## 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,



 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!



 3<sup>rd</sup> 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

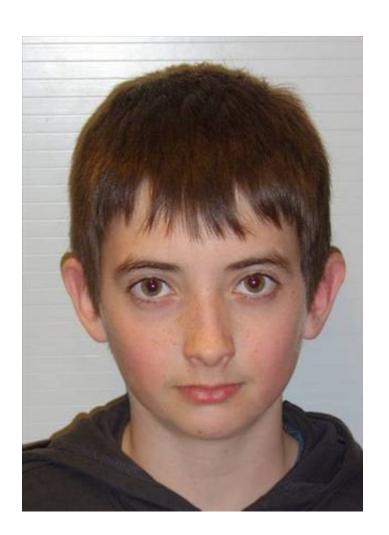




### 2008

 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

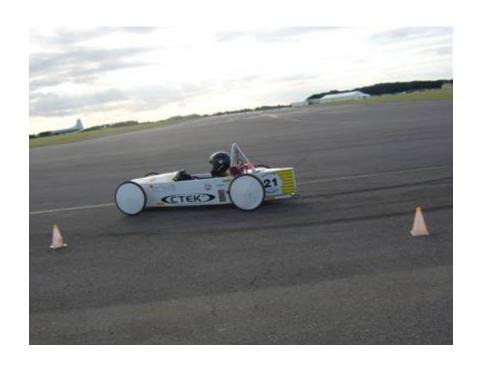




## Testing @ Kemble Airfield on 10<sup>th</sup> June 2008

#### 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
- 4. Airfoils were added to the rear axle and front axle heads.



# Castle Combe South West Regional Heat 23<sup>rd</sup> 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

