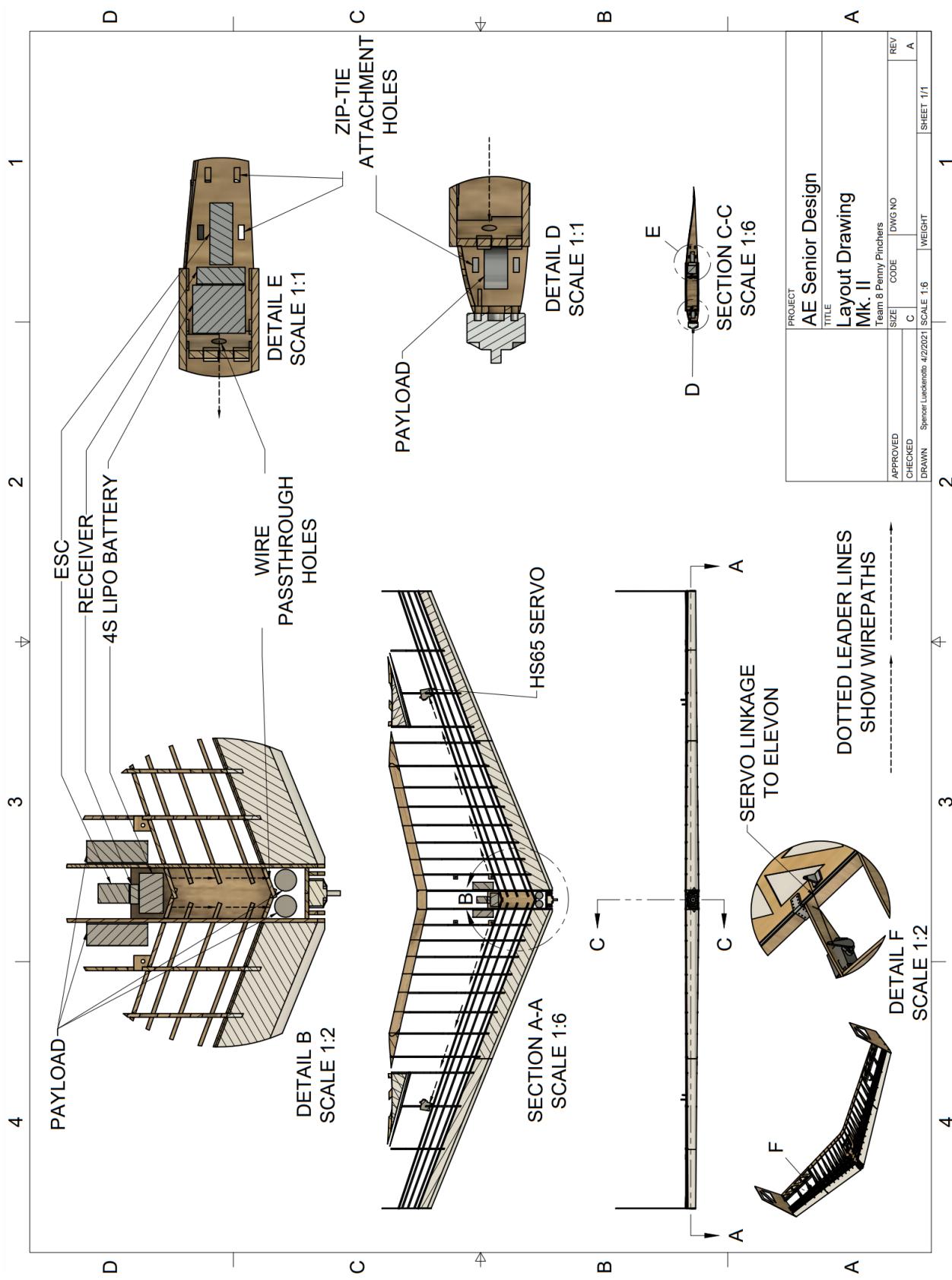
## 1.8 Oblique Drawing



## 1.9 Three View Drawing



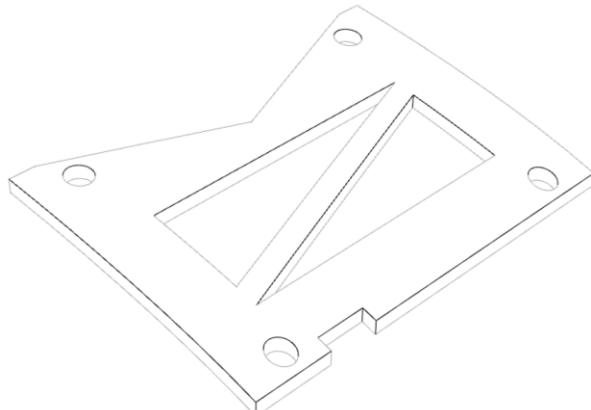
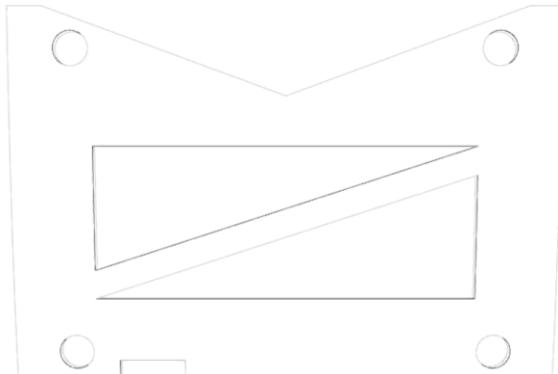
## 1.10 Layout Drawing



## 2. Part List

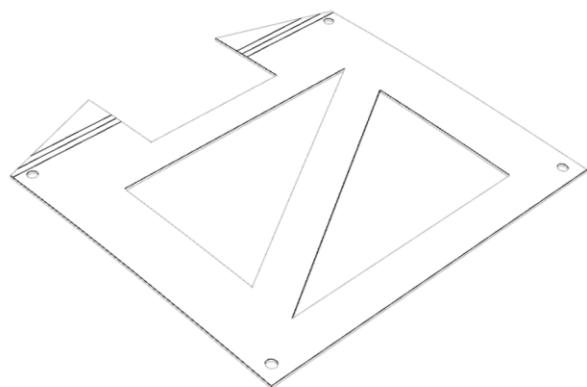
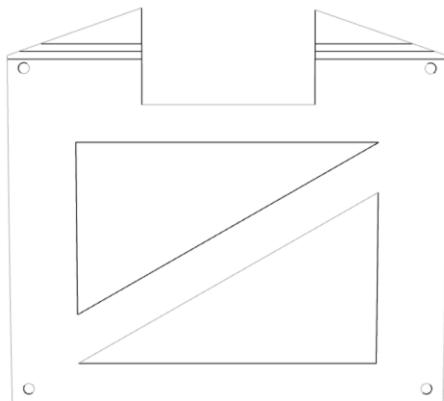
### 2.1 Access Hatches

#### 2.1.1 Front Payload Panel



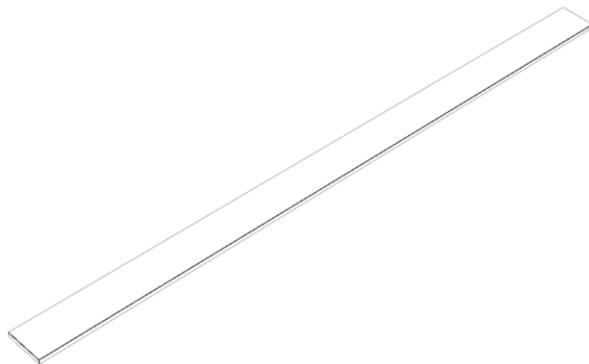
*Quantity Needed: 1*

#### 2.1.2 Rear Payload Panel



*Quantity Needed: 1*

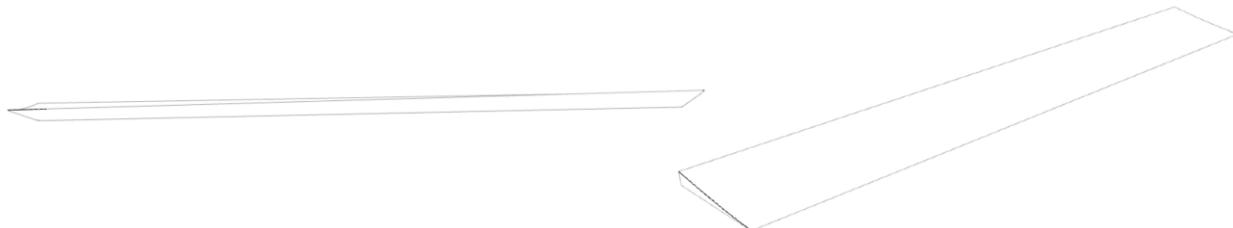
#### 2.1.3 Rear Payload Panel Support



*Quantity Needed: 1*

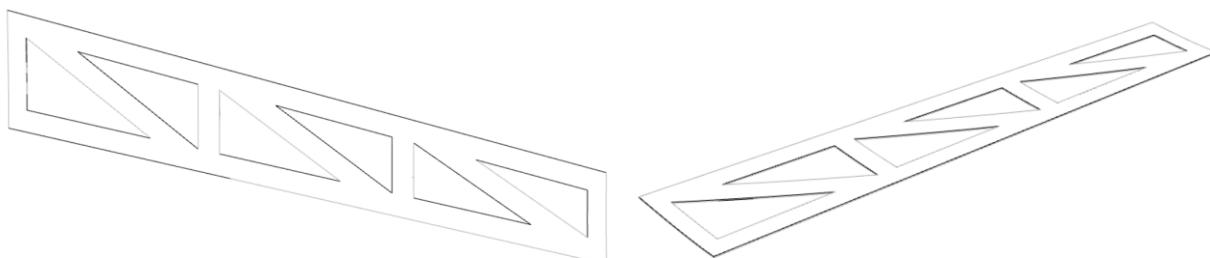
## 2.2 Elevons

### 2.2.1 Right Elevon Foam Core



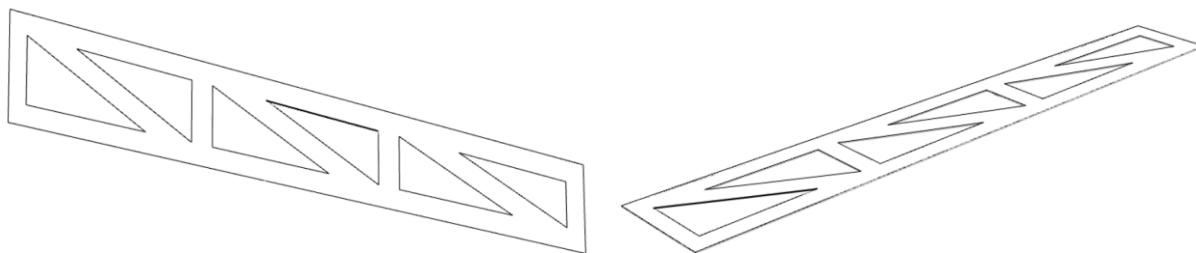
*Quantity Needed: 1*

### 2.2.2 Right Elevon Top Skin



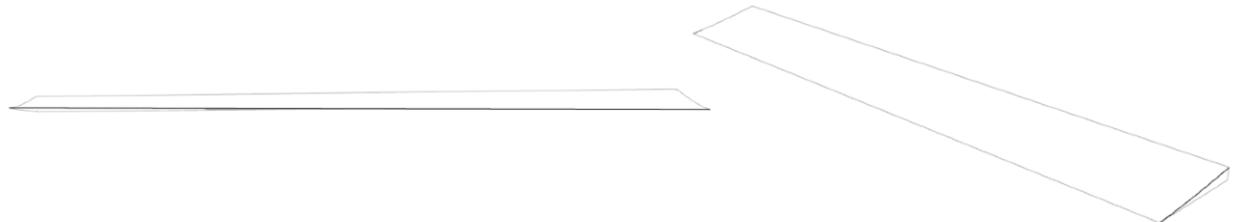
*Quantity Needed: 1*

### 2.2.3 Right Elevon Bottom Skin



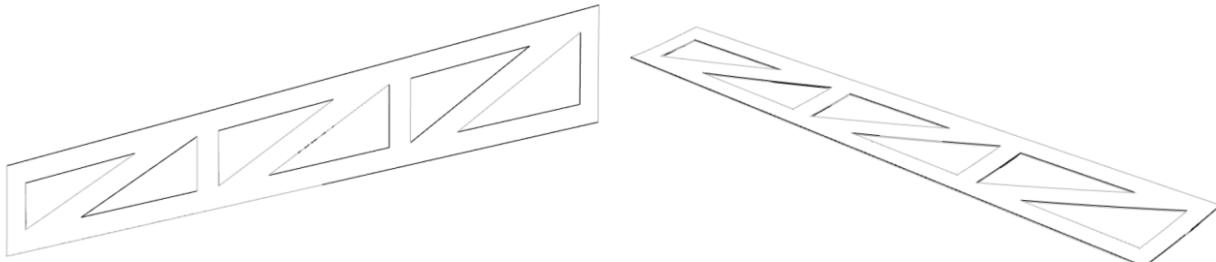
*Quantity Needed: 1*

### 2.2.4 Left Elevon Foam Core



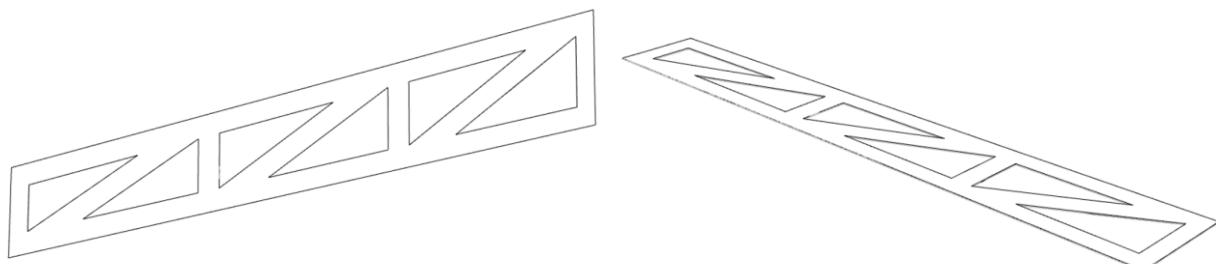
*Quantity Needed: 1*

#### 2.2.5 Left Elevon Top Skin



*Quantity Needed: 1*

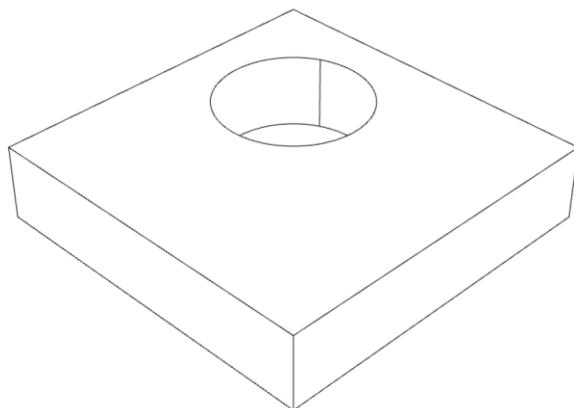
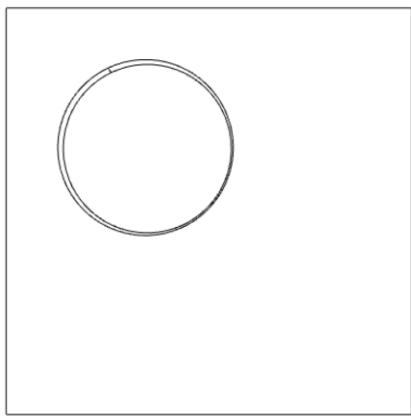
#### 2.2.6 Left Elevon Bottom Skin



*Quantity Needed: 1*

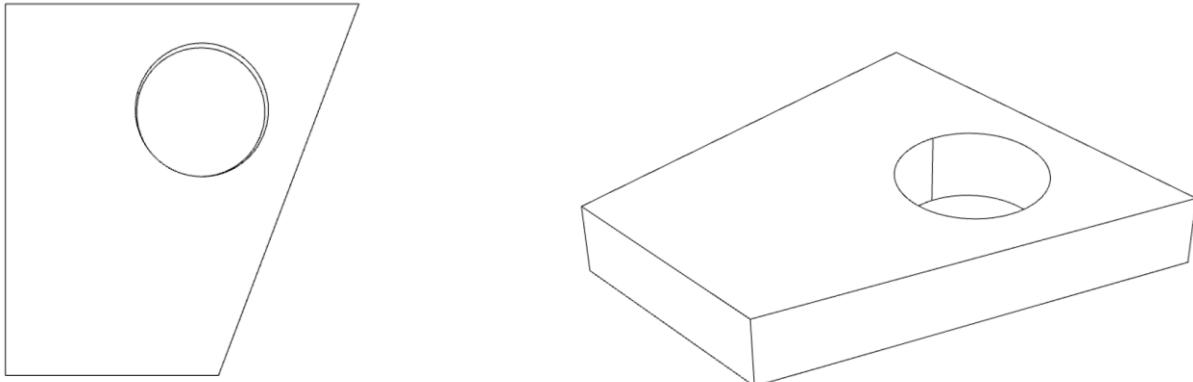
### 2.3 Hatch Pin Sockets

#### 2.3.1 Fwd Front Right/Left Corner Socket



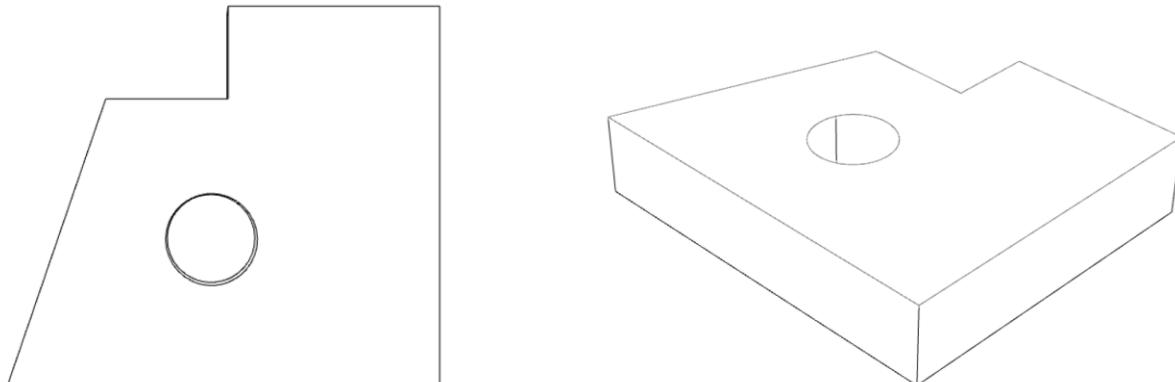
*Quantity Needed: 2*

### 2.3.2 Fwd Rear Right/Left Corner Socket



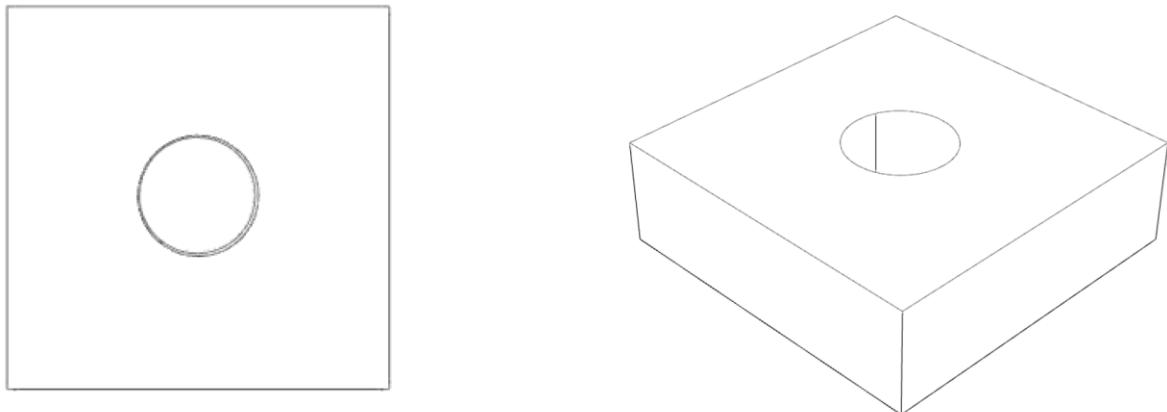
*Quantity Needed: 2*

### 2.3.3 Aft Front Right/Left Corner Socket



*Quantity Needed: 2*

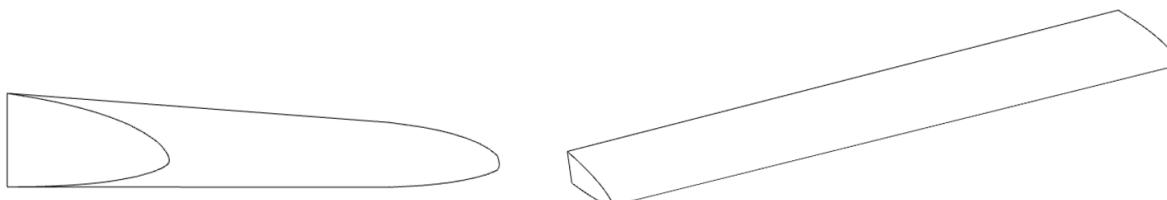
### 2.3.4 Aft Rear Right/Left Corner Socket



*Quantity Needed: 2*

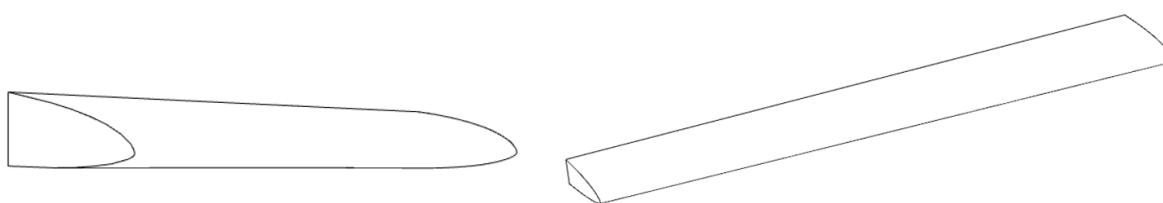
## 2.4 Leading Edge

## 2.4.1 Right LE 1



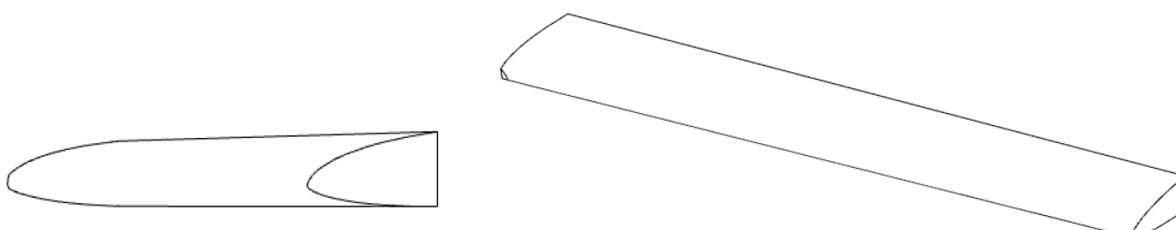
*Quantity Needed: 1*

## 2.4.2 Right LE 2



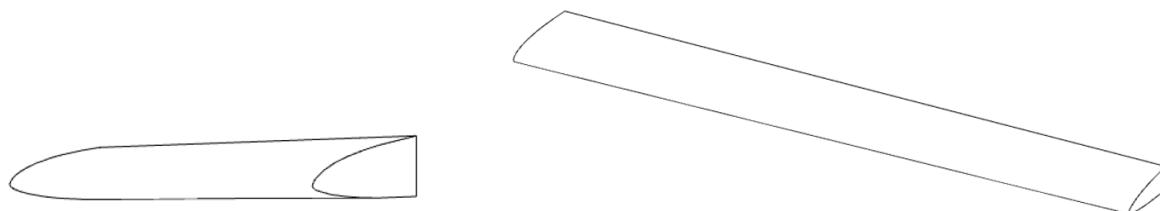
*Quantity Needed: 1*

## 2.4.3 Left LE 1



*Quantity Needed: 1*

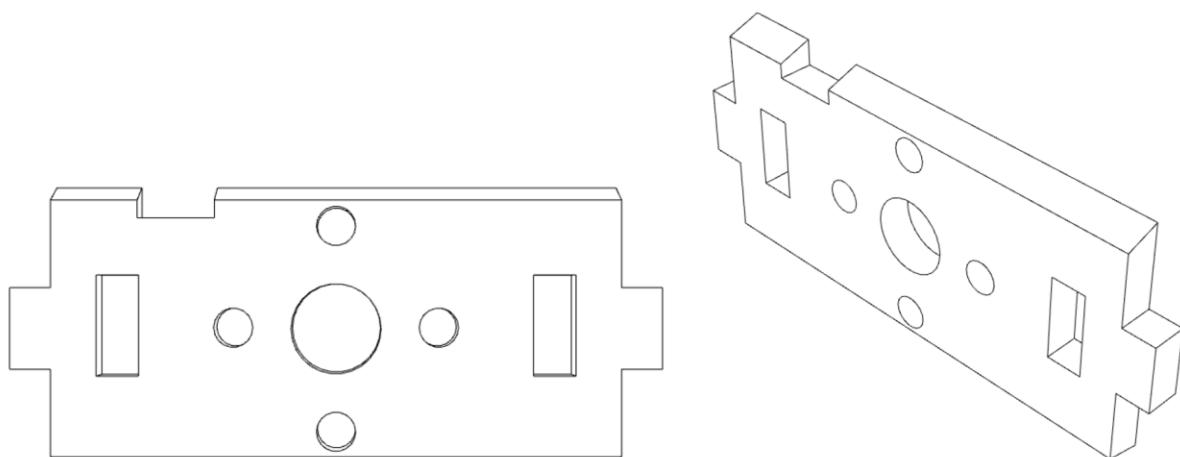
## 2.4.4 Left LE 2



*Quantity Needed: 1*

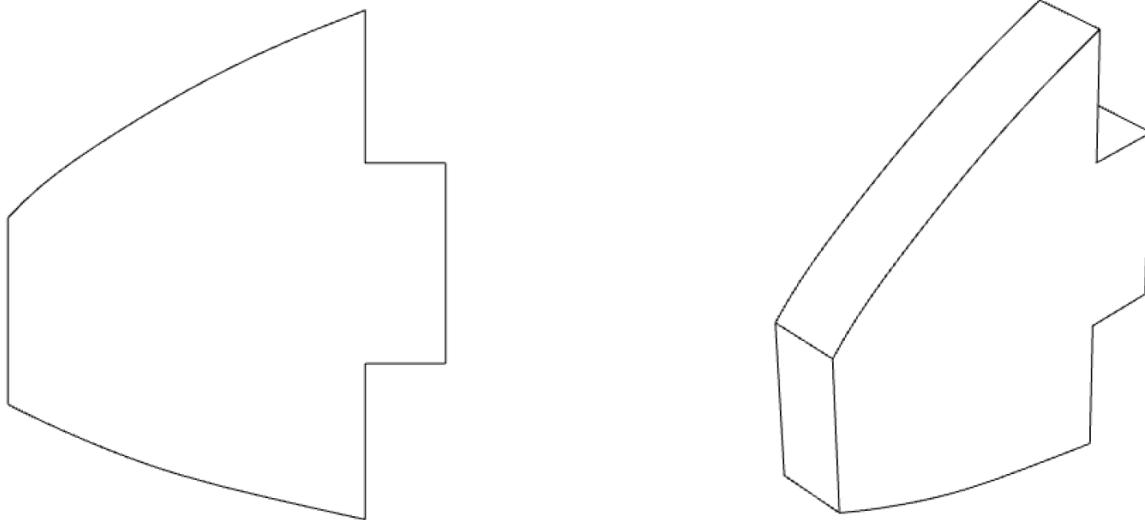
## 2.5 Motor Mount

## 2.5.1 Motor Mounting Plate



*Quantity Needed: 1*

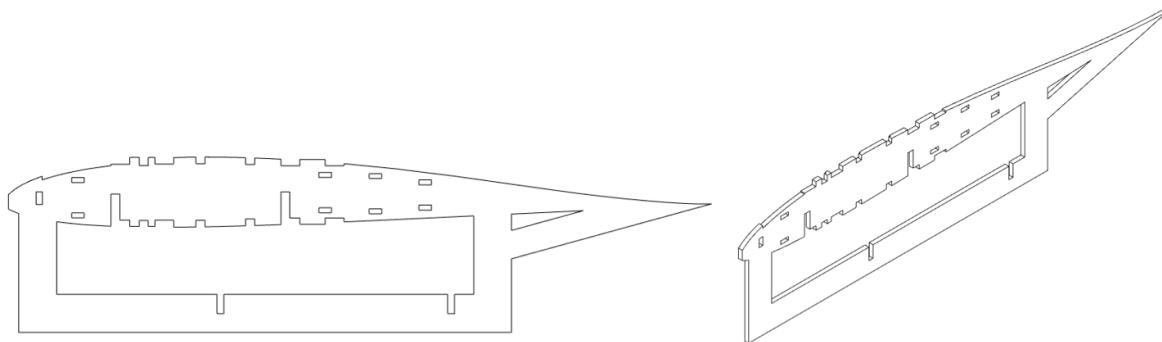
### 2.5.2 Motor Mount Side Plate



*Quantity Needed: 2*

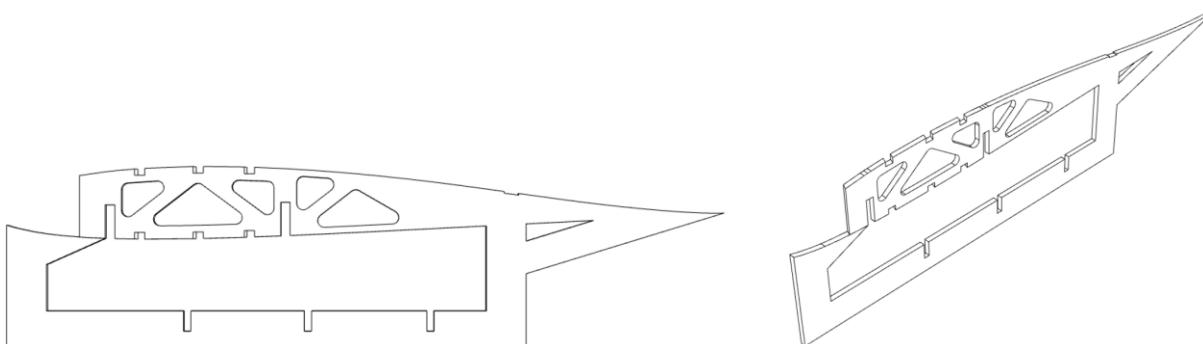
### 2.6 Ribs

#### 2.6.1 Bulkhead Rib (Rib01)



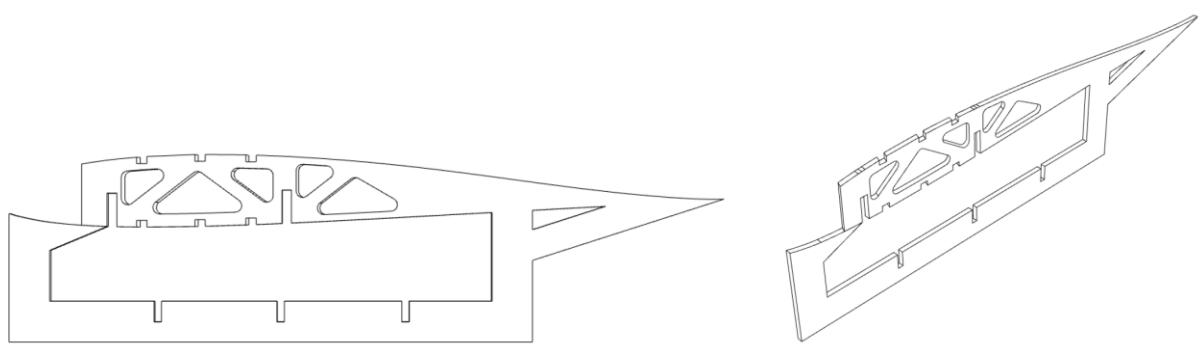
*Quantity Needed: 2*

## 2.6.2 Rib02



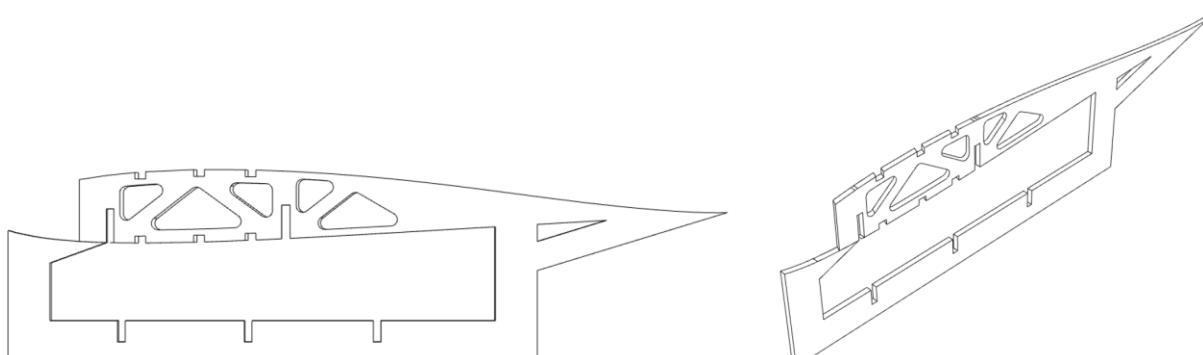
*Quantity Needed: 2*

## 2.6.3 Rib03



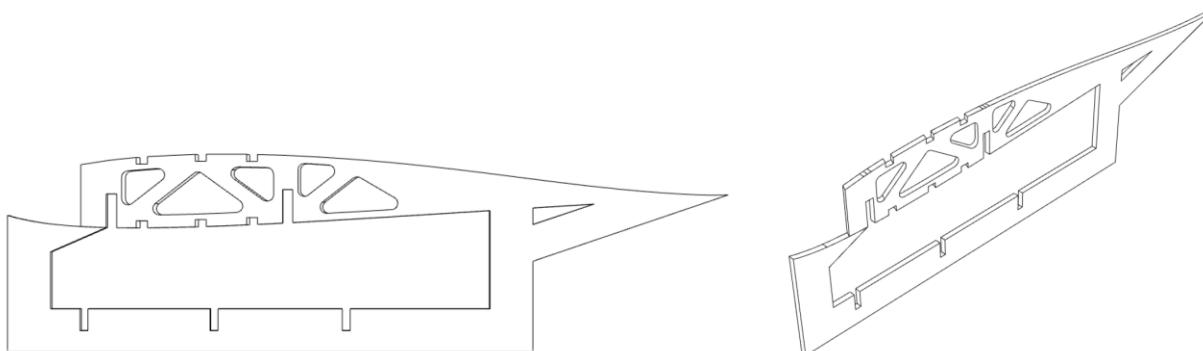
*Quantity Needed: 2*

## 2.6.4 Rib04



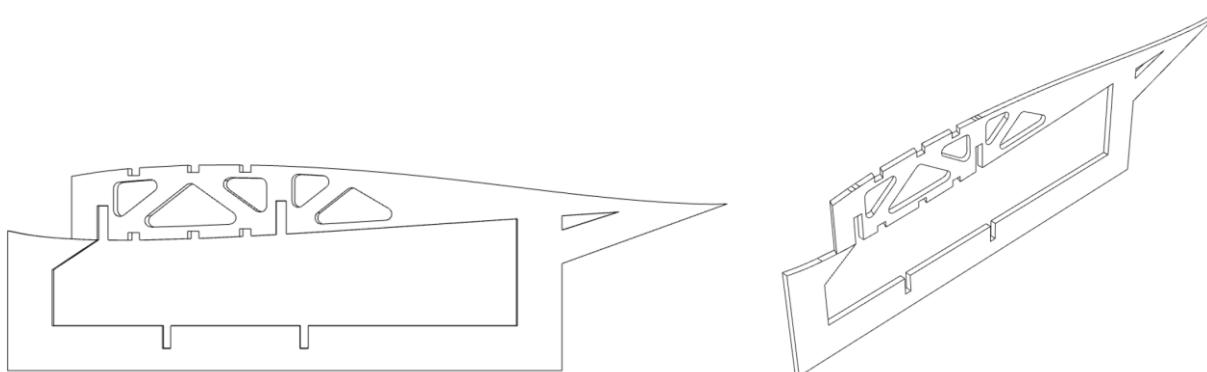
*Quantity Needed: 2*

## 2.6.5 Rib05



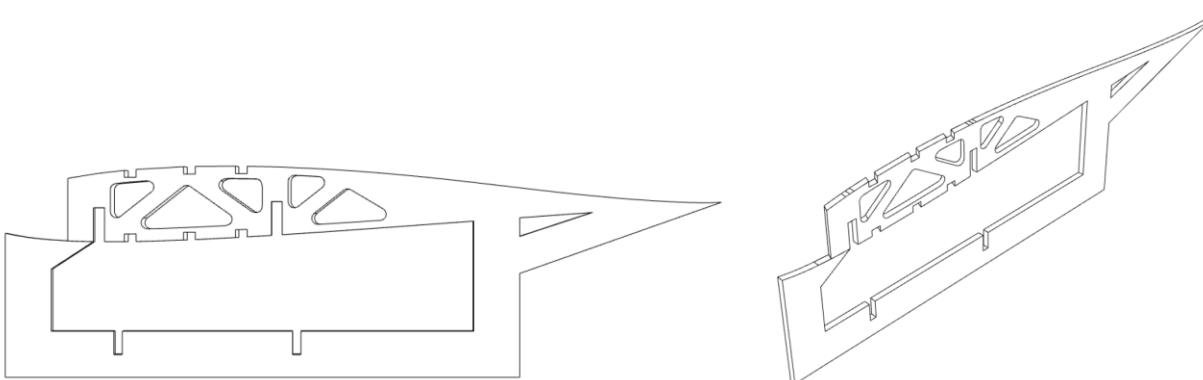
*Quantity Needed: 2*

## 2.6.6 Rib06



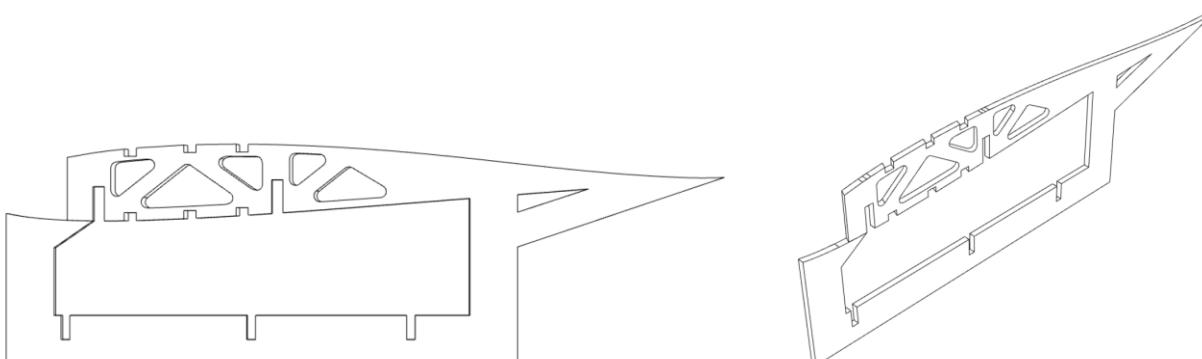
*Quantity Needed: 2*

## 2.6.7 Rib07



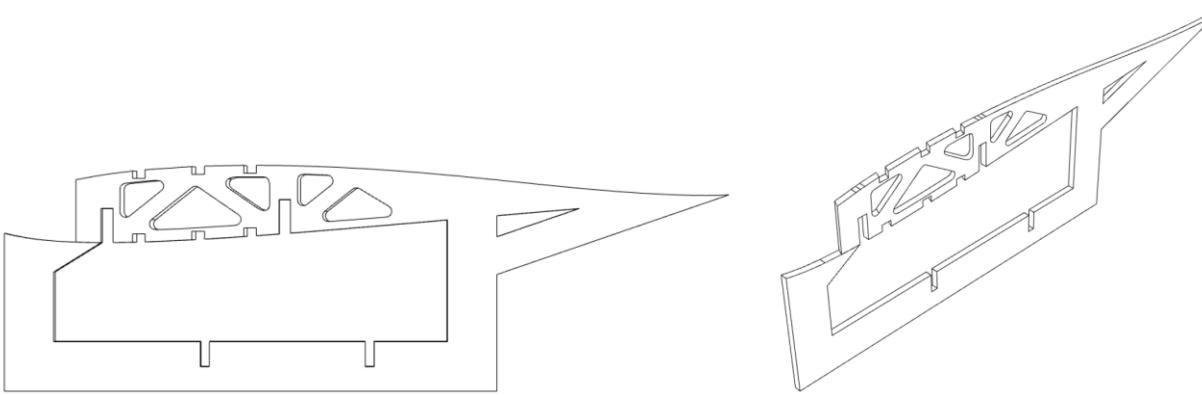
*Quantity Needed: 2*

## 2.6.8 Rib08



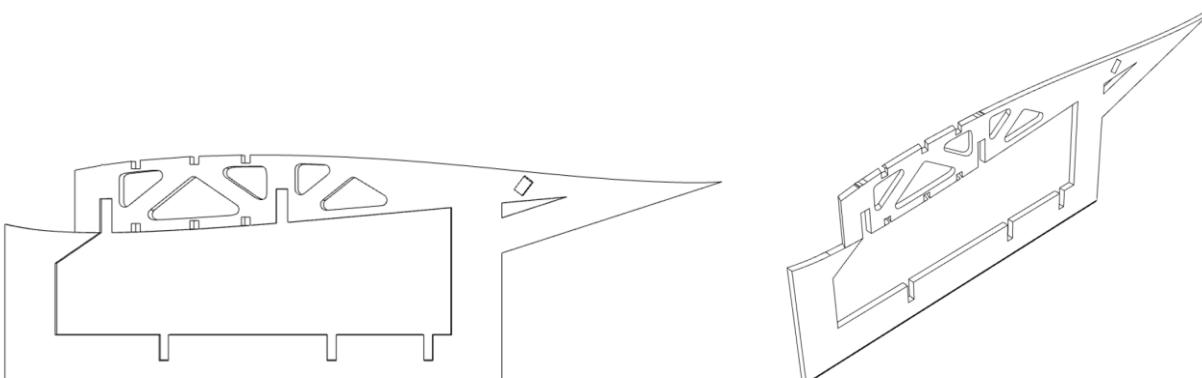
*Quantity Needed: 2*

## 2.6.9 Rib09



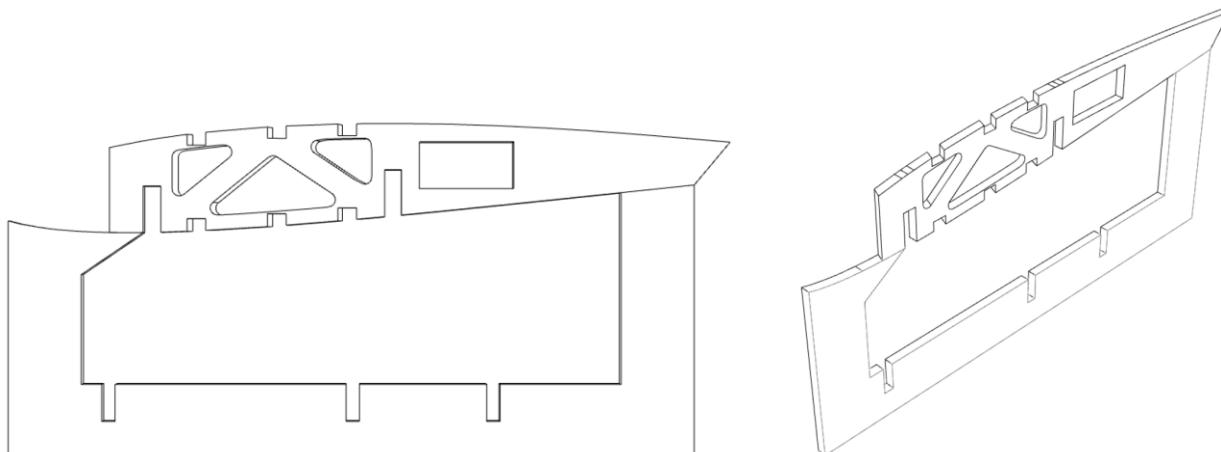
*Quantity Needed: 2*

## 2.6.10 Rib10



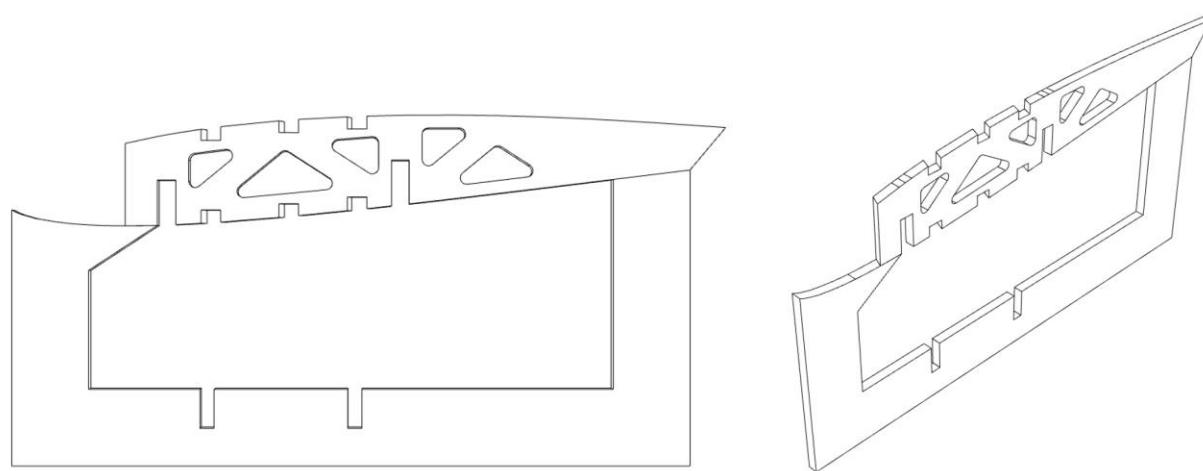
*Quantity Needed: 2*

2.6.11 Rib11



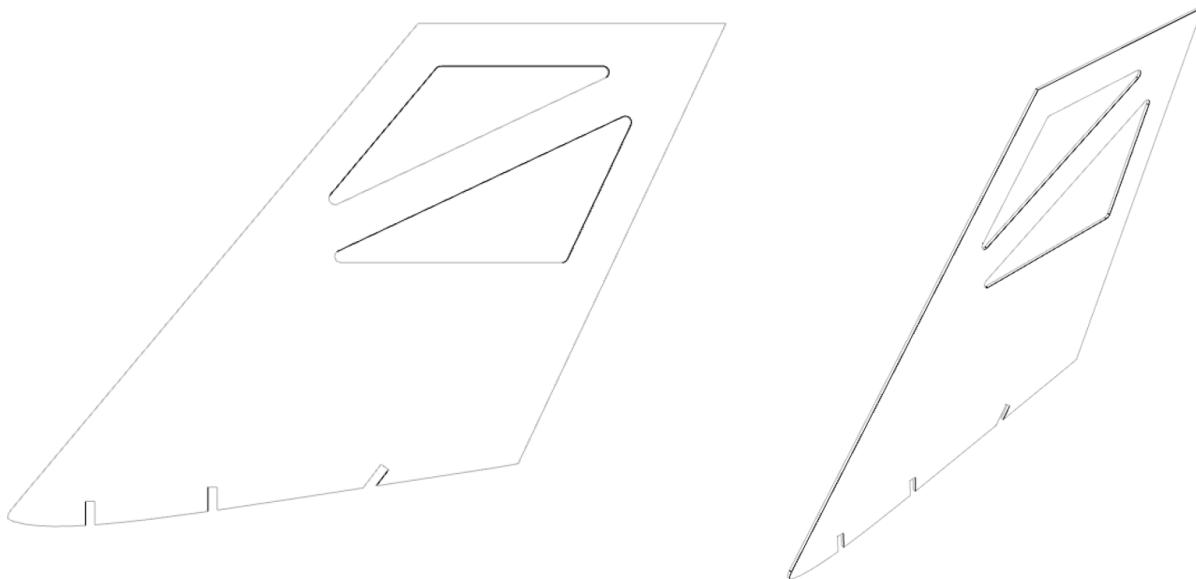
*Quantity Needed: 2*

2.6.12 Rib12



*Quantity Needed: 2*

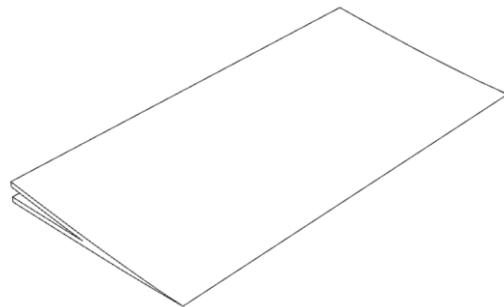
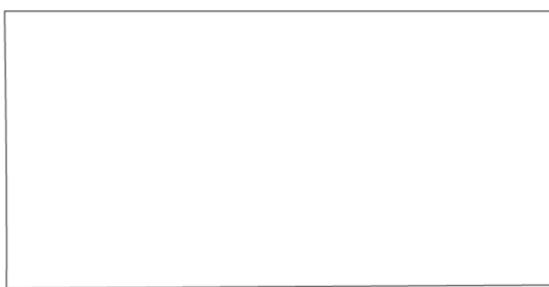
## 2.6.13 Winglet (Rib13)



*Quantity Needed: 2*

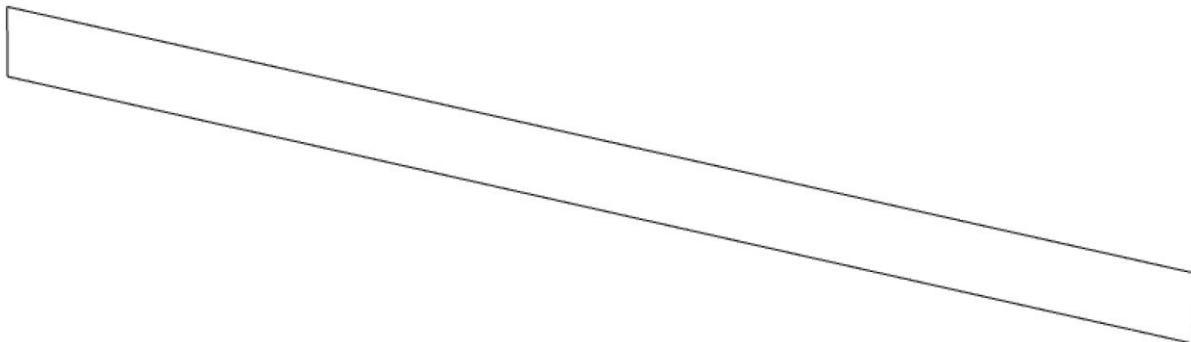
## 2.7 Skin

## 2.7.1 Center TE Skin



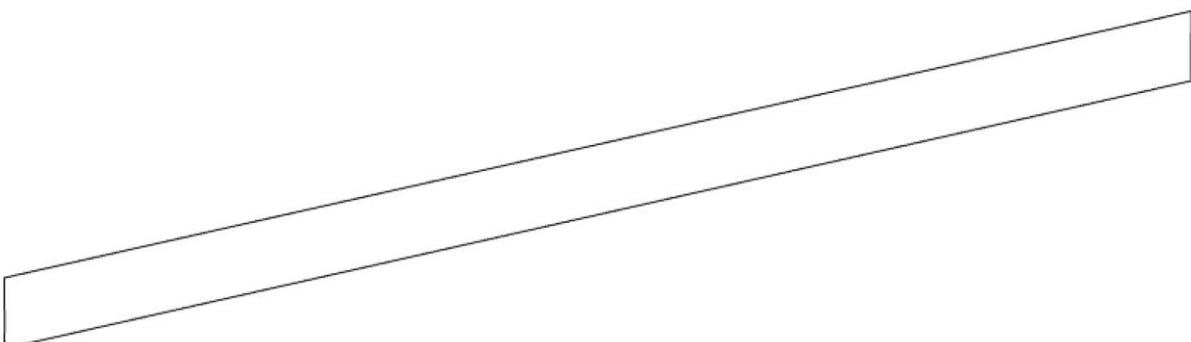
*Quantity Needed: 2*

### 2.7.2 Right TE Skin



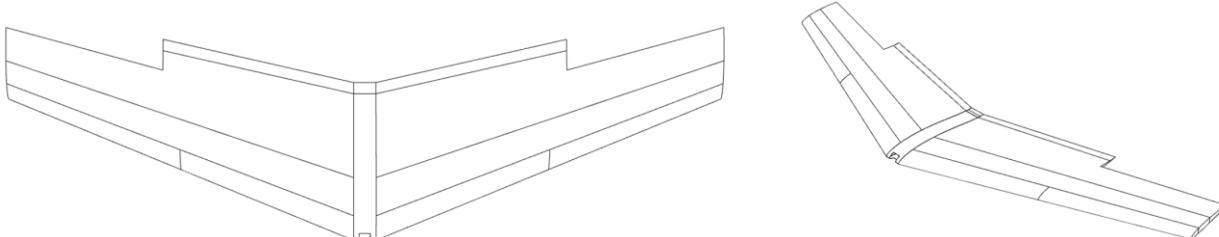
*Quantity Needed: 2*

### 2.7.3 Left TE Skin



*Quantity Needed: 2*

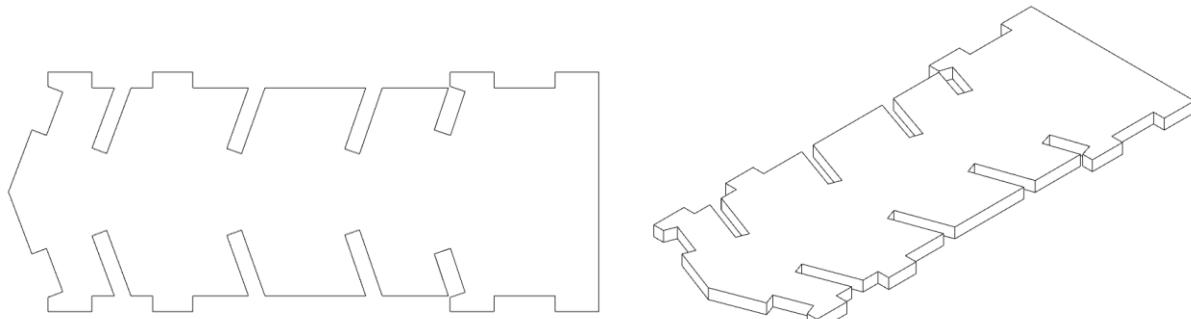
### 2.7.4 Coverlite



*Quantity Needed: Varies*

## 2.8 Spar/Stringer Joints

### 2.8.1 Connector Plate



*Quantity Needed: 2*

## 2.9 Spars

### 2.9.1 Right Front Spar



*Quantity Needed: 1*

### 2.9.2 Right Rear Spar



*Quantity Needed: 1*

### 2.9.3 Left Front Spar



*Quantity Needed: 1*

### 2.9.4 Left Rear Spar



*Quantity Needed: 1*

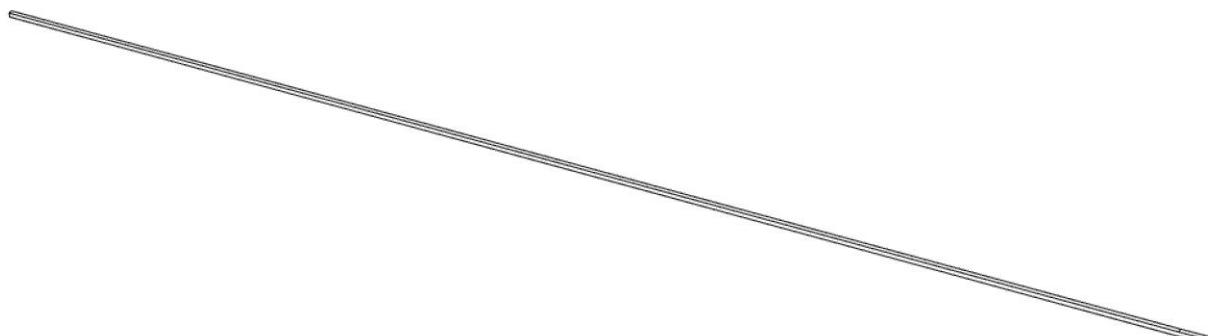
### 2.9.5 Elevon False Spar



*Quantity Needed: 2*

## 2.10 Stringers

### 2.10.1 Stringer



*Quantity Needed: 12*

## 2.11 Tooling

### 2.11.1 Front Interlock Tool (Connects R01-R05)



*Quantity Needed: 1*

### 2.11.2 Right Front Outer Interlock Tool (R02-R08)



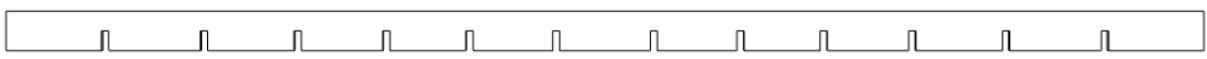
*Quantity Needed: 1*

### 2.11.3 Left Front Outer Interlock Tool (R02-R08)



*Quantity Needed: 1*

### 2.11.4 Mid Interlock Tool (R01-R06)



*Quantity Needed: 1*

## 2.11.5 Right Rear Interlock Tool 1 (R07-R11)



*Quantity Needed: 1*

## 2.11.6 Left Rear Interlock Tool 1 (R07-R11)



*Quantity Needed: 1*

## 2.11.7 Right Rear Interlock Tool 2 (R06-R12)



*Quantity Needed: 1*

## 2.11.8 Left Rear Interlock Tool 2 (R06-R12)



*Quantity Needed: 1*

## 2.11.9 Right Rear Interlock Tool 3 (R10-R12)



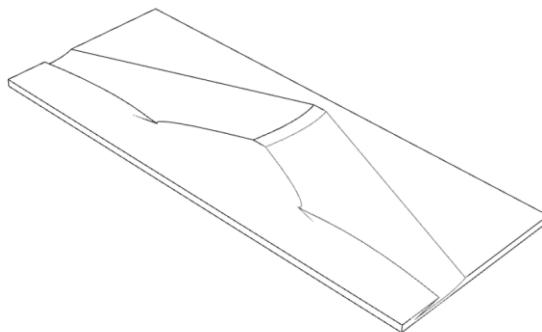
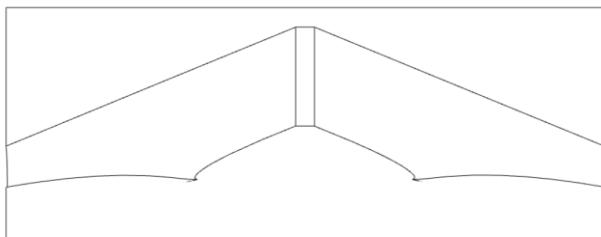
*Quantity Needed: 1*

## 2.11.10 Left Rear Interlock Tool 3 (R10-R12)



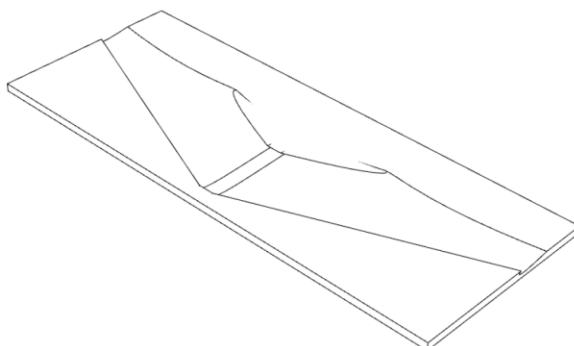
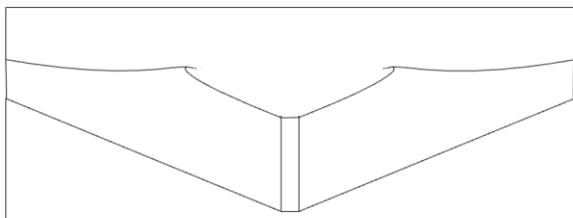
*Quantity Needed: 1*

## 2.11.11 Full Wing Case Top



*Quantity Needed: 1*

## 2.11.12 Full Wing Case Bottom



*Quantity Needed: 1*

