

SHEFFIELD FORMULA RACING

2022 Sept - Dec Issue

MERRY CHRISTMAS



Edited By Daniel Hazel

Meet The New Recruits

After the conclusion of our rigorous application process in November, we were able to officially induct the new first years into the team. Now that they've had a while to settle in we can't wait to see all the amazing things they'll *achieve!*



Chloe Carter



Cole Perera



Sam Walton



Will Jones



Vincent Anderson



James Grainger



Andrew Domville



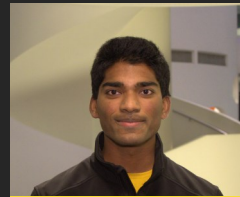
Kacper Szczesny



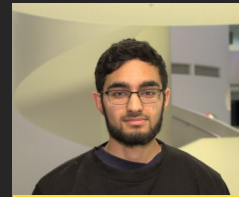
Jake Pitt Miller



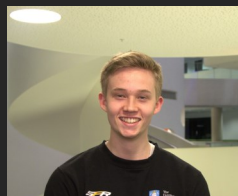
Eshan Ekanayake



Shashika Morakanda



Ibrahim Haider



Ben Shurrock



Throwing On The Wet Tires

Parkwood Testing Session

On the 10th October, the team went down to Parkwood race track to do some test laps in SFR 12. Due to the size of the track, had to leave behind our beloved aero package.

It's the first time SFR 12 has been run in the wet using the wet tyres and so it was an insightful experience for the team and our drivers.

It was also a great chance for the team to practice getting the car ready as fast as possible as well as seeing how some of the last year's designs could be improved to aid in this process.

Sub Team Updates

It's been a busy time at the team since our last newsletter, here's a quick update on what each of our sub teams have been working on.

Chassis and Driver Environment

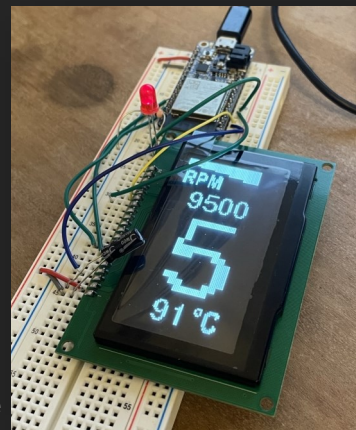
The team has been full steam ahead working on completing the composites tests necessary to complete the structural equivalency sheet which is a document that proves our car is structurally sound and complies with all of the formula student rules.

The team also plans to reduce the weight of our pedal box by utilising composite materials for the accelerator pedal as well as working to remove slack in the current system.

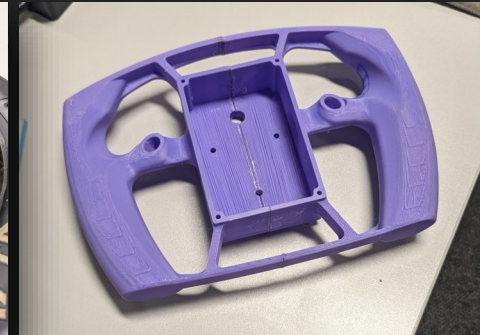


Electronics

SFR 14 is getting smarter. A big goal of the electronics sub-team is to deploy more sensors around the car; the data collected can then be fed directly to the driver or be used to tune performance after testing. Some of this information collected will be displayed on our steering wheel new screen. The team is also working on electrifying the steering wheel's quick release instead of making the electrical connections through an auxiliary connector. Plans for implementing the new electronic clutch and launch control system are also progressing smoothly.



Vehicle Dynamics



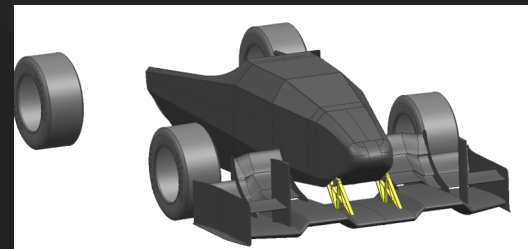
The vehicle dynamics team have been working on conducting FEA analysis on our carbon wheel design for SFR14 as well as simplifying our current upright design. They have also started to design the new suspension system for SFR14B our bio-composite car project.

The VD lead has also been going back and forth with our drivers to design a new steering wheel which should be more ergonomic and will be able to house the new screen.

Aerodynamics

CFD simulations have been running smoothly and many of the parts being resigned/optimised are making great progress. The components currently being worked on are the front wing, canards and the rear wing endplates.

There is also work being done on the mounting systems for the front wing and the diffuser to make them much easier to remove when needed which was one of the bigger flaws of the previous car.



Power Train

The team has been working on 3 main projects.

- Making our current differential mount adjustable.
- Moving the location of the pro shift lever to ensure it shifts every time more reliably.
- Re-routing our exhaust so it no longer interferes with our floor diffuser



Open Days & Outreach

Attending open days and outreach events is always a pleasure for members of the team as it's a chance to make an impact on the future generation and inspire potential engineers. The team held stands at two open days this quarter on the 26th of November and the 22nd of October

We met so many passionate students all with different backgrounds and future aspirations; answering questions about our team and what university life is like here at Sheffield.

The level of interest in our team was fantastic and we hope to see many of the students we spoke with applying to join our team in the future.



Movember At SFR

Raising Awareness

During November some of the members at SFR grew out their moustaches in support of Movember with the aim of helping to raise awareness for men's health.

Movember focusses on tackling 3 main men's health issues: mental health and suicide prevention, prostate cancer and testicular cancer



How You Can Support

If you feel like you have the capability to support us and our project please do not hesitate to click the link below to reach out to us for information on our sponsorship packages. Any help is greatly appreciated!

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