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The best articles from  
European recumbent  
cyclists.



# Supino

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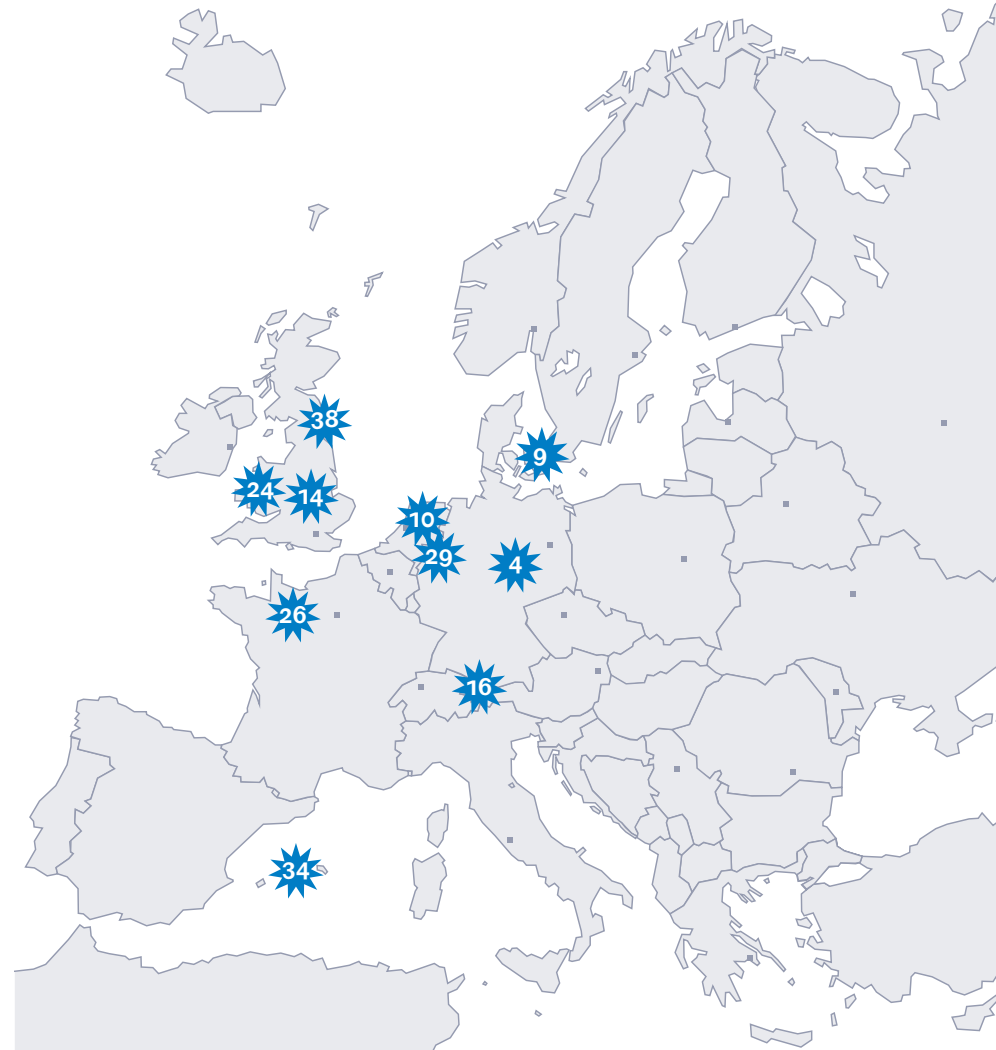
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# The sixth Supino

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## Lay-out

Hans Nieuwstraten, *NL*.



by Roel van Dijk

*EuSupino* is published for the sixth time. Once again it is mainly an anthology of magazines for recumbent cyclists from Germany, Switzerland, England and the Netherlands. And, of course, there is another story by Peter Brown from Canada.

In a world full of violence and threats, full of competition and hatred, it is wonderful that there are still recumbent cyclists who peacefully live out their adventures. As at the celebratory world championships in Austria and the races in Aldenhoven.

And there are still positive developments on the technical front. This issue is mainly about velomobiles and velocars. Contributions on bikes and trikes are of course very welcome.

I would like to thank Brian Robertson again for his corrections of the English and Simon Bailey for maintaining our website. <



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# What's new with velomobiles and velocars?

by Dietrich Lohmeyer  
in the German and  
Swiss club magazine  
Info Bull 230, April 2023



**I presented 222 Velocars for one person in Info Bull. More than a year has passed since then and I would like to report on what has happened in this time. I will limit myself to vehicles that are likely to be available in Germany.**

## Podbike

In the Podbike newsletter of February 23, the delivery of the first *Frikar* was announced. The first vehicles are going to Norway. The first vehicles are due to be delivered in Germany in the middle of this year. However, the announced very large series at a very moderate price has been replaced by a significantly smaller series of 180 units in the first year. The price of € 9,500 plus German VAT and transportation to Germany is now well above the level of comparable traditional velomobiles. The hope of offering a popular velomobile for a very low price with large production capacities has thus been dashed. Production will take place in Norway, a high-wage country, and not in Germany as has been announced in the meantime.

The announced production capacities are currently smaller than those of Velomobile World, and trade fair activities also appear to be reduced in line with the downsized workforce. Podbike is not listed in the Spezi 2023 brand directory at the beginning of March. With the 3,700 pre-orders mentioned on the homepage, new prospective customers will have to wait a long time for a new *Frikar*, unless many pre-orderers cancel their purchase due to the high price.

The hope that velocars will conquer a much larger market than traditional velomobiles has thus been dampened for the time being. For the older velomobile manufacturers, this certainly means that many pre-orders of the *Frikar* are looking for alternatives in the traditional velomobile sector.

Everyday velomobiles such as *Leiba Classic*, *Leiba X-Stream*, *Leitra*, *Alleweder*, *Strada*, *Quattrovelo*, *EC-Velo* and *Cab-Bike* are all also available with an electric motor. Most of them are now cheaper than the *Frikar* with a license-free electric drive.

All of these well-known everyday bikes are considerably lighter, so that they are also easy to ride without an electric drive. Most of them are mature vehicles that have been on the market for many years. Most of these velomobiles have a large entrance opening so that getting on and off is not much more difficult than with the *Frikar*.

I know from some companies that inquiries and orders for everyday velomobiles have increased again in the last year. Of course, the other single-seater velocars, which I will discuss below, are also alternatives.

## News from the sporty, very fast 'best-practice velomobiles'

### Bülk

Jens Buckbesch, one of the developers of the *Milan*, has finished developing the new *Bülk*. The first vehicles produced by Velomobile World in Romania are already at the dealers, and at least 30 have already been delivered.

The *Bülk MK1* is not a successor to the *Milan*, but a new, independent velomobile. In the thread *The Bülk project: a new velomobile*, the developer formulates the following development goal: "... to build



*Bülk MK1, photo Velomobile World.*

a velomobile that is extremely compact (257 cm long, 84 cm high and 70 cm wide), but at the same time allows shoulder widths of 60 cm and body heights of up to 200 cm. To achieve this goal, any dead space between the wheel arches and the exterior surface had to be made usable. In short: as small as possible on the outside, as large as possible on the inside."

Holger Seidel's new record in the new *Bülk* (crossing Germany from south to north in just under 30 hours) shows that the *Bülk* is one of the very fast velomobiles. The *Bülk* is offered by Velomobile World in Romania for € 9,750.

### Tuna

Intercity-Bikes presented the new *Tuna* in August 2022 and the first vehicles have already been delivered. After the production of more than 700 *DF*, the *Tuna* is a very fast velomobile that is more compact, lighter and stiffer than the *Quest*, but also more practical and easy to maintain.

The *Tuna* is suitable for people between 160 and 200 cm tall.

Its 16" wheels and removable 'pants' are particularly striking. Small wheels take up less space in the wheel arches and are lighter and more stable than the usual 20" wheels. As a result, the turning circle is no larger when the pants are fitted than with the *DF* with open wheel arches. Intercity-Bikes states on its homepage that a spare wheel can also be

*Tuna, photo Intercity-Bikes.*



taken along. The price of € 9,800 is the same as that of the *DF*.

### Snoek L

Velomobiel.nl announced a larger version of the very fast but small *Snoek* in early 2022, for people between 1.80 m and 1.97 m tall. In February 2023, it was reported in the forum that the negative molds were ready. Perhaps we can hope for a first presentation at the Spezi.

With the *Snoek L*, Velomobiel.nl once again has a very fast velomobile on offer, even for taller riders. With the *Quest*, of which more than 1,000 have now been built, the *Snoek*, the *Quattrovelo* and the *Strada*, this manufacturer now has five very different velomobiles in its range, covering many different requirements.



*Snoek L*, photo [www.recumbent.news](http://www.recumbent.news).

### Alpha 9

Work on a new *Alpha 9* was already described in another thread in spring 2021: *Alpha 9 Development, Velomobil-Forum (velomobilforum.de)*. Not only the external shape of the *Alpha 9*, but also a number of built-in parts were developed on the computer. The target group is all riders, but especially those up to 200 cm tall, who can sit comfortably here without compromises (i.e. extreme sitting positions and short cranks).

It should also have all the proven features of the *Alpha 7*: Suitability for everyday use and rigidity at a comparable weight. The *Alpha 9* has already been built 60 times since fall 2021. At the 2021 World Recumbent Bike Championships in Amsterdam-Sloten, Matthias König took first to third place overall with the *Snoek*, ahead of Daniel Fenn with the new *Alpha 9* and Ymte Sijbrandij with the *DF-XL*.

### Alpha M9

After the *Alpha W9*, which is also suitable for very tall riders, Daniel Fenn presented the *M9*, the counterpart to the *Snoek* in the Velomobilforum. At 2.60 m, it is just as long as the *Alpha 9* and 72 cm wide, but has a different shape. The rear section is drawn together at a flatter angle. The track is 6 cm narrower than the *M9*. A rider height of up to 1.87 m is possible. If 140 mm cranks are fitted, riders up to 1.90 m can also fit. The first orders have been received by Velomobile World and the first vehicles are expected to be delivered very soon (as of 15.2.2023).

With the *Snoek* and the *Alpha 9*, there will then be velomobiles for very short and very tall riders.



*Alpha 9*, photo Velomobile World.

Many other velomobiles such as the *Quest*, *DF* and *Milan* are also available in two versions, for taller or shorter people.

### Evo-R Photo Go-one

The *Evo-R* is now built by Velomobile in Hessen. Axel Knaus has redesigned the *Evo-R* together with Robert Mattes, who is also the new dealer in Berlin, <https://rolacarbon.de>.

"A special feature is the very stable carbon rear swingarm. It was deliberately designed as an H-swingarm (2-arm swingarm) to accommodate almost all rear wheels with an installation width of 135 mm, not least because of the coveted rear hub motors or hub gears, as well as additional disc brakes." (<http://velomobile-in-hessen.de>).

The *Evo-R* is also available with a removable roof segment. The curved windscreen makes the *Evo-R* a recognized beautiful vehicle. Wulf Kraneis also addresses the fundamental problems with closed cabins in his article "Das neue Velomobil von Canyon. Anmerkungen von Wulf Kraneis" in *Info Bull* 216. On the other hand, there are numerous *Evo-R* riders who have been using this velomobile for years. There is this thread in the Velomobilforum: *From the life of an Evo-R, Velomobile Forum (velomobilforum.de)*. Velomobile in Hessen offers a hardened windshield as an accessory, which protects against scratches when using a windshield or thread wiper.

On February 20, 2023, Axel Knaus announces on his homepage that construction of the *Evo-R* has begun.



*Evo-R*, photo Go-one.

## Leiba Rekord

The wind speed of the *Leiba Rekord* was measured at the Ostfalia University of Applied Sciences. The  $C_w$  value is now being determined on the basis of three common wind speeds (30, 50 and 70 km/h). The value will be announced later. The test shows that the *Leiba Rekord* has an optimal shape. For further outstanding results, we would also like to increase the wind cut on the visor.

At € 7,700 for the carbon version, the *Leiba Rekord* is by far the cheapest of the sporty, very fast velomobiles ([www.Leiba.de](http://www.Leiba.de)).

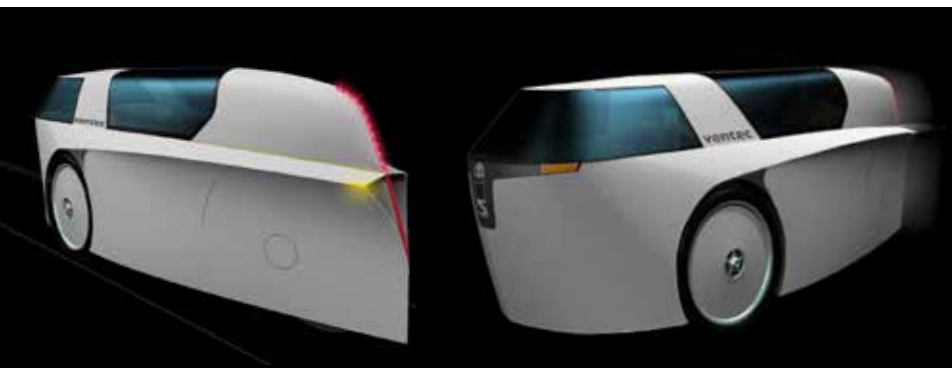
## 441

The four-wheeled velomobile by Charles Henry and Jürg Birkenstock was already presented in Info Bull 226 from August 2022. As far as I know, production has not yet started.

## Ventec from Sitko-Velo

The new *Ventec* from Sitko-Velo has a very unusual shape with a good  $C_w$  value. As with the *Agilo*, great importance was attached to good ventilation. The entire hood can be slid backwards for boarding.

Bodo Sitko has been offering the construction plan for the *Agilo* for several years. The construction plan including pattern and material list costs only € 98, further costs are: plywood and paint, basic



*Ventec, photos Sitko-Velo.*



*Leiba Rekord, photo Leiba.de.*

equipment with bicycle and velomobile components € 1,800, electric support approximately € 1,000.

I assume that the costs for the *Ventec* are similar. The construction plan for the *Ventec* can be ordered from May 2023. The *Sitko Ventec* thread reports on the project in the Velomobilforum. Not everyone can or wants to afford a velomobile for € 10,000; just under € 3,000 including the motor is no more expensive than a normal electric bike.

## Attention to detail and market development

In addition to these major new developments, there has been a lot of attention to detail on all velomobiles, which I will not go into here. These include the addition of smaller luggage boxes at the front and very good lighting with blinker and brake light functions, magnetically attached service flaps and 'pants'. There have also been improvements to the hoods for fast velomobiles. There are hoods for everyday use and racing hoods that are aerodynamically optimized. There are long threads in the Velomobilforum about all the velomobiles available in Europe. The Velomobile World newsletter describes the latest developments to the *Milan*, the new model designation is now *Milan MK 7*.

Velomobile World now produces 11 different velomobiles, they are the manufacturer of 6 vehicles and 5 vehicles are produced on commission for Velomobiel.nl and Intercity-Bikes. More than 250 velomobiles were built in 2022, making them the world's largest producer of traditional velomobiles. Another major manufacturer is Katanga. They produce in the Czech Republic and are currently expanding their production capacity with a new hall. The well-known developers of the velomobile scene create new prototypes within 1-2 years, and with the help of Velomobile World, production can then begin in the shortest possible time. Unfortunately, prices have not fallen due to the outsourcing of production to Romania and the Czech Republic.

## Dealers for Velomobile World

Velomobile World dealers now receive a larger margin. As a result, the number of Velomobile World dealers in Germany has increased to 13. Pedalwirbel-Witten opened its doors on March 4. The manufacturers and dealers of larger and taller velomobiles from Germany, which are not so consistently designed for speed, have also been added: Leiba, Akkurad, Veloxiter, Pedilio and Katanga. Many developers and manufacturers are also dealers. More and more dealers have different velomobiles from different manufacturers on offer and repair velomobiles from other manufacturers. At one dealer ([Velowerk.info](http://Velowerk.info)) you can test ride 12 velomobiles, most of them have at least 5 different velomobiles to test ride.

If you don't have the confidence to maintain and repair a velomobile yourself, you should check which velomobiles the nearest dealer has on offer. There is a list of dealers and manufacturers in the wiki of the velomobile forum, <https://www.velomobilforum.de/wiki/doku.php?id=velomobil:allgemein:links>.

If you are interested in a specific velomobile, you should ask the manufacturer about its dealers.



## Velocars for one person

Velocars are intended to bridge the gap between bicycles and cars, and the significantly larger vehicles differ from the very fast velomobiles by:

- more space for luggage and/or a child,
- easy entry and exit
- electric assistance to compensate for lower efficiency
- higher seating position in some cases
- sometimes four wheels for improved road holding
- smaller turning circle
- space for puncture-proof tires with good tread
- partly solar roof for power generation
- partly electric assistance up to 45 km/h.

**In December 2021, I presented some vehicles in Info Bull 221 and am now briefly reporting on developments over the past year.**

### Frikar from Podbike

As already reported, there will be a smaller series of 180 *Frikar* in the first year. The first vehicles were delivered in Norway. The *Frikar* was presented in *Info Bull 226*.

### Pedilio

The first *Pedilio* vehicles have been delivered to customers. Compared to the vehicles that are produced in Romania, the initial quantities will be



*Pedilios, photo Pedilio.*

smaller. The first test series is limited to 10 units, after which it will be "scaled up in a healthy way." Test drive events took place in Nehren, Munich and Fürstenwalde. *Pedilio* will be exhibiting at Spezi 2023.



*GallopE-AZ, photo Sitko-Velo.*

### GallopE-AZ

Akkurad has finished the prototype of the *GallopE-AZ*, you can see it at the Spezi, I hope you can also test ride it. A second prototype is in the works. At the front, it has the slightly revised chassis of the *Alleweder 6*, and no new front-wheel drive had to be developed due to the installation of a pedal generator. The electric drive with two wheel hub motors on the rear axle is controlled by a control system developed in-house. The prototypes will be sold after extensive testing.

### Quadvelo from Eurocircuits

The first test series was delivered in 2022, test rides are possible at Velomo in Weida, at the manufacturer and perhaps in Bremen, where three vehicles are in operation. The experiences of one rider are shared in the *Quadvelo* thread in the Velocars subforum.

The homepage still says "sold out" at the end of February 23, which refers to the 2022 pre-series model. Perhaps the first vehicles in the series will hit the road after the Spezi this year. The pre-series was sold at prices between € 8,500 and € 11,424 excluding freight and VAT.



*Quadvelo, photo Eurocircuits.*

The *Quadvelo* is the largest of the Velocars presented here for one person. There is space in the rear for 2 smaller children or a lot of luggage. Eurocircuits will be exhibiting at Spezi 2023.

### Sunrider 3

Veloxiter has started to deliver the first vehicles, but only with 25 km/h approval. Work is underway on approval up to 45 km/h. Veloxiter will be exhibiting at Spezi 2023.



*Sunrider 3, photo Veloxiter.*



*Podride, photo Podride.*

### Podride

Podride has had the drivable prototype ready for six years, but is still not saying anything about the price or the start of series production. On the *mypodride.com* website, there is talk of a three-wheeled version and a version for two people.

### VM45

Katanga launched an R&D project in January 2021 that was required to produce a new type of LEV: "A lightweight bio-hybrid road quad with a range of 200 km thanks to an extremely energy-efficient design and the use of leg power in addition to electric power." For simplicity's sake, let's call it the VM45 for now.

The four-wheeled vehicle is designed for 45 km/h and thus falls into the L6e-A vehicle class (Homepage *Katanga.eu*).



*VM45, photo Katanga.*

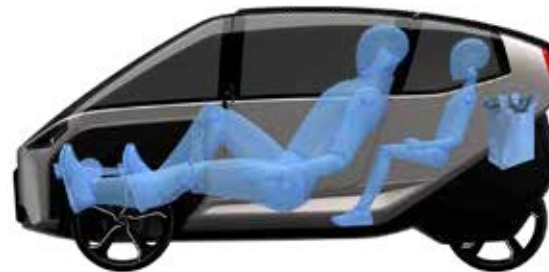
Katanga announced in January 2023: "After two years of intensive research and development, the VM45 is finally on the road! We are currently producing the first body parts and finalizing the production drawings of certain steel parts. We should have all the parts for the first assembly by April." Katanga will be exhibiting at Spezi 2023.

### Jetbike

The Jetbike is a completely new concept from Velocar. The *Jetbike* is said to be the first single-seater velocar to be developed for three speed ranges: 25, 45 and 100 km/h. Despite a width of just 82 cm and a relatively high seating position, the tilting technology should give it very good road holding. 6 kW drive power should be sufficient for 100 km/h.

In response to my inquiry, Mr. Hecker said that a first prototype should be ready in the course of this year. The first vehicle is due to be delivered in 2025, initially the 25 km/h version.

I have been riding a velomobile with 45 km/h approval for 25 years and can well understand the desire to ride faster than 45 km/h on public roads. Like the very fast non-motorized velomobiles, I often ride on the road and am frequently overtaken by cars, often at too close a distance. Every overtaking maneuver increases the risk of an accident. I rather dream of a velocar with a top speed of 70 km/h. In my experience, that would be enough for many country roads.



*Jetbike, drawing Velocar.*

### Xelo

The *Xelo* looks very similar to the *Elf*, of which more than 500 were built in the USA. Organic Transit then went bankrupt in 2017, but a new edition is planned (*organictransit.com*).

The *Xelo* was presented for the first time in the Velomobilforum at the end of 2022: "Xelo construction report prototype." Work is currently being carried out on the chassis parts using CNC technology. A first prototype should be ready in the second quarter of 2023. The vehicle is to be presented at Spezi 2024.<



*Xelo, drawing Xelo.*



# The story of two English cyclists in challenging weather conditions

by Carl Georg Rasmussen  
from Copenhagen,  
Denmark

In June I received a web mail from two young English cyclists, who wanted to rent or buy two used *Leitra* velomobiles for a long distance tour in Europe. They wanted good luggage capacity and weather protection for a budget tour, starting in Copenhagen and heading south through Germany/Berlin to the Czech Republic and Austria.

To be well prepared for their first velomobile adventure, they flew from London to Copenhagen in June, one month before the planned tour departure, for test rides and individual adaptations. Finlay and Jack have very different sizes, 198 cm and 160 cm respectively, and they wanted different fairing models: the low and long *Wildcat* and the classic *Leitra*.

I checked with some German *Leitra* owners, on the route, if they wanted English guests and perhaps could offer a nights accommodation. The answer was positive.



Finlay (left) and Jack ready for their first velomobile tour.



Visit to a Space museum in Sweden.

In July they came back to Copenhagen, did a final check, not least of the weather forecast. It turned out, that a serious heat wave was building up in central Europe, with temperatures of 38-40°C. This dry and very hot weather condition could last for a week or more. I told them about my experience from a tour in France, in 36°C. Just open the adjustable air inlets full, wear a thin T-shirt or nothing and let the seat's sheep skin absorb your sweat. Then you are OK with a good internal climate.

Finlay wanted to take the top of the fairing off, but I warned him. You will get burned in the face by the sun. After a discussion, for and against, they decided to take an alternative route, north to the cooler Scandinavia instead of south. The following week they cycled through the Swedish forests with rivers and lakes to Stockholm and entered the ferry to Turku in Finland. It happened in pouring rain. Finlay was quick to put the top of the fairing back on again. It was raining all the time, also when they reached Estonia, where they visited a



wet jazz festival. They continued south through Riga to Klaipeda in an increasing storm and lots of rain. They were lucky to catch the last ferry to Kiel. The storm then stopped all ferry service for a couple of days, Finlay cycled from Kiel to the ferry in Hoek van Holland in his *Wildcat/Leitra* and reached his hometown, Reading by London, partly by pedal power and by British rail. For Jack the velomobile tour ended in Copenhagen, cycling from Kiel. It was a tough first experience with a rented vehicle. <



We have been travelling across Sweden and are now waiting for the ferry to Turku, Finland!

# New: the Tuna by Intercitybike

by Kees Jan Heijboer,  
photos Arjen Meurs and  
Kees Jan Heijboer



from the Dutch magazine  
*Ligfiets&*, 2023-1

On February 15th Arjen Meurs and I, Kees Jan Heijboer, did a test ride with the two *Tunas* that Intercitybike have available. Arjen had ridden from Utrecht to Dronten in his *DF-XL*, I came there from Arnhem in my *Carbon Quest*. All for carbon-neutrality. Arjen has been immensely enjoying his yellow *DF* for two years now and I've been *Questing* for many, many years. Having known each other since kindergarten, we consider ourselves a well-matched test team!



It goes without saying that the reception at Intercitybike was relaxed and welcoming. But, no dawdling: ride! In short: a well thought-out, practical and roomy velomobile, without being big.

## Rider

Getting in. As a *Quest* rider it is a weird idea to be allowed, no, expected, to sit on the 'hood'. So sit on

the hood and support oneself on the stiff edge of the seat and getting in is easy, easier than into a *DF*, the entrance is bigger.

After getting in, looking at the wheel arches I was immediately reminded of the (real) Mini car, in which a lot of interior room was won by using 10" wheels. The same happens here.

The seat itself can easily be adjusted in many ways: fore and aft by putting it into a different notch of rails left and right, and at the rear hanging in easily adjustable straps. Adjustment is quick and easy. Adjusting the crankset for the right leg length is easy too via the big service hatch on the nose of the velomobile. A roller for the return chain run on the bottom of the *Tuna* takes up the difference in chain length so there's no need to get out a chain punch.

The straps that the seat hangs from released too easily when one only slightly lifted the seat in the *Tunas* we rode. This will be improved, we're told. They also made



a note of the suggestion to mark the straps so that it is easier to adjust left and right to the same length straight away. Initially I sat a bit crooked and then found that pulling one of the straps tighter made me sit straight in the bike.

For me, pretty average 5'10" (178 cm), there was ample room. Below the sill there is enough shoulder width without needing the filler pieces that a *Quest* has. Plenty of room also for hips and thighs. I did touch the bulge for the suspension strut once or twice with my calf but hardly noticed once we were really travelling. If it really had been a problem I could still have ad- >







A well thought-out, practical and roomy velomobile, without being big.



> justed both seat and crankset a bit further forward in the bike. The shape of the seat itself was not ideal for me, but that is very much a matter of personal taste.

### Riding

Steering is similar to the *Quest*, pretty neutral. One can ride 'no hands' even with a 3 Bft oblique headwind. Still the steering is nice and direct. I think that the relatively short steerer helps here.

Alas, we did not have any stronger wind so we have not been able to feel how a *Tuna* behaves in stronger winds. At about 7 degrees Celsius the climate inside was comfortable, there is less air that drops into your lap than in a *Quest* with mini-visor.

I did miss that visor however, as now I had the wind straight into my face. It felt a lot more comfortable when I experimentally held a finger or two directly above the edge.

Bike and drive chain are nice and stiff. Response is im-

mediate once you start pedalling and the stiffness of the construction is very noticeable.

A consequence of the stiffness is that one hears (and slightly feels) cobbles more than in, for instance, my *Quest*. The still rather 'fresh' suspension components on the *Tuna* as compared to the well run-in parts on my *Quest* may add to this, too. It was not my impression that the smaller front wheel diameter had influence here. While riding I've not really noticed the smaller front wheels.

The speed of the bike is on or slightly over *Quest* speeds. On long straights I gravitate towards 42 km/h and I did the same in the *Tuna*.

### Drive train

1 x 12, with their proprietary low-Q-Factor 155 mm crankset ('Q-factor' = Quack-factor, the higher the more one pedals like a duck).

Coming from a *Quest* with 170 mm cranks, I did notice the shorter arm during the first metres but only then.

Better for the knees, as one does not have to bend the legs as far.

A chain tensioner at the front, below the chain ring, allows adjusting the sled of the crankset without having to adjust the chain length.

### Equipment

Shifting of the 1 x 12 is quick and precise. I did find the triggershifter a bit bulky on the handlebars, not leaving enough room to comfortably grip the grip itself.

The lighting has two positions: daytime-running-lights and (dipped) headlight. Indicator switch and horn button are in the usual spots on the steerer. The horn is nice and loud, by the way. So is the bell, which has very cleverly found a place at the front of the air inlet.

At the rear the rear lights, brake lights and direction indicators are all combined in small Kellermann rear lights. These work well. Personally I still have to get used to what basically is a tadpole trike having two rear lights, I think I find one rear light more logical here. The maintenance covers for the front wheels and underneath the bike are very, very practical and fit smoothly. The fit if the cover on the nose of the bike was not as perfect, I hope that this was because this was one of the first *Tunas*. The magnets do hold it in place very nicely however, nicer than Velcro. Especially for me as a *Quest* rider the easy access to all things mechanical was a revelation!

Arjen remarks that the *Tuna* rides very nicely and basically is a much improved version of the *DF-XL*. The easily removable wheel covers are much better than having taped Hosen on a *DF* that limit cornering to boot. The turning circle of the *Tuna* (with the covers) is very similar to that of a *DF* so quite in order. We rode one the slightly wider Continental Contact Urbans (35-349), Arjen is used to narrower tyres himself. The narrower the tyre the smaller the turning circle, so theoretically one could even reduce the turning circle even further. Slightly more balloon to the tyre does improve comfort however. <







# Bean hunter PART 2

Russell Bridge is on a mission: to design and build a new car-transportable faired two-wheeler for UK-based BHPC racing events, and chase down the Beano. Russell now reports on building the body shell and getting Snoopy closer to completion.

## Plugs

After four months of waiting for TheCNCFactory in Uxbridge to do the moulds, I finally ran out of patience with the owner Ed, and searched around for a new company to CNC them for me. Last time I did this I got quotes from £1600 (for cash) up to £6000 + VAT, so I was a bit nervous for my bank balance. I found CNC Polystyrene in Winchester who agreed to do them for £2400 inc VAT, and they turned them round in 10 days, which wasn't too bad overall. The only issue being that each half was made of 3 blocks of PU80 glued together, and I know from past experience that the glue lines are a nightmare to deal with. I picked them up in a hire van (**image 1**) after an exhausting weekend helping a mate who's building a house in Poole. Thus followed a few weeks of painting with high-build primer, and lots of filling, sanding, repainting etc until you've got two plugs polished down to 2000 grit. (**image 2**)

## Bottom shell half - disaster!

I don't know what I did to annoy the composite gods, but they were not happy with me when we (Barney and I) were making the bottom half of the shell. The layup of the shell bottom half was due to be :

- 200g carbon / innegra (which looks good, and was free! from GST - many thanks...)
- 200g carbon
- 3mm nomex aramid honeycomb
- 200g carbon
- 200g carbon

It got laid up OK after a bit of a wrestle - we tried to do all five layers at once but the last two wouldn't stay still on the wobbly honeycomb, so we did it in two 'pulls' instead which generated a lot more plastic waste - this is not a low-carbon activity! We've still no idea why, but the outer layer stuck to the shell, and the whole thing had to be scraped out an inch at a time after slicing  $\frac{3}{4}$  of the way down the mould and shell - a real heart-wrenching thing to have to do! (**image 3 and 4**) The only thing that I can think I did was maybe I used 6 x layers of mould-cleaner instead of 6 x layers of chemical-release whilst tired, but I'm pretty sure that I didn't!



image 1



image 2



image 3

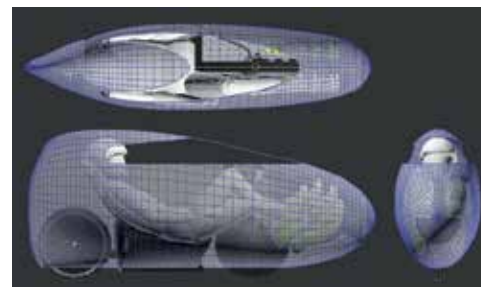


image 10



image 7

Anyway, after a lot of blood, sweat and tears I got the shell released from the mould, and decided to repair it rather than write off about £400 worth of materials and start again. The split line was repaired with carbon strips above and below, and then another whole layer of carbon/innegra was wet-layed on top of the rough outer layer, with some pink release film pulled tight over it to keep it flat (**image 5**). If you stand 10' away and squint it doesn't look too bad, and it feels solid enough. After bonding in some composite-board bulkheads, all the mechanical bits could then be swapped over from the temporary steel frame to the new shell bottom half, and then taken car-park testing (**image 6 and 7**).



image 5



image 4



image 6





image 8



image 9

### Landing gear - better with 2020 alu extrusion

Finally cracked it with Mk 3 of the landing gear - 2020 aluminium extrusion running on 24mm diameter bearings specifically designed for the 2020 rails. It still uses two brake cables to operate via an over-centre lever, and it now feels a bit more solid having swapped the cable housing for very-good Jagwire compression-less stuff. The lever pulls each cable 187mm and this is enough to take each wheel from fully extended position, to fully retracted position inside the shell. In the extended position, the wheels are 380mm apart, which feels like the minimum to stabilise the bike on a flat surface - it definitely doesn't like slopes! (Image 8)

### Racing at Stourport

So after racing at Hillingdon and having a great battle with Kim and Dan, the next track up was Stourport, with it's tight hairpin. Car parking testing of the bike revealed that the turning radius was huge, being limited by the bars banging on the shell at either side - I measured 24m diameter, and from Google Maps the hairpin at Stourport is 24.5m - it was gonna be tight! In reality, the camber of the corner helped and it got round OK, and thankfully everything on the bike worked OK. Steve still disappeared off into the distance as per usual in his fully-faired Beano, whilst I had a great race with Andrew on his partly faired Ratty. It was great to compare Snoopy and Beano side by side - Beano really is tiny! (Images 9 and 10) image 10 on previous page.

### Top half

The next step was to build the top half of the shell. I decided to use a split mould for this, which meant creating a 'fence' down the middle of the plug, making one half, and then using the

first half as the fence line to create the second half of the mould. Thankfully everything worked OK, and the moulds split apart with the usual satisfying clicks, creaks and groans until they



image 11

finally 'pop' free. (Image 11)

I tried a few test samples of the carbon and carbon/innegra to check that the chemical release worked OK, which thankfully it did, so from here I then laid up the top half using a lighter overall make-up:

- 200g carbon / innegra
- 200g carbon
- 3mm nomex aramid honeycomb
- 200g carbon

I'd built a step into the top half of the mould for the windscreen, so from here the hole was cut-out and a big cardboard template was made, transferred over to an 8x4' sheet of 1mm Lexan, and then this was cut and bonded in using Upol Tigerseal, which was good stuff. Right - ready to race... or not as the case may be! 1 lap of York with the lid on revealed that the bars were banging on the lid which overly restricted the turning radius and it only



image 14

just got round the hairpin with a lot of swearing from inside the overheating carbon sarcophagus. To add to this, my feet were banging on the top half of the lid at the front, so I'd also made it too tight there as well!

Two great races at York and Hull followed, just racing with the bottom half of the shell. The highlight for me was the first race at Hull, where David, Jochen and I raced a great race at 26+mph average for 40mins - they both keep getting fitter and fitter and must be both around 300W FTP in order to race that fast unfaired. (Image 12)



image 12

### Revised, remote steering

York and Hull were both good for chatting through ideas with people. I had an idea in my head for doing a remote-steer set-up with high-hands in the hamster position, however this would mean re-engineering the landing gear lever, which I was reluctant to do. Lee Wakefield helpfully suggested using an under-seat remote steering set-up instead, which I hadn't




image 13

thought of, and a quick mock-up in the garage over the next week showed that this worked really well - thanks Lee! Lee also suggested using two track-rods instead of one in order to counter 'brake-steer'. Some very good track ends were sourced from Geoff Birds' preferred supplier McGill Motorsport and this has led to a really good set-up. I tested it last night in the local M&S car park and I'd struggle to tell that it was a remote set-up and not direct. (Image 13)

### And finally!

The final bit of the puzzle was the feet banging at the front - I dropped the BB mount down 5mm, and sourced some new (cheap Decathlon special!) smaller size 9 shoes that have the cleat mounts about 8mm further forward than usual. This has allowed the feet to drop down by about 15mm in total which means that my shoes now (just!) clear the shell. That's pretty much finished I think - more testing to be done and fine fettling... (Image 14). Next - racing at Rhyl - can't wait 🍌

Russell Bridge

 find @russellbridge77 on instagram



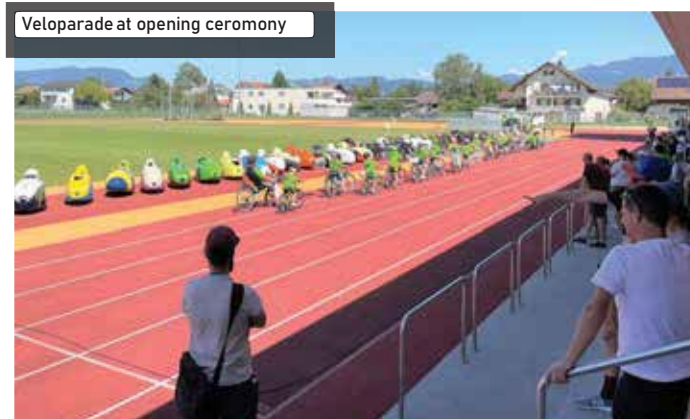
## LIEGEVELO-WM 2023 LUSTENAU

Text various – Fotos: Stefan Wohlsfeld, Johan Zeistra - Redaktion Andi Gerber – Translation Deepl.com

For the first time a World Recumbent Championship in Austria, since 1999 finally another one in Switzerland. The cooperation between the Liegeradclub Vorarlberg and Futurebike Schweiz was a complete success. Thanks to the many supporters who made this possible. Not only the participants were enthusiastic, but also the supporters and visitors were able to experience a great event with a fantastic atmosphere over three days. Below shown are different perspectives on the World Cup.

### Fast-forward the run-up to the HPV World Cup 2023

Another World Cup was planned for France in 2023, but it became clear that this would not materialise. At the 2022 World Championships in Orgelet (FR), Werner Klomp therefore agreed to check whether a World Championships in Vorarlberg (A) was possible. An initial organising committee meeting was held in Rapperswil (CH) in September, and the clarifications showed that it should be possible to host a World Championships. The main tasks over the next few months were to obtain the necessary authorisations in both Austria and Switzerland, launch the championships in 2023. At the beginning of December, it was then announced that the Spezi would be coming from Germersheim to Lauchringen, just next to the Lake Constance, meaning that a second major event was on the agenda for 2023 putting additional work load on many people involved. The registration page for participants went live at the beginning of February, while the page for helpers went live a few weeks later. The race mode and regulations were finalised. After the special in April, the organisation really got underway: route permits with visits to the authorities and an expert opinion from a traffic expert, renting the park stadium, insurance, ensuring catering, information for participants, media work. The list could be extended almost indefinitely. It's unbelievable how much Werner and his helpers did on site. The World Championships were approaching at breakneck speed, outstanding authorisations had to be obtained, technical aspects of timekeeping clarified, T-shirts and start numbers ordered and a detailed schedule for the World Championships, including the deployment of helpers, drawn up.



in the German and  
Swiss club magazine  
Info Bull 233, April 2023



HPV Human Powered Vehicle World Championships 2023 Lustenau (Austria)

So there was a huge amount of work to be done in the run-up to the event, but most of it worked well and the mood in the organising committee was good. Only when construction work on the 100km course was delayed and there was still no surface one week before the World Championships did we start to feel uneasy. However, we were assured by the municipality of Lustenau that the work would be completed by Friday and this promise was honoured with a good surface.

From Thursday: The Parkstadion Lustenau, heart of the World Cup On Thursday morning we were able to move into the stadium, the kitchen team got started, and we only really realised the dimensions of various aspects: the purchase of the food was just under five times as much, several trips by car were necessary for the drinks deliveries, and we had to make a few more trips to the stadium a small delivery van.

It also took time to prepare the documents and material for the 110 participants and over 70 helpers so that everything was ready on Friday.

Thanks to the concentration of the World Championships at the World Championships Centre in the Parkstadion Lustenau, there was a clear centrepiece where people could meet after the races. The cosy atmosphere was greatly appreciated by all those attending. Nadine and her kitchen team catered for everyone from Thursday evening to Monday morning and set a high bar in terms of both quality and quantity with their culinary offerings. Thanks to the mild temperatures, it was possible to linger in the stands and socialise until late into the night. Overnight accommodation was available in the tent or scout hostel directly in front of the stadium and the stadium's sanitary facilities were free to use. There were also the opportunities to cool off in an outdoor pool, which was also just round the corner.

### Friday: "Lustenau in recumbent bike world championship fever" Registration, opening ceremony and hill race in Switzerland.

Friday it was soon like an anthill: participants had their vehicles registered, were able to collect their documents and transponders and pick up their vehicles for the race. The helpers were also greeted, equipped, and briefed for their tasks.

The official opening was at 15:00 with the arrival of a bike parade of schoolchildren with the flags of all participating nations, followed by a speech by the mayor of Lustenau.

Various groups of cyclists then travelled over to St. Margrethen for the start of the mountain race to Walzenhausen. Drinks and toilets were available in the waiting area at the school building.

### Hill race from St. Margrethen to Walzhausen

"This year I lined up at the front of the start line. The start went great, no problems and I quickly got into my rhythm. Christoph Rindlisbacher in his Alpha7 and a WAW overtook me, but that didn't matter to me at first. My plan was to cover the course at an average of around 320 watts. So I continued, revolution after revolution, always keeping an eye on my performance. After less than 2 minutes, I overtook the WAW and was able to catch up with the first tandems and trikes. (I don't think we started 5 minutes behind them as planned).

At some point I no longer saw the Alpha7, it had travelled so far away from me. Instead, Julian and his DF XL followed behind me. We went up the hill like this for some time. At some point, the gap between Julian and me got bigger. A few hundred metres before the finish, Christoph appeared in front of me again in his Alpha7. So, I put the pedal to the metal and put in another final sprint, maybe I could catch him again?

As far as I could, I drove on the right, as Christoph didn't have a mirror on the right-hand side. I caught up with him unnoticed. I moved over to the left and started to overtake. Christoph then noticed me and gave it his all again. Fortunately, I already had more speed and was able to catch up. Less than 100 metres to the finish, what a thrill!



Birk Comet 4.000m-Sprint



Power Woman Kerstin 4.000m-Sprint

Fully at the limit and with a new maximum heart rate, I was able to get ahead of him and cross the finish line as the first velomobile rider. According to the recording, I averaged 335 watts and a maximum heart rate of 204, system weight just under 90kg.

Fortunately, the volunteers provided water directly at the finish. You could also hear and see Werner's speeding there. At the finish there were 3 alphorn players playing music! Really fantastic! A mega view, great race, brilliant route and a really nice atmosphere! All the tension and nervousness were gone, very relieving!" **Simon Löw**

A video of Simon and his full report on the World Championships can be found on Droplimits.

Alain Hinzen was the fastest up the climb on his Cruzbike, over 50 seconds ahead of David L'Hostis and Bruno Cagnolati (both on Zockra), with Simon and Christoph the first velomobiles behind, also only 1:15 minutes behind Alain.

After the race at the finish line, you could enjoy the marvellous view over Lake Constance and an alphorn trio greeted you with their traditional music. After the return journey to the stadium, a dinner was already waiting for the participants, actually just a small detail, but not a matter of course, and the sum of these details make the difference between a good and an outstanding world championship.

1) [https://droplimits.de/Berichte\\_zu\\_Rennveranstaltungen/wm-2023-lustenau-fahrerberichte.html](https://droplimits.de/Berichte_zu_Rennveranstaltungen/wm-2023-lustenau-fahrerberichte.html).



### Saturday: The sprints on the Rheindamm

"For some riders, it was a real relief when they could finally pedal, they were like aspen leaves or shaking poplars... Distributing water, shooing transponder carriers away from the cables, asking fellow riders and spectators to leave the road, aligning bikes at the start (transponder line), reading off names and numbers, which occasionally made our international participants smile and laugh :cool:.

The highlight in between was a little girl, about 3-4 years old, when I guided her around the timing cables, she let me know with hand signals and questioning eyes that she wanted to know more about it. The answer that the time is measured here was not enough for her, she wanted to know everything about the log box, the transponders, the cables... Her mum had to "take her by the hand" to continue." **Lyvius Meichtry**, helper at the starting line

### Summarising the results from Saturday

**1000 metre race with standing start:** winner Simon Löw with 61.7 km/h, one tenth of a second faster than Julian Kraft, in 24th place Geoffroy Lelievre the fastest "non-velomobilist" with 53.6 km/h.

**200 metres flying start:** Winner Julian Kraft in 9.205 seconds with an incredible 78.2 km/h, followed by Pieter Sijbrandij and Simon Löw, Geoffroy Lelievre as the fastest partially clad rider with 64.2 km/h and Alain Hinzen unclad with 62.1 km/h.

**4000 metres standing start:** winner Pieter Sijbrandij with 65.9km/h ahead of Julian Kraft and Daniel Fenn, Alain Hinzen in 31st place fastest "non-velomobilist" with 53.3 km/h.

"The breaks between the sprints: Opportunity to chat with the others in French, English and German and to admire the wide variety of bikes. Ultimately, the best result of the day: all these encounters. I left Lustenau full of positive energy (a big thank you once again for this great sporting event)" **Miriam Eisermann**



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### Sunday: The 100 km race

"19 laps on a flat 5.4 km course with three sharp bends. The start with fully clad, partially clad and unclad recumbents, tandems and trikes was chaotic as expected. I took the lead of the uncovered (UV) and partially covered (TV) bikes, with the plan of setting the pace to form a good group. This strategy worked. Melchior and I were in a group with four recumbents with rear fairings. After about half an hour, two more riders joined us, one with and one without a rear fairing. Unfortunately, I was already getting cramps in my legs at this point. I was lucky that the pace was pretty constant, but I was always on the verge of cramping. I only had to finish in this group, so I tried to avoid excessive power peaks and stay in the group. Not an easy task on this course with three bends, after each of which you have to make a tight start to avoid falling out of the group.



I only had to finish in this group, so I tried to avoid excessive power peaks and stay in the group. Not an easy task on this course with three bends, after each of which you have to make a tight start to avoid falling out of the group. With 20 minutes to go, what was bound to happen happened. One kick from a rider with a rear fairing and my legs exploded, I could hardly pedal any more. I only had one thing on my mind: "Don't stop pedalling. If you do, the race is over". I had to let the group go (or at least what was left of the group after the attack). What followed was 20 long minutes in which I just had to survive without being caught by too many riders in my category. I found my rhythm and was able to finish the race with another UV rider and finish second in my category." **Alain Hinzen**



The winner of the 100km race was Christoph Rindlisbacher, who rode from the very back of the field and finished the race with an average speed of 53.0 km/h, more than two and a half minutes ahead of Pieter Sijbrandij and Julian Kraft. Jürg Birkenstock demonstrated his racing skills as well as the speed of his Comet RT with an average speed of 46.0 km/h, while Melchior Pope was the first to cross the finish line at 45.7 km/h (unclipped)

The race was not only exciting for the leading group, but also further back in the field, where every place was fought for with great vigour.



100 km-Race: Stephan A. at the Limit



100 km-Race: Lyvius at Work

### The closing ceremony and the overall results

Back at the stadium, the refreshments were once again waiting for the participants, people spread out in the stands and once again took advantage of the informal atmosphere for intensive discussions, whether about the 100km race, recumbent bikes or something completely different. The bikes were set up again and the ranking ceremony began.

### Overview of the (overall) results

It was pleasing to see so many young and fresh faces, such as Thais Leborgne at the age of 16 in the women's category and Julian Kraft and Simon Löw in 2nd and 3rd place overall.

The ranking lists can be found at

<https://www.hpvm2023.org/teilnehmer>

Those remaining were then able to enjoy a final dinner, followed by a spectacular thunderstorm including a joint rescue of the Park Stadium marquee, thanks to Jascha's cordless screwdriver. We did the final dismantling and clearing up work until midday on Monday, followed by a small closing dinner for the OC at Gasthaus Rohr and a dip in the Rhine before cycling home (a point of honour). It was a great weekend at the World Championships in Lustenau, so we can only say: we'd love to come back again.

### Categorie Tandem

1. François Damien Combe & Diego Almeida
2. Jan & Petr Herberk
3. Christine & Herve Scieur

### Categorie Trikes Frauen

1. Miriam Eisermann
2. Judith Swallow
3. Kerstin Lechtenberg

### Categorie Trikes

1. James Coxon
2. Philippe Descubes
3. Peter Heal

### Categorie Unverschalt Frauen:

1. Thais Leborgne
2. Anna May Brönnimann
3. Elisabeth Karrer

### Categorie Unverschalt Männer

1. Alain Hinzen
2. Melchior Poppe
3. Pierre Goujon

### Categorie Teilverschalt

1. Marco Ruga
2. Geoffroy Lelievre
3. Jürg Birkenstock

### Categorie Velomobile Frauen

1. Nici Walde
2. Natacha Walther
3. Susanne Sailer

### Categorie Velomobile Männer

1. Julian Kraft
2. Pieter Sijbrandij
3. Christoph Rindlisbacher

### Overall Winner Juniors

1. Riwan Leborgne
2. Thais Leborgne
3. William Tulett

### Overall Winner Women

1. Nici Walde
2. Natacha Walther
3. Susanne Sailer

### Overall Winner

1. Christoph Rindlisbacher
2. Julian Kraft
3. Simon Löw



Starting row of the Trikes



Unique Ambiance in Lustenau

#### The speaker's perspective (Michael Döhrbeck)

"Even at 60, you have the chance to slip into a new role. I wouldn't have dared to do it without Andi's request. Before I accepted, I briefly considered what the requirements profile of a speaker for an HPV World Championship was - and was surprised to realise that I met them quite well (3 languages, knowledge of the HPV scene for decades, racing experience with Lightning F40,...).

The information support before and during the race was excellent. Andi had completed a list of participants for me with information about the riders and vehicles; in the timing lorry at the finish I was provided with the best possible information by 3 people: Edgar, the main person responsible for timing and race scoring, Sigi, who provided the lorry and hardware free of charge, and Vronie, who jumped into the saddle of her e-bike and speed off whenever a problem arose. I also had my own screen with up-to-date data at my disposal.

Although the radio transmission of data from the start to the finish usually works reliably, it just wouldn't work at the Rhine dam - probably because of a large transmission aerial on the Swiss side of the Rhine. Edgar was close to despair, although this "only" meant that the exact start times of the 3 sprints could only be transmitted and analysed afterwards, and that I, as the speaker, could "only" entertain the audience with background information on drivers, vehicles and technical facts instead of ad hoc results.



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Over time, I also learnt to switch off the mic between the announcements so that no conversations were transmitted from the "cockpit".

For my sake, Sigi exposed himself to the sun along the route to radio me the start numbers about 150 metres before the finish so that my information was correct.

While I - like most people – spent the night from Saturday to Sunday asleep, Edgar, Vronie and Richard struggled with the scoring software, which suddenly

refused to accept the riding times digitally. Anyone who ever finds it appropriate to criticise Edgar for results that are not immediately available, should please bear in mind the enormous commitment and ambition with which Edgar compensates for the additional effort required by the unexpected adversities of hardware and software. Edgar, who does an important job. Edgar, who does such an important job and is so modest that he doesn't like to be in the limelight!

### Thanks from the organising committee (OC)

Organising a World Cup was exciting new territory for the entire OC. Such an event is only possible with the active support of numerous helpers. We were supported not only by members of the Vorarlberg Recumbent Cycling Club and Futurebike Switzerland, but also by numerous other helpers, e.g. from Germany, the Netherlands, France and Italy. We were particularly pleased to hear from many that not only the helpers and spectators were full of compliments for a great World Championships, but also that the crew of helpers were able to enjoy a harmonious World Championships despite all the work.

### Once again a huge thank you to you!!!

A big thank you also to the municipality of Lustenau and Volta-Edelstahl for their support!

Werner Klomp, Julia Hämmerle, Andi Gerber and the other members of the organising committee of the Recumbent Bike World Championships



The 100km criterium was particularly interesting for me: the riding times were recorded individually for each rider and after each lap the current position and a forecast of when he/she would next cross the start/finish line was calculated. I was therefore able to pass on this exciting information live to the audience. To cut a long story short: I was thrilled and hope that this enthusiasm was palpable!"

### What remains?

"An incredibly well-organised world championship with great competition conditions. I thought the setting was extremely well organised. And the great work was worth it, the participation with over 110 starters was very good. The atmosphere and the weather were simply fantastic. I simply enjoyed my time on site, was able to have lots of conversations, meet fantastic people. Now I have a face for even more names and lots of stories. I spent too much time in the evenings, but it was worth it." **Holger Seidel**

### What happens next?

HPV-WC 2024: Betteshanger Country Park UK 16/17/18 August 2024

If we don't see each other at the Spezi in Lauchringen in April 2024, the British Human Power Club will take over the organisation of the 2024 World Championships. Many people will probably remember Betteshanger Park from the 2018 World Championships. The facility is located on the site of a former coal mine and features a 3.5 km circuit, which can be divided into a 1.5 km and a 2 km course. This means that another great championship with varied and exciting races can be expected.


# Family holiday from the Netherlands to Austria

by Rembrandt Bakker,  
photos Marieke Rijkse,  
Rembrandt Bakker



from the Dutch magazine  
*Ligfiets&*, 2023-4  
(*Vakantie* is holidays)

Legoland has been on the wish list of our kids (11 and 14) for a long time, and the plan for 2023 is to select Denmark as our holiday destination. However, when it becomes clear that the HPV World Championships are held in Austria, near Legoland Germany, our travel plans turn 180 degrees. In three weeks we will cycle there and get to know many rivers: the Rur, Rhine, Moselle, Neckar and Danube.

 The first campsite is also by far the best: the garden of Nellie and Gerard (timekeeper of the Dutch HPV association) where we are completely pampered. We arrive late due to a tire that first goes flat and then gets damaged because the brake pads rub against it. The next day the tire explodes with a bang, just after we pick up a new one at the local bike store. What a timing! Along the rippling Rur we reach the open-pit coal mines between Cologne and Aachen, where environmentalists have put up much of a fight to prevent further expansion. When you look at the huge gaping hole, with the thick layer of coal under a six times thicker layer of sand, you can understand how difficult it is to say goodbye to this cheap source of energy that is there for the taking. Close to Cologne Marieke points out a large castle with a flag on top. However she's not wearing



*The Hambach open-pit coal mine.*



*The infamous schnitzel in camping Schwarzwaldblick. Here we still look happy.*

her glasses, what we see is a large industrial complex. The following days we spot dozens of beautiful 'Marieke castles'. We bike along the Rhine and turn right at Koblenz for a side trip along the Moselle. It's fun to be on a route that is very popular among holiday cyclists. From the campsite we see them going: a father with a child. And lagging a hundred meters behind: a mother pushing a smaller child. While we look at it we make up stories about the family situation and accompanying internal tensions. To get back to the Rhine we go into the mountains. A tourist attraction has been created here: the suspension bridge at Geierlay. Its biggest appeal is the large crowd of tourists that gives momentum to the narrow footbridge. Going back to the Rhine is the 'grand finale' of this detour. At the top of the descent we take a break to observe the Rhine flowing fiercely through the mountains, and how difficult it is to steer a large barge combination through the sharp turns.

Beyond Mannheim, we turn east. With trepidation we cycle into the Black Forest. Do Ents or other tree creatures live here? Don't we have to make sacrifices to be allowed to pass? Unfortunately, we never

encounter the entrance to the forest. We ride along car-free bicycle routes with steep climbs and descents, while the easy roads are filled with a relentless stream of traffic. "Head up to go down," is how we encourage ourselves every time we go uphill at walking pace. Camping Schwarzwaldblick appears to be populated by frail elderly people and workmen. The ashtray in the toilet is well used. Just as we want to leave for a trendy eatery, it starts to rain heavily. Reluctantly we opt for a schnitzel at the campsite. The innkeeper and his guests are already quite tipsy. A young woman begins to talk enthusiastically about the sights in the neighbourhood. She has problems with her husband; when she talks about this she gets emotional and goes outside for a cigarette.

The next day we are all sick. At a snail's pace we ride to the beautiful city of Tübingen. All around us the most diverse types of bikes are buzzing along. Sticking out



*A surprise in Tübingen: a 1990s Twike with dual pedal stees and besides a sturdy electro motor, with which you can ride 80 kilometer an hour. The Twike still is alive and kicking, model 5 can be preordered via [Twike.com](http://Twike.com).*





*A recumbent is very apt to go sightseeing.*



*Two bravest of us party when we reach the Bodensee (Lake Constance).*



*Main characters Victor, Oliver, Marieke, Rembrandt.*

of a garage we even see an old Twike, an experiment from the 1990s with electric motor and pedal assistance for both rider and passenger. We are pitched next to the beautiful Neckar but lock ourselves up in our little tent to get our guts back in order. A rainy day follows; for only 20 minutes we get to see how beautiful the little river Erms is when the sun shines on the many rapids. The next day is better, this stage goes down a net 300 meters and the route on a gravel path winding through old forests makes such optimal use of it that it feels like having e-assist. So we get some fat on the bones again. After the lunch break, the handlebar of one of our bikes breaks off at the hinge. Miraculously we manage to reassemble this home-made part, albeit slightly shortened. We camp near the beautiful city of Ulm on the Danube. In the Fishing Quarter there are old half-timbered houses built in the middle of a fast-flowing river. Just open the front door and a salmon may jump in! A war is being prepared in the market square; dozens of police vans are lined up in battle order. Later, when we cycle past the soccer stadium, we draw our conclusions.

In Legoland, as real HPV-ers, we naturally want to explore the park in the pedal-powered monorail. We stand in a boring slalom line for an hour, just as the sun breaks through to make us sweat. Unfortunately, it makes no difference to your speed whether you spin the pedals forward, backward or just in your mind. All in all, it's quite a fun park with an outdoor mini-world built entirely of Lego bricks. After two more days of cycling through the beautiful Allgäu with its fresh green alpine meadows, we reach Lake Constance in Bregenz, where the two bravest of us soon find themselves upside down in the water. This is the busiest cycling junction we have ever come across. In Lustenau we search in vain for other World Cup guests when we arrive at the wrong sports stadium. Fortunately, I have the phone number of Alexander who constitutes the Dutch field of participants together with Ymte and Pieter. Only five minutes late we arrive at the opening ceremony and our task as volunteers can begin. Mission accomplished!



*After the Worldchampionship we ride in two days through a beautiful mountain pass, closed for automobiles, to Oberstdorf train station.*

We would rather not remember the return trip. In four words: the big train battle. <



*We navigated with an Android telephone mounted on the handlebars with the app OsmAnd+. Left hand in green the predownloaded maps, and in red the with graphhopper.com or brouter.de preplanned stages. On the right hand in red the planned track to go on (mind you, the motorhighway also is red), and in brown roads that local authorities deem cycling routes with few automobiles.*



# The 100km record or how to nearly kill yourself while cycling in circles

James Coxon's report on how he set a new World Ultra Cycling Record for 100km Indoor Velodrome at The Geraint Thomas National Velodrome of Wales, Newport, Gwent.

After the hour record last year, I was a bit deflated. My friends would ask me what I was going to do next. To be honest, I was at a loss regarding an answer. In terms of Paralympic cycling, my disability did not fit into the prescribed categories. I struggled to balance on a normal bike but my disability was not listed on the UCI list of pathologies qualifying one for an upright trike. Even if my condition, MMN\*, was on their list, I am not sure if my none functioning arm could cope with the gymnastics required cornering on these "normal" upright trikes.

Plus, I had a record breaking, custom made, carbon trike just sat there. In a Disney anthropomorphic world, it would be asking me what the hell I was doing, its little wheels spinning in frustration. Added to this, my coach, Youcef Cummings from HandSling Coaching, was convinced I should look at longer distances, sighting my total lack of sprinting skills and massive tolerance of monotonous efforts. As a cyclist, I was no Cippolini but good at boring steady efforts.

So what distance? We looked at the outdoor 100 mile records but I did not want to take on the tremendous record that my friend Jochem Leemans, achieved on his standard ICE VTX trike. Plus, knowing Wales, it would be pouring with rain and a blowing force 10 gale.

Once we had ruled out outdoor efforts, we were left with a record attempt to be set on the 250m Geraint Thomas National Velodrome of Wales. Here we were guaranteed a fast surface and no rain. However, lapping every 18 seconds is hard on the body and mind. Every few seconds your body is pressed into the seat as you hit the corner, feeling the G force of travelling 50kmh into a 45 degree banked track.

After riding the track for 90 minutes at a moderate pace I realised 100 miles would be too much for me. My brain was spinning already. So that left 100km or as I looked at it, 400 laps.

The only downside of this was that no-one had set this

record before. With the hour record, I had Kyle's record to aim for. Kyle is a great athlete and this really motivated in training and during the event. However, looking through the WUCA records I saw the fastest time for a "upright" bike was 2hr 19 minutes. This became the target and I felt that beating this record would really highlight what a para-athlete could do on three wheels.

The training followed a similar pattern to the year before. October to February consisted of long easy rides with lots of strength and conditioning work. The dumbbells were occasionally lifted. Indeed, at one point with strong down lighting, while severely dehydrated, I saw a slight dimpling where six pack abs should be.

From Feb to May the training time increased, with some intervals introduced. I also competed in some BHPC events, which were great fun. I had superb races with the two-wheel recumbents, all on short twisty courses. However, these types of efforts, where you are sprinting out of corners, are not the best training for holding over 300 watts for 2 hours.

Therefore, as the record date came closer, the training consisted of long intervals with short rest periods in between. These were hard and required real concentration to complete. To start they were four 20 minutes efforts at around 320 watts with 10 minutes spinning between. However, at the end they were around the same effort for 40 minutes with just four-minute rest periods. Needless to say, that shed, turbo trainer and farm cats shared some really dark times with me.

However, these efforts taught me some lessons. Number one; expect to feel low mentally once you get past 80 minutes but remember you will come out of this mental state in a few minutes.

Number two; drinking and eating are vital, especially in the heat. I think for an hour you can get away with it. I certainly did not drink during the hour effort. However, your heart rate and perceived effort will shoot up if you don't drink or



6 \*Multi focal motor neuropathy (MMN) is a progressively worsening condition where muscles in the extremities gradually weaken. The disorder is a motor neuropathy syndrome and was first described in the mid-1980s (source wikipedia).



eat during longer efforts.

Number three; this is going to be really hard, especially in a hot environment.

Due to Youcef's training plan, by the time of the record attempt I was looking good. My power at low heart rates had increased dramatically and I was able to hold threshold power for long period time. My weight was down due to all the training and lack of cake, which should help with the heat build-up. A bonus of this was not needing to breath in constantly while in the skin suit.

We knew the trike was a record-breaking beast. However, I was convinced there were gains to be made with the air flow over the huge chainring. I approached Digirit, who kindly supplied me with a solid 90t narrow wide chainring. This looked amazing and more importantly added the equivalent of 10 watts to my speed when we measured it on the track.

We also looked at improving the chain line to decrease the friction of the drive chain. 8 gears became 5 as we shifted the cogs in the rear cassette to a more favoured position. This felt noticeably better.

This, plus new wheel covers from Daniel at Streamline Cycling, gave me a feeling of confidence which really showed up on the data we collected when training on the track. Beating 2hrs 19 minutes was possible. 2 hours 10 minutes was going to be hard. 2 hours 5 minutes would be very hard indeed but maybe....

The day arrived and I met Jonathan and Dave, the WUCA officials, armed with their laptops and cameras, at the track. Carrying equipment from the car, I was sweating. It was a humid day, with the low-pressure system forecast failing to push away the heavy air. The temperature trackside was in the high twenties which was causing me to worry about heat build-up.

However, time moved quickly, as I warmed up on my Sportsraft rollers. It all seemed a bit surreal, after thinking about this, for over eight months while pedalling away in the shed. Before I knew it, I was on the track with Bryan, my track coach, counting me down. I could now go on about lap times, power numbers and other data. However, a brief summary of my inner dialogue during the



next two hours would be this.

1. First 40 minutes – “OMG I am flying, here comes a new hour record and a sub 2 hour time. These spectators are going to witness something special here.”
2. Second 40 minutes – “why am I going slower? Maybe I should settle for sub 2 hours 5 minutes. Why is everyone eating pizza? Are they saving me some? Can they not see the discomfort I am in?”
3. Next 40 minutes – “Why are my arms going numb? Am I having a heart attack? At least I could stop then. OMG don't think about stopping, imagine the shame. There is a film crew here for crying out loud. Don't think about it, just pedal.”
4. Last 4 minutes – “I have never, ever, felt in this much discomfort. Just finish, just finish.”

I finished in a time of 2 hours 3 mins 57 seconds, averaging over 48 kmh and unable to move. After a few minutes, I was lifted from the trike and left to recover on a chair while people shouted their congratulations. Despite this, my first thoughts were one of disappointment. During the first hour I genuinely thought I was on for sub 2 hours. However, with hindsight I realise that the effect of the heat and the physical effort riding 400 laps on a velodrome made this impossible for me. I felt better after looking back at the data. Despite my power dropping down way below what I would expect, my heart rate was within 5 beats of its maximum for the last 30 minutes. There was no way I could have pedalled harder, despite what my ego told my legs.

What really cheered me up was talking to my fellow trike racer, Jochem, on the way to the pub, who reminded me what I had achieved. I had beaten the record set by an upright bike by over 15 minutes. Of course, my next thought was “I wonder what I can do next?”

James Coxon



James' machine is a Phantom carbon fibre recumbent tricycle built by Tim Corbett in Australia. For the most part the seat is the structure. It has wheel covers but no other non-structural aerodynamic parts. A transponder for the MyLaps system was taped to the frame to the right of the rear wheel. He had an on-board drinking system with a tube.

## 100KM Technical report (extract) Jonathan Woolrich

Dave Larrington and I set up the timing system provided by Mike Mowett. It consists of a tape strip, which operates a debounce circuit, so only one crossing is recorded per lap. That operates a calibrated stopwatch which can record up to 500 laps, and makes a mouse click on a mouse positioned to update the lap counting spreadsheet provided by Mike. Dave had tested this system for 400 activations. The spreadsheet has an occasional glitch but corrects itself next time around. The debounce is switched to start or stop on the stopwatch for first and last crossings and to record laps through the attempt.

The other timing system in use was the velodrome's own MyLaps system, operated by Steve Miller.

Steve asked that James start 3m short of the line so he could see the transponder response and distinguish it from his start countdown. That first response was removed, so James rode about 3m further than 100Km in the time. The backup system tape was positioned 3m back from the start line. James shuffled back and forth a little over it and we had to reset each time. He ended up with the front wheels just in front of the tape, so it was triggered by the back wheel. The front wheels triggered it at the finish. I estimate the difference to be about 0.03 seconds at racing speed.

James tells me the trike was positioned on the track so the MyLaps transponder, attached to the rear of the trike, was 3m behind the track MyLaps sensor line. This extra distance was added at the request of Larry Oslund, to allow for the distance lost from cycling on the blue band for the first banking on the first lap. As the tape switch was 3m back, this put the front wheels in front of it.

We put out standard foam pads around the track. James started on the blue band of the track and the pads were not in place on the first corner, to help him get to speed. Within a few minutes into the attempt, they were in

place every 5 metres around the curves.

James started at 18:05. He went off very fast. He was scoring sub 18 second laps. He hoped he might be able to beat his own hour record as part of the attempt. After about half an hour he slowed a little and shouted to his trainer he was aiming at 205 – two hours five minutes. After 300 laps he was lapping at over 19 seconds. At 370 laps he was over 20 seconds per lap. I encouraged his supporters to cheer him on. They did and for most of the remaining laps he recovered his pace to mostly sub 20 second laps.

**Dave Larrington adds:**

I've been through the figures recorded by the stopwatch several times. It has lap 338 taking four seconds longer than those either side of it while the spreadsheet and velodrome system both recorded a time of ~19.31 seconds. Subtract four seconds from the cumulative time on the stopwatch and it agrees with the spreadsheet to 0.007 of a second. By adding the individual lap times and converting to hh:mm:ss.000 format I get:

**Velodrome system**

02:03:57.189

**Spreadsheet**

02:03:58.400

**Stopwatch**

02:03:58.393 (with anomalous 4 seconds subtracted)

To see more photographs: Google 'Jonathan Woolrich' + 'flickr' or 'mr\_larrington' + 'flickr' to find their photo albums from the day.





# The party called Paris–Brest–Paris

by Eva Jacobs, photos  
Eva Jacobs and Ivo Miessen

**I didn't understand it. For a year I had been preparing. A brevet every month, sometimes two, and mostly cycling to the start, Boekelo, Groningen, Zeeland and the Climate Tour along the 'future' Dutch coastline. Putting in miles to know if I could do it.**



It was once my dream to be able to participate in Paris–Brest–Paris. Soon my dream became an illusion, too many ailments along the way, fatigue and eventually climate change, were the reasons that led me to the conclusion that I had better leave the trip to others.

That was in November 2022. A month later, I had second thoughts. If I don't give it a try, I won't forgive myself for the rest of my life. By July, I had 12,000 miles on the annual bike-mile counter. I was all set. My dear family decided to come with me to Paris. So we drove the car, the *Pike* on the roof and a trailer with 4 'upwrong' bikes. The Paris–Brest–Paris brevet I would ride with Jos. Jos believed I could handle the distance before I did. And... he had a plan! I never plan, I take it as it comes or I do what other people do... And we had the *Pike-L* that he really wanted for this. The deal was quickly done.

A few rides in the French countryside show, that the front derailleur doesn't shift quite right after all. In

the morning before the start of Paris–Brest–Paris (August 20) we were still adjusting it. After an hour of boarding/riding/booting/tutoring... I'm exceedingly nervous. I no longer have confidence in it... yet Allert managed to tune it!

The start is in Rambouillet, a town next to Paris, which is far less crowded. It's hot. Or at least that's how it feels after a month of rainy cold summer in the Netherlands. All the Dutch people are hot. We gather at the Château Rambouillet for the Paris–Brest–Paris group photo. Most are wearing the club clothes I designed. Nice to see.



*The registration location La Bergerie in Rambouillet.*



*The Dutch at the start in Rambouillet.*



*Most participants drive a racing bike.*



*Peter, Eva and Jos.*





Then some rest under the trees of the castle park, chatting with friends or those who want to admire my bike. Peter's *Snoek* is also there, but just before we have to line up for the bike check, it turns out his lights don't work. Jos comes to the rescue and together they quickly solve the problem of the loose cable. Even before the start I am interviewed by two lovely ladies. "And why did you choose this bike?" "I make them, my husband is the designer, I have no choice."

At 17:15 hours we leave together with the group F, the special bikes. Once on the road, when overtaking (or being overtaken) I see folding bikes, *Moultons*, fixies or ancient randonneur bikes, tandems, even a triple tandem with a German crew. And some 9 other velomobiles.

At first it goes smoothly, but I also pedal more than is desirable for Jos. Then there is a coffee/cola stop, which refreshes us both. A journalist joins us and since my knowledge of French is nil, he just takes pictures and writes down our names. In every village we pass through, people cheer in cafes, families stand around corners waving, on hills >





The first day the three Snoeks still drove together.



from the Dutch magazine Ligfiets&, 2023-4

couples sit on camping chairs in the burning sun to clap. I wave back at everyone and usually smile along with them.

Jos and I keep a steady pace (100 watts average for me), we ride from checkpoint to checkpoint. If I can, I buy coffee, coke and a French sandwich (a filled half baguette). I eat a lot and regularly. To my surprise, I don't get an upset stomach. For drinks, I bring along powdered sports drinks for the entire trek. Maybe silly, but the taste is very sensitive to me. We climb super slow, and descend super fast. There are 10,000 meters of elevation gain along the route. And it's hot. We interrupt the first night just after the checkpoint in Fougères with 2:15 hours of sleep on the side of the road. Me in my sleeping bag, Jos in his bivy.

The second night we want to sleep in Carhaix-Plouguer (at 514th km), for 6 hours long or so. Denis, a client of ours, would be waiting for us there. I exchange a few messages with him and understand that he has arranged an overnight stay. After meeting him further along the route to Brest, it turns out to be a misunderstanding. Still, I am happy to see him! He calls his wife and we cycle another hour, there she arrives with a camper van. We sleep in it on the 540th km, for almost 6 hours. In the morning we join a long line of red lights and reflective vests. Truly magical! So many cyclists doing the same thing. Denis cycles with us.

We passed the checkpoint in Brest just before closing time. We didn't pay attention, how stupid! A quick shower, some more lingering, photo taken on the bridge where you can see the Atlantic Ocean and then back to Paris. Denis left us again in Carhaix.

It's still hot, the hills are steep, one time I'm going up at 6.3 km/h and then again I'm going down at 85 km/h. But there are still all these people along the road, as if they have come for me. "Bravo, madame!" Kids hold out hands, sometimes clapping five-5 in a row. You see names of the participants on banners, who most likely grew up in those villages with the brevet every 4 years. "Maman, quand je serai grande, j'y vais aussi." (Mother, when I'm grown up, I'll go too!) I accepted water three times while cycling from a little boy. So cool! And all those decorations everywhere! The second day we cover 384 km. That means that after a short sleep (three hours) in Fougères, we only have 290 km to go.

Sleeping in a dormitory is not a success. Never mind, after the finish it certainly succeeds. And it is cloudy. So the first 100 km go nicely. Breakfast along the road is provided by the local people in exchange for sending a postcard. And Jos is still cheerful company. And then someone stole all the clouds. There comes a terrible 150 km, bathed in sweat, salt and pain constantly pouring water over the head or your head under the tap if there is one. Everyone is struggling. Participants lie in the roadsides in the shade. Spectators cheer even more enthusiastically, which is also my salvation. They distract me from my personal woes and they lead me toward the finish line. How grateful I am to them! They made it a feast! We cycled over the last threshold in Rambouillet at 22:35 hours. We had covered roughly 1200 km in a total of 77 hours and 16 minutes (including sleep and stops). <



Bicycling through the night.



# The race day in Aldenhoven, September 2, 2023

by Jan Kranczoch,  
translated with DeepL,  
photos Jörg Basler,  
in the German and  
Swiss club magazine  
Info Bull 233, April 2023



The small town of Aldenhoven lies in the middle of the Rhenish lignite mining area. On arrival, the mountain-high spoil heaps and steaming cooling towers stand out as evidence of the ongoing open-cast mining operations. The plain is also used intensively for agriculture due to the rich soil and is otherwise almost empty, which obviously provides favourable conditions for wind turbines that have now conquered the landscape.

In any case, the area also offers enough space for a spacious test track which, according to its name – ATC, Automotive Testing Center – is actually only intended for motorized vehicles. But fortunately, exceptions are possible...

The 2.1 km long circuit, consisting of two 600 m long straights connected by two long hairpin bends with significantly different radii ('egg-shaped' would be a bit of a misnomer), is very banked and can be circumnavigated without lateral forces even at high speeds. As wide as a highway, with a very good surface almost throughout and run-off areas, it is almost ideal for HPV races. In addition, a service hall with a roller shutter door and sanitary facilities can be rented, which are located directly next to the track and a spacious outdoor area – resources for a well-functioning paddock. It was not for nothing that this track was already the scene of the stunning performances in the 6 to 24-hour races on July 2 (Holger Seidel reported in *InfoBull* 232).

September 2nd greeted us early in the morning with flip-flop temperatures and a cloudless sky. When I arrived at the ATC course at 9:30 am, there was already a colourful line of velomobiles on the course and the smell of coffee was coming from the hall. By lunchtime, more participants had arrived, some having travelled long distances from northern and southern Germany or the Netherlands and Belgium. The usual changes to



The area around Aldenhoven.

racing tires and final tuning work on the housings were already making the velomobilists' foreheads sweat, prompting some to choose a spot in the shade. Meanwhile, Veronika Schaffenroth and Otmar Buchert registered the starters and handed out the transponders. Looking at the list, I could already look forward to a podium place, because in addition to 26 velomobiles, there were only two single-track unfaired (including my single-track fossil), and two single-track partially faired vehicles in the field – the typical representation proportion of HPV classes in recent years.

Just in time for the speech by Matthias König, the initiator of this race day, who together with Ralf Golanowsky and Jörg Basler, also kicked off a Saturday of racing in Aldenhoven in 2022. Some clouds gathered at midday and a steady breeze set in. The wind turbines turned to the east and tentatively began their work. The competition for the fastest lap was to be held first: after two warm-up laps, under the guidance of a pace velomobile (driver: Christian Wingken), which sped up to around 50 km/h, we were allowed to overtake and accelerate properly. The order of finish at the end of >



Veronika and Otmar in position, first at registration and later during timekeeping.



> the third and final lap was then simply counted, with Matthias crossing the finish line just ahead of Richard Schaffenroth and Julian Kraft – all in highly race-ready velomobiles, of course. Unfortunately, I could no longer speak of ‘accelerating’ in the scoring lap. At first I was able to keep my pace just over 50 km/h on the straight with the slight headwind, but my knees got soft in the last 400 meters and Heinz Bentlage overtook me with his partially covered *Razz-Fazz*. Overall, I wasn’t able to get my result over the 50 km/h mark.

The strained thighs had about 90 minutes to recover before the line-up for the hour race was called. A further delay reprieve was granted because one

participant was allowed to fix a puncture that had occurred just before the starting signal... So I took advantage of the delay to have a coffee and half a banana. But then we started: even on the first few laps, I feel more like a spectator at the side of the course, counting the passing cycles. At times I’m going over 45 km/h. After a quarter of an hour, however, the speedometer drops below this value for longer and longer sections, as the freshening wind saps my strength and soon my spirits too. I’ve obviously overdone it in the sprint race, my legs seem strangely sluggish.

Again and again, I hear the noise of a larger resonating body closing up from behind, followed by

the rapid passage of a yellow, red or green velomobile. The gap rapidly widens again, although each time I try to take advantage of the weak pull with three or four kicks so as not to slow down too much. But my feet can hardly exert any pressure on the cranks, I concentrate on pedalling as painlessly as possible and give in to the adverse winds when I have to. After three quarters of the distance, I somehow come to terms with these conditions and, curiously enough, this awakens new strength. In the last four laps I can increase my speed again and finally I even take on a sprint with Heinz and Patrick Hagemann on his unclad trike, which I lose – but after a comfortably fast final lap.

*Briefing of the drivers.*







*The field of vehicles from behind with many velomobiles.*





*The four participants who are not fully clad.*



*The duel between Heinz and Jan.*

After a short break to catch my breath, I stagger over to see the timekeeping results, which Veronika Schaffenroth managed in both races: in the end, it was still an average of well over 40 km/h, but the winners in the full-vehicle velomobiles (Matthias König, followed by Stephan Burmester and Ruben Schütze) were a whopping 30 km/h faster. Nici Walde won the women's race ahead of Heike Jöst. Young rider Rieke Bentlage also showed a consistently high speed on her partially faired low-rider. Detailed results can be found at <https://drop.limits.de/BeND/bend-2023/results-bend-2023.html>.

For me, there was yet another reason to acknowledge that 'the trees don't grow into the sky' (there are natural limits to growth) when it comes to performance and that the aerodynamically optimized velomobiles are worlds ahead. A little humility and missed targets are just as much a part of sport as good form on the day and personal bests.



*Uli at the tea towel flag.*





*The group photo at the end could be taken outside this year.*

The prizes for the award ceremonies, including high-quality tires and sports nutrition, were donated by Basler Bikes. During the communal clean-up, participants enjoyed the leftovers from the sumptuous cake and snack buffet, which had been put together by numerous participants. In the closing session, which was once again moderated by Matthias König, the suggestion to hold further events at this location was of course loudly welcomed. Thanks to the active and financial support from the HPV association and the proximity to the

Netherlands and Belgium, there are certainly good prospects for growing popularity and exciting, diverse competitions. At any rate, that would be very much to be hoped for...! <



*Jan's single-track fossil.*

# I Never Change My Plans

by Peter Brown from  
Vancouver, Canada

**I had a plan. I flew from Canada to Turkey in August to visit family. Of course not everything followed my plan, because almost immediately I got covid and spent two weeks flat on my back in bed (including a day in the hospital).**

Covid really knocked me out, so after sort-of recovering, I made a last minute decision that instead of flying back to Canada, I needed to do a cycling trip to get my strength back!

## Change of plan 1: Don't go home, go bicycling!

I am lucky that I flew to Turkey on a one-way ticket. Being recently retired I have some freedom in my schedule, and tickets from Istanbul to just about anywhere in Europe are not very expensive. Although when I left Canada I didn't have any real plan to do a cycling trip, at the last moment, just in case, I had tossed some bicycling shorts into my suitcase. In my world, that is considered pretty sophisticated planning.

In general, I prefer bicycling downhill as much as possible, so here was my Original Cycling Plan: Fly to Europe, rent a bike, cycle down a river, and then fly home. Simple. What could possibly go wrong? I want to get started as soon as possible because it is already late September. So my goal is to fly to Europe three days from now. Not much time to organize a trip, but I do have my bicycling shorts! (This is better than my trip a few years ago when I didn't have any cycling shorts and I cycled across Poland in my underwear: [www.crazyguyonabike.com/doc/?o=3d26&doc\\_id=22171&v=Ad](https://www.crazyguyonabike.com/doc/?o=3d26&doc_id=22171&v=Ad), see Page 8).

So why is my cycling story in this recumbent magazine? Because of my wrist. My wrist gets sore if I ride an upright bike, so I have been riding recumbent bikes in Canada for about 15 years now. I can't ride an upright bike for more than an

hour. But even in Europe, where there are many more recumbents, it is not so easy to find one available for rent. They are expensive bikes and very few companies want to risk getting them scratched and dirty for just a few euros of rental. Probably that is why the last time I rented one, it was quite old and worn out, and I had a few problems with it ([https://www.crazyguyonabike.com/doc/?o=3d26&doc\\_id=24253&v=Fc](https://www.crazyguyonabike.com/doc/?o=3d26&doc_id=24253&v=Fc)).

If renting a recumbent was going to be a challenge, I noticed that there were lots of recumbent bikes for sale in Europe right now, probably because it is the end of summer. And the prices (for an older bike) are often cheaper than I would pay to rent one for just a few weeks!

## Change of plan 2

Instead of trying to rent a recumbent, I will buy one! (As for what I will do with it at the end of the trip, that is too far into the future! No idea yet!) And bonus, I learned that two friends from Canada are going to start a cycling trip from Milan at just about exactly the time I was planning to fly. I can join them!

## Change of plan 3

Find a recumbent bike for sale near Milan, fly there and buy it, and join my friends on a tour. Perfect. This plan also didn't work. Why? There is a website called Subito where pretty much all the bikes for sale in Italy are listed. Anyone can view the ads, but in order to contact the sellers, you first need to open an account. And you can only open an account if you have a local Italian phone number (they send an SMS code to your phone number that you need to enter to establish the account). Of course I don't have an Italian phone number, so all I could do was just look at the ads showing the very nice recumbents for sale.

Fortunately my friends arrived the next day in Milan to start their bike tour, and they got an Italian SIM card with a local number. Great! Now I can open an account! I am still in Turkey, they are in Italy. She sends me her phone number and I enter it into Subito. The SMS code gets sent to her phone. She then e-mails the code to me, and I enter the code on the Subito website. It should have worked, but it didn't. Why? Because the Italian website only gives you 60 seconds to enter the SMS code! Of course I didn't know that, but no problem, we will simply do it again, and try to go a bit faster. But no, not possible! Now her phone number is locked out of the Subito website. Clearly anyone who tries to register more than once to buy a used bicycle in Italy must be some kind of evil hacker or terrorist that must be blocked at all costs!

## Change of plan 4

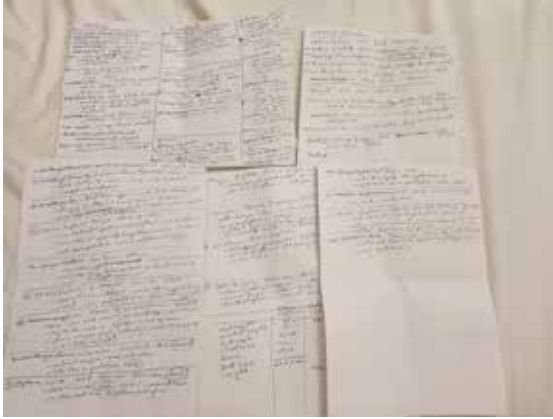
If I can't buy a bike there, I can't start in Italy. No problem, I am flexible. By using her Italian number I am able to open accounts in Netherlands (<https://www.marktplaats.nl/l/fietsen-en-brommers/#q:ligfietsl>) and Germany (<https://www.kleinanzeigen.de/s-fahrraeder/liegerad/k0c217>). Why? Because the Dutch site gives 3 minutes to enter the code and the German site gives 5 minutes! Darn those speedy Italians!

I looked at the websites. Lots of recumbents for sale. My very original plan (before I knew my friends would be arriving in Europe) had been to ride down the Elbe River. Starting from the source of the river in the mountains of the Czech Republic, past Prague, and then up through Germany ending at Hamburg. I couldn't find any recumbents for sale near the source of the Elbe, but there were a number of good recumbents at reasonable prices near Hamburg. So I decided I could start my trip there.



*Excellent Turkish breakfast. Am I really going to leave this behind for a cycling trip?*





*I enjoyed doing a few days of research before my trip. This is my list of the recumbents for sale in the various countries in Europe. Quite a few choices!*

### Change of plan 5

Instead of riding down the Elbe River (as most people would) I will fly to Hamburg and ride up the Elbe River!

However, looking more carefully at the websites, for some reason recumbent bikes are quite a bit cheaper in Holland than in Germany. And also last minute flights to Amsterdam were less expensive than to Hamburg. So again I revised my plan.

### Change of plan 6

Instead of flying to Milan to join my friends, tomorrow I will be flying to Amsterdam, which is almost the furthest point away from them in Europe. So I won't be riding with them, or down the Elbe river. Never mind!

After buying my flight ticket, my friends informed me that they had decided to go hiking in Switzerland for a week or so, and they had changed their tickets to be flying back to Canada from Amsterdam instead of Milan!

It seems that due to these accidental and random unplanned changes, the perfect plan has now fallen into place: Tomorrow I will fly to Amsterdam and purchase a bike (there are 3 that look good, so I am sure at least one will be suitable!)

I will take about 10 days to bike towards Zürich while they finish their hiking in Switzerland. I haven't planned a route yet, but the French wine

country along the way (the new Eurovelo 19 route!) may be calling me!

We will meet somewhere near Zürich and then we will have 2 to 3 weeks to cycle down the Rhine River together to Amsterdam.

They will fly back to Canada, and I will try to decide what to do when I grow up (if I ever grow up. The thought is frightening!).

### Change of plan 7

Instead of just me biking along the Elbe River by myself, it seems like there will be a group of us biking down the Rhine River to Amsterdam!

Great, the plan is all settled! But late at night while doing the final packing for my flight tomorrow, I got an e-mail from my friends that there has been a one-letter spelling mistake that has caused quite a miscommunication. My friends don't want to bike down the Rhine River from Switzerland to Amsterdam. They want to bike down the Rhone River from Switzerland to Marseille since they are going to meet another friend on the south coast of France! Now I have to plan a whole new route!

### Change of plan 8

I need to urgently change the plans again, but I am very tired and I will fly to Amsterdam early tomorrow morning. My last thought before falling asleep is "Who needs a plan anyway?"

So, with all these changes occurring in the last days before our trip, how did it all turn out in actuality? Excellent, but not exactly as planned. Let me explain.

It started off perfectly. My flight from Istanbul to Amsterdam landed exactly on time. The train taking me to the first recumbent (in IJmuiden) was waiting for me as I walked from the airport onto the platform. The bus going to his house was waiting for me as I got off the train. And the bike was lovely. 25 years old, but it looked absolutely brand



*My Optima Lynx with above seat steering, rim brakes, dual suspension, 8 derailleur x 3 internal geared hub = 24 speeds. The original 25 year old Vredestein tires still worked just fine. Lovely and fast bike! I named her Sunshine.*



new. The odometer (I believe it was the original one) showed only 540 km. It had sat under a blanket in his father's garage for a long time. I happily paid the 125 euros that he was asking (how could I argue about that price?) Within 2 hours of landing in Amsterdam I had my new bike (named *Sunshine*) and was heading towards Switzerland. Nothing could be better!

I enjoyed using the bike for about a week across Netherlands and into Belgium, but to be honest it did not suit me perfectly. Lovely bike, but just not quite the right frame size or fit for me. My friends finished their hiking in Switzerland and contacted me again. They said "We would love to join you for more cycling, but we only have one folding bike, and renting a bike would be a problem (because returning it to the original rental location after

*Meet Orange Beauty. My HP Velotechnik Streetmachine Gte from 2004, with under-seat steering, dual suspension, hydraulic rear disk brake, and a very comfortable adjustable seat. 3 x 9 derailleur x 3 speed internal hub = 81 speeds!*



*Self serve wine sales. Fill up recycled bottles with as many liters as you want from the big containers, and put the money on the collection tray.*

riding down the Rhone River would be time-consuming). So unfortunately we can't join you." Hmm.... what to do? Fortunately they had e-mailed me at a critical juncture. The next day, instead of continuing along Eurovelo 19 deeper into France as I had been planning to do, I turned left and headed along the German-Luxembourg border. Why? There had been another recumbent advertised for sale in that region. It was my absolutely favourite recumbent bike of all time, and it was even in my favourite colour: the HP Velotechnik *Streetmachine* in metallic orange. It wasn't near any major airports, so I had crossed that one off my original list for flying to and buying.

#### Change of plan 9

My friends will take the train and meet me in Germany. I will buy the *Streetmachine*, my friend can ride my *Sunshine*, and his wife has her folding bike!



*The author on Orange Beauty somewhere in the French countryside!*

Strangely enough this plan worked. The *Streetmachine* (which I named *Orange Beauty*) was about 20 years old, but in excellent condition. Very similar in design to *Sunshine*, but just a few factors that made it more comfortable for me to ride. Even though it was his first time to ride a recumbent bike, my friend was just fine on it. We biked through the French wine country (a moment ago I accidentally typed "French wind country" which was also true!) We enjoyed sampling the "fresh wine" which is basically grape juice that is actively fermenting in the tanks, but which has not yet been bottled. Sold in a recycled soda pop bottle, it is somewhere between fruit juice and sparkling wine. Great tasting stuff with completely random alcohol content at less than 2 euros a bottle!

After about 10 days we finally arrived with our bikes in Basel. My friends were going to take the train to Zürich (where they had left their suitcases) and then fly to meet a friend on Mallorca. During our





discussions, when we realized this was a friend that I had also known from high school but had not seen in over 40 years, they said "Come with us!"

#### Change of plan 10

Instead of cycling down the Rhone river, I flew to Mallorca.



*My usual position was well behind the rest of the group while going up the mountain switchbacks!*



*Google Maps sent us along some unrideable and steep Roman-era roads.*

Mallorca was fascinating. I was shocked at the number of elite athletes who come there in October when the weather gets too cold in northern Europe to train by riding up the mountains. My friends and I rode up just one of the mountains and it just about killed me. These athletes often climb 4 mountains in a day, several times a week. Respect.

After a week or so, I took the ferry to mainland Spain and cycled from Valencia up to Barcelona. While cruising through the countryside, I was thinking about continuing cycling up into France, when the couple ahead of me were chased in considerable panic by two vicious dogs. To avoid the dogs, I turned around and headed back down the road that I had just come up. This happened to be the road back to the train station. Instead of taking the 10 or 15 km detour up through the hills that I needed to avoid the road-of-dogs, I made the



*Putting some rather large cardboard boxes on the back of Orange Beauty. It was hard to ride with these in the wind. I carried them to the airport and built a box for the bike to be transported on the airplane. Despite being a large airport, they don't sell bike boxes in Barcelona airport.*

sudden decision that one month of cycling (1800 km, 6 countries) had been enough, and at the last moment I jumped on the train and ended my trip.

#### Change of plan 11: I flew home from Barcelona.

I have never had a trip where I bought two bicycles on one trip before! Unfortunately I had to sell *Sunshine* in Basel because my friend did not want to keep her, but for sure I didn't do that to the other bike!

#### Final Change of Plan 12

I took Orange Beauty home because I plan to be riding her in Canada for a long time! And, as you know from all of the above, I never change my plans! <



# Travel to Newcastle

*Text and photos  
by Wilfred Brahm  
of the Dutch NVHPV*

**28 May 2023.** It was the end of May and western Europe had stable weather with sunshine, lack of rain and a brisk north wind. The wind came from the right direction. The Cyclist Unions route planner led me along beautiful and for me unknown cycle paths, such as along the Merwede canal. On Voorne-Putten, I had another endlessly beautiful cycle path. Then came the dams in Zeeland.

The oncoming cyclists struggled against the wind, at least the poor souls without electric assistance. It was crowded, there were especially impressive numbers of kitesurfers. At 5.30 pm, I was warmly welcomed by my friends.

## **29 May**

After a delicious breakfast, I said goodbye and got on my bike at eight o'clock. There are those days when everything works out. I reached the boat in Vlissingen just in time. There I spoke briefly with an elderly Belgian recumbent cyclist who had plans to cycle to the North Cape. After arriving in Zeeuws Vlaanderen, the first stretch was on a kilometres long beautiful cycle path through the dunes. Then through a lovely farming landscape until Sluis where I had coffee on a terrace in the sun. Then I continued my journey. From the terrace, I cycled up a towpath along a canal. It was reasonable for the first few kilometres and then excellent tarmac. This continued until Nieuwpoort. That was over fifty kilometres in ideal conditions with the same strong tailwind. A little after two it was time for lunch at the IJzer quay. The restaurant's kitchen was closed so I took a pancake with chocolate sauce, ice cream and whipped cream. An odd combination but good for the cyclist.

A little after five o'clock I arrived at the hotel in Dunkirk and decided to have a look at the harbour,



*Kitesurfers.*



*Towpath.*







*On the ferry.*

just five kilometres away. Once there, I asked if I could get my ticket in advance, but I couldn't. The man, who didn't speak English at first, asked what time my boat would leave. When I told him it was at nine, he said that time was not possible. The boats leave at eight and 10, not nine. He looked at my booking and noted that DFDS had managed to make it a trip from Calais instead. But it could be converted to Dunkirk tomorrow.

### 30 May

The alarm went off at six and twenty-five minutes later I was on my bike. A friendly young lady arranged for me to join the first boat. That went smoothly. At the next post, masked and uniformed men wanted to see my passport. A little further on my ticket was checked. Finally, I came to a friendly lady from British Customs. At seven o'clock, I was ready to board. The duty-free shops were still closed and there was no coffee to be had. But I was more or less sheltered inside. Then the trucks went in and I was allowed in too. The bike had to go on the foredeck and was tied to a railing in the open. Not ideal but fortunately the weather was calm.

A little after seven-thirty, I was in the premium lounge, something I can highly recommend. There you can grab coffee, cold drinks and all kinds of snacks, whatever you want. There is also fruit. Shortly after departure, I was even offered pro-secco but I declined.



*The way out.*

The weather had been dominated by a stable high-pressure area west of Ireland for more than a week. With a high-pressure area in the northern hemisphere, the wind turns clockwise and therefore we had a cold north wind for quite some time. It was cold because the wind came from the polar region and also did not warm over the still cold North Sea. Decent high pressure areas moved east and then the wind cleared to the east and later south. The theory is ideal now that I am in England going east first and then north. However, the BBC's weather forecast was that the high pressure area would stay in place and a cold north wind would keep eastern England fresh for the next week. And I would have to pound against the wind.

By quarter past nine local time, we arrived in Dover. It took a while to get going. It is a complicated road to get from the port complex. They found a good solution to that: you have to follow a red line on the road. In Dover, I first looked for a pharmacy to buy lip balm with UV protection for my burnt lips. That went well with the coins I brought with me. Then on my way. I soon came upon beautiful English roads with high hedges. They are quite steep and full of pot holes so you can't get up speed uphill or downhill. It was slow progress but really enjoyable.

Around eleven o'clock I reached a small town where I bought some bars at a small supermarket.



*Kent.*

The cashier looked a little strangely at the ten-pound note I had brought with me. The machine that checks paper money rejected it and then also my twenty-pound note. The branch manager was called in and he managed to jam the checking device with my precious note, so he had to dismantle it first. The other customers waited patiently – as usual in England – and the queue by now stretched to the back of the shop. When my note was freed again, I was allowed to pay by card. Unfortunately, my pounds purchased with hard-earned guilders were no longer usable (later I was able to exchange the notes at a bank without any problems).

By now, half the village was present in the long queue. Quickly I got some more modern pounds from the cash machine outside and set off again.

As the afternoon wore on, the hills decreased and I made more progress. The wind didn't bother me, by the way, probably because of all those high hedges.



*Oast houses.*

Along the way, I saw quite a few buildings with a curious pointed cap. Usually it was on a round part of a building. The pointed hat could rotate. A passer-by told me they were 'oast houses'. They were used for drying hops and were thus part of a brewery.

### **31 May**

The next day I set off to visit a recumbent friend in south-west London. Soon I was in the urban area of Greater London. It looked like a suburb of any English city, but endlessly large. It was very pleasant cycling. My hotel was behind a beautiful park that had belonged to Henry VIII and our own stadholder William III of Orange. In the afternoon and evening, I had a very pleasant meeting with my friend and his family.

### **1 June**

In the morning at half past seven I was already on my way from south-west London to north-east London. First again through the beautiful park and then along a busy road that was not yet too busy.



*London.*

Then across the Thames and further down a very long road that went over a big hill. This was a busy road with cycle lanes next to it. Not bike lanes like we are used to in the Netherlands but it worked fine. It was used a lot.

It was only after 2 hours and 25 km that I reached St Paul's Cathedral. Then I continued through busy roads and beautiful parks. Around 11 am and after 40 km, I was out of the city. It was quite an experience to cross this metropolis during rush hour. The cycling infrastructure is still improving and I saw lots of cyclists. You can cycle very well on a recumbent with the flow of other cyclists.

The next day, I was very hospitably received by a recumbent cyclist friend and shown around Cambridge, a very nice student city. We took a trip on a punt on the river Cam, a wonderful experience past the ancient college buildings. We had lunch in a church and beer in a pub where Crick and Watson had announced their discovery of DNA. At the

end of the afternoon, of course, we had a 'proper tea'. My host told of a friend he had invited for a 'proper tea' and who later asked questions about his 'property'.

### **3 June**

The next day, a Saturday, I left after a late breakfast with my chatty landlady. After we had gone through her husband's entire medical file, I could finally checkout. Somewhat to my surprise, this mid-seventy-year-old lady allowed me to pay by debit card.

The day went largely without incident. The landscape in eastern England is even flatter than I thought. I had already heard from an Englishman that lovers of mountains should head more west.

At half past four, after more than a hundred km, I saw a 'Bar open' sign somewhere in the countryside. It was a kind of makeshift building and there were very many exceptionally nice people. Here, over a pint of shandy, I looked for a hotel but they





*Crick and Watson were here.*



*Lincoln Cathedral.*



*On the Cam.*

were nowhere to be found nearby. I called one 20 km away and a young person promised to call me back. But again on my way, I heard nothing. When I walked in an hour and a half later, the very young staff knew nothing and called the manager. The manager started a long-winded story about his wife not being there and her dogs he had to look after. But he didn't have a room. At the pub down the road, all three rooms were rented. And so I ended up cycling much further than intended and ended up in a very cosy and large hotel where it was very noisy because of a wedding. To my surprise, a room was still available and I got my food fairly quickly. And that was also very tasty as was the Portuguese wine.

#### 4 June

Highlight of the day was Lincoln. This lies on a sort of ridge in the landscape running northeast. On the high part is a beautiful cathedral. It can be seen from afar. It was a bit hillier today than yesterday, though.

At a quarter to twelve I had apple pie with lots of custard sauce at a very simple restaurant in a kind of holiday park on a former industrial estate. Ten km before York, I found a fine hotel.

#### 5 June

Soon after leaving, I felt irritation in my eyes. I was riding on a busy road, so that seemed a good explanation. But soon I came to quieter roads and the irritation only increased, as did the tears. And the light irritated more and more. It became increasingly difficult to read the GPS device. After some time, I called a friend who was an ophthalmologist and he advised me to find an ophthalmologist. These are not plentiful in northern England, except in York through which I rode just an hour ago. As I stood in a yard for a moment searching on my phone, the resident came up to me and he strengthened my belief that there are no ophthalmologists further north for the time being. So I returned to York after all. There I came to a hospital that is for outpatients only. So onwards again to the hospital with an emergency room arriving at a quarter past twelve. Three quarters of an hour later I was sitting in the General Practitioner's waiting



*George guards my bike.*

room. Note that only they are allowed to refer to an ophthalmologist. After ten minutes, I found out that you have to draw a number. At half past one, a young female GP called. She saw no reason for a referral.

Then I ate a sandwich in the hospital restaurant. It seemed sensible to stop cycling for a while and so I covered the last 180 km to Newcastle by train. Fortunately, the symptoms had completely disappeared by the evening. And so ended my cycling trip.

As I understood later, the eye complaints could very well be explained by traces of the sunscreen, possibly due to sweat getting into my eyes. <



*The World Championship in Betteshanger, Kent. 2018. In 2024 the World Championship returns here, 16–18 August, photo Wilfred Brahm.*