

Keyword: Formula Student

Inventors to keep bullet car grounded

INVENTORS at a North university are working on plans for a car capable of reaching 1,000mph. Given traffic-free roads, such a vehicle would be able to travel from Newcastle to London in 20 minutes.

Professor Dave Crolla, an automotive expert at Sunderland University, is part of the team on the Bloodhound Super Sonic Car (SCC) Project to create the worlds fastest car.

The team is designing a car powered by a Eurofighter-Typhoon jet engine and hybrid rocket that will be capable of about 1,050mph twice the speed of a bullet fired from a handgun.

The car is being developed and built with the intention of blowing away the land speed record of 763mph, set in 1997.

Construction of the Bloodhound SSC should be completed by the end of next year.

Prof Crolla, who is a Fellow of the Royal Academy of Engineering, has been involved in the analysis of the vehicle dynamics, stability and control using mathematical modelling at the advanced labs at the university.

He said: Sunderland is recognised as one of the UKs leading universities for automotive engineering for its work on advanced manufacturing with Nissan and research into hybrid electric and low carbon vehicles.

It is now involved in what Science Minister Lord Drayson has described as a great British engineering adventure. One of the most challenging aspects of this ambitious project is to keep the vehicle stable and in contact safely with the ground at speeds of up to 1,000mph.

Were using the latest prediction techniques to ensure safe vehicle stability in the supersonic region. Only one vehicle that we worked on the ThrustSSC has ever achieved safety at supersonic speeds.

A key element to the project is to excite and motivate the next generation of UK engineers and technologists through schools, colleges and universities.

Prof Crolla said: I hope our students in Sunderland will be able to follow this

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engineering programme and contribute to it.

They certainly have the talent, as projects such as Formula Student race car designs show. The professor is a renowned expert in vehicle dynamics and control, and was involved in the stability behaviour of the current land speed record car ThrustSSC.

It holds the World Land Speed Record, set on October 15, 1997, when it achieved 763mph and became the first land vehicle officially to break the sound barrier.

The car was driven by Royal Air Force fighter pilot Squadron Leader Andy Green in the Black Rock Desert in Nevada, United States.

<http://www.journallive.co.uk/north-east-news/todays-news/2008/11/11/inventors-to-keep-bullet-car-g>