

# Inverted Pursuits Lab

## **MACEY 2.0**

### Parts:

#### 3D Printed

- Nose Cone (IP100201)
- Fin Can Body (IP100202)
- Motor Retention (IP100203)

#### Standard Parts

- Kevlar Cord 36 inches
- Estes BT-20 Tube (003085)
- Streamer - Orange

#### Additionally Needed

- Estes Porta-Pad II (002215)
- Estes Launch Controller (002220)

#### Anticipated Altitudes

- Estes B6-4 - 164 ft
- Estes C6-3 - 550 ft

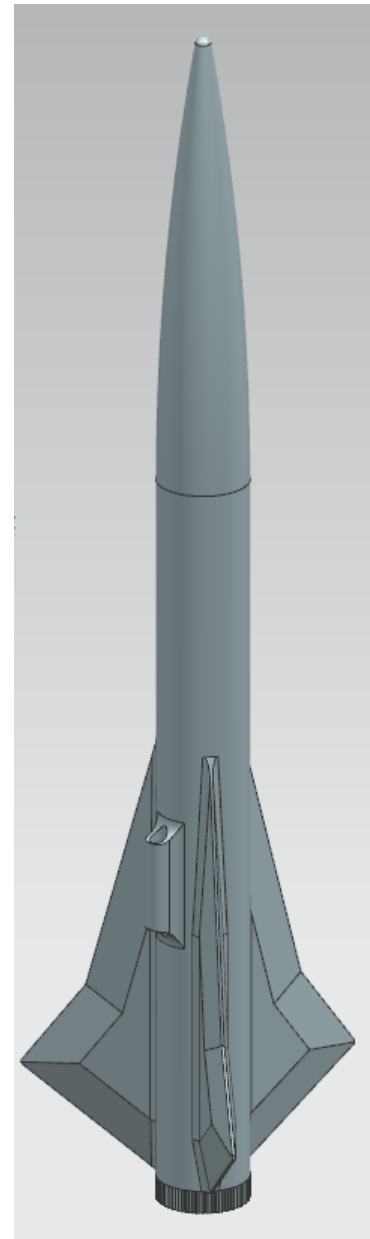
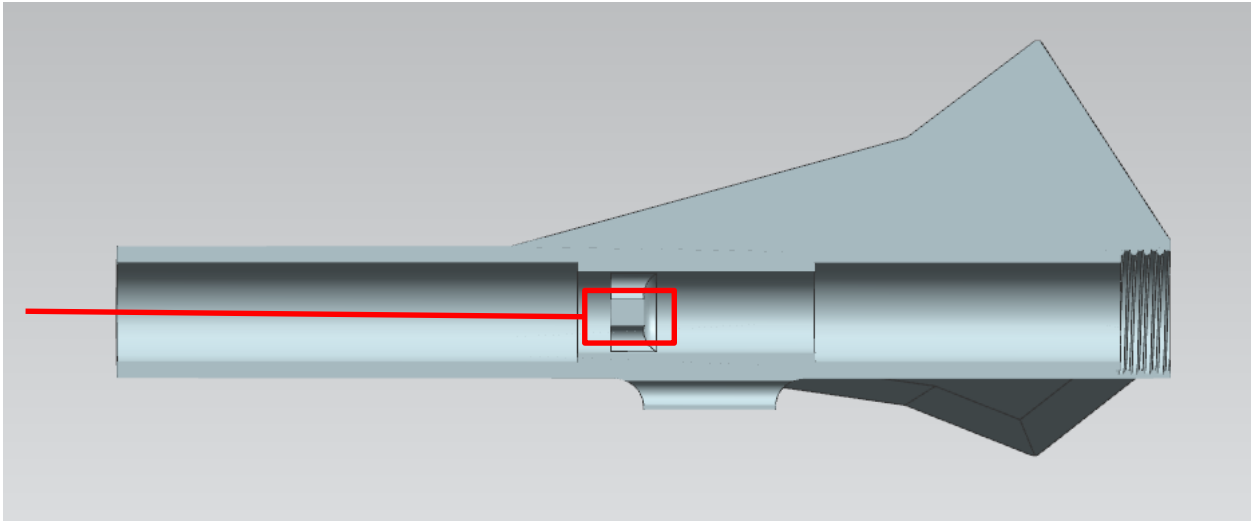


FIGURE 1: The MACEY 2 Rocket

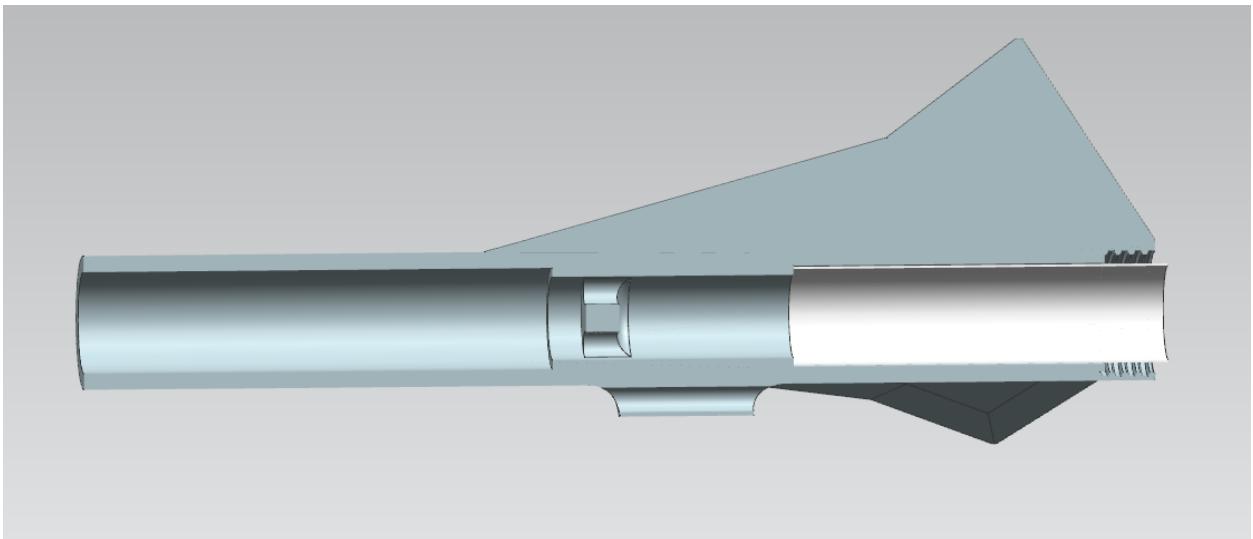
## Assembly Instructions

1. An assembly video is available on YouTube at Inverted Pursuits Laboratory
2. Be sure to test fit and sand all components prior to proceeding.
3. Thread the shock cord through the body and tie around the internal strut.



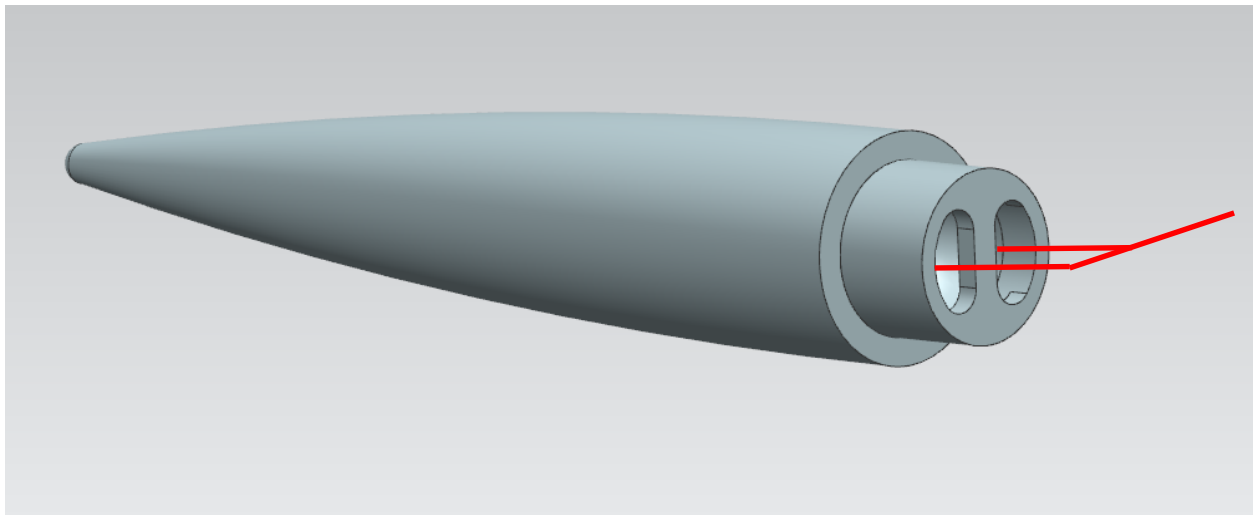
*Figure 2: Tie Shock cord to strut*

4. Slide the BT-20 and Motor Hook assembly into the bottom of the Fin Can Body to test fit.



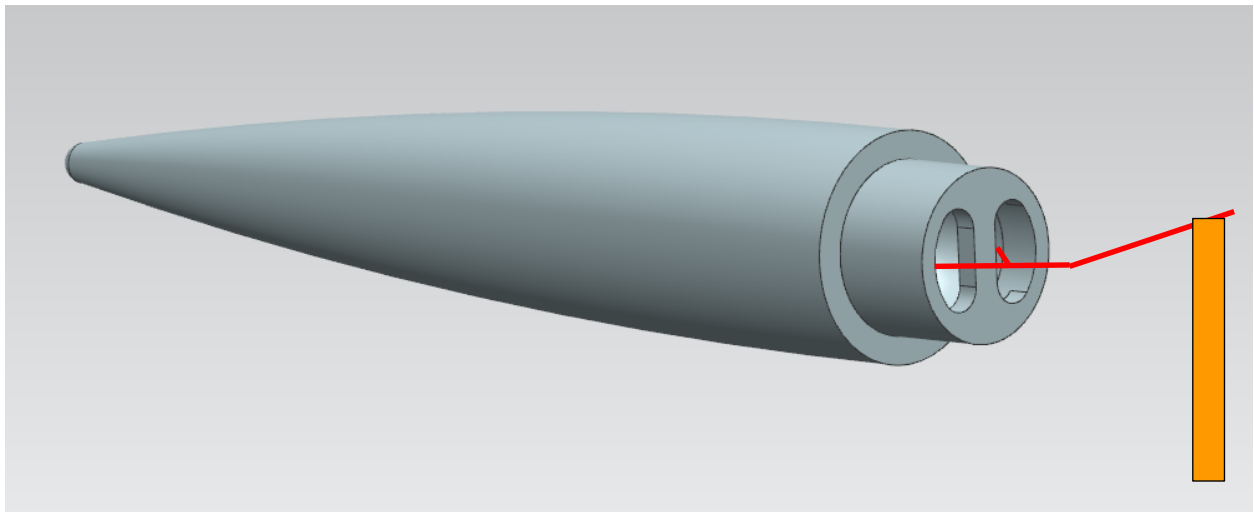
*Figure 3: BT-20 Final Position*

5. Tie the other end of the shock cord to the Nose Cone.



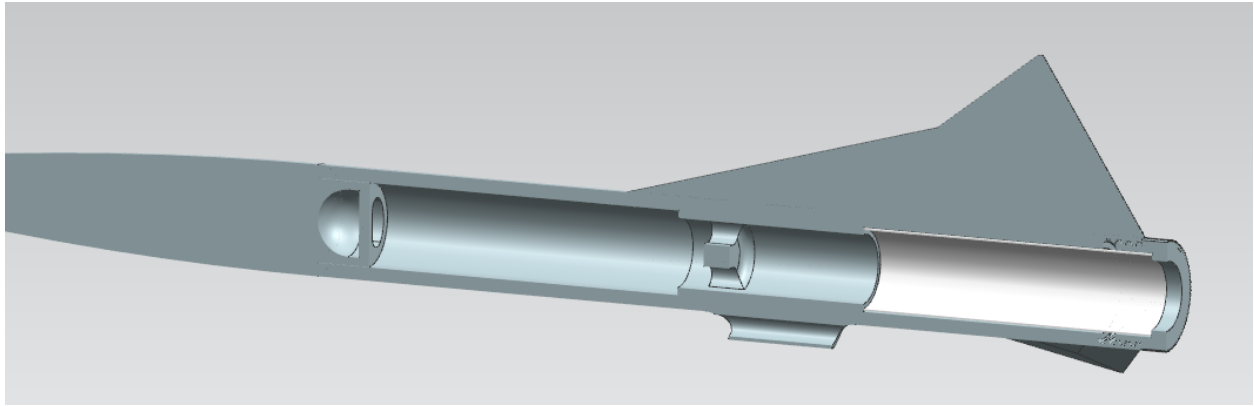
*Figure 4. Tie Shock Cord to NC*

6. Tie Streamer 4in behind Nose cone Shock Cord attachment.



*Figure 5. Tie on Streamer*

7. Install Motor Retention into the body by threading it into the aft of the fin can.



*Figure 6: Install Motor Retention*

8. Flight Characteristics can be verified through the provided OpenRocket file.
9. Once the motor is placed, go out to the launch pad and enjoy.

