

# The University of Liverpool Velocipede Project

## Project Aim

To design, build, test and race a recumbent human powered tricycle; specifically, to break the International Human Powered Vehicle Land Speed Record!

## Project Team

This project is led by the ULV Team, a team of engineering students from the University of Liverpool, who design and manufacture human powered vehicles. The team was established in 2013 and has continuously been setting and breaking British Records – through ARION1, 2 and 3, with ARION4 competing in September 2018, and now work has begun on ARION5.

## Rider Aim

The ARION5 will be competing at the World Human Power Speed Challenge (WHPSC) in September 2019 – held in Battle Mountain, Nevada, USA. ARION5 will be competing in the 200m Flying Start Speed Trial – Multitrack.

**The male land speed record is currently set at 73.95mph**

**The female land speed record is currently set at 54.45mph**

The racetrack is 5 miles long and the average speed of the vehicle is recorded within a 200m speed trap.

ARION5 are now seeking riders that are capable of outputting 600 Watts of power, during the final part of the race.

## The Bike

The rider is completely enclosed in an aerodynamic monocoque shell, giving the bike super low air resistance and an extremely stiff structure which is vital for high transmission efficiency. This specially designed aerodynamic recumbent enables riders to travel at high speeds, as it will be 35 times more aerodynamic than a standard upright bicycle.

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## **Hello Potential Rider of the ARION5!**

By filling in this application form, you are applying to be a rider of the ARION5 human powered vehicle.

The application deadline is 14<sup>th</sup> September 2018. Applicants who are successful will be invited to undertake a series of fitness tests at Liverpool Hope University, on 24<sup>th</sup> September 2018.

By applying, you are willing to undertake over a year of specially devised training, commencing after the selection process. This training aims to develop you into a world class, record breaking recumbent cyclist!

Once 2 male and 2 female riders have been selected, riders will then compete against each other throughout the training process to maintain 100% motivation and competition ahead of the big event in Battle Mountain in 2019.

This is no small challenge, however by succeeding, **you could be the fastest rider in the world!**

Best of Luck,

The ULV Team

Christian Nygaard and Beth Rushton

Job Title – Rider Liaison

University of Liverpool

Email: [sgcnygaa@liverpool.ac.uk](mailto:sgcnygaa@liverpool.ac.uk) [sgbrusht@liverpool.ac.uk](mailto:sgbrusht@liverpool.ac.uk)

## ARION5 RIDER APPLICATION FORM

### SECTION 1: Personal Information

First Name		Surname	
D.O.B (min 18 years old)		Tel. No	
Weight		Height	
Sex		Nationality	
Email Address			
Home Address			

Do you have a disability, health condition or injury that may affect your ability to be fitness tested?	Yes/No
If yes, please give details	

How did you find out about the University of Liverpool Velocipede Project?	
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## SECTION 2: Sports History

Please give details of the past 5 years of sporting activity, including a time frame and the level at which you competed

Sport/Event	Date	Level of Competition	Achievement

## SECTION 3: Other Commitments

Training to be the rider of ARION5 is a big commitment. Some people may not be able to commit to such an intense training programme due to other commitments in their life. Please give details of commitments in your life including jobs, family etc.

Commitments

## SECTION 4: Declaration

- I am available in September 2019 to travel to the World Human Powered Speed Challenge in Nevada
- I am willing to travel to Liverpool and other locations based in the UK when given 2 weeks' notice



- I am committed to training hard and will follow the training regime provided by the coach
- I will follow the dietary plans set out by the coach
- I am available to attend testing sessions with the coach to monitor my fitness and will do so when given 2 weeks' notice
- I have no outstanding criminal convictions and I am permitted to travel to and within the United States
- I understand that if selected this will not guarantee my position on the team and if I fall below the targets set by the team I am at risk of losing my position

**I declare that the information I have provided is, to the best of my knowledge, correct at the time of signing and would like to be considered to be a rider of the ARION5.**

**PRINT NAME**

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**SIGNATURE**

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Once completed and signed, please scan and email to Christian Nygaard and Beth Rushton: [ulv.arion5@gmail.com](mailto:ulv.arion5@gmail.com)

Please make the subject of the email 'ARION5 Rider YOURNAMEHERE'