



# LASER WEEKLY NEWSLETTER



The Rover programming team has started work on the User Interface (UI) and roles have been designated within the team. Arnav has been given ultra-sonic, humidity and temperature sensors so that the team can start working on prototyping part of the Rover. A lot of work has been done to organise the code on GitHub, helping the team with debugging.

Section written by: Peter B. Swift

The Satellite Design Competition team, Galactic Grannies, have started working on the test rig which will be used to simulate the vibrations that the satellite will be tested on. Other members of the team are putting together their social media pages, a crucial part of the outreach requirement in their competition.

On December 5, 2024, the European Space Agency's (ESA) Vega-C rocket made a triumphant return to space, successfully launching the Sentinel-1C Earth observation satellite from Kourou, French Guiana. This was Vega-C's first flight since its failure in 2022, where a nozzle issue in its second stage led to the loss of two satellites. After months of hard work and redesigns by the rocket's contractor, Avio, the problem was fixed and rigorously tested earlier this year. The Sentinel-1C satellite, built for the Copernicus program, replaces its malfunctioned predecessor, Sentinel-1B. Equipped with advanced radar imaging and maritime monitoring capabilities, it will play a vital role in tracking environmental changes and supporting disaster response. This mission is a story of resilience and teamwork. The failure in 2022 could have been a major setback, but ESA and Avio's determination to fix the issue has paid off. Sentinel-1C's successful launch shows satellites' critical role in protecting our planet, from monitoring climate change to supporting maritime safety. It's inspiring to see how innovation and collaboration can overcome challenges, pushing the boundaries of what we can achieve in space exploration.

Section written by: Elyazia Alghool

## Upcoming Events:

Wirral UK Unplugged Christmas Unplugged Pop Up:  
-9th - 13th of December, 10am-4pm, 19 Abercromby Square

## LASER Merch is now available to order on the website!

Limited Edition Hoodies available in sizes L -

XXXL £40- £25 38% Discount

All hoodies include a free ruler

One ruler alone is £2



Back of hoodie



Front of hoodie



Ruler

This week, we had a Beginners Guide to CAD workshop hosted by our CEO, Natasha. It was a fun and informative session where members got hands-on experience learning how to use CREO software to create 3D models. Following this, Aurora led a 3D Printing workshop where she explained how to upload designs into the Creality Ender 3 and use it to print. These sessions were very useful and a great help to our teams and projects members who may not have used CAD before.

Thank you to everyone who came to the LASER Christmas Party!



'Design is the silent ambassador of your brand'  
-Paul Rand