

Rotary Racer

2007 into 2008



**Dan
Gareth**



**James
Alex**



Dan

2007 Rotary Racer



Airbus, Kit Car Capers

- The First outing in 2007 was at Airbus for some sprint races.



Airbus, Kit Car Capers

- Due to time constraints there were not many drivers left to receive the second place award.



Castle Combe

- Early start, not a bad morning



Castle Combe

- Nervous faces going to the scrutineers



Castle Combe

- We only raced twice in endurance events last year. The first race was at Castle Combe. A memorable day, a first race for some,
-
Scrutinising



Castle Combe

- The weather did turn little wet, but the repairs still got done!



Castle Combe

- The pit stop
- *How nice were the comments we received regarding the lads working well together!*



Castle Combe

- 3rd Place overall & winners on the South Gloucestershire cup



The Goodwood Final 2007

- The Final was held at Goodwood Park in October.
- We won the Scalextric award for best pit stop



2007 Sponsorship

- We were very fortunate to be sponsored with materials by the following companies;-
- Durbin Metals
- BLD
- CTEK
- Boat Coat



Design & Build a New Car

- Cutting the board in strips
- Applying the glue



Forming the body

- Cutting the basic shapes
- The basic body shape of the car (after sanding etc)



Detailing

- Adding the details such as wheels & roll bar



In the Wind Tunnel

- Mounting the models in the wind tunnel (upside down you may notice)
- Making sure the tunnel is clear of debris



In the Wind Tunnel

- The model we decided to try & reproduce
- All the lads in the wind tunnel



2008

- In 2008 we had a new addition to the team
- Ben



Jobs required for producing the new car

- Cutting & turning tubes to the correct length for assembly
- Design & make prototype circuit boards



Jobs required for producing the new car

- Manufacture various components for the car such as wheel spacers
- Assemble the chassis



Jobs required for producing the new car

- Assemble & fit the steering
- Assemble & solder the electronics



5 weeks until the Season Opener & still lots to do!

- More advanced assembly
- ‘Sculpting’ a nose cone



“*A little overtime* was required!”

- Further assembly



Steering test

- Crash test dummies..... No Test pilots!



“*A little overtime* was required!”

- Fitting body work
(using 1.5mm
plywood & Boatcoat)



- Shrinking Boatcoat



Electronics testing

- Motor & electronics testing
- 'Dashboard' display panel



Almost there!

- Ready for a quick test
- The last night at the school before the opening race



“Just *little more overtime* was required!”

- The finished car!



Team Photo at Goodwood 2008



Race shots from Goodwood

- Coming successfully out of the chicane.
- Completing the 4 hour race with a distance of 98.4 miles



Testing @ Kemble Airfield on 10th June 2008

Tests completed

2. Car in current form. Same as Goodwood but with lowered roll-bar without foam and airfoils on front axle
4. Try rounded nose cone.
6. Try Screen
8. Try filling around driver
10. Try filling in behind driver
12. Try rollbar airfoils



Trialing the improvement ideas

- Filling in around the driver
- And with the wind screen fitted



.....and a couple more!

- Filling in behind the driver
- Filling removed and airfoils added to the roll bar



Improvements from the testing completed ready for Castle Combe

1. A screen (shape to shed air to side rather than upwards) was added.
2. Long Airfoils were added to the rollbar
3. The bottom of the car was covered with Boat Coat
4. Airfoils were added to the rear axle and front axle heads.



Castle Combe South West Regional Heat 23rd June 2008

- Rotary Racer pulling away at the start.
- Excellent teamwork on the pit stops again, with a record driver & battery change in 31 seconds!!!!!!!



Supporting the Team!

- Team Banner on the homeward bound embankment.
- After the race smiles all round!



Winners all round!

- The school won a joint award for the Best Presented Teams
- Rotary Racer won the overall race, combined with the Renishaw cup with 57 Laps or 105.45 miles



Team photo with the Trophy's

Names

Top left to right (Dads & Teacher)

- Andy, Ian, Martin, Brendon (Teacher), Gary, Kevan & Terry

Bottom left to right

- Dan, Dan, Alex, James, Gareth & Ben



Team member Changes

- After the Castle Combe race Alex left the team to pursue his other passion, Golf
- In September 2008 Thomas joined the school & the team



Improving the Aerodynamics

- We wanted to put the motor inside of the car, this meant cutting & drilling holes in the base & side panels



Improving the Aerodynamics

- As the motor had been moved we had to alter the chain length & make a new chain guard.



Dunsfold

- The hard work paid off, the car passed scrutineering and we won the race with 99.8 miles!



Raising the bonnet!

- Dunsfold race was on 28/09/08, after the school holidays!
- When some of the team finished their driving stint they complained that they no longer had enough room for their legs.
- Apparently cutting them off was not an option 😊



Fitting a new bonnet

- We cut & formed a new clear bonnet & painted the inside. It gave approximately 100mm extra height for the lads legs
- We added the team & driver names & were ready for the final.



The night before the 2008 Goodwood final

- We camped at the Goodwood race course where the hog roast was held.
- It was a good opportunity for the adults to talk tactics



Before the race

- The motor speed controller worked perfectly during the practice laps & allowed us to up the gearing.
- Before the race we had a photo session with RPod's



Looking Good

- The team looked excellent in the parade before the race, a credit to the school.
- Excellent driving all round



What a result !

- The all round driving skills & excellent team work during pit stops paid off when Rotary Racer came home in second place with 112.8 miles!
- It was a little dark for photos after!



All in All a Very Successful Year

