EE/CprE/SE 492 STATUS REPORT 5

03/13/2025 - 04/03/2025

Group number: 9

Project title: Space Cyclones - COSMIC CAPSTONE CHALLENGE 2024-2025

Client &/Advisor: Bo Varga, Benjamin Rupp, Rachel Shannon

Team Members/Role: John Beuter (Team Lead), Daniel Sprout, Maheeka Devarakonda, Tanvi Mehetre, Riley Heeren, Ben Swegle

• Weekly Summary

Week Objectives:

Finish rough drafts of our mid-April presentation and final paper for advisor revisions on the 2nd and 9th of April.

• John Beuter:

Reviewed and revised sections of the paper. Collaborated with Bo and Ben Rupp to share ideas and team progress. Attended office hours for C3 and revised the mid-April showcase presentation.

• Daniel Sprout:

Worked on C3 showcase presentation, and the report. Planning to continue working on my slides and report sections.

• Maheeka Devarakonda:

Worked on presentation for the final c3 presentation. Working on completing the electrical prototype along with writing the research paper.

• Tanvi Mehetre:

Worked on the presentation for the C3 showcase and finished the first draft for the same. Started consolidating additional information about the challenges and technology gaps for the final paper.

• Riley Heeren:

Worked on C3 showcase presentation slides. Finished up a rough draft for the slides that I

was assigned.

• Ben Swegle:

Received the finished 3D print of a net capsule model. Created CAD animations for the launcher and the net capsule. Worked on filling in C3 presentation slides, focused on animation slides.

o Pending issues

- John Beuter: N/A
- Daniel Sprout: N/A
- Maheeka Devarakonda: N/A
- Tanvi Mehetre: N/A
- Riley Heeren: N/A
- Ben Swegle: N/A

o Individual contributions

NAME	Individual Contributions	<u>Hours this</u> <u>week</u>	HOURS <u>cumulative</u>
John Beuter	Continued work on the final paper and worked with industry advisors to receive feedback on current design progress. Updated and revised the final presentation slide decks to be prepared for the mid-April showcase.	5.5	40
Daniel Sprout	C3 Presentation slides and report	3	36.5
Maheeka Devarakonda	C3 presentation, paper and electrical prototype	3	37
Tanvi Mehetre	Power consumption report changes and component finalization.	3	33
Riley Heeren	C3 presentation slides and paper rough draft.	5	30
Ben Swegle	Picked up our 3D-printed net capsule from the 3D printing lab. Created CAD animations and updated the according slides in the C3 presentation.	8	50

• Plans for the upcoming week:

Complete the assembly of our design once the 3D-printed model is available. We will continue to progress with our final paper and conduct revisions.

• Summary of weekly advisor meeting:

N/A