FORMULA SAE 2003

Newsletter - November Edition



K+H Surface Technologies

Wow, it is now only one month to the competition. While the year has gone past incredibly quickly the team is in a great position to perform well having now tested the car for four weeks. This testing has been fruitful and proved the car to be both reliable and fast. With work being done at both MotorCycle Motion and Calder Park, significant progress has been made on the chassis balance and the car is now over 5 seconds a lap faster over a 25 second lap than after the first tests. Further testing is planned leading up to the event to further tune the cars balance, while also giving our drivers experience. With this in mind keep an eye out for an invitation to attend a BBQ at one of our testing sessions in the near future.

With the new car ready for testing it was an opportune time to unveil the vehicle to our sponsors, family and friends. Held at Dutton in Richmond, the 2003 car launch allowed the team to show off the fruits of our labour over the past 11 months. A fun night was had by all.

Promotional activity has also been phenomenal during the month with the team appearing in two newspapers, the Herald Sun and Monash Journal, as well as being interviewed by Bernie Finn on 3AK in the afternoon. The Herald Sun article, as can be viewed on page four, was featured in the major news section (page 16) on Monday the 13th of October, while the Monash Journal article appeared on page 5 the following Monday.

As we continue to gear up to the event in December, we are pleased to announce that the SAE has organised for the official Formula SAE Competition launch to be held at Federation Square on Thursday the 20th of November between 9-10am. All are welcome to attend the event on what will hopefully be a bright sunny Melbourne morning. We look forward to seeing you there.



Track Testing







Looking sharp and nimble the new car roared into life at MotorCycle Motion on the 7th of October. Featuring notably improved throttle response the car had no major teething problems and felt like a good baseline from which to work from.

Further testing of the car at MotorCycle Motion and Calder Park has verified this initial feeling with the car handling extremely well. On an even more positive note the car has been very reliable. No failures of parts intended for the race specification car have occurred. In this regard the only failures have come from a broken gear shifter and driveshaft, the latter problem now fixed with the introduction of our race spec shafts, expertly manufactured by Modena Engineering. Not withstanding these (expected?!) failures, the car has completed a total of five trouble free endurance runs.

Having now established an excellent underlying chassis balance, the attention will now turn to attaching the wings to the car. Using an in-house lap simulation these are expected to generate improved lap times of 3.5 seconds per lap over a 60 second lap using a track identical to the one raced at the US competition in May.

Further chassis tuning will then be undertaken, utilising in depth the MoTeC data logger. Values to be gathered include tyre temperature, wheel position (thanks to the Honeywell Linear potentiometers) and wheel speed.





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Car Launch

Polished and buffed to a mirror shine the 2003 car stood out from the crowd at the official car launch. Set amidst the exotic offerings of Ferrari, Porsche, Lamborghini, etc. the Dutton Sporting Cars Showroom in Richmond presented the ideal venue.

The event provided a great opportunity for the team to thank our extensive band of loyal supporters. Sponsors, family, friends and a few rivals from other teams were given an insight in to what the team have been up to on all those late nights. Beer, champagne and finger food were also on offer to sweeten the deal.

The night began with the car under wraps but with plenty of automotive excellence to admire and dream about. As the crowd built up all team members were on hand to discuss the car and to thank the respective families for their patience and assistance over the year. Then, finally, a presentation and video outlining the car and the teams progress throughout the year was given prior to the official unveiling and a team photo.

A special thank you to those who it made it to the event to share our excitement and relief at finally having built the beast. We look forward to sharing any future successes with you. Thankyou also to Dutton for allowing us the use of your wonderful venue.

For more details of the night, visit the website at www-personal.monash.edu.au/~fsae.









Herald Sun Article

16 www.heraldsun.com.au Herald Sun, Monday, October 13, 2003 Students crack formula for speed

WATCH out McLaren, Ferrari and Williams — there is a new racing team in town.

team in town.

Twenty engineering students from Monash University have designed and built a 600cc car.

The students spent up to 100 hours a week over the past year to build it and raised \$40,000 to do so.

They are heading to Adelaide in December to test the car against other university competitors in the Formula SAE 2003.

Team leader Allstair

Team leader Alistair McVean, 22, said the stu-dents were confident of a victory.

a victory.

"The car can go from zero to 100km/h in 34/seconds," he said.

"We are hoping to win because we are the only team that uses wings, and they are a significant advantage."

There is always a tus-

There is always a tus-sle in deciding who will drive it on the big day.

"We time test every-one to see which student is the quickest," said Mr McVcan, a final year en-gineering and com-merce student.

"But I may pull rank this year."

The team also hopes to take on the world in May next year at a com-petition in Detroit, US.



Sponsor Feature - Gear Cutting & Manufacturing





Gear Cutting & Manufacturing are specialists in the supply of custom and off-the-shelf power transmission products for manufacturers, service technicians and individuals involved in Agriculture, Earthmoving, Food production, Materials Handling, Mining, & of course Automotive (including vintage, veteran, racing and Accredited to ISO 9001, Gear Cutting & Manufacturing also provide a custom gear-cut service for any blanks, in both metric and imperial sizes.

As evidence of this ability Gear Cutting & Manufacturing have custom gear cut (with a very short turn around time) our steering rack and pinion, along with the internal splines of our hubs. Furthermore they are producing a range of custom drive sprockets to allow the team to quickly and easily adjust the final drive ratio of the car at the track.

The team thank Bill and his staff at Gear Cutting & Manufacturing for their tremendous assistance with parts production this years car.