



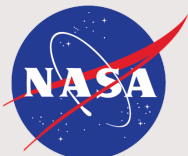
First Nations Launch: Build and Assembly Webinar

Presented by: Adrian Guither
March 4, 2025



ARTEMIS
STUDENT
CHALLENGES

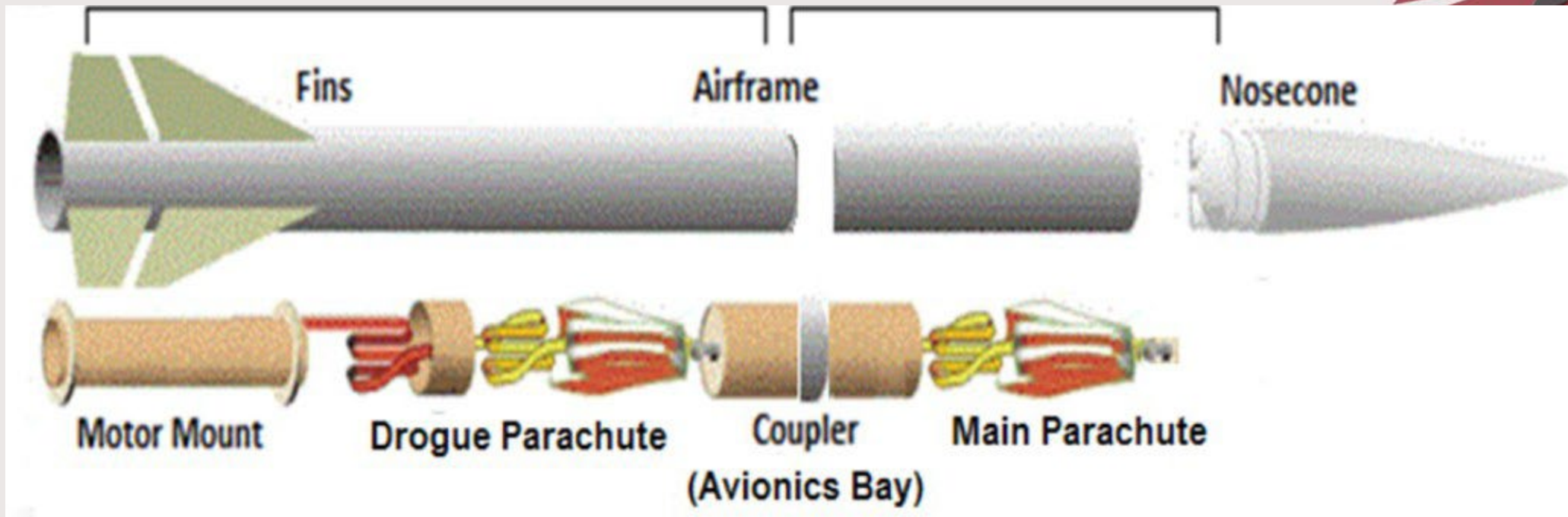
nasa.gov/stem/artemis.html



Partner

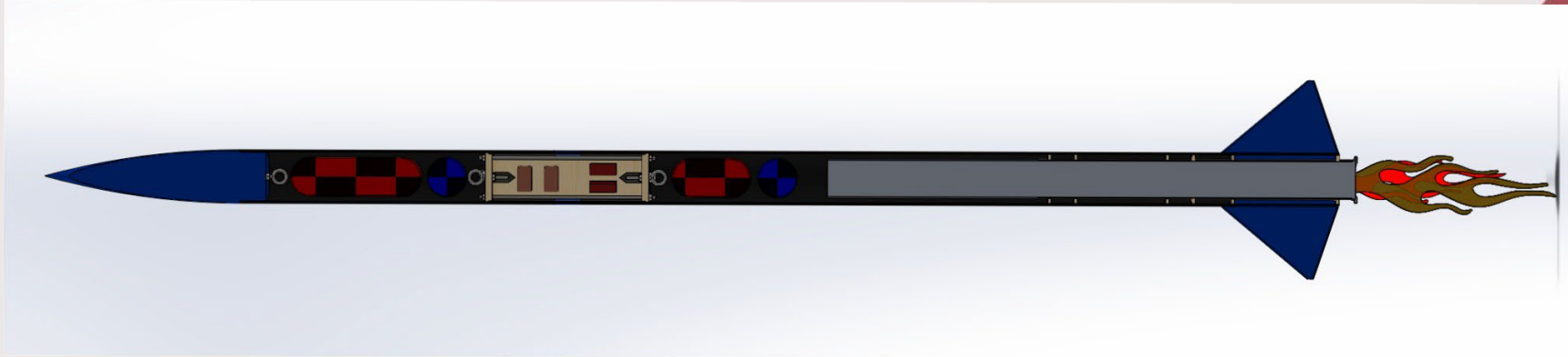
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Overview





Cutaway View





Bonding Components

- Use the right adhesive
 - Wood Glue
 - CA (Super Glue)
 - Structural Epoxy
 - Laminating Epoxy
- Proper surface prep
 - Remove glassine layer from cardboard tubes
 - Surface free of grease and oil
 - Light sanding
 - Clean with IPA/Acetone



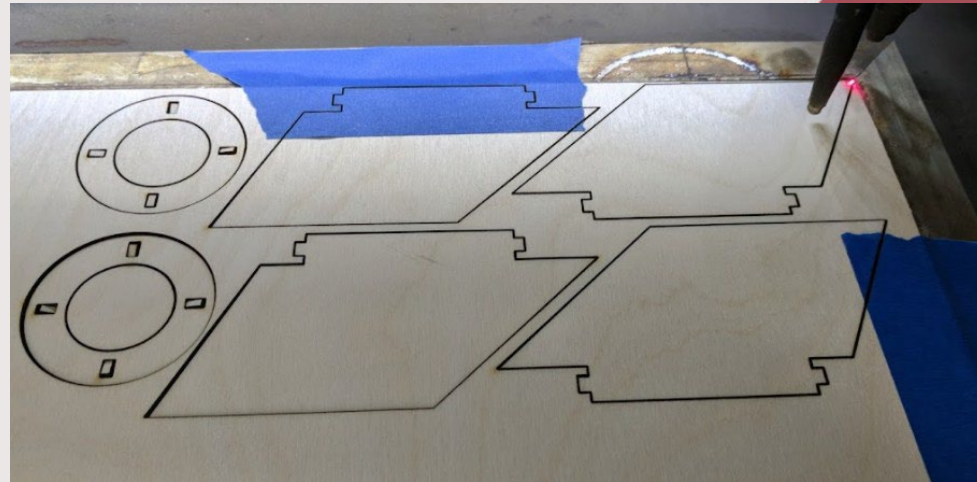
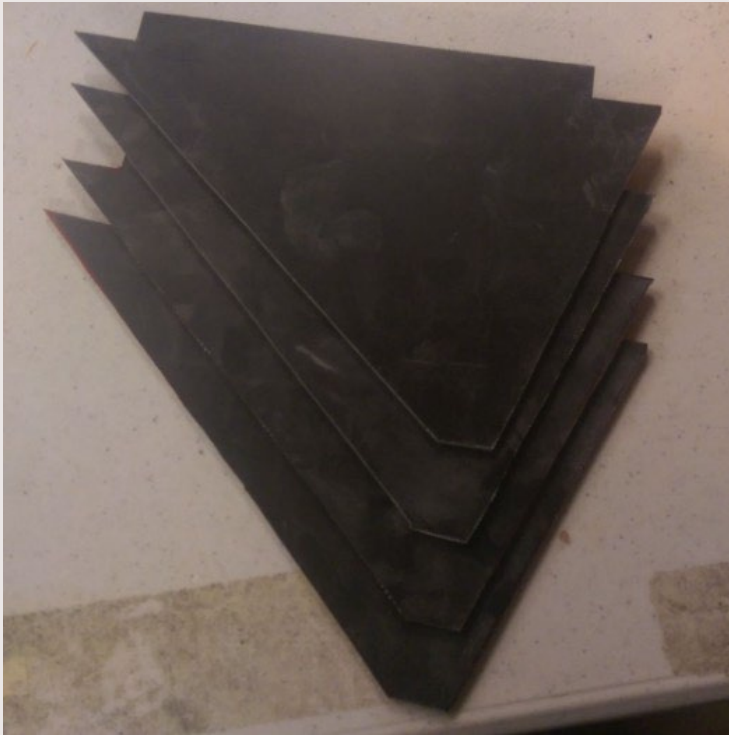


Fin Can





Cutting flat components



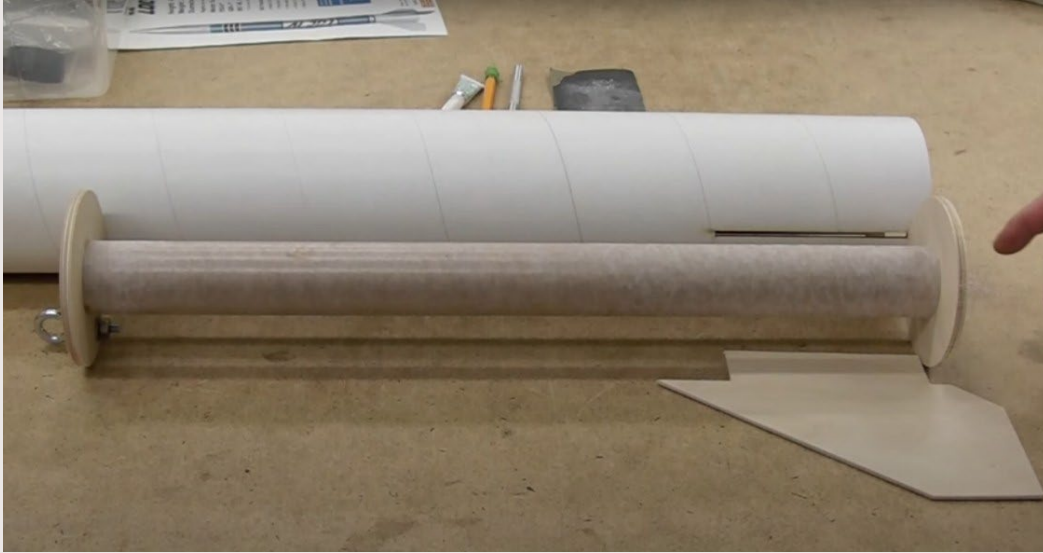


Fin Slots





Motor Mount Assembly



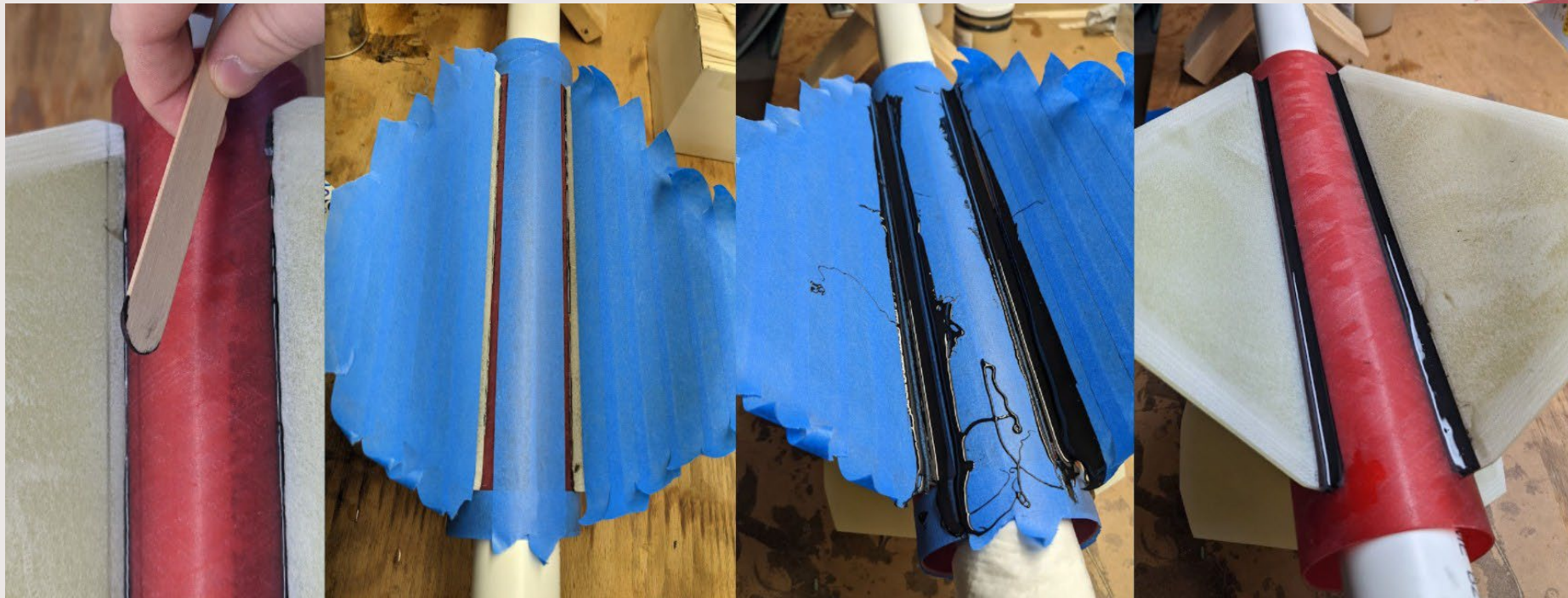


Fins and Internal Fillets



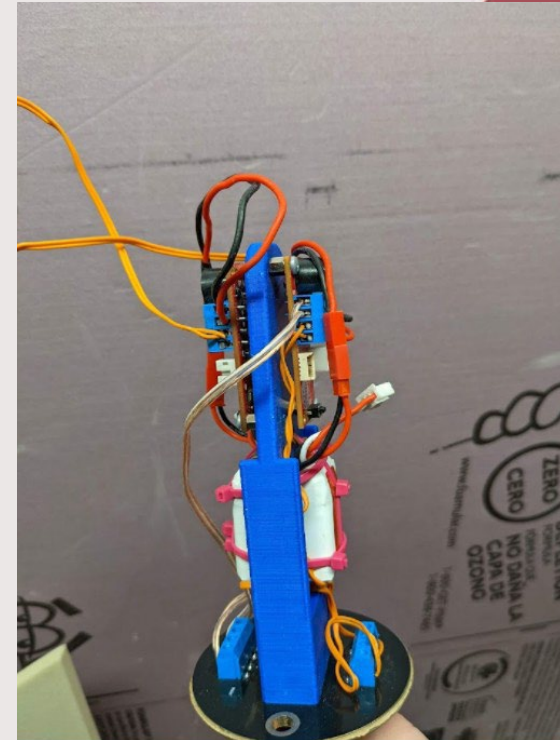
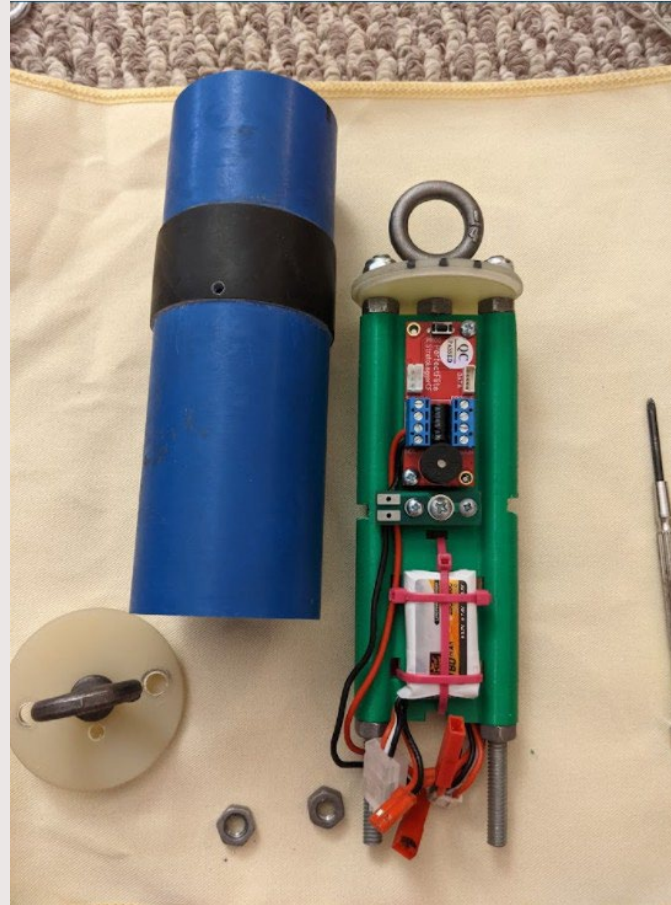


External Fillets



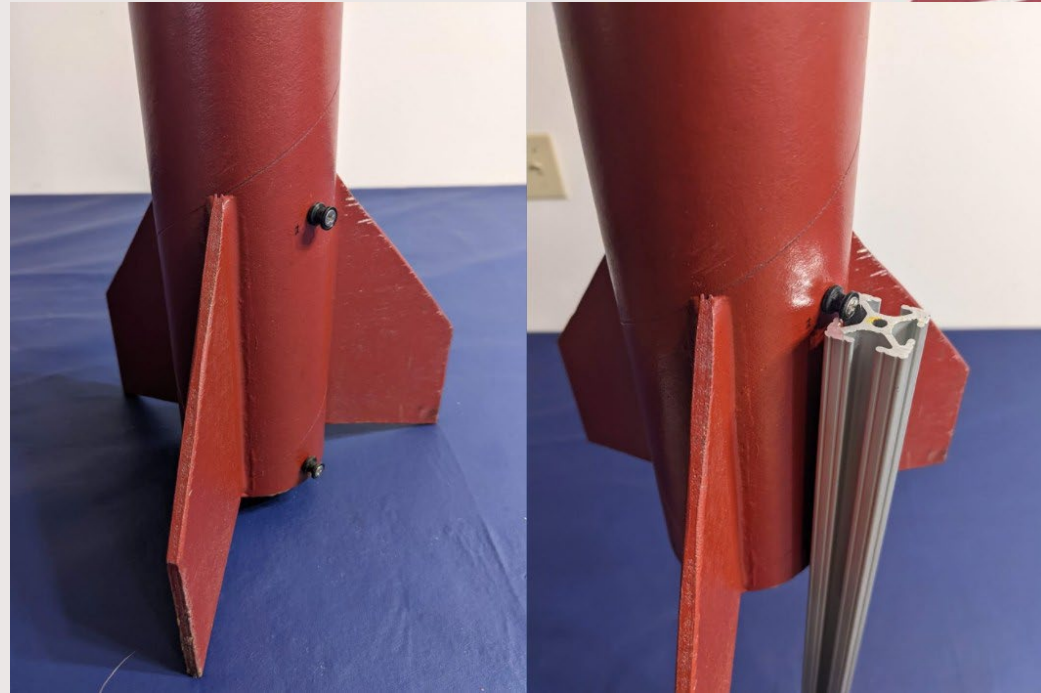
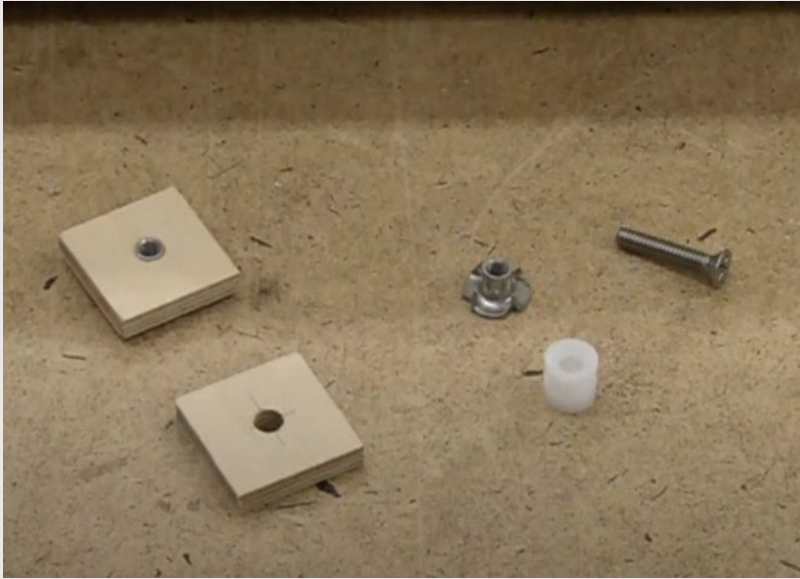


Avionics Bay



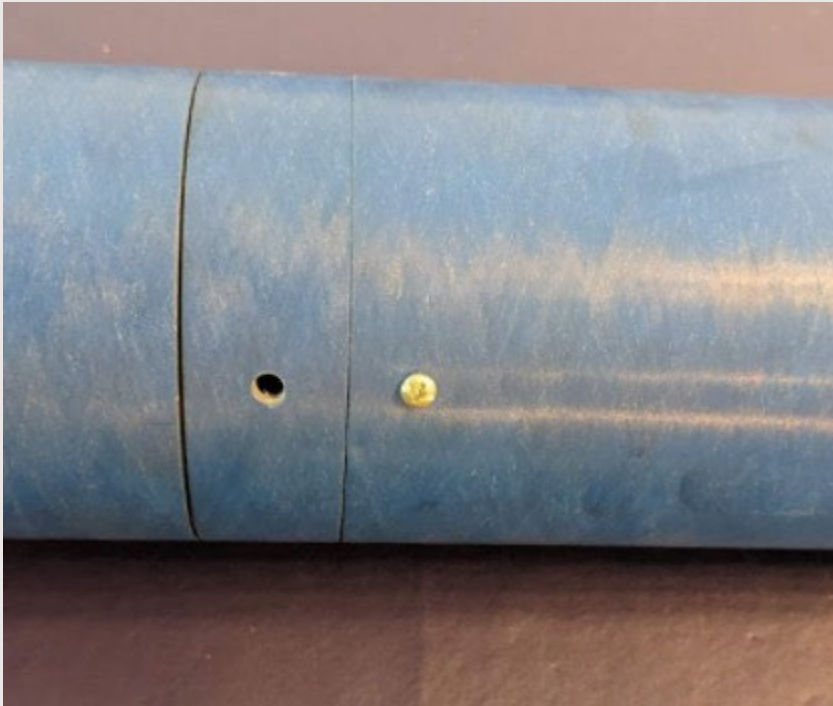


Rail Buttons





Bolted Connections





Motor Retention





Painting and Finishing

- Select the right paint
- Surface prep
- Multiple light passes
- Re-coat and Dry times on each can



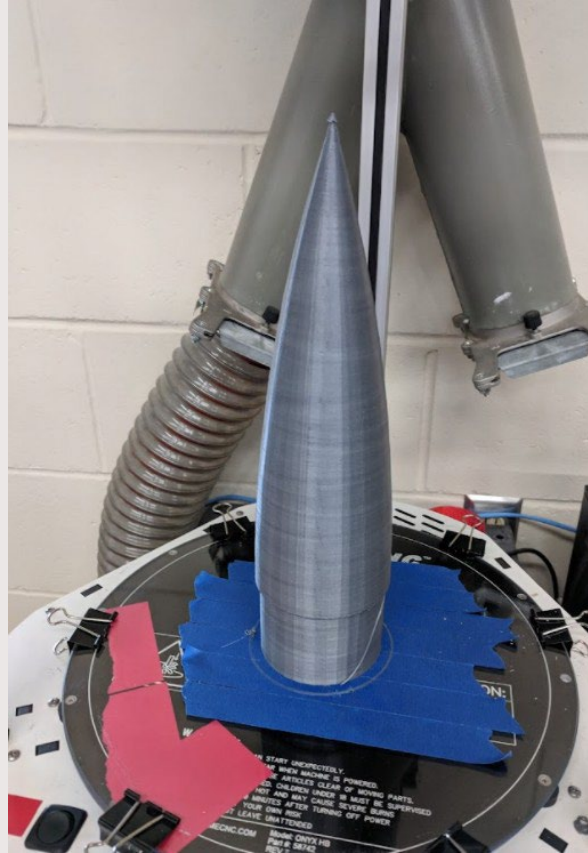


Composite Reinforcement





3D Printing





Failure Modes

- ❑ Recovery Attachment Failure
- ❑ Drag Separation
- ❑ Zipper
- ❑ Fin Flutter
- ❑ Motor fly through





Any Questions?





Other Resources

- John Coker's YouTube videos
 - Certify Level 1
 - <https://www.youtube.com/watch?v=Xtr3758PvzA>
 - Level 2 in Style
 - <https://www.youtube.com/watch?v=PMqzxl1tVF4>
- The Rocketry Forum
 - "Properly bonding composites and what your government doesn't want you to know"
 - <https://www.rocketryforum.com/threads/properly-bonding-composites-and-what-your-government-doesnt-want-you-to-know.58389/>
 - Build threads
- Kit instructions
 - Not just for the kit you are building

