

3-D Model Proposal

1. DIMENSIONS:

Aircraft: Bee craft Wee Bee

Scale: 1:36

Wingspan: 5.59m

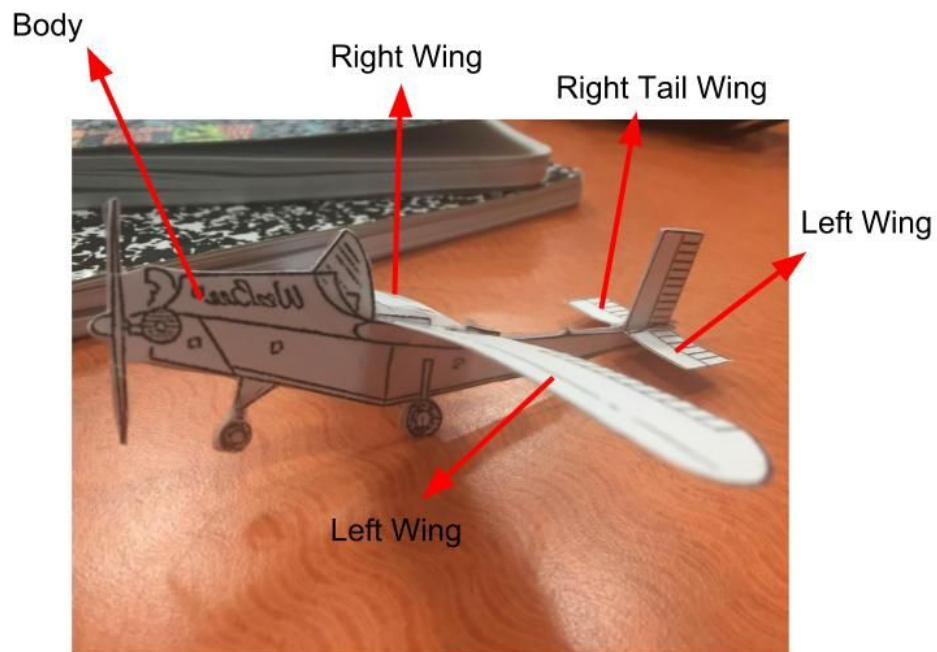
Scaled Wingspan: 155.3mm

Length: 4.32m

Scaled Length: 120mm

2. STRUCTURAL DESIGN

Material: Sheet of aluminum, toothpick, hot glue gun, and a thin black paint pen (Montana Acrylic Paint Marker, Extra Fine)



- **THE BODY** is going to be traced from the cardstock body onto the metal using a sharpie or paint pen. (it will be cut out based on the shape of the images we have)
 - This will be the base for all of the wings to connect to
 - The metal will be cut using the shears
 - We aren't going to trace the propeller or the wheels
 - We are going to poke or cut small holes where the landing gear would go

- **THE WHOLE WING** is going to be traced from the cardstock body onto the metal using a sharpie or paint pen. (it will be cut out based on the shape of the images we have)
 - The metal will be cut using the shears
 - We are going to make a slit in the body and slide the whole wing into it

- **THE WHOLE TAIL WING** is going to be traced from the cardstock body onto the metal using a sharpie or paint pen. (it will be cut out based on the shape of the images we have)
 - The metal will be cut using the shears
 - We are going to make a slit in the body and slide the whole wing into it

- **THE PROPELLER** is going to be a toothpick cut in half and attached to a small hot glue ball
 - We will hot glue the toothpick ball to the front of the model with the glue gun

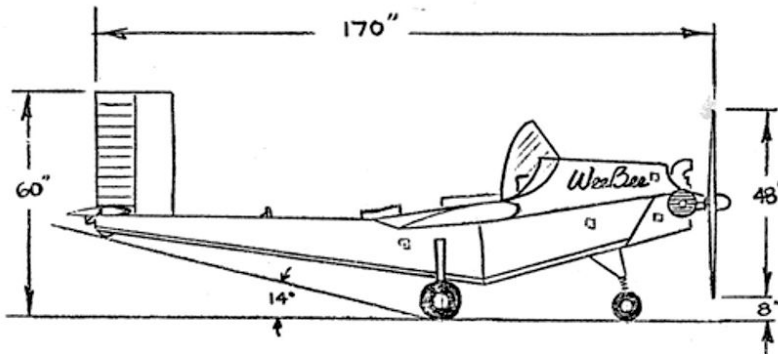
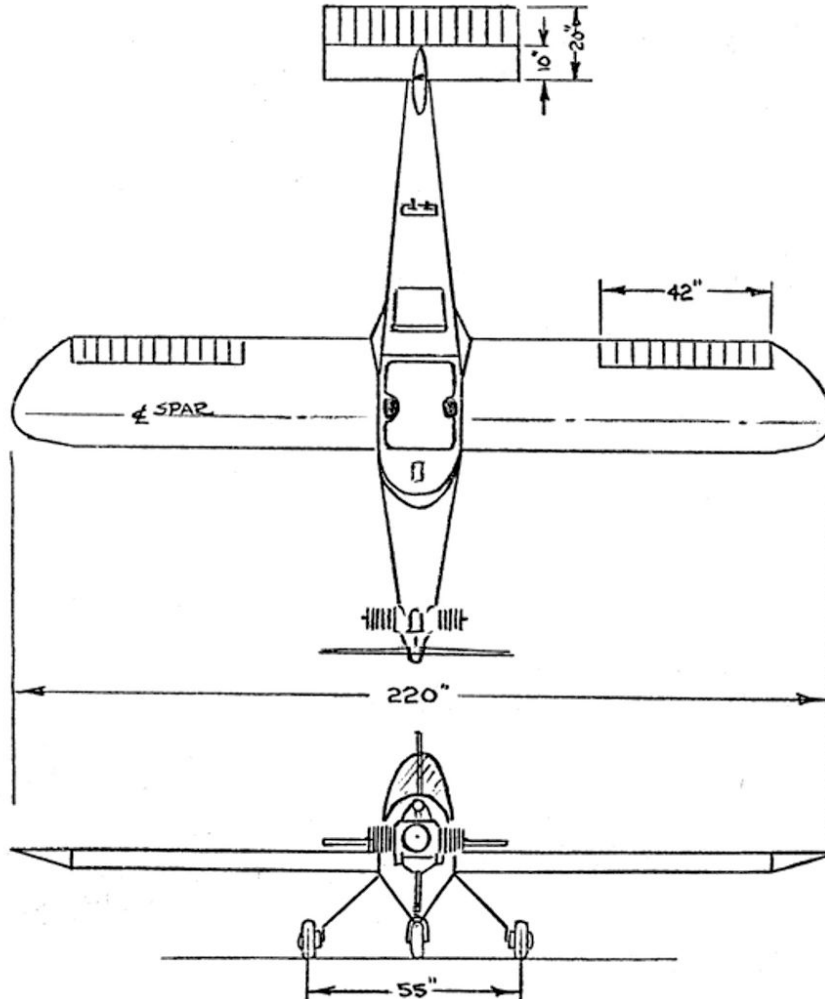
- **THE LANDING GEAR** is going to be connected with two small wires going through the body, with small craft foam wheels.
 - The body will have small holes and so we will put the wire through and bend it on each side
 - We will cut three small craft foam circles to attach to the ends of the wire

3. ARTISTIC DESIGN

We are going to draw on the details for each piece of metal using a fine black paint pen (Montana Acrylic Paint Marker, Extra Fine)

- **THE BODY** is going to have marks drawn with a sharp knife showing where to draw
 - Black drawn details of left and right side of plane
- **THE WHOLE WING** is going to have marks drawn with a sharp knife showing where to draw
 - Black painted or drawn details of top and bottom of wing
- **THE WHOLE TAIL WING** is going to have marks drawn with a sharp knife showing where to draw
 - Black painted or drawn details of left and right sides
- **THE PROPELLER**
 - The toothpick is not going to be colored because the real propeller is wood
- **THE LANDING GEAR**
 - The wheels (made out of craft foam) will be black to resemble the real ones
 - The wires are going to be silver to match the metal design of the aircraft

Picture to use for reference:



**The
WEE BEE**

Power 28 BHP
 Empty Weight 210 Lbs.
 Design Criteria:
 CAR 03 Nor. Category
 Aero Parameters:
 Wing Loading 9.3 lb./ft.
 Power Loading 13.7 lb./BHP
 Aspect Ratio 7.6
 Airfoils:
 Wing & Tail 0018
 0012-64

4. PAPER MODEL DRAFT 4

