









# November 2011 - Newsletter

G'day Sponsors, Supporters, Crew and LSR fans, welcome to our November newsletter.

Our entire crew are all busy working away in their area of expertise. This past month has been a bit like the duck on the pond scenario with not much movement seen from above but the legs going 100 MPH underneath. We are working on so many different design aspects of our car that my head is in a spin. Here are a just few examples...

Wheel forgings, wheel bearings, seals and lubrication, onboard hydraulic requirements, rocket motor nozzle design, airbrake design, drogue gun design and manufacture, nose mounting frame design/ build and support tooling design and construction to allow our car to be rotated 45 degrees to fit hydraulic plumbing and brake lines.

A lot of areas are interconnected and a hold up on one, means delays or stops in another, but progress is being made and each month this car is further forward than the previous month.

### First Models of Aussie Invader 5R Arrive

Great news, we have just received the first few Aussie Invader 5R model prototypes. If you see the detail in these you will know why they have taken so long to materialise. We really wanted to get this right, rather than rush them out and just like the real thing they are a work of art.



There are a couple of minor changes being made to the models design, but we have put in our first major order with Spark Models and should have a delivery time very soon. These models will come boxed and signed by Rosco to add that exclusive touch.

Just to clarify, these are not toys or massed produced models, they are collectors' items which are all hand made from resin and are

36cm long (14 inches) and take a considerable time to produce. We have decided to offer prelaunch special price to our newsletter readers of A\$150 + packaging and posting valid for orders placed prior to 7th November. **Remember all profits go towards supporting the project.** 

















These will make an ideal Christmas gift for the petrol head in your life that has it all, now they can own a replica of the world's most powerful car and soon to be the world's fastest car. If you would like to pre-order your Aussie Invader 5R model, please email **Alex Blain** at <u>alexb@aussieinvader.com</u> for full details.



### Media Coverage

We have also had a pretty hectic month with talks, presentations and media interviews. I did a workshop motivational talk for our newly found friends at G&G Mining Services in Perth, boy what a fantastic workshop setup and first class operation.











We also were approached to film a TV segment for **ZOOM TV** where they pick up a celebrity hitch-hiker and then interview them, asking 5 questions about their motoring history. The program aired on TV's channel 7mate on Saturday 29<sup>th</sup> October at 1 pm.

From the ZOOM TV programme came a great email from Kurt Walter and I feel it needs to be shared as Kurt's response is exactly why we continue to do what we do. Yes, I want to break the World Land Speed

Record, but it is bigger than that, it is about inspiring people to strive for their goals and feeling good on the way. View the ZOOM TV interview on our website with the link below:

http://www.aussieinvader.com/videos/zoom-tv-on-channel-7mate-29th-october-2011/

Here is Kurt's email...

"Hi to everyone involved, I saw Rosco on Zoom TV today and immediately felt inspired to research what you guys are up to. I think you all deserve a pat on the back for sticking with Rosco and his dream of breaking the 1000MPH land speed record.

It really is inspiring that things still progress even though we are constantly reminded that we are supposedly having a Global Financial Crisis! Good on you and all the sponsors. It makes me proud to be an Aussie when you promote Australia as much as you do, with an attitude that anything can be done with a bit of perseverance, sweat and an open mind.

Keep us all informed with the newsletters etc. and I can't wait for the real event. I will be there with the Aussie flag cheering you on."

# A Blast from the Past



It is amazing what turns up on YouTube these days and we stumbled across a 1987 UK advert for the Vauxhall Belmont SRi with my jet dragster.

The story behind this ad is that Vauxhall undertook a nationwide door to door consumer campaign in the UK to ask people what they would like to see in a car ad. The public voted for a jet car on a remote salt lake racing the new Vauxhall Belmont. It was filmed at Lake Deborah in WA in about 1987.

Lots of fast scary runs in trying to make my car hook up on salt, with speeds exceeding 300 mph... Great times. View the full TV ad on our website with the link below: http://www.aussieinvader.com/videos/rosco-appears-in-uk-vauxhall-belmont-sri-advert-in-1987/

If anyone else has interesting pictures or videos from the past with any of the Aussie Invader cars or my drag racing days, please can you email rosco@aussieinvader.com.















# **BIG Ideas for Small Problems**

At the beginning of this month we were invited to meet with the great crew at Curtin University in WA, to be bought up to date with their latest CFD predictions for our 1000 MPH racecar.

# **Curtin University**

Dr James Jewkes, Dr Andrew King and a very clever gal named Noviyani who presented her fantastic thesis on the CFD analysis of our car and its performance.

#### http://www.curtin.edu.au/

Present from our team were Pete Taylor, Chris Demunck, Alex Blain, myself, Brett Boughton Teacher and 2010 Engineers Australia President's Prize winner and our newest team member Ben Parry who has a long history in engineering around new car production in the UK and abroad, with Fords, Lotus and Sprintex superchargers to name a few.



The finer points of aerodynamic design for Aussie Invader 5R are what will hopefully allow it to go beyond the performance of any car in history. The running of computational fluid dynamics (CFD) data on the cars design by Curtin, has allowed the Aussie Invader team and experts at Curtin to identify potential performance issues before final construction takes place.

There were some amazing ideas being thrown around the table based on challenges presented by Aussie Invader's design and documented findings from the Curtin team. Discussions included the shape and size of the nose cone, canards, front and rear wheels, rear axle, tailfin and the underbelly and how small changes to each item affects the car as it goes through subsonic, transonic and supersonic speeds. Some truly revolutionary ideas were discussed by this incredibly talented group of physics and engineering minds and the marathon 3 hour session ended with a list of actions and studies that will be undertaken in the coming weeks.

### State Government Help?

We have also been busy this past month with a special grant application being submitted to our State Government for innovation funding to get our RACE (Regional Australia Community Education) Program up and running. This application took some time to prepare and created a few sleepless nights for our great mates Ali, Mia, Alex Blain and myself.

Hopefully we will receive a favourable review for our application and soon some funding for this initiative, allowing us to be on the road to several state-wide towns teaching and promoting the Science, Technology, Engineering and Physics involved in designing, building and racing the world's most powerful car. Boy what a great learning concept, a biofuel powered car that can reach 1000 MPH in 20 seconds, being built here in Perth by a team of professional people, all volunteering their time and expertise for nothing... now that's INNOVATION.

















# **Progress with Wheel Development**

Our cars wheels have been under development for nearly a year, but there is light at the end of the tunnel. Recent talks with Alcoa Australia have put "the wheels in motion" so we can utilise their fantastic 2014A grade aluminium to forge the blanks for our 900mm x 200 mm solid tireless





http://www.unitedfluid.com.au/

wheels. Alcoa call their product "The miracle metal" and we definitely agree with them, our wheels will have a mass of 140 kg and a rotational speed of 10,000 rpm.

Unfortunately Australia does not have the capability to forge these wheels, with our previous record setting wheels being forged by HDA Forgings in the UK. The same company (now known as Mettis Aerospace) have been asked to produce our latest forgings, with product hopefully coming via our friends at Alcoa Kitts Green in the UK. We are still having some issues with our wheel bearings, seals and lubrication, but are hopeful of resolving these issues within a few weeks.

Our mates at United Fluid Power have been busy designing our onboard hydraulic supply for the car. This involves a constant feed to our Major Motors power steering rack, a high volume/high pressure feed to our airbrakes, and a high pressure feed to our ground/service brake. A long rated, fan cooled 24v power pack has been selected with a two pump combination allowing a constant

non disrupted feed to our steering with the second pump is used from the airbrakes and ground brake. Thank you Chris Rice and the great crew at United Fluid Power for your help with this very important system design on our vehicle.

### Location of Our Track

This is an ongoing search, we have several sites under review and several people helping us to try and locate a dry flat mud lake about 25km long and several kilometres wide.

Building a car is one thing, but we need to be able to run it for Aussie Invader 5R and myself to break the record. The search is on and we will be putting a lot of effort into this now.

# **Team Profile**

Over the coming months we will run a monthly feature on members of our team. I am known to a lot of you, but many of our team are not and it would be great for you to see why this project is progressing and the dedicated people who help to make it happen.

### Mark Read - Project Management & Website Development



Mark joined the team in May 2009 and has a background with IT and online businesses. He offered to run the Aussie Invader website and also oversees a lot of the work we undertake, working closely with me and also Alex Blain who controls media, sponsorship & merchandising.

Mark is from the UK, born in London and moved to Perth in 2004 with Julie and his young family. He is a bit of a petrol head, having started to build his first hot



















rod at 15 and went on to build many over the years. He has a passion for American cars, having owned many, including Mustangs, Corvettes and a Dodge Viper. Here is a selection of his cars.



V8 Trike with 5 litre Mustang engine



Supercharged Chevy V8 1923 Model T



1948 Fordson Van with 360 cu in AMC V8



8 Litre V10 RT10 Dodge Viper

Mark is the General Manager of <u>www.westjobs.com.au</u>, an online jobs and careers site that specialises in promoting WA employers and recruiters in front of WA job seekers.

It has been great having Mark work with us, we met for a coffee one day and I managed to talk him into running the website, although he did not need much persuading. Thanks Mark.

A special thank you also this month must go to our great American mates Mike Druse and Charley Shaffer for your long time friendship and support of our project. We are doing our very best for you guys and are out to make you proud. Looking forward to catching up with you both and having you join us in the winner's circle very soon.

A big thank you to all the great companies and folks who are helping us bring this project to reality... much appreciated.

That is about it for this month, so until next month, be your very best.

Rosco Mcglastar

**Rosco McGlashan OAM** Fastest Aussie on Earth

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