



Formula Student Brief

14/11/2022

Week 16 Progress Report

[University of Leicester Racing](#)

The (not so) Weekly Brief

This week's brief is a double issue with updates from the past 2 weeks, so lots to report on!

The first round of our recruitment process has finally come to a close – we received a large number of applications and after shortlisting, this past week we interviewed some potential candidates with the newcomers hopefully starting with the team this coming week. The new team members will undergo an onboarding period to help them settle into the team.

The car went to a rolling road session with Steve Walford through which some electrical communication issues were identified. Unfortunately, on the way back from the rolling road session the car was caught in some heavy rain leading to a hydrolocked engine! However, the team were quick to rectify the issue and all is well now.

Chassis & Ergo

- Finalised and purchased....
 - Material for chassis
 - Front hoop & main roll hoop
- Finalised chassis fabricator – payment in process
- Wishbone mounts...
 - Material received
 - Drawing submitted to the technicians – currently in production

Suspension

- New bearings have been validated and are ready for purchase
- New front wishbone designs are being worked on with the new Lotus Shark coordinates
 - Changes – front wishbone to utilise tie rod ends rather than welded bearing housing

Aero and Bodywork

- Quarter Turn fasteners have been sorted and tried out
- 3rd year team members are getting up to speed with CFD
- Preliminary research regarding the diffuser design concepts
- Organizing team visit to KS Composites

Powertrain

- Rolling road
 - No fuel leaks & engine didn't break – good!
- Engine oil and filters changed
- Engine inspected – seems to be in good health
- Started documentation for design review
- Short engine tests to obtain some rough values for intake vacuum
- Refresh of the fuel delivery system is in progress – new filter purchased and pump spec'd out
- Received sponsorship package from RAMAIR – new air filter installed

Control Systems

- Communication issues discovered at rolling road
- Engine diagnosing is going well – managed to get control of the ECU with the engine running until shutdown
- Organizing meeting with DIY-EFI to discuss wiring skills and ECU
- Documentation regarding current control systems, loom etc to be shared
- Starting work on contingency loom
- Investigating Speeduino ECU communication issues
 - Look into contingency for Speeduino ECU
- Work on the telemetry system is currently being paused to focus on engine

CAD & Integration

- Master model has been updated with accurate steering wheel and seat

Test Ops

- Team went for Rolling Road session – documented advice regarding troubleshooting ECU
- Looking into organizing low speed testing as soon as possible
- Documentation regarding track testing and insurance is currently being complied

Business

- In touch with Verplas, who have 3D printing facilities – also interested in a sponsorship opportunity
- Will be reaching out to local suppliers/sellers for any items the team might need

Thank you for all of your hard work and support.

Monica Peeris

“To achieve anything in this game you must be prepare to dabble in the boundary of disaster.”

– Stirling Moss



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