Aussie Invader 5R Pitch Deck

Join us for *World Land Speed Record* Event 2020

Meet the world's most powerful car

THE CHALLENGE

The challenge is to break the World Land Speed Record and blast our way into the history books.

Join us for the ride of your life!

- Rosco McGlashan OAM is the driver, and the current Australian Land Speed Record holder, with a lifetime of experience in high speed racing
- Rosco and a team of passionate, qualified professionals, have applied innovated concepts in the design and construction of this unique car to beat the World Land Speed Record
- We seek financial support and sponsorship, along with global media exposure to bring this 2020 event to a eager audience and successful reality

How the world record event works

- To break the World Land Speed Record, Aussie Invader 5R is required to perform 2 high speed passes in opposite directions over the same measured mile
- The record is broken if the average speed over these 2 runs exceeds the previous record by at least 1%
- The turn around time between runs is limited to just one hour

3 Phases to the finish line

The Aussie Invader 5R project is at the beginning of Phase 2...

1

Phase 1 (complete)

- Car design and engineering consultation/decision (complete)
- Car construction material analysis (complete)
- Car construction phase (complete)

2

Phase 2 (in progress)

- Rocket engine size and power analysis (complete)
- Rocket partner negotiations (commenced)
- Rocket engine/propellant selection (commenced)
- Rocket test site investigation (commenced). Preferred location - Mojave Desert, California
- Rocket build/testing program (dependent on above)

3

Phase 3 (next)

- Dynamic testing of car and components (low speed runs - unmanned)
- High speed runs to break the current World Land Speed Record Event 2020 (USA or Australia)
- Full power World Land Speed Record attempt – 1000mph 1600km/h+)

Roadmap to Aussie Invader 5R Land Speed Record Event

Car Design & Construction Begins

Start: Jan 2003

15 Years

First Showing

Perth, Australia

Start: Jun 2018

Vehicle Completed

Finished Jul 2018

Media & Photoshoots

Car available for media and photoshoots

Location: (TBA)

Dates: Aug 2018 – Dec 2018

•Discovery – Impossible Engineering

Rocket Engine Build/Static Tests

Location: California

Sep - Dec 2018

5 months

International Unveiling

Jan 2019

Dynamic Tests

Component testing

Start: Sep 2019

Track Testing

Vehicle test runs

Location: TBA

Date: 2020

3 Months

Challenge Event

Date: 2020

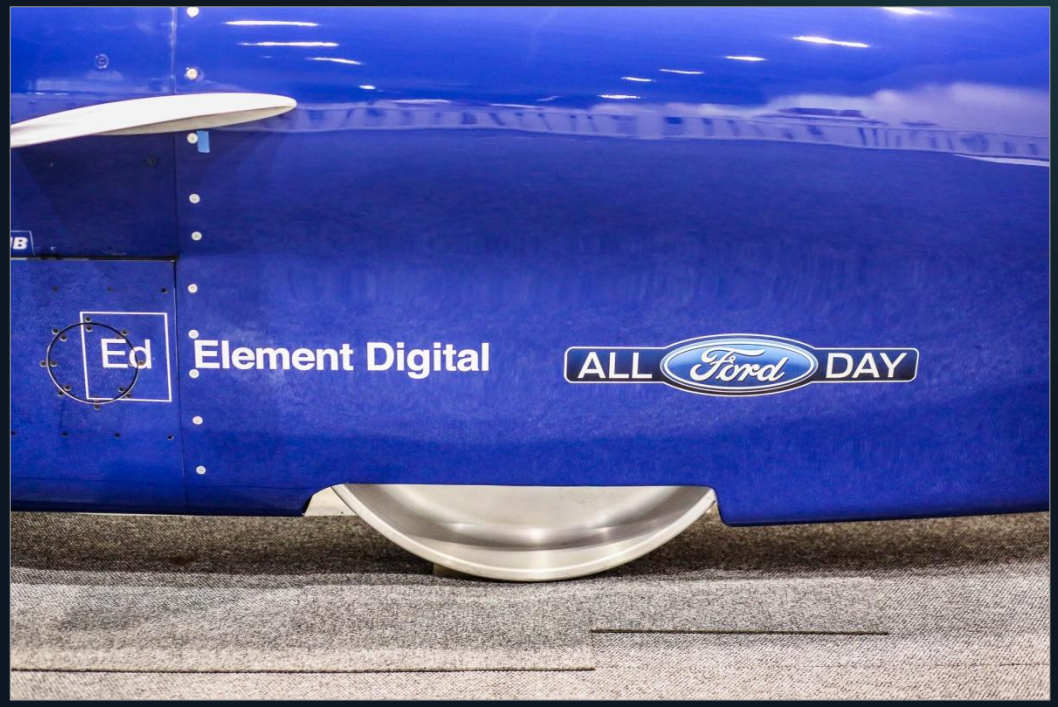
Location: TBA

Powerful Facts

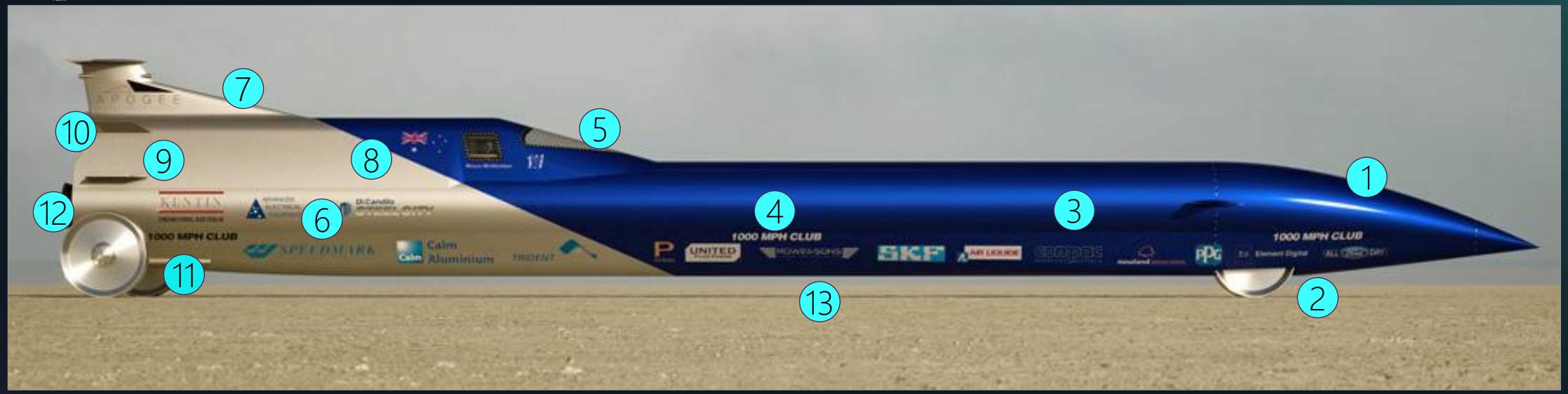
- 0 to 1,000 mph in 20 seconds
- 62,000 lb/f of thrust (200,000 hp)
- 16m long (52ft)
- 3m high (10ft) at tail fin
- 6.2 tonnes (dry weight)
- 9 tonnes (fully fuelled)

Safety by Design

- Aussie Invader 5R was built with very few moving parts
- Benefits from a low drag, aerodynamic design and is capable of achieving supersonic airflow
- Has a low cross sectional area and forward canards for high speed stability
- Remote control, high speed component testing
- There are numerous, integrated layers of redundancy to ensure that the safely of the mission is never compromised



Aussie Invader 5R explained…



1. Nose Cone – Composite fabrication. Nose cone used to house batteries and on-board computer equipment.

2. Front Wheels – Solid front wheels mounted on a common axle. Machined from 7050 billet alloy. Max RPM 10,000 +/- 5%. Minimal steering.

3. Oxidiser Tank – Contains 2000kg of White Fuming Nitric Acid (WFNA).

4. Composite Nitrogen Pressure Tanks (4000psi max.) - Bank of 3 tanks in front of the driver. Used for blowing the White Fuming Nitric Acid (WFNA) into the rocket engine via adjustable regulators.

5. Canopy/Cockpit – Carbon fibre with 15mm polycarbonate windshield. Also houses all instrumentation, breathing air tanks and fire safety equipment.

6. Fuel Tank - Contains 400 litres of turpentine. When both the oxidiser and fuel are blown into the motor hypergolic ignition occurs, creating 62,000 pounds of thrust / 200,000 hp.

7. Horizontal Stabilizer – Vertical tail fin made from alloy of honeycomb construction with an adjustable horizontal stabilizer. Used to help keep the car straight and provide rear end down force.

8. Composite Nitrogen Pressure Tank (4000psi max.) – Filament wound composite N2 tank is mounted behind the drivers seat, it is a dedicated blowdown tank for the fuel.

9. Brakes/Air Brakes - Situated on either side of the car and deployed at about 800mph after the engine is shut down. These rapidly slow the car so the parachutes can be fired.

10. Brakes/Parachutes x 2 – Low & High speed chutes are deployed using drogue guns. High speed chute is deployed at around 600 mph and stabilizes our vehicle, which rapidly decelerates to 400 mph. Low speed chute is then deployed.

11. Rear Wheels - Solid rear wheels machined from 7050 billet alloy. Max RPM 10,000 +/- 5%. Wheels have a "V" shaped rim to cut into the mud lake surface and keep the car straight.

12. Rocket Engine - The engine is a pressure fed liquid bi-propellant rocket. The use of pressure fed propellant avoids the more complex turbo pumps.

13. V Shaped Underbelly – Deflects the ground effect shock wave either side of the car as the car goes supersonic.

Competition

Australia vs. England

Aussie Invader 5R

- Rosco's top speed was 638mph, set in Aussie Invader III in 1996 using jet engine propulsion
- Recognizing that jet engine speed is limited on the ground, Rosco and his team have upped the ante and are using a rocket engine in Aussie Invader 5R
- This car has been carefully engineered and implemented to the highest safety specifications, in order to break the sound barrier and reach 1,000mph through the measured mile

Bloodhound SSC

- England's Andy Green holds the current World Land Speed Record of 763mph , set in 1997
- The British team have been constructing their supersonic car in an effort to break their own World Land Speed Record, but now have a challenger in Australia's Aussie Invader 5R
- The Bloodhound SSC is a combination rocket/jet and internal combustion engine car and is currently in the construction phase

Sponsorship

We seek sponsors who are aligned with our quest to be the world's best

Many sponsorship types are available including:

- consultancy (accountancy, insurance, legal)
- communications (design, marketing, event management)
- travel (airlines, hotels, car rental)
- team kit (racewear, sunglasses, timepieces/watches)
- components (chemicals, lubricants, adhesives)

Funding Requirements

The project needs to raise $7.5m AUD to complete Phase 2 (in progress) and Phase 3 (the event).

*Please note - $3.5m has already been raised through existing channels / sponsors and used for Phase 1.

$750,000
2. Test Engine R & D

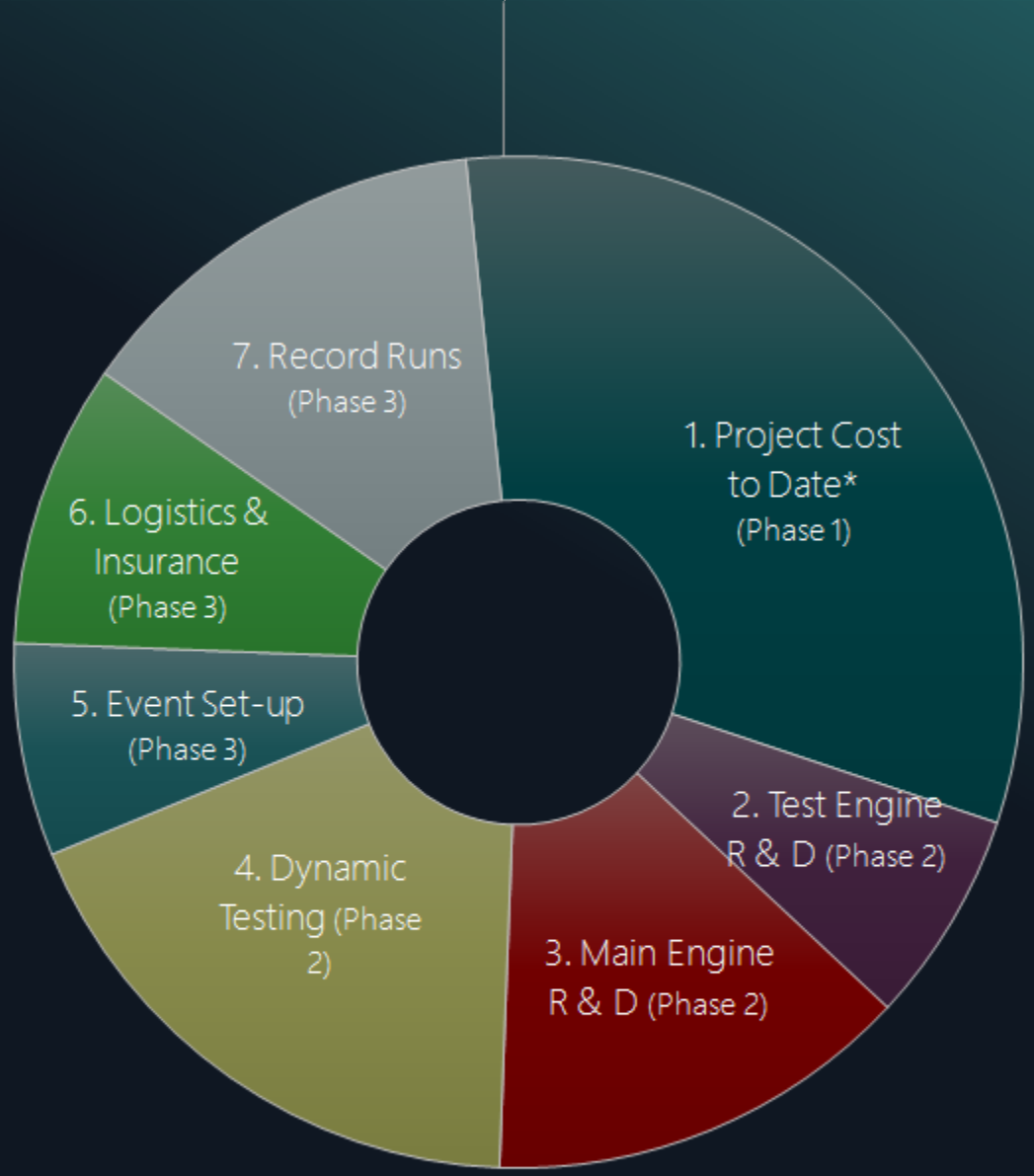
$1,500,000
3. Main Engine R & D

$2,000,000
4. Dynamic Testing

$750,000
5. Event Set-up

$1,000,000
6. Event Logistics

$1,500,000
7. Record Runs



Organic Funding

UPLOAD YOUR SELFIE

www.supersonicselfie.com

YOU AND YOUR COMPANY CAN JOIN US WHEN WE #GOSUPERSONIC AND AT THE WORLD LAND SPEED RECORD EVENT! 2020

#Campaigns

- Social media campaign (launch August 2018) to help raise money for the world land speed record event. (#gosupersonic) supersonicselfie.com
- GoFundMe campaign (Aussie Invader) currently under development to offer a selection of donation levels and perks – from rocket sound phone rings through to VIP event day spot on the sidelines

Media Interests

Interviews, photos and videos are available under the following themes:

- Science and Technology
  - Rocket Engine Design
  - High Speed Aerodynamics
  - Design Innovation
- Extreme Sports
- Rosco McGlashan: A self-made charismatic man
  - Australian Land Speed Record holder

Please approach us with your media request to: trish@aussieinvader.com

Our Team

We are a team of passionate enthusiasts, each bringing their own experience and talents to a global team to achieve the impossible.

Rosco McGlashan OAM

Team Leader & Driver

Rosco McGlashan is Australia's current Land Speed Record holder and aims to beat the World Land Speed Record in 2020 by reaching more than 1000 mph in just 20 seconds!

Global Action Team

www.aussieinvader.com

www.supersonicselfie.com

#gosupersonic

#aussieinvader

#aussieinvader5r

MARK READ

Online and Digital Promotion

Singapore
UK

+61 (0)422 517 887
mark@aussieinvader.com

TRISH BISCHOFF

Project Ambassador

Dubai
North America

+971 (0)56 744 0373
trish@aussieinvader.com

DAVE GUTSELL

Project Management & Strategy

Australia
New Zealand
Asia Pacific

+61 (0)467 558 035
dave@aussieinvader.com

Summary

Together, let's make land speed history

- We are a passionate team of volunteers aligned with the goal of smashing the World Land Speed Record
- We believe that Aussie Invader 5R is the car that will blast through the sound barrier and into the history books, and we want you to come along for the ride
- We are happy to discuss potential sponsorship and media opportunities so that we can all be winners

THANK YOU!

Trish Bischoff

Project Ambassador

Email:

trish@aussieinvader.com

Website:

aussieinvader.com

Organic Funding Website:

supersonicselfie.com

Social Media Hashtags

#gosupersonic
#aussieinvader
#aussieinvader5r