

Chase for 1,000mph shifts to UAE

Charlie Hamilton



An illustration of the Aussie Invader, a high speed car, which may race across the mudflats of the UAE. Courtesy Aussie Invader

Almost as difficult as building a rocket car capable of tearing through the sound barrier at more than 1,000mph (1,609.34kph) is finding a place to race it.

The ground must be flat, smooth and spacious enough to allow the driver room to throttle up to the landmark speed and, more importantly, slow down.

Rosco McGlashan, an Australian who with his team of designers and engineers is part-way through construction of a 1,000mph car, hopes his search for a track may have ended in the UAE.

Mr McGlashan, 57, hopes to bring his rocket-powered vehicle, Aussie Invader 5R, to the UAE and has suggested a supersonic showdown with two other teams vying to set a land-speed world record.

His car is meant to smash through the current record of 763mph (1,227.99kph), which has stood since 1997, and reach speeds of around 1,015mph.

He has thrown down the gauntlet to the other record challengers, the British team, Bloodhound SSC, and the joint US-Canadian group, North American Eagle. He wants them to come to the UAE and make their world-record bids simultaneously to his.

The Australian team has been travelling the world looking for a suitable venue to make the record bid and has found a 27km-long site on mudflats outside Al Ain.

Mr McGlashan hopes to travel to the UAE in the coming months to meet officials and visit the site.

“The UAE would be a great venue to race the car because it has reliably dry weather and clear, flat open spaces,” said Mr McGlashan, who already holds the title of “Fastest Aussie on Earth” since he reached 500mph in 1995 in an earlier rocket car, Aussie Invader II.

More than A\$800,000 (Dh2.6 million) already has been spent constructing the fuselage of the new car, but this is still short of the \$4.5m cost of a completed project.

“We are still on the lookout for sponsors,” Mr McGlashan said. “At the moment, we are about one-third of the way through the project.

“We are very keen to come over to the UAE and hold a proper conference to launch the concept in the UAE,” said the former mechanic who lives in Mullaloo, a suburb of Perth in Western Australia.

The car is powered by four rocket engines, which each provide 15,500 pounds (7,030kg) of thrust allowing the vehicle to accelerate from zero to 1,000mph in 20 seconds.

Mr McGlashan will experience more than three Gs of acceleration from the standing start. When at peak speed, he will cover a mile in less than four seconds.

After speeding through the test distance, the rockets must be shut down sequentially, because if they were stopped simultaneously the deceleration would top 15 Gs, putting too much strain on the driver’s heart, causing him to black out.

The car will cover 10 miles (16km) before it comes to a halt.



The workshop of the Aussie Invader a high speed car a team from Australia want to race across the mud flats of the UAE. Courtesy Aussie Invader

The engineers will refill the rocket’s tanks with 500 litres of JP5 biofuel and 2.5 tonnes of the oxidising agent, high-test peroxide.

The car will then have to be turned 180 degrees before completing a second pass across the

track to comply with the conditions of the race. The standing land-speed record was set on October 15, 1997, by former RAF fighter pilot Andy Green in a car called Thrust SSC at Black Rock Desert, Nevada, in the United States.

Mark Read, a technical manager for the Aussie Invader 5R, said extreme speeds generate “phenomenal forces” on a land vehicle.

“When you come up to and break through the speed of sound you go through a shock wave. There is a vast amount of buffeting,” he said.

He said that examination of the tracks left by Thrust SSC when it broke the sound barrier in 1997 showed ground that was “completely churned”. They had expected to find a channel left by the wheels.

Aircraft dissipate force in all directions when breaking the sound barrier, Mr Read said. “Here they are driven back down into the ground and bounced back up to the car.”

No land craft has previously travelled within 200mph of Mr McGlashan’s goal of 1,000mph, so much of the science involved is breaking new ground.

“We are trying things and doing things that have never been done before,” Mr Read said. “Some of the science is really cutting-edge.”

The plan is to have the car make dozens of runs over the UAE course in a year, building speed while engineers monitor the vehicle.

Safety is a top priority, but it is impossible to eliminate all risks.

“Obviously, it is dangerous,” Mr Read said. “You can put all the safety factors in that you want but it is still inherently risky.”

Mr McGlashan is keen to get behind the wheel, despite the danger.

“It has been my life’s ambition to set this world record,” he said. “I have been focused on it for as long as I can remember. It is all I have ever done.

“This is my way of earning a place in the history books.”

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