

Solidworks Final Project

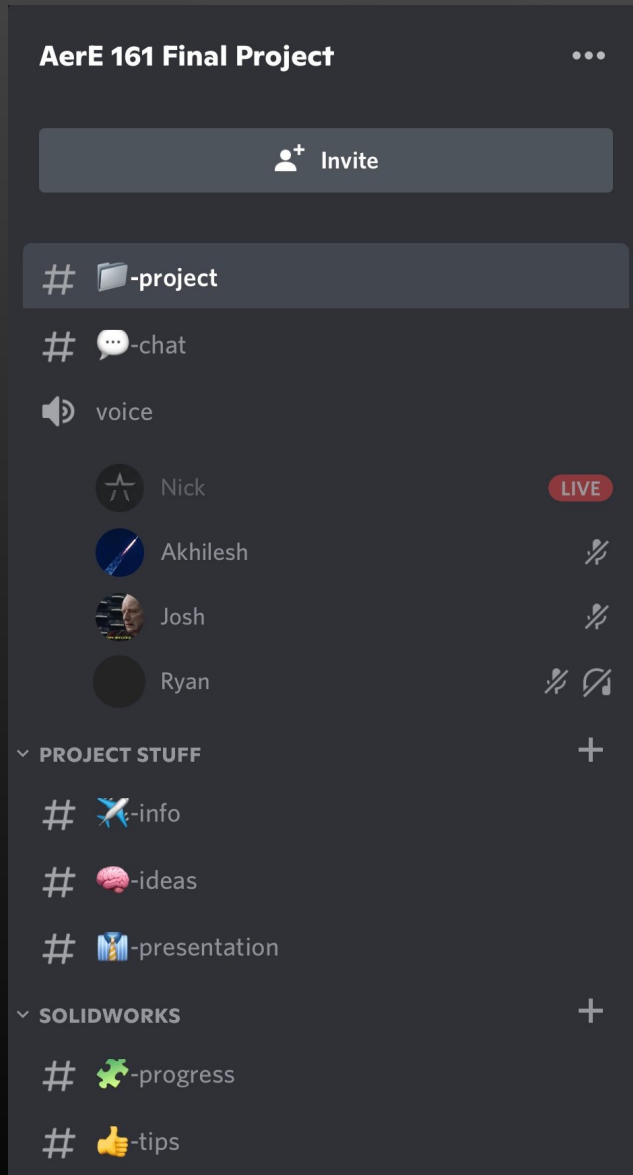
SR-71A BLACKBIRD



GROUP A5 MEMBERS:

- ▶ Nick McCullough
 - ▶ Ryan Dunn
 - ▶ Josh Hediger
 - ▶ Akhilesh Nevatia
 - ▶ David Lane
- 
- A series of several parallel white lines of varying lengths and slopes, located in the bottom right corner of the slide, creating a modern, abstract graphic element.

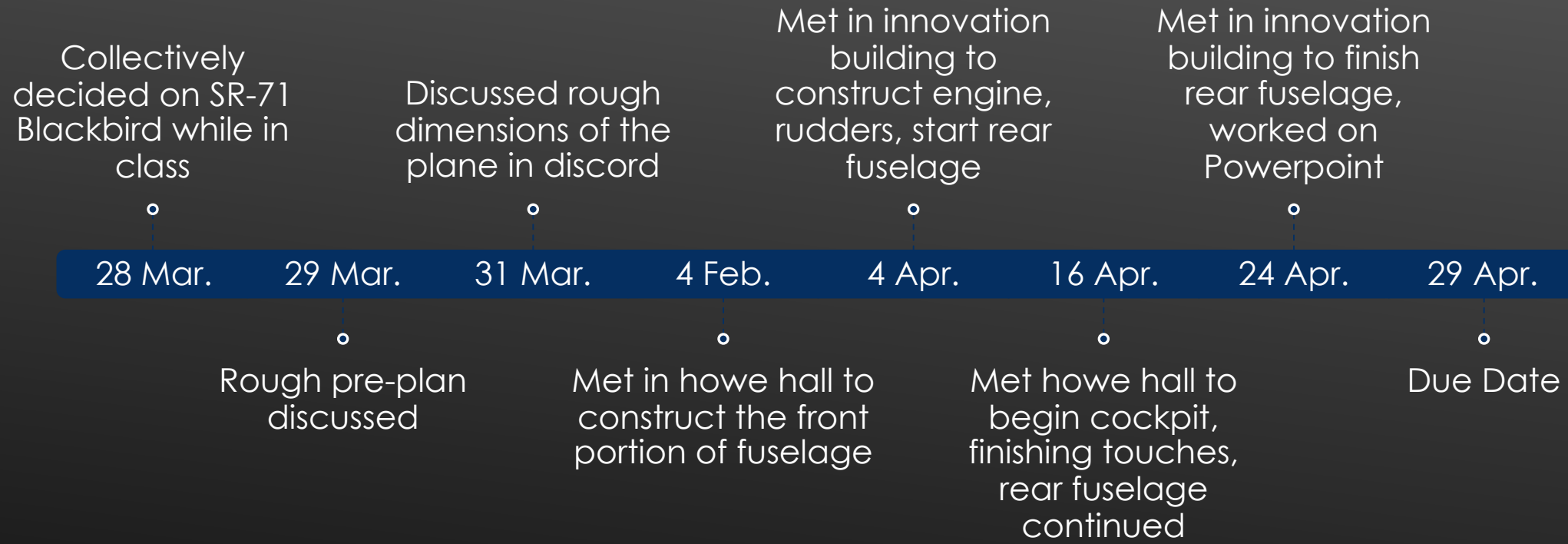
COMMUNICATION



► We created a discord server to communicate, share ideas and work together virtually on the project and a google drive to share Solidworks parts

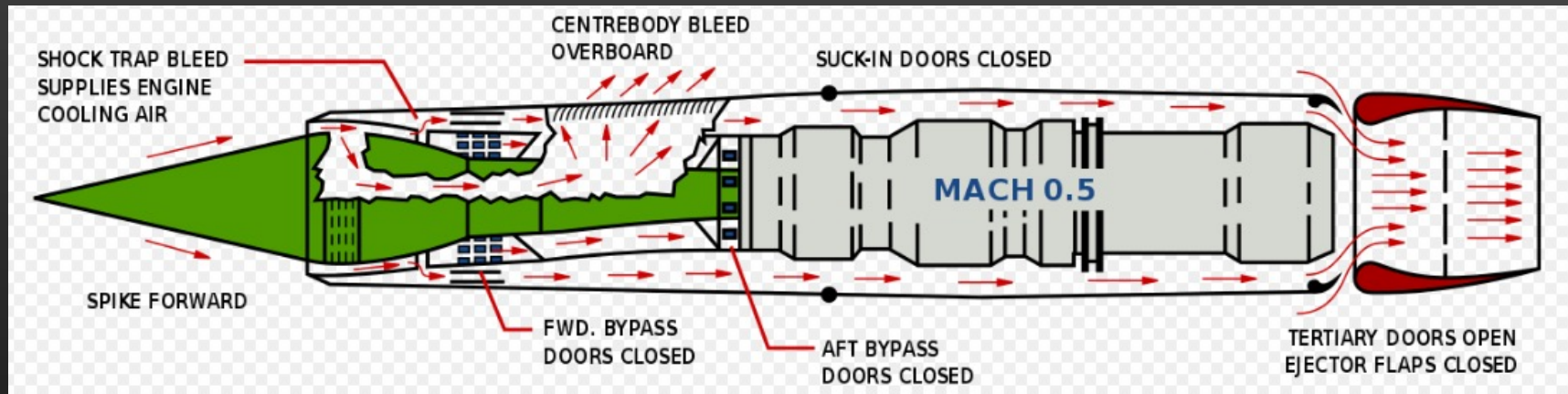
► The discord server included multiple sections:

- Project
- Chat
- Voice
- Ideas
- Presentation
- Progress
- Tips



TIMELINE

THEORY (SIMILARITY RATIOS)

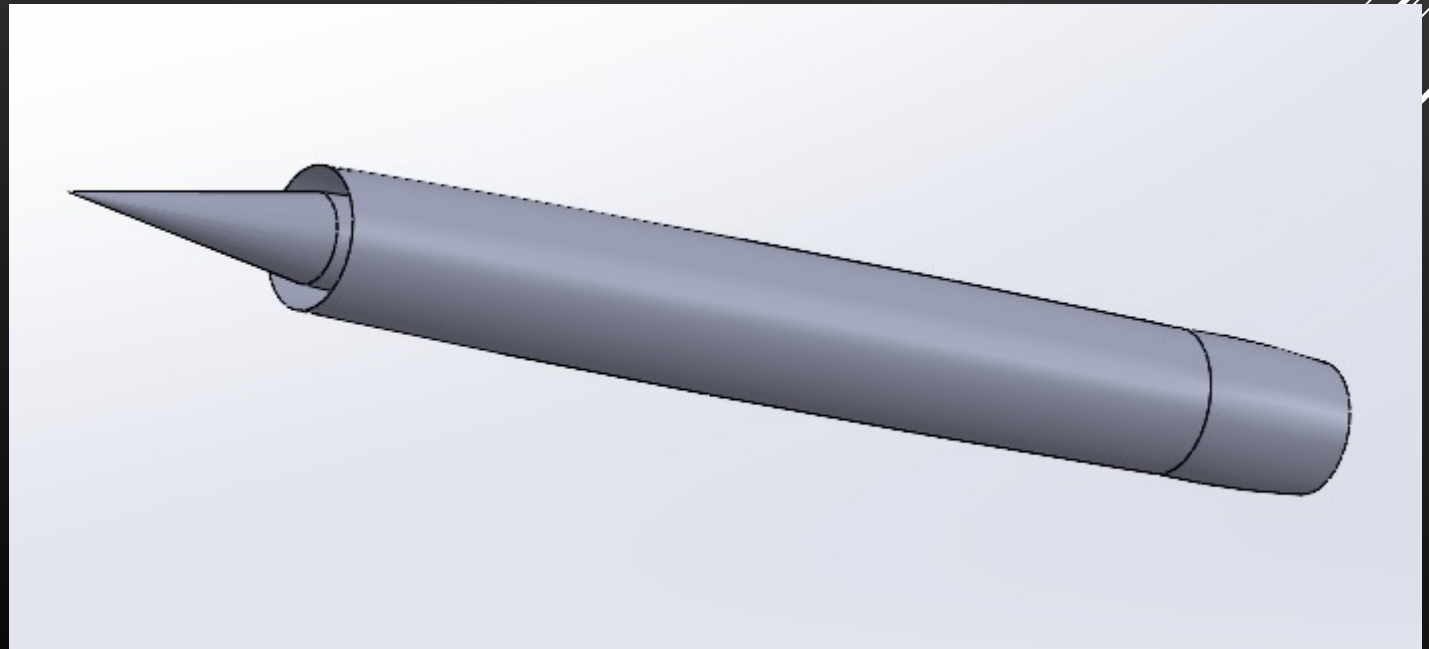


Pratt & Whitney J58 turbojet engine

- Many dimensions were not included

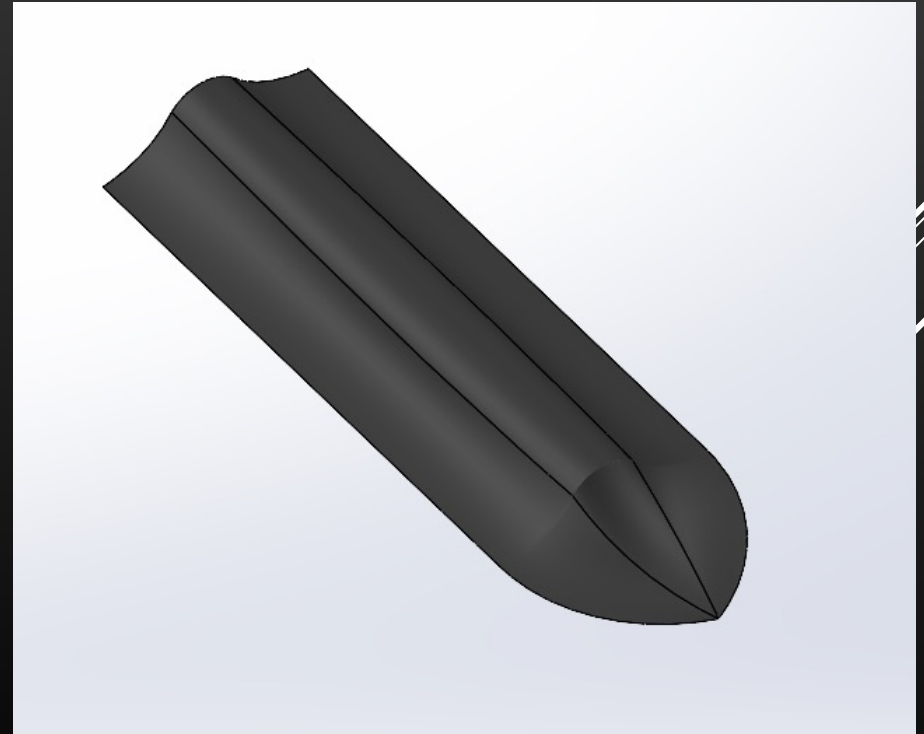
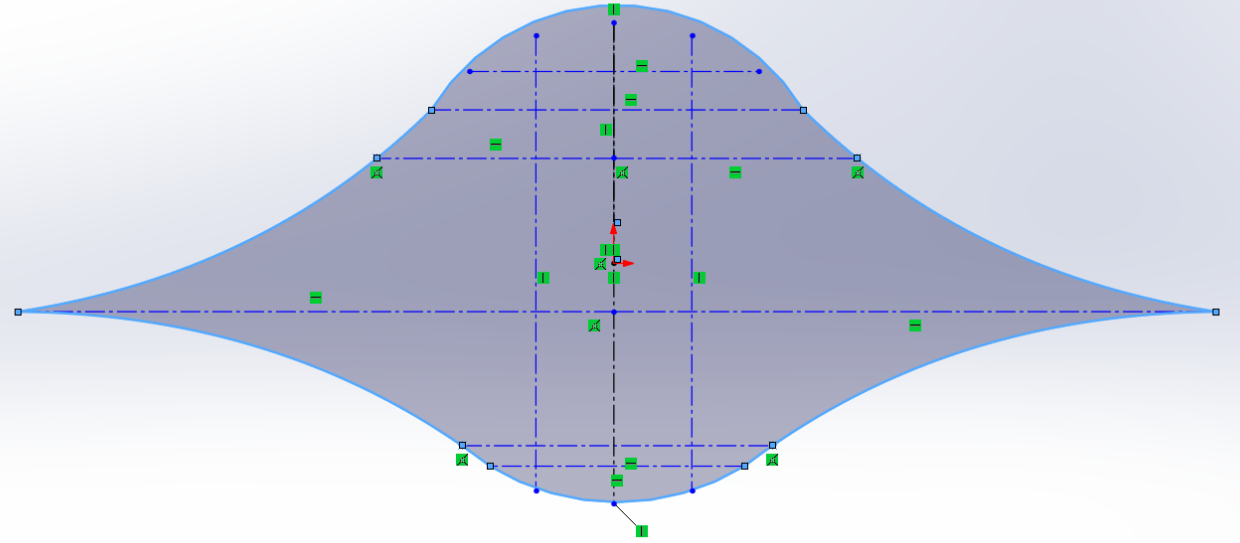
ENGINE

- ▶ Turbojet Engine
- ▶ Conical inlet spike (ramjet)



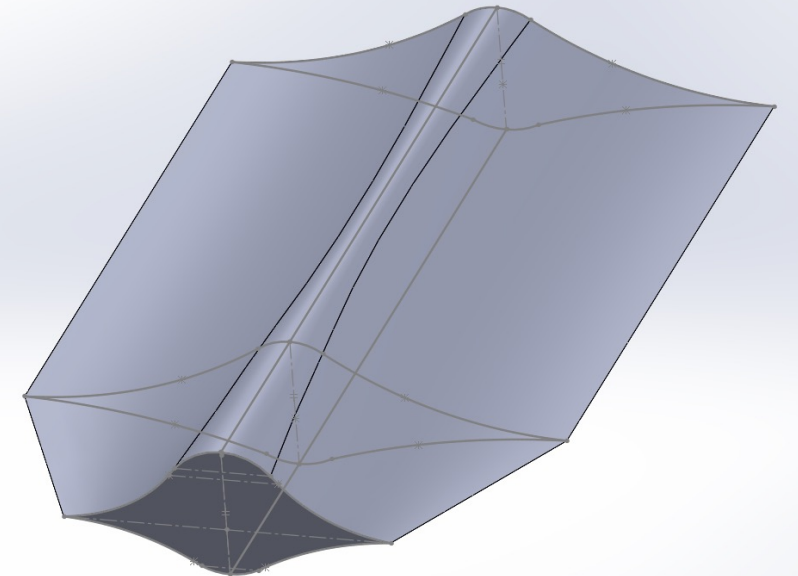
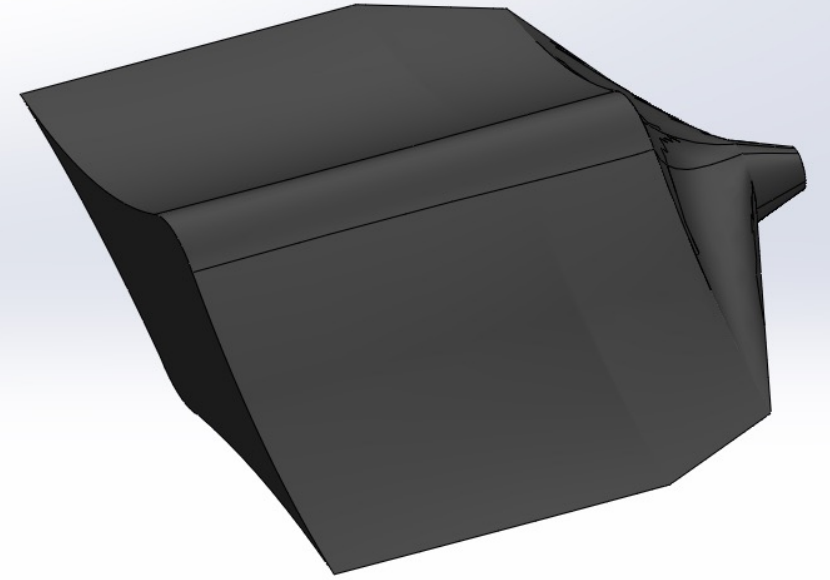
FRONT FUSELAGE (CHINE)

- ▶ Our starting point for the project was the fuselage where the front meets the rear, splitting the aircraft in “half”
- ▶ We extruded this 2D sketch to a scaled length to the front of the aircraft
- ▶ We started with the 5.33' diameter based on the resources

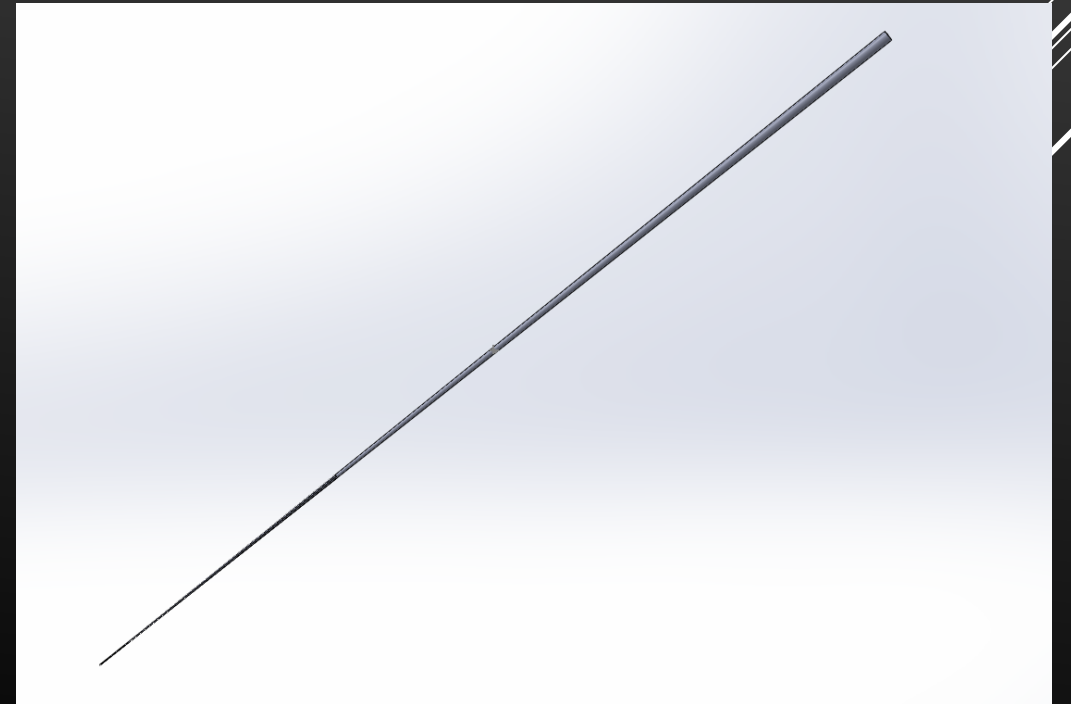
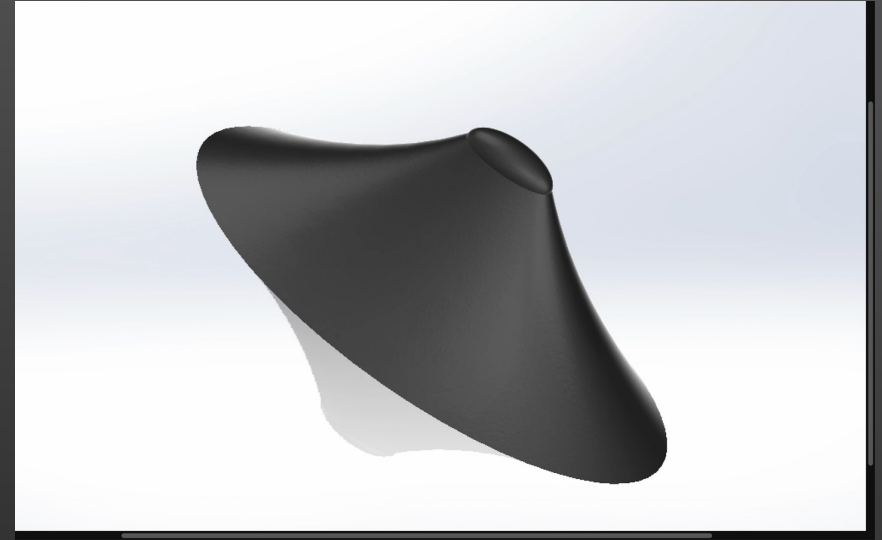


REAR FUSELAGE (CHINE)

- Split in two sections

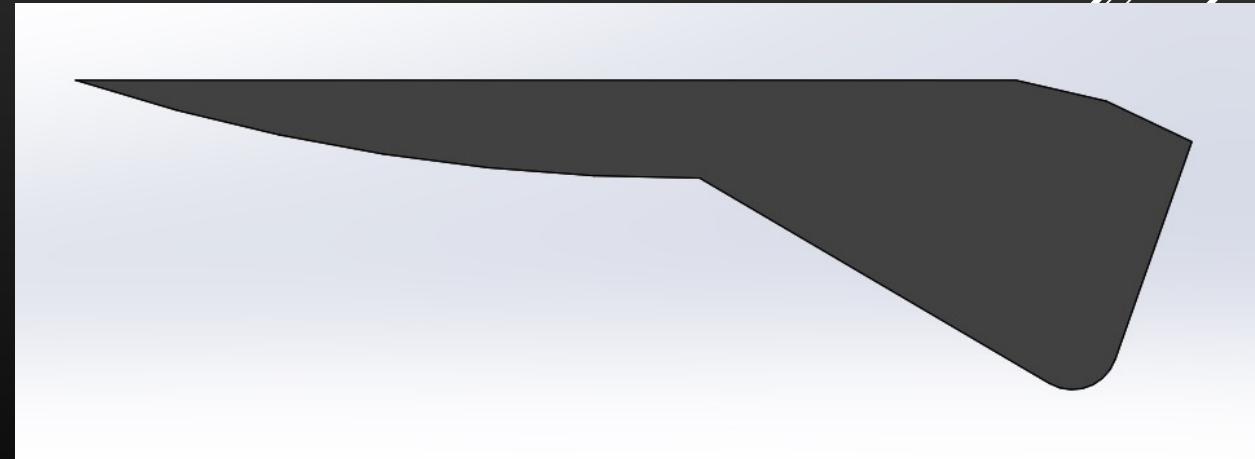
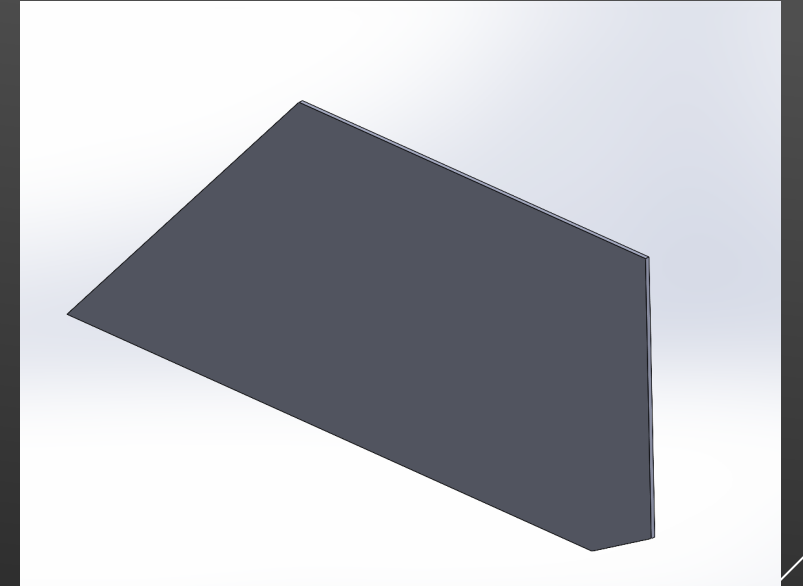


COCKPIT & PRESSURE GAUGE



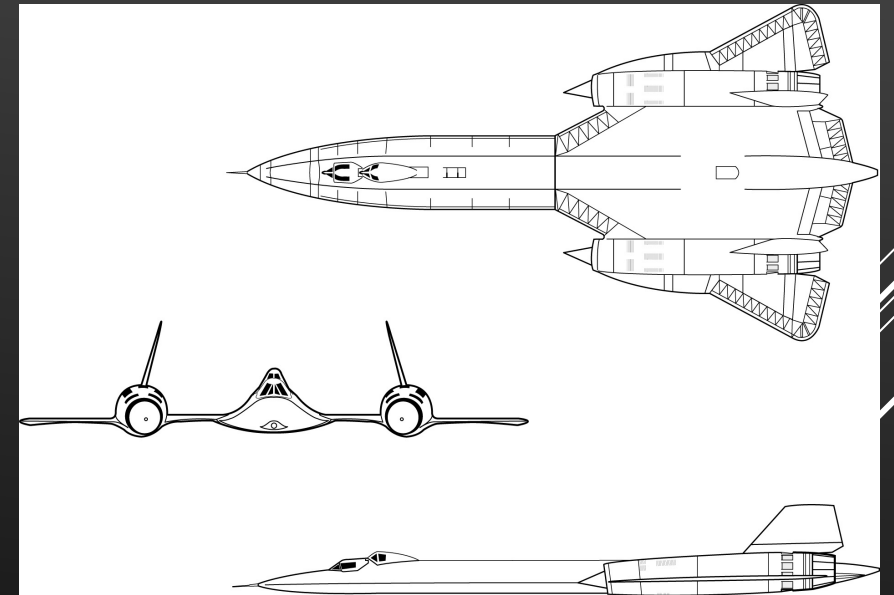
RUDDER & WING

- ▶ Rudder angle 17 degrees



RESOURCES

- ▶ We sourced most of our information from these websites, including Wikipedia:
- ▶ <https://www.nasa.gov/centers/armstrong/news/FactSheets/FS-030-DFRC.html>
- ▶ <https://www.sr-71.org/blackbird/sr-71/>
- ▶ <https://aerocorner.com/aircraft/lockheed-sr-71-blackbird/>
- ▶ https://en.wikipedia.org/wiki/Lockheed_SR-71_Blackbird
- ▶ <http://www.fiddlersgreen.net/models/aircraft/Lockheed-SR71.html>



QUESTIONS?

