



MARCH 2018

EDITION 2

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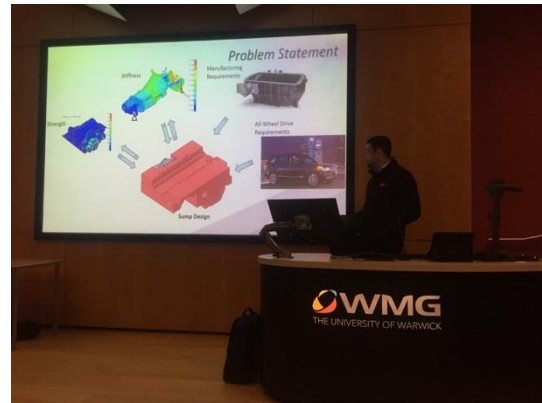
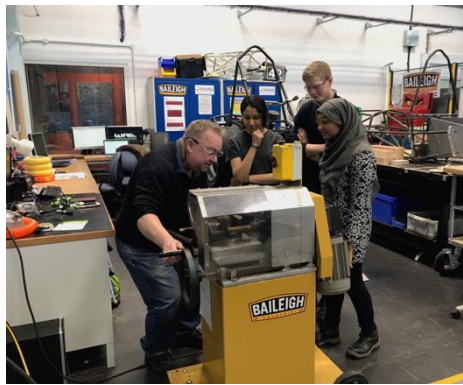
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AN INTRODUCTORY WORD

Warwick Racing have just finished the last weeks of term 2, with the end of term 2 comes major deadlines and the acceleration of manufacturing. The team have been extremely busy these past two weeks: the chassis team have been researching the capabilities of a moulded carbon fibre chassis for WR9, the anti intrusion plate has been designed and is currently at our sponsors AquaJet for manufacture, the cooling team have completed a new side-pod design, with the moulds for the carbon fibre lay-up, ready to be manufactured and much more!

The team have been involved in many events over the last two weeks as well. The team attended the School of Engineering's Engineering Day, the IMGRP's Industry Day and gave a talk at Richard Cross Church of England School to help them build their Greenpower Formula Goblin Electric Vehicle. Please read on to learn more about what the team has been up to!

- Harvey Cumming, Business Manager



TECHNICAL UPDATE

CHASSIS

The chassis team has been very busy preparing for a change in direction for the design for WR9. In order to switch to a moulded carbon fibre chassis, the design needed to be changed to allow for further aerodynamic features. This allows us freedom to mould the shapes we need to ensure the long term usability of the chassis, with scope for addition of aerodynamic components like rear and front wings, and a smooth underbody. A CAD model of this new chassis will follow shortly!

For WR8, the anti intrusion plate has been designed and is at Aqua Jet for water jet cutting. The tabs for the firewall have been guillotined and shaped and are ready to weld onto the chassis. The final few steps are being taken to ensure that the car is ready for the Coventry MotoFest 2018!

POWERTRAIN

The powertrain team have been busy over the last couple of weeks, with developments being made in several different projects.

The cooling team have completed a new side-pod design, with the moulds for the carbon fibre lay-up, ready to be manufactured. We have also designed a new double catch can which fits within the triangulation points of the WR8 chassis – improving our rear-end packaging greatly; this is currently being manufactured.

The Wiring Team have completed the string dummy model for the new wiring harness, and are currently in the process of adjusting this dummy harness to make the harness neater, safer, and more accessible when required.

The WR8 Chain guard has undergone a complete redesign. As well as being a more aesthetic prospect than previous solutions, it is also safer. The constraint has also been improved, and as a result, the vibrations from the chain guard that WR have previously encountered from the chain guard have been almost completely eradicated. This design is currently being cut out using a high precision water jet thanks to one of our closest partners, AquaJet.

Finally, the WR8 Airbox design has been completed. A 3D printed model is currently being manufactured to correct the dimensional disparities between the chassis CAD model and the physical WR8 car. Once these changes are implemented, a carbon fibre box will be manufactured to cover the ARAB54 Airbox and Filter provided by our sponsor, ITG Performance Air Filters.

ELECTRIC CAR TECHNICAL UPDATE

The electric car team has been very busy over the past two weeks fabricating several parts for WRe, such as the floor tabs, harness tabs, throttle pedal, steering supports, brackets and mounting plates. Another task we have been working on is the positioning of the wishbones and the mock-up with uprights/brakes/hubs; the bodywork is also making good progress and is on the way to being manufactured. Overall we are very optimistic about the way WRe is coming together and are looking forward to more exciting challenges in Term 3.

OUTREACH AND EVENTS

ENGINEERING DAY

Warwick University's yearly "Engineering Day" took place on Saturday 17th March, featuring 25 different stands spread around the Engineering building that showcased a variety of projects and activities. As well as having a video screen and a few parts from WR8 on display, the Warwick Racing stand featured a Formula 1 simulator created with the body of a fully-sustainable Formula 3 car.

Visitors got the chance to drive a few laps and try to challenge the record; the simulator proved to be one of the most popular activities of the day, especially for our younger visitors who got their very first experience driving a racing sim and were visibly thrilled!



INDUSTRY DAY

Monday 19th March was the University's Physical Sciences Industry Day. We didn't have a simulator this time, but ran the Warwick Racing stand throughout the whole day and explained the team's activities to interested guests, helped by an illustrating video that showed the car and some behind-the-scenes work as well as a few display parts from WR8.



OUTREACH AND EVENTS (cont.)

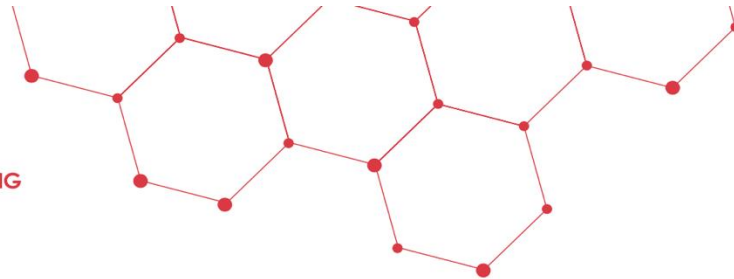
PRIMARY SCHOOL VISIT

On Friday 9th March, Warwick Racing visited Richard Crosse Church of England School. Gosia and Shaf, Managers of WRe and WR8 Powertrain teams respectively, helped Class 5 build their Greenpower Formula Goblin Electric Vehicle. The class worked on fitting the brake calliper, brake cable, and setting the alignment for their rear axle. They also pumped the tyres up to their correct pressures; all in the space of 1 hour and 45 minutes!

Gosia and Shaf were also grilled about their interest in cars, university, and career aspirations in what were two incredibly challenging interviews! For regular updates on Richard Crosse Racing's build progress, please visit their twitter @RCRacing2018



HAPPY EASTER FROM THE WARWICK RACING TEAM!



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