



SUMMER 2011

Welcome to the Summer Term edition of the BLOODHOUND SSC Education Update 2011. As per last term, the team have been extremely busy and the project is progressing with the build phase.

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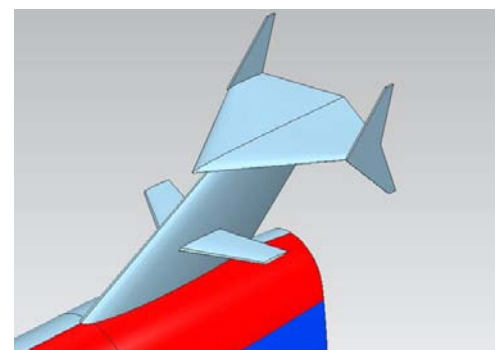
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BLOODHOUND SSC progress:

BLOODHOUND SSC's stability solved

As always seems to be the case with projects of this complexity, solving one thing just gives you other "challenges". The "[holy grail](#)" [shape of Config 10](#), together with detailed analysis of weights and centres of gravity and pressure, gave us a Car with acceptable lift ... and the designers have recently changed their design targets to make the Car even more stable through the crucial mid-speed range.

The centre of pressure can be moved aft by some clever fin design, and the team have been doing just that. This picture is the result of the first round of theoretical designs - it achieves the design objectives, but is totally impractical to build!

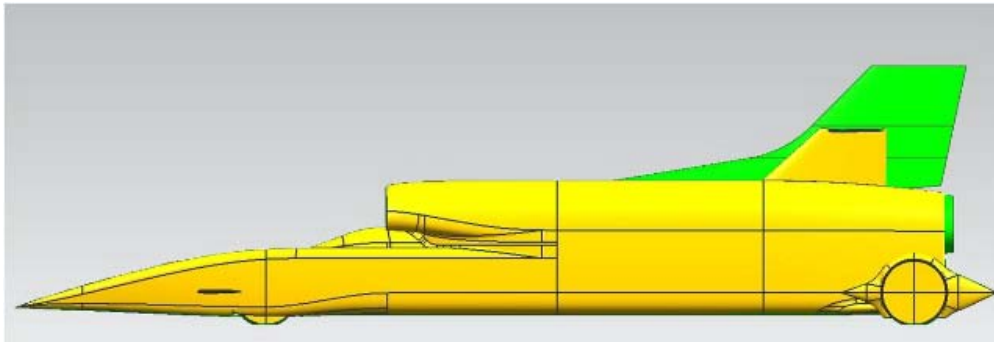




However, it's an interesting picture for the history books!

It looks like the team have now settled on a fin much larger than the one we're used to, and built on a dorsal strake similar to an F16 fighter. Although bigger, designer Chris Hannon tells us it has less drag as it is proportionately thinner. The good news is that there is now plenty more room for names, so make sure you've included all your school on this piece of history! ...

The diagram below shows just how much bigger the new fin (in green) is compared to the existing design (in yellow)!



High speed models!

The BLOODHOUND Challenge for the fastest model car powered by miniature CO₂ gas bottles was held at the Goodwood Festival of Speed over the weekend. The winner of the STP £1,000 prize for the fastest time was Wilmington Boys Grammar School Kent.....!!

Also on the model front, congratulations go to the Joseph Leckie Community Technical College in Walsall for a new official Guinness World Record for model rocket cars - a magnificent 88.89 mph. Read about the day [here](#). Not content with this, they are determined to achieve 100mph before the end of term. Good Luck to them from the Bloodhound Team! Tell us if you would like to compete for the title of the World's fastest model rocket car and we will organise the competition and provide some technical expertise.





South Africa

The Team would like to know if any of you have established links with schools in South Africa. If you have, are you discussing BLOODHOUND?

Is this something that might be of interest to you as we now have schools registered in many areas of South Africa?



Please let me know if you would like to develop links with schools in South Africa, I can't guarantee that they will be near the track in Hakskeen Pan, but they will be schools willing to develop links with the UK. Remember the high speed runs are due to take place in the Northern Cape in 2013.

Primary Engineer STEM Leaders Award

Meet and Interview Wing Commander Andy Green Competition!



The World Land Speed Record Holder!

The winners of the meet and Interview Wing Commander Andy Green Competition are as follows:

Advanced – Alcester Grammar School, Warwickshire

Secondary – Tupton School, Sheffield

Primary – Joy Lane Primary School, Whitstable, Kent

The winning schools will have the opportunity to interview **Wing Commander Andy Green** a Royal Air Force pilot and **World Land Speed Record holder!** He is also the first person **ever** to break the sound barrier on land! Andy reached 763.035 mph (1227.99 km/h), the first supersonic record (Mach 1.016) in 1997. Andy is part of the the BLOODHOUND SSC development team and will drive the BLOODHOUND SSC car in an attempt to take the World Record to 1,000 mph.

Primary Engineer

The Primary Engineer interactive white board resource is now available free to any primary school through a local Institution of Mechanical Engineering (IMechE) member. If you would like to receive this excellent curriculum resource that contains over 120 flip chart pages of science, maths and technology materials aimed at key stage 2, please contact Christine James at Primary Engineer – christine.james@primaryengineer.com phone +44 (0) 161 205 7507

Promethean



Promethean supported - **Professional Development at ICTMT10**

The 10th International Conference on Technology in Mathematics Teaching (ICTMT10) ran July 5–8, 2011, at the University of Portsmouth, England. It featured a professional development day for secondary and FE mathematics teachers, supported by Promethean and featured Bloodhound materials.

More information can be found [here](#).

You can also access Promethean's BLOODHOUND SSC materials [here](#).

Bang Goes The Theory

In case you missed it the first time, BLOODHOUND SSC was featured in "Bang Goes The Theory" broadcast on BBC1 (England) at 7:30 28th March. More info on BBC iPlayer on their website. <http://www.bbc.co.uk/programmes/b00zx8j5#clips>

Feedback

BLOODHOUND Ambassador and ex teacher Chris Henley feeds back on his day at St John's School, Trowbridge [here](#).

EESW

The Engineering Education Scheme in Wales (EESW) offers a range of activities to encourage pupils to take an interest in engineering. European funding has helped EESW to extend its activities and to engage more pupils. Every year EESW holds a major celebration event at the Celtic Manor Hotel (?) in South Wales and for the past two years they have featured the Bloodhound SSC project. This year the show car and Bloodhound driving experience were a major feature and the keynote speaker was been Wing Commander Andy Green. The project has generated a great deal of interest from the pupils, students and guests and Andy Green's presentations have been inspirational.

Andy also announced the opening of the Welsh Bloodhound Education Centre at Waterton in Bridgend (01656669381 admin@eesw.org.uk). Next year the event will take place on April 11th and Bloodhound will be featured once again. The centre is managed by EESW and the local contact is Clare Wood.



Announcements

3D Drawings

Don't forget that you can now download design drawings for 1,000mph Car - 3D imagery captures 30 man-years of design effort

The downloadable 3D design drawings, that make up the car's genetics, are the result of an incredible 30 man-years of cutting-edge research and world-beating design work. Comprised of 4,000 individually-designed components, you can deconstruct the CAD model layer by layer, rotate on all axes and zoom in and out, using professional engineering software from Siemens. Visit the BLOODHOUND website for links to download -

http://www.bloodhoundssc.com/car/facts_and_figures/cad_drawings.cfm

The 2011 WISE Annual Awards - 19 October 2011

The [WISE Annual Awards](#) are given in recognition of companies and individuals who have actively addressed the issue of promoting science, engineering and construction to girls and young women, so supporting the aims of WISE.

The Award ceremony will held on the **19th October 2011** at The [Institute of Engineering and Technology](#), London. **Her Royal Highness the Princess Royal** will present the awards to the successful candidates.

The [WISE Excellence Award](#) is open to women who are in the early stages of their career, scientists, engineers and those working in construction. She must have demonstrated a high level of commitment to her chosen profession and to the promotion of science, engineering and construction to girls and young



women. The winner will receive a cheque for £1,000 and an engraved plaque.

The [WISE Champion Award](#) is open to schools, industry, universities, colleges, charities and professional bodies who have taken steps to actively address the WISE mission to encourage girls and young women in to STEM education and related careers. The winner will receive an engraved plaque.

The [WISE Advisor Award](#) is open to career advisors, teachers, ambassadors, mentors and educators who have motivated and enthused girls and young women to pursue STEM related subjects. The winner will receive an engraved plaque.

Deadline for [nominations](#) is 5pm Friday 16th September 2011

For any further information, to nominate or to sponsor the WISE Awards 2011, please [visit the WISE website](#) or call 01422 302666

Careers

For more information about careers from STEM qualifications, please visit the careers tab on our website [here](#).

BLOODHOUND TV

The first two episodes of Cisco BHTV are out now; watch the first pieces of the chassis being manufactured and the Joseph Leckie Community Technical College rocket car record.

Many more episodes to follow as the car takes shape.

You will need your registered password to access it www.bloodhoundssc.com/ciscobhtv/forschools

Goodwood Festival of Speed Challenge

Best times at the Goodwood Festival of Speed F1 in Schools BLOODHOUND SSC Challenge are:

Reaction Time	Total Time	Name	Total Time Rank	Total Reaction Time Rank
0.180	0.770	Neil Winter	1	22
0.184	0.790	Ben Lawson	3	26
0.170	0.803	Peter Pitman	4	11
0.172	0.824	Tom Corbett	11	17
0.170	0.843	Bernard	16	14

Permissions

If you would like BLOODHOUND STEM enhancement & enrichment partners contacting you directly, please can you



let me know if you give your permission for me to pass on your contact details? Email your reply to <mailto:dawn.fitt@bloodhoundssc.com?subject=BLOODHOUNDSSC-%20Partner%20Permission%20Granted> – no response is a default 'not allowed to pass on contact details'.

The BLOODHOUND Education Team would also like to be able to match BLOODHOUND Ambassadors to your schools. If you would like a BLOODHOUND Ambassador to get in touch with you directly, please can I have your permission to pass on your contact details? Email your reply to <mailto:dawn.fitt@bloodhoundssc.com?subject=BLOODHOUNDSSC-%20Ambassador%20Permission%20Granted> – no response is a default 'not allowed to pass on contact details'.



Future Events

Coventry Transport Museum Land Speed Record Weekend - 23rd to 24th July

Bristol Harbour Festival – 30th to 31st July (Doors to the Bloodhound Technical Centre will be open)

British Science Festival – Bradford University 10th to 15th September

National Science & Engineering Week – 9th to 18th March 2012

The National Big Bang Fair – Birmingham NEC 15th to 17th March 2012