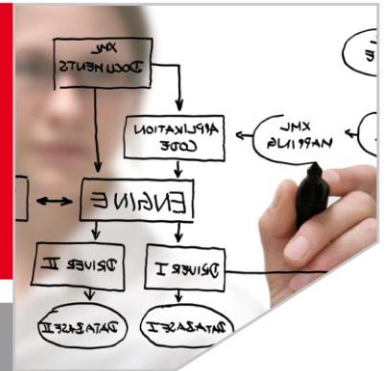


# Engineering the World's Fastest Car –The Aussie Invader 5R

## Speakers:

Rosco McGlashan OAM, Professional Jet and Rocket Car Driver  
Ben Parry, Chief Engineer

Mechanical Branch Engineers Australia WA, the Institution of Mechanical Engineers and the American Society of Mechanical Engineers



## EVENT DETAILS

### Date:

Wednesday, 25 July 2012

### Time:

5.30 pm for a 6.00 pm start

### Venue:

Auditorium  
Engineers Australia  
712 Murray Street  
West Perth

### Cost:

Free

### RSVP:

Essential and by COB 20  
July 2012  
<https://engineersaustralia.wufoo.com/forms/z6r4m3/>



The Land Speed Record (LSR) is currently held by the English at 763mph. Local legend Rosco McGlashan and his dedicated team are currently building a rocket propelled car capable of attaining 1000mph, and in the process, bring the LSR to Australia. The engineering challenges which need to be overcome are formidable. For example, the approximately 10 tonne Aussie Invader needs to be accelerated to supersonic speed and brought back to rest in one piece in the space of 12km. To achieve this speed, the 150 000kW rocket motor must consume 800kg of kerosene and approximately 2 tonne of liquid oxygen in 25 seconds. As you can appreciate, the aerodynamic loads on the chassis and the inertial loads on the 900mm diameter solid wheels in particular are immense. The local boys believe that they have the winning design.

Rosco will give a 10 minute historical overview of significant LSR cars from Craig Breedlove's Spirit of America in the 1960's to Richard Noble's current contender-Bloodhound SSC. Rosco will conclude his overview by introducing the key elements of the Aussie Invader 5R.

Ben, will elaborate on the engineering demands posed by the Aussie Invader as the car needs to withstand extreme stresses and accelerations at supersonic speed. Engineering discussion will focus on wheel design, bearings, lubrication, brakes, engine mounts and control systems. Make the most of this fantastic opportunity to learn about one of the world's most extreme engineering endeavours.

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## ABOUT THE SPEAKERS

**Rosco McGlashan OAM** is Australia's fastest man on land with a two way average of a little over 500mph. Rosco is a professional jet and rocket car driver who has dedicated over 40 years of his life to be the fastest man on earth.

**Ben Parry** is a Senior Engineer who is no stranger to speed or engineering challenges. Ben has a background in automotive engineering with specialised knowledge of engine design and development. In addition, Ben has considerable experience with high performance motorcycle and car design gained at Lotus and Triumph Motorcycles along with time spent developing high volume production cars like the Ford Focus and Mondeo.

