



The pioneering Bloodhound SSC is attempting to set a new land speed record and, as **Edward Murray** finds out, the firms insuring the project have also been required to set new benchmarks in the management of risk



# PUSHING THE BOUNDARIES

There is a car under construction – Bloodhound SSC – that, travelling as the crow flies, could get from Land’s End to John O’Groats in less than 37 minutes. It will literally scorch its way across the earth, moving faster than a bullet fired from a .357 Magnum and, in trying to break the world land speed record, there is good deal more to its insurance programme than third party, fire and theft. Currently, the programme comprises policies for public liability (PL) and employers’ liability (EL). Arch Insurance Europe is the lead on the PL policy, with Kiln also carrying some of the risk. The EL cover is held with RSA, while Griffiths & Armour Insurance Brokers have been responsible for placing the policies. The Bloodhound project is currently in its engineering and UK testing phases with a transit to South Africa still to come. Once in South Africa, where the record attempts will take place, there will be in situ testing and trial run phases to complete, before trying to break the existing record in 2013 and pushing on to attempt the 1,000mph landmark in 2014.

**Evolving cover**  
Given the physical and technical demands of each phase, the insurance cover required will evolve significantly during the coming months, while the unique nature of the venture has certainly given underwriters food for thought. Gareth Hilton, RSA’s regional director for the north of England, comments: “The Bloodhound project is an incredibly exciting programme that appealed to us from the outset. We are providing EL cover for the engineering aspect of the programme, covering those involved in the design, assembly and sub-system testing. Cover also extends to the various educational roadshows and presentations the team is making up and down the country in the lead-up to the land speed record attempt.” Clearly this was not an everyday risk and Mr Hilton adds: “With something of this magnitude, undoubtedly our biggest challenge was getting under the skin of the project to ensure we truly understood the risk. We did this by working closely with brokers Griffiths & Armour and by meeting the team behind the project.” John Spenceley, vice president at Arch, also found himself pondering over just how to go about underwriting the risk and says: “When the risk was first presented to me, the unique and pioneering nature of the Bloodhound project

fired my imagination, but it also presented the problem of how the risk could be accurately assessed, quantified and underwritten.” Mr Spenceley says there were a number of key concerns, including:  
• Injury to third party spectators during the testing trials and, ultimately, the main speed record attempt;  
• Damage to third party premises used in the engine testing process, which in this case included airfields;  
• Injury to third party sub-contractors;  
• Damage to equipment in their care, custody and control, particularly while at third party premises.  
However, as he explains: “Once I got closer to the project and saw the detail and precision of the planning, it became clear just how well each individual risk had been identified and how much effort was going into managing and mitigating them effectively.” In particular, Mr Spenceley says he was ultimately able to accept and underwrite the risk because of the past experience of those involved – driver Andy Green is the current record holder and project director Richard Noble held the record before him. The team could offer detailed explanations of everything from the safety protocols in relation

to the unique fuel propellant being used, to detailed plans of the various test locations and the potential proximity to aircraft. The UK’s Health and Safety Executive has also been heavily involved from the early planning stages, giving further confidence to Mr Spenceley.  
**Breaking new ground**  
Bloodhound has been so successful in securing support from the insurance market because of the precise nature of its risk management programme and its insistence on identifying and managing every individual strand of risk in a hugely proactive way. As Mr Green, the man behind the steering wheel, comments: “We are continually breaking new ground with Bloodhound SSC. Throughout the design, development, build and running of the car we are identifying, managing and minimising the risks. We are deploying the very latest technology combined with established safety protocols. This makes us both the fastest and most insurable world land speed record attempt ever and we are lucky to have great insurance partners to share the adventure.” By way of example, the risk management strategy for the firing of the rocket that will help power the car – detailed in the box alongside – was not groundbreaking in itself, but where it

really set the standard for others to follow is in the way it dealt methodically and painstakingly with every conceivable aspect of the risk. What, perhaps, is most exciting about the Bloodhound project is not the speed, the glamour or even the cutting edge technology involved, but its desire to showcase best practice and engage with everyone from school children to multi-national corporations. It has sought to celebrate what science and engineering can achieve and very publicly demonstrate that even the most extraordinary risks can be identified and managed through ordinary risk management strategies. These risks cannot be eliminated, but they can be brought within the bounds of reason and this is a lesson that Adam Piper, associate director at Griffiths & Armour, hopes can be taken on by the wider commercial market. He says: “I think there are a lot of read-across lessons from this project to businesses in every sector about managing risks with real military precision. By getting the underwriters close to those involved and showing them how well risk is managed, we have been able to show just how insurable this venture is. Just think what sort of impact businesses could have on their own risks if they took the same approach to identifying and managing them at every conceivable level.”

## FIVE STEPS TO SUCCESS

The project adopted a traditional model for continuous risk improvement for the successful rocket firing, following five simple steps:

- 1. Partner with risk specialists:** The Bloodhound SSC team works closely with the Health and Safety Executive. Its advice, guidance and availability as a professional sounding board have been invaluable to the project. Griffiths & Armour were involved from the initial assessment to ensure the cover provided matched the risk profile.
- 2. Identify, analyse and quantify the risks:** Meetings were held with the whole project team to identify risks to the rocket firing.
- 3. Define best solutions and confirm ownership of risks:** At the firing, every member of the team was informed of their roles and responsibility in terms of the safety considerations for the day. Everyone was empowered to make decisions.
- 4. Mitigate and manage risk through small teams:** Given the potential gravity of not managing the risks there is a clear focus on teaching all the team to truly own the risk. Each team managed its own element of the risk process.
- 5. Continuously review and monitor:** The Bloodhound project is about carefully managed steps towards an ultimate objective. If the numbers match the car will go faster; if the numbers deviate no increase in speed will occur until the implications are fully understood.



BH ROCKET TEST, STEFAN MARJORAM