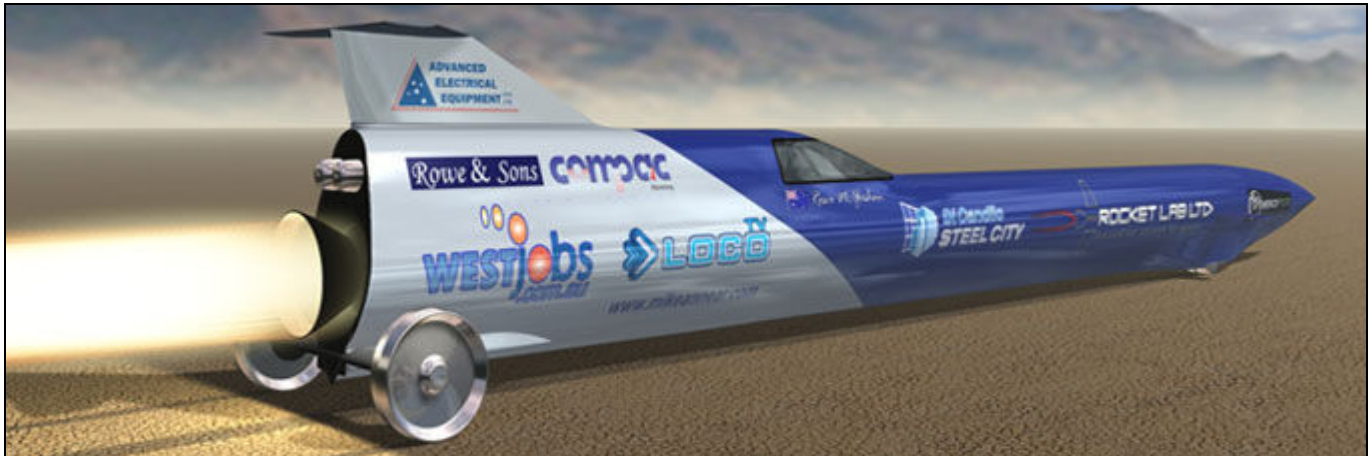




Support the sponsors who support us - visit [http://www.aussieinvader.com/the\\_sponsors.php](http://www.aussieinvader.com/the_sponsors.php)



### April 2011 - Newsletter

Hi to all our newsletter recipients, sponsors, supporters and fans. March has blasted by in the blink of an eye and here I am trying to put pen to paper to recall all that has been achieved over this past month.

As you would have seen in our last newsletter Aussie Invader has been stripped, inverted in readiness for her underside to be sheeted with 80 thou T3 Aluminium panels.



Aussie Invader 5R turned over before major work started

Boy what a job so far, hundreds of angle fastening brackets fitted and around 1000 holes professionally drilled. These panels have been expertly rolled by our great mates at **Rowe and Sons in Maddington**, WA and fit perfectly to our cars underbelly. Team boss Pete Taylor, Chris Demunck and myself have been busy preparing these panels for fitment, with some continued support from Dave Flynn at **Fielders** who formed and supplied our side attaching rails.





Support the sponsors who support us - visit [http://www.aussieinvader.com/the\\_sponsors.php](http://www.aussieinvader.com/the_sponsors.php)



<http://www.sika.com.au/>

Thanks also go to Jason Bates at Sika Australia for the supply of our specialist gluing product and our great team member Alex Mesics who welded our attaching rails in place. Alex also updates our Facebook page, a great step forward, thank you all very much. Virtually all team members' multi-task (yes ladies, men can do it too!).



Thank you also to Martin Heffer and the crew at Infastech for the donation of their great fastening products and tooling. **Top quality product for a ground breaking car.**

We are now waiting on some final CFD predictions being run by Curtin University for our nose and front underbelly frame design. This is a critical area of our cars aerodynamic performance, as airflow must be directed around our front wheels and then blend back into our "V" underbelly as efficiently as possible. This work is well underway and we should have our results within weeks.



Underbelly after hundreds of fastening bracket installed... a lot of work

Building a car like this has a huge amount of obstacles to overcome, even though we firmly believe that Aussie Invader 5R is the best ever concept for a Land Speed Record car and the idea of building her around a 36" (915 mm) steel central mainframe (tube) is a unique and brilliant idea (we are biased), there are still lots of engineering hurdles to overcome.

For example, the mainframe was made from a flat piece of 12mm steel and although it has been expertly rolled, it is almost impossible when rolling and bending 12mm thick steel to a tight circumference to make it perfectly round. We have a series of 8 flat spots the length of the tube, created by the forming mill rollers. These flat spots are about 3 mm lower than the peaks on the tube. This would be quite workable if these flat spots were concentric to each other (opposing flat spots lined up on each side) but they do not, so things like the top hat section and "V" underbelly

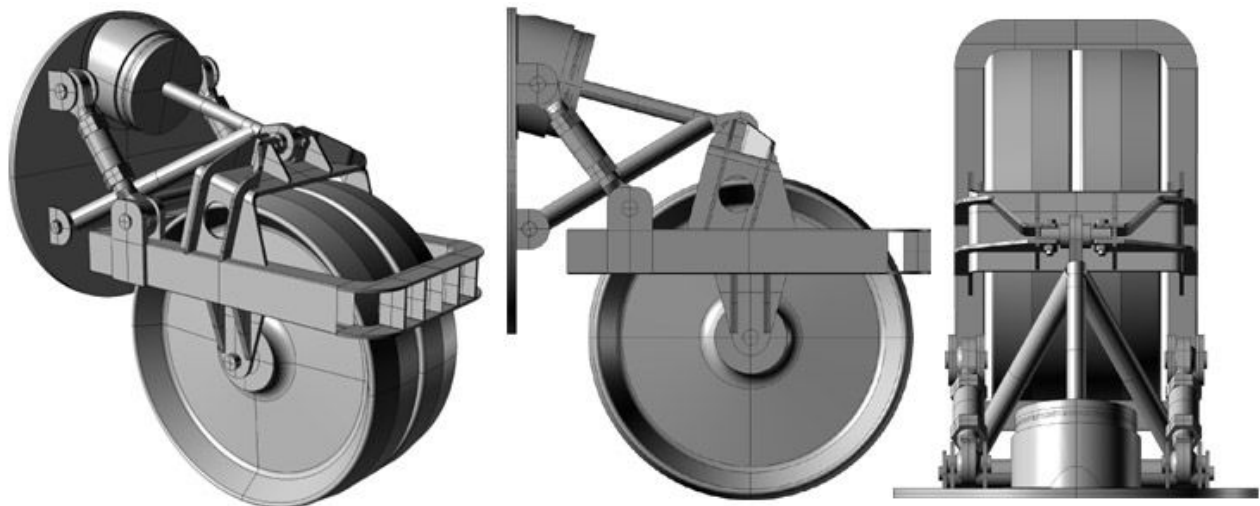


Support the sponsors who support us - visit [http://www.aussieinvader.com/the\\_sponsors.php](http://www.aussieinvader.com/the_sponsors.php)

frames all have to be individually customised. The driver's area cut out has a small discrepancy in the length of both sides due to the flat spots, making the alignment of the canopy very tricky.

There is also a weld the total length of the mainframe and that is positioned at about 5 o'clock when looking front on. It is positioned there as that weld must be left in tack and no drilling or hole cutting must breach the weld, as this is the weakest part of the whole structure. When the "V" underbelly is in place that will help clamp and keep the weld from trying to open.

Add to this a front end assembly that must be supported from the extreme front end of our mainframe via a bulkhead, with no further forward support members (see diagram below). The mainframe also supports a series of pressure vessels that must be over pressurised (stretched) to meet the mainframes inside diameter. The main idea of this design concept is for the mainframe to gain strength and rigidity from the pressure vessels and the pressure vessels to gain strength from the mainframe.



Front wheel and suspension assembly is attached to front bulkhead

One such headache we have overcome is our driver's canopy hinging mechanism. Our canopy has to work via a hinge that would allow the canopy to move rearward 100mm before going through an upward, forward arc, clearing the rollcage and allowing the driver access.

Our long time crew member Stephen Sugden spent many hours coming up with a stainless steel roller hinge that looks like the perfect solution, it incorporates quick release pins and a method to dismantle it for servicing if needed. Great job Steve!



Canopy hinge



Support the sponsors who support us - visit [http://www.aussieinvader.com/the\\_sponsors.php](http://www.aussieinvader.com/the_sponsors.php)



St Bernards Catholic Primary School in Kojonup

We were excited to have a visit from the kids and staff from St Bernards Catholic Primary School in Kojonup last week. We had a great evening with lots of questions being asked by the kids and teachers.

I was concerned that our car would not be seen in her best light as she was the wrong side up and probably would pose some confusion for our visitors, but to my amazement these kids were very mechanically minded and could see the big picture, they asked some very technical questions and were a pleasure to have in our workshop, good luck to you all.

We have agreed to fit in to our very busy schedule in the next month, two appearances at two motoring events in WA. This is a great way to spread the word and meet some loyal supporters.



<http://www.maxpinjarra.com.au/>

The first is the Murray Auto Xtravaganza on Sunday 3rd April at the Ross McLarty Oval in Pinjarra, WA. The event starts at 10am and goes on until 4pm. I will be there with a few team members & signing our new merchandise.



<http://www.dowerinfielddays.com.au/>

The second appearance is at the Theo's Run Motoring Show at Dowerin WA, which runs for two days starting on Saturday 16th April and concludes on Sunday 17th April. Both days are from 10am – 4pm.

I will also be appearing at the V8 Supercars with our friends and sponsors Advanced Electrical Equipment. These shows have a great public following and get the blood pumping with some of Australia's best race cars, show cars, hotrods and sheilas. If you live in Western Australia please do your best to come along!



<http://www.compacmarketing.com.au/>

Compac Marketing has done us proud with a huge effort and huge image of our car to display at these shows. Thanks must go to all concerned at Compac. Thanks also needs to go to Mike Annear and Alex Blain for their input.



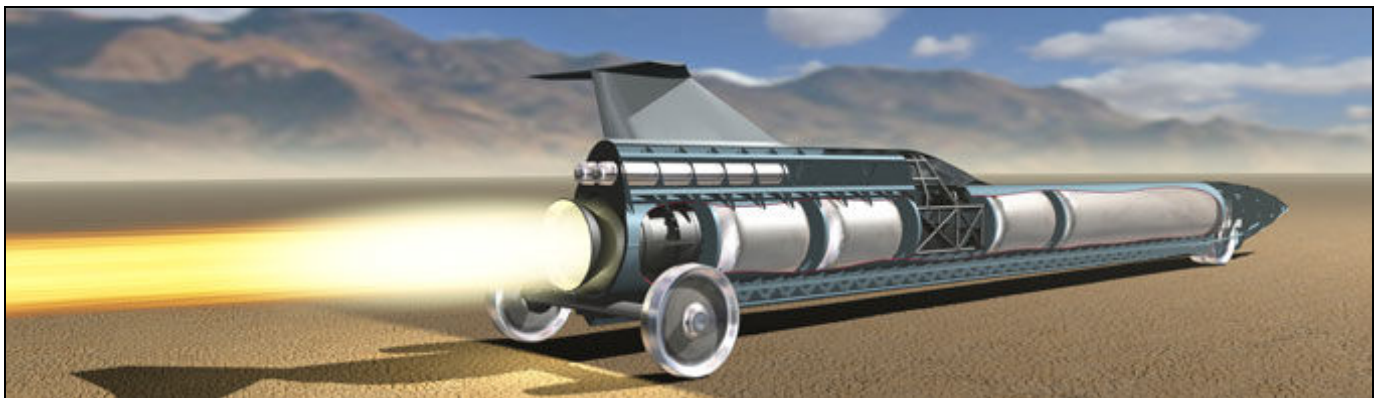


Support the sponsors who support us - visit [http://www.aussieinvader.com/the\\_sponsors.php](http://www.aussieinvader.com/the_sponsors.php)



New sign for the motor shows, modelled by Chris Demunck & Pete Taylor

Mike Annear has been burning the midnight oil again and with the rocket engine design changes has had to rework the model for CFD and images for our website and printed material.



Without Mike this project would be nowhere near the stage it is now. Here are some of Mike's new images



<http://www.mondo.net.au/>

Our great sponsor and friend Vince Gareffa, owner of Mondo Meats, asked us for assistance recently to help him raise money for charity. Each year Vince hosts a large group at his house, cooks them a memorable brunch and auctions items of value to raise money for Lifeline WA. Rosco donated a framed signed poster along with a motivational speaking session to the successful corporate bidder. The auction was a massive success, smashing all previous records with an amount of \$200,000 raised – every cent going to great local causes. Vince, you are a great Australian and an inspiration to us all!





Support the sponsors who support us - visit [http://www.aussieinvader.com/the\\_sponsors.php](http://www.aussieinvader.com/the_sponsors.php)



<http://kieranmolloydesign.com/>

A new Aussie Invader website is under development with Alex Blain of Nutwork (<http://www.nutwork.com.au/>), Mark Read and Kieran Molloy from KM Design working together. This website will allow far more flexibility, as the current site takes a lot of time to maintain and update. With the project

moving along, with more to report and more video to load, a newer and fresher site is needed. We are not sure of the exact launch date, as there is a lot of data to transfer and content to rewrite, but will let you know as soon as it is ready.

**Merchandising Update** - As of writing this newsletter the merchandise site was just about to be launched by Tangibility It is so new I still think the test images are up for the t-shirts, caps and stubbie holders. Over the coming days, these will be replaced, but my understanding is that you can purchase online NOW!

**Purchase Merchandise NOW!** - <http://www.tangibility.com.au/aussieinvader/>



Above is the t-shirt design, there will also be writing on both sleeves

Thank you all for your continued support and until our next newsletter, be your very best.

*Rosco McGlashan*

**Rosco McGlashan OAM**  
Fastest Aussie on Earth

If you wish to be removed from this newsletter, please reply to [rosco@aussieinvader.com](mailto:rosco@aussieinvader.com) with remove in the subject line.

