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.



Early start, not a bad morning



 Nervous faces going to the scrutineers



 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



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



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



 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

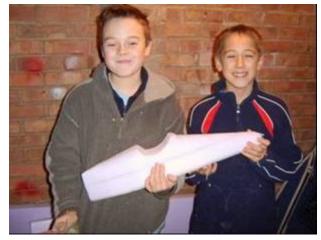
Applying the glue



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

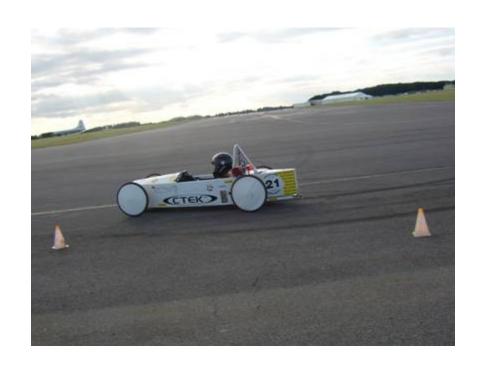




Testing @ Kemble Airfield on 10th June 2008

Tests completed

- Car in current form. Same as Goodwood but with lowered rollbar 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
- 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

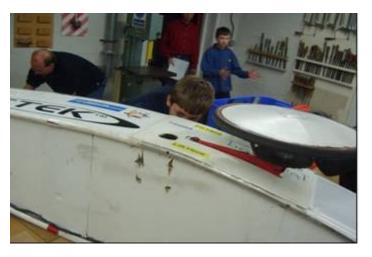


In September 2008
 Thomas joined the school & the team



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





