



From the editor

- * Did you get to see the recumbent bike presented on the ABC new inventors show recently. It created quite a stir on the OzHPV mailing list, some questioning it's capabilities etc and others defending the design.
- *Even more controversial happenings on the Internet of late is the message that past issues of the IHPVA Technical journal, *Human Power* is being offered free on CD in Adobe Acrobat format.

This was followed by another email saying the IHPVA board is taking legal action to prevent the group from releasing said CD.

Corflute versus Carbon-fibre (versus athlete;-)

This article might be quite out of place against the excellent objective comparison article from Rob Wartenhorst in the last HUFF but I present some thoughts. My experience concurs with Rob in that I think a lot of little aero and other improvements can add up to quite significant gains in performance – you can go faster with less effort or to take that analogy further maybe your goal is to go slower with no effort? So if you want to read on I would like to describe some of my findings on the shape of tailfairings and especially corflute v carbon fibre when these materials are used to make tailfairings.

Firstly though I'll make some dodgy observations about the Challenge results from 2003 and 2004 - some are facts and some can only be described as subjective. Actually firstly I will thank Damien and Steve and their team for running the Challenge in Victoria this year – hopefully we can give the team a rest



- *The OzHPV web site has now moved to our new location and is being administered by Andrew Stewart. andrew.stewart@ieee.org http://www.ozhpv.org.au I notice that the old site no longer works now so it wasn't before time we moved on the additions.
- * We have amended the results of the last OzHPV Challenge shown in the last HUFF. New results displayed at the Web site.

Timothy Smith - tas@ozhpv.org.au

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and see the Challenge north of the border in 2005 or the Melbourne event later in the year?

Challenge 2004 vs 2003

Timetrial – an unscientific appraisal

There were only 7 people who competed in this event in both years and had no technical problems with times around or under 300 seconds. I guess the rest may not have returned due to the testing ie hilly nature of Broadford! All but one of those people who rode again improved their speed from 2003 to 2004 – an average of 8.3 seconds per lap or more than 1.5kph! Of the improvers the average improvement was 2.2kph!

From worst to best:

Rider	2003	2004	Km/h	Result
Scott Setford	Road bike	Race trike +tailbox	-3.7	-20s slower
Malcolm Butler	SWB + Tail	SWB + tail	0.5	3s faster
Mick Webster	Swift	Swift	0.3	3s faster
Peter Mathews	SWB + tail	SWB + tail	0.7	6s faster
lan Humphries	Steel Low racer + tail	Carbon low racer + tail	2.5	13s faster
James Friday	LWB	SWB	3.9	25s faster
Gareth Hanks	Trike	Trike and full fairing	5.4	29s faster

Why is it so? Your guess is as good as mine for some of these changes but here goes:

Scott Setford: Much slower on his race trike with tail fairing in 2004 than his road bike in 2003 – at a guess this must be just fitness related or a minor technical hitch somewhere? I'd expect a light race trike to be at least equal on this course.

Malcolm Butler, Mick Webster and Peter Mathews – all 3 I think on almost unchanged steeds – perhaps their minor improvements were just due to familiarisation to the course.

Malcolm also did two laps in 2004 – and was notably 1kph faster on his Flying Furniture SWB than on his road bike – both were in similar "trim" as both had fattish tyres, accessories etc. His old Flying Furniture SWB is one of my early heavy ones,

proving that if you ride everyday on hills, you will be fast even on something heavy!

Ian Humphries: I was rather less fit in 2003 having had a knee problem in the month before so it wasn't a surprise I was a lot faster in '04 - by 13 s and 2.5km/h! My improvement was probably mostly in fitness but having a very light bike obviously really does help too;-) I also rode the VELOKRAFT VK2 also in the Audax Alpine Classic in 2004 (200km with 3600mm altitude gain) so I know it flies up hills. I had exactly the same tailfairing in both '03 and '04. My time in 2004 would have put me in front of Ben in his swish fully faired trike in 2003 but alas Gareth on his fully faired trike was faster than me this year by 0.8kph! Glenn Druery on his Optima Baron (rear wheel disk, no tail) was also faster.

Jamie Friday: 25s faster on his new SWB bike this year – fitness or bike? – probably both! Did you train this year Jamie?

Gareth Hanks: A massive improvement in 2004! I'm not sure how his trike was set up in '03 – improvement due only to adding the Corflute body panels etc or fitness too? Both again probably. I wouldn't have got up that

hill with the single big chainring that Gareth had! He must be quite fit and very strong as he also pushed this heavyish faired trike up that hill lap after lap to finish only a bit sun roasted and about 1 minute ahead of me after 23km – again less than 1kph faster than me.

So it certainly seems like we need some electronic measuring equipment eg Rob's article, to really investigate what improvements work and which do not. Rob's article in the last HUFF was great!

The point so far? Not sure there is one from this analysis so far other than training will make you faster! It seems the strength of the rider AND the machine aerodynamics AND weight are all important. It is good to see perhaps some tweaking of bikes to improve their efficiency from year to year and the larger and



overall faster field this year. Perhaps we should have a pure "Aero" event where we do some proper testing so speeds can improve further. Small improvements = free speed!

Benchmarks...

But another way to test things if you don't have the technical equipment is to use a benchmark test - either coasting the same hill repeatedly or maybe a riding buddy. I do a lot of riding with Peter Heal on Audax rides these days – these involve a lot of pedalling but also a lot of coasting downhills. I have the opportunity of using a few different bikes and seeing how they go against Pete on these coast downs. Close observation can show me a lot and reminds me of all those really fun commutes with corflute tailbox guru Tony Jack – we rode together most weekday afternoons for a few years – always tweaking the bikes and tailboxes to see what was fast and what wasn't...Anyway enough reminiscing and back to my riding with Peter on his home built low racer.

What sort of low racer does Pete ride? (Picture on front page)

Its notable features in benchmark mode are:

- 1. Laidback but fixed seat angle
- 2. Low seat height
- 3. Around the knees "n" handlebars
- 4. Disk aero rear wheel spoke cover
- 5. High crank position
- 6. 120psi Schwalbe Stelvio tyres
- 7. Corflute/coroplast tailbox (though sometimes this is missing)

Not a bad bike — on the items Rob W has mentioned - really quite efficient compared to most other HPVs around with some aero goodies like disk wheel and corflute/coroplast tailbox, but I still think it is a way behind the world's absolute best practice. (Note Pete should be really flying soon though as he has now got a piece of the curved cromoly main tube that I had bent up for the new FLIGHT model — this tube is available for sale to homebuilders)

So anyway what bikes have I had out testing alongside "Pete's benchmark"? Just the usual suspects (in alphabetical order;-):

Flying Furniture SWB M5 20/20 M5 ShockProof M5 Titanium Shockproof Optima Baron Optima Stinger

I guess you could say the above are THE efficient bikes of choice for long and fast rides.

So what works best? I guess all you really need to do is check out some of the bikes I sell to give you some clues on optimising the aerodynamics of a bike with respect to clean lines, seat angle, handlebars and aerowheels with fewer spokes and more V shaped rims.

What sort of differences are we talking about? Significant! On a recent long ride – this 600km ride was the first time I'd fitted the nicely shaped carbon fibre M5 tailfairing to the Titanium Shockproof and one coastdown provided a clear example. While riding along with Pete...on one long downhill I guess Pete must have thought I had been pedalling when I coasted up beside him – he put his arm out and grabbed my shoulder and pulled me back gently, and sped himself up in the process – clearly Pete was now going faster and I was almost a length back - it took all of 5-10 seconds on this long downhill for gravity to reaccelerate the M5 and I up to Pete's speed and for me to begin rolling faster than Pete again, first pulling up alongside, then coasting ahead again and eventually easily rolling away from him. AND this on a lighter, higher, perhaps even more practical bike (tight U-turns are easy on a ShockProof). The ShockProof is VERY COOL! Clearly M5 know how to make bikes and the attention to the little(?) things on the M5 (listed below) all make a big difference! I note that Pete recently wrote about his N+1+1 bike built for his son Matt – very little difference between N+1 and N+1+1 but N+1+1 coasted significantly slower - they should be getting faster

Take note, ye oldy moldy bike builders, that when you are out in the shed sketching, cutting and welding, the elegance of the design and other "little" things really do matter! If your homebuilt bike has tubes going everywhere, and bits hanging off here and there, not to mention heavy tubes and lots of weighty welds and joins, you probably have a bike that may never really feel fast

- it doesn't need to be such - you can clean it up!

The M5 ShockProof for example has:

- 1. Wing shaped monoblade single leg "fork"– aero!
- 2. Narrow M5 handlebars narrow rider profile aero!!
- 3. 18 spoke very strong deep "V" sectioned wheels aero!!!
- 4. Elegant curved main frame and elevated and curved rear stays—clean airflow—aero!!!!
- 5. Curvy carbon tailfairing very attractive with smoother airflow very fast very aero!!!!!



Attention to detail? A monoblade "fork" can be lighter, stiffer, stronger and also more aero if shaped correctly than a standard dual leg fork. It does cost more to make a bike properly but you feel the rewards every time you ride. I can custom bend to shape and sell you a nice pair of narrow handlebars. I have in stock a good number of ultra strong and lightweight "V" shaped 406mm/20" FUSION rims from Velocity in 18, 24 and 36 spoke holes (These are exclusive to Flying Furniture;-) I also have curvy maintubes and tailfairings for sale.

The ShockProof's other features, in comparison to Pete's N+1, don't seem to cancel out the advantages of the above:

6. Lower pedal height relative to the seat compared to Pete's bike (I find a lower pedal height on the long rides more comfortable)

7. Higher seat height than Pete's bike (a higher seat is better for s c e n e r y watching and in traffic;-).

The cromoly steel version of the ShockProof with 406mm wheels shares these features and should WWW.flyingfurniture.com.au M5 CITY RACER (for fast touring tool)

Aerodynamically optimised with clean airflow under the rider tool

roll even faster too due to it being ~2kg heavier than the Titanium version. The ShockProof is quite amazingly also designed to carry your camping luggage in aero-shaped sidebag panniers on an outback or world tour too!

It should be noted that all 1 to 5 above, AND a higher pedal height and a lower seat are found on the M5 Low Racer with its many world records – see photo

It is only surpassed by the very swish M5 Carbon Low Racer and other new and low carbon fibre bikes like the VeloKraft VK2 and VeloKraft NoCom which shape carbon frames into even more elegant and aero designs.

But what is most important I hear you say? I point you to Rob's article firstly and then, for what it is worth, with respect to Pete's benchmark N+1 bike and the M5 and European bikes, I can guess that the one important and easy to change thing is that the around the knee "n" shaped handlebars aren't nearly as fast as the narrow Optima and M5 "^" shaped ones closer to the rider—the narrower the better. The arms are quite tucked in and the speeds improve with narrow handlebars, but all the items 1-5 obviously play their part. I wont even mention underseat handlebars as they provide lots of extra drag—reduced only if the rider is laid way back—see a photo of Rob on his M5 28/26 bike.

So all the things I've learned over the years from riding with Tony, attending World HPV Championships, touring into stubborn headwinds and from studying the great bike designs of people like Bram Moens of M5 and Dries Baron, designer of the Optima Baron, are going into the pot to brew the new Flying Furniture bike – it is called the "FLIGHT" and will be comfortable and efficient and very affordable due to the design also being easier to make than the TOUR and PBP special. Reinventing the wheel is not where it is at – efficient bike design is like all science - we move incrementally forward, faster by research, development, evolution and if I can misquote, I think, Einstein (?) who said we see ahead further by standing on the shoulders of others (and Bram Moens is quite tall!;-)

Stay tuned to see the new Flying Furniture "Flight" model shortly! I'm aiming for perfection in affordable HPVs – the Aussie designed and made bike with the elegantly curved main

frame tube and optimise d lightweight! You will be able to race, commute or tour on "FLIGHT"! the Several fork, brake, front and rear suspension and seat options and touring gear and integrated luggage systems will be available. Like the Flying Furniture TOUR and PBP special models, it will be designed so that

when you add panniers and luggage you wont compromise the aerodynamics and end up with a slug! There is also a new FLIGHT HIGH RACER version in the workshop—a bike with a high seat height and good ride and handling (unlike some other high racers;-) and excellent "balance" and aerodynamics. It will have the ability to sit in and participate in a peleton of upright riders if you want.

Oops I just mentioned the OTHER big difference between bikes I've noticed – the difference in handling and balance between a bike of excellent design and pedigree and other lesser recumbent bikes – a difference you can appreciate with every ride. (note imho Pete has this "balance" right in his N+1 – which as I said is not a bad bike at all and really quite efficient compared to most other HPVs around).

So stay tuned for updates from Flying Furniture Cycles and thanks for reading!

Ian Humphries - ian@flyingfurniture.com.au Founder (and Chief Scientist and Test Pilot;-) Flying Furniture Cycles (a full time HPV business!) www.flyingfurniture.com.au

A charming bike in the Spezi Plaza

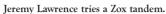
Spezi bike show & Cycling in Germany

During April this year my family and I travelled to England and

Germany for a holiday to visit relatives, and to see the German "Spezi" Bike Show. Before we'd left I'd built a recumbent bike which packs up to fit inside a suitcase and entered the folding recumbent bike contest of Spezi. The bike travelled with us and whenever we stopped for more than a night I'd bring it out, put it together and ride around. You can see quite a lot as a cycle tourist, more than would be possible by walking alone. My brother Richard lives in Folkestone in Kent, England and during our stay we went for a few rides through villages in the area.

At dusk one night we went for a ride on the Folkestone promenade called the Leas and my son Ewan stacked a pedal of my recumbent into a lamp post at about 2 kph, and the brazed on bottom

bracket fell off! But 24 hours 20 pounds, some help from Richard and a trip to a local welder fixed that. The bottom bracket is now welded on. From England we flew out to Frankfurt in Germany and we trained it north to Neubrandenburg where, (former OzHPV President) Jeremy Lawrence is living with his wife Alyson. The town was formerly a fort, with a 1 km diameter 10m high wall surrounding it: this wall separates the very bike friendly "Zentrum" from the rest of the town. There were lots of bikes and lots of types of bikes in town and in Germany.





- * There are cobblestones in the towns and so full suspension is often installed even on ladies town bikes.
- * Frames in Germany are mostly aluminium with very few steel frames available.
- * You don't have to wear helmets riding a bike in Germany. People ride to do everyday things and sometimes wearing a
 - helmet would stuff things up a bit. Can you imagine a lady riding a bike to a hairdresser, only to have her 'do destroyed by a bike helmet on the way home?
 - * New bike new types include "Fitness Bikes" (racers with straight handlebars and Treking bikes (mountain bikes with looped handlebars and slick tyres for trails and touring.)
 - * Most manufacturers are offering some form of scooter bike i.e. Reiser and Muller Eqinox. If there is a recumbent to be seen in a regular bike shop, it is most likely a scooter bike, they are a bit like a Bike-E usually, with the pedals just behind

the small front wheel and a fairly upright seat angle.

- * Fat tyres and puncture proof tyres are available and often used.
- * "Daggy" ladies bikes and old folding bikes are often ridden by older men without a care.

After Neubrandenburg we stopped at Leer in Northeast Germany, again many bikes in evidence and a few more bikes from Holland available i.e. Utopia, Gazelle brand. Some of the bikes had really plush saddles and were ridden very upright – no need for speed whatsoever.

Our final destination in Germany was Germersheim where the Spezi event was held. There is no bigger event in Germersheim throughout the year with over 6500 visitors to the town. The exhibition space is the small, modern town exhibition hall and university.

Despite the large number of visitors, the show still has a family feel with stacks of HPV's around the show area, some fully laden for a weekend of camping and HPV Deutschland very much in evidence, running the folding recumbent competition and a meeting place for their members. Aussies there that I knew included us (Ewan, Stephen and Christine Nurse), Ian and Rachel Sims from Greenspeed, and Jeremy Lawrence who came down from Neubrandenburg for the show. HPV luminaries such as Florian Schlumpf (mountain drive), Bernhard Rohloff (Rohloff speed hub) Dieter Baumann (Radnabel ATL) and Peter Eland (velovision) were there and ready to discuss their inventions and creations with anyone interested. This years invention could be next years big thing, and there were several

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A stressed Stephen Nurse demonstrates the Hammerhead special.

there that looked like they could make it like the Hettlage (www.hettlagedrive.de) toothed belt drive and the Tieffflieger trike from Bergwerk (http://www.bergwerk-bikes.de/2003/ **03_service/news.php**) – a monster, 26" tilting trike that can be snapped up for about 5000 Euro.

There were 16 competitors in the folding recumbent competition, up from 6 at the same event held 2 years ago. Most of the HPV's were built by amateurs like me, but there were 5 professional entries including Greenspeed's folding trike. The criteria for the competition were folding time, folded size, weight and portability when folded. Unfortunately my bike was slow to "unfold" / take apart and heavy and not very portable so I ended up somewhere near the bottom of the competition. Anyway, I have been to several OzHPV challenges riding my own machines and have gotten used to not winning things but enjoying going along. (Folding Recumbent site www.faltlieger.de)

I'd highly recommend a trip to Spezi, and will let the pictures tell rest of the story.

Steve Nurse - cesnur@austarmetro.com.au

Vichpy" email group

A few weeks ago, I set up a "vichpv" yahoo group. Up till now, all communications about Hpv rides and events in Vic have been via "bulk email" and this new group should simplify the process of receiving Email notification of rides and events in the Melbourne area. Bulk emails won't disappear in the forseeable future though! Robert Waryszak will continue to send out notifications of his "Be Spontaneous" rides with a copy to the new yahoo group.

Vital statistics of the group are:

Post message: vichpv@yahoogroups.com Subscribe: vichpv-subscribe@yahoogroups.com Unsubscribe: vichpv-unsubscribe@yahoogroups.com List owner: vichpv-owner@yahoogroups.com

And all welcome to join!

Steve Nurse - cesnur@austarmetro.com.au

Spezi CD

I have just received a CD full of pictures & movies (660 MB) of the 2004 Spezi special bike show in Germersheim Germany.

The CD features the 2nd folding recumbent bike competition (www.faltlieger.de) with a movie of the folding process of the bikes & trikes plus detailed photos of all entrant's bikes folded and unfolded. Also featured are velomobiles, recumbents, Hettlage drive system & some historical bikes. Greenspeed's Ian Sims & I both participated in the folding recumbent bike competition.

Conditions for distribution of the CD are "The material on this CD is HPV-Ware, it may be copied freely, but not for commercial use, and only in the sense of HPV spirit."

Anyway, I want to make the Cd available to list members: my copying, packaging & mailing costs are about \$5.00 and I will make a \$5.00 contribution to ozhpv for every Cd to stay within the spirit of the "licence".

So, if you want a copy of the cd, please send \$10.00 cash cheque or money order to me.

Steve Nurse - cesnur@austarmetro.com.au

New World Hour Record approved at 83.72km

The submission by Paul Gracey of Sam Whittingham's Hour attempt has been reviewed by the IHPVA Records Committee.

The Records Committee finds that Sam has met the hour record requirements. The new hour record will be listed as:

Land - Men's 1 Hour Record - Standing Start (Single rider)

Distance - 52.02miles

Distance Type - 83.72km -10

Name - Varna Diablo

Designer - George Georgev

Rider - Sam Whittingham

Location - Uvalde Texas

Date - 19 Nov 03

Elevation (Meters) - 279

My apologies in the delay in reviewing & approving this record. The committee receipt of the observer report was in mid April.

Bill Gaines- IHPVA Records Chairman

http://www.ihpva.org

Canberra Mob - Come and Try day

Last Saturday the OzHPV Canberra Mob held one of it's "Come and Try Recumbent" afternoons.

It was organised in conjunction with Pedal Power ACT, the local cycle advocacy/commuting/recreational cycling mob.

Even though it was a cool afternoon (temperature not hip) there was a very good turn out.

There were at least 20 recumbents available for people to ride and look at.

This number included 8 trikes 12 bikes and 1 bent tandem.

The must have been 30 non Mob people present during the 2 & 1/2 hours we were out there and they all showed a lot of interest.

Ian Humphries (Flying Furniture Cycles) brought along parts of his fleet and was very busy answering questions and adjusting bikes for various riders.

For the come and try events we use a concrete soccer (Footsal) court about 100m x 50m and so long as everybody goes the same direction, there is enough room for over 10 cyclists to circulate.

The Mob will try and run this type of event again some time later in the year. There's talk of a demonstration trike race and a come and try at the Big Canberra Bike Show to be held in September.

Come and try's are an effective way for people to see all the different types of recumbents available and also to promote OzHPV membership and maybe other state groups might like to give it a try?

The Victorians would have a walk up start having the various trike manufacturers on call, who I am sure would support such events. All you need to do is find a suitable car park or open area and advertise it in the local cycle advocacy group newsletter.

Peter Heal - heal@cyberone.com.au

Recumbent Cycle Tour

What do people think about an annual OzHPV recumbent tour?

You would have to say that the vast majority of recumbents sold and built in Australia are ideal touring vehicles.

I'm thinking that OzHPV could organise an annual week long (9days) tour averaging around 100km a day in some scenic part of Australia on quiet country roads.

Places to tour that come to mind are:

- * The lower Flinders in SA from Hawker back to Adelaide -East coast of Tassie
- * Riverland of SA
- * Albury to Melbourne

Organisation could be as simple as setting the date and the starting point.

Maybe later as numbers grow we could get more formal with organising support, meals etc.

Peter Heal - heal@cyberone.com.au

(Rather be touring than working)

Recumbent touring in Turkey

Check out **www.centralasiabikeride.com** for some very lucky Australians (Chris and Nat Hatherly) riding M5 recumbent bikes through (at present) Turkey.

Photos, a daily diary and even movies! They have a satellite phone for daily contact with Aussie Schools etc. Certainly a different sort of touring than I'm used to! See them riding in Turkey by downloading the windows movie.

http://www.centralasiabikeride.com/cabr/pages/images/Riding.WMV

I am quite pleased that these guys are going so well now - It was a rush for them to get set up with last minute changes to forks etc - I wasn't even sure Nat would be tall enough to ride the underseat M5 26/20 bike (she had never ridden a recumbent bike before and they are carrying loads of gear!) but now after a few days or so of riding she sounds experienced enough to tackle the mountains!

Chris is one of the duo who previously rode from London to Bejing on recumbent bikes.

Ian Humphries - ian@flyingfurniture.com.au

For Sale

Old Recumbents need a new home

Anyone interested in these old recumbents?

http://www.gr8m8s.net/Dudley/dudley.htm

Maker is getting on a bit and wants to off load them but has no idea what they might be worth.

Near new M5 - M5 26/20 recumbent, Rear suspension, Carbon fibre seat, Custom alloy M5 rack, 27 speed Shimano groupset, Excellent condition! A chance to own a light, fast and comfortable bike from M5, one of Europe's leading recumbent bike manufacturers. The adjustable seat angle and flexible configuration enables you to use this bike as a great user-friendly commuter, or a super fast laid back racer. Near new, hardly ridden. Bargain price! Only \$1500. Pedals not included. Contact Geoff at geofflaw@tpg.com.au

Optima Carbon Tailbox - I've had this TB for about 18 months its in fairly good condition apart from a few scratches on the lower left hand side and a small crack on the bottom. If you're a bit handy these can both be repaired easily as I recall the TBs are \$800 new, this one is \$300. Glenn Druery **weec@bigpond.net.au**

Greenspeed GTR trike, excellent condition, 63 speeds, 15 to 126 inch gear range, 3/7 Sachs rear hub, Sturmey archer drum brakes, computer, mirrors, mudguards, carrier and flag. \$2500 or near offer. May be able to organise transport to NSW or VIC if anyone interested. Owned by Bob Braunstal, Adelaide, phone 08 8365 5309. A few photos of Bob and his trike in the last HUFF. He has ordered a new Greenspeed, so has to sell this one.

M5 Shockproof - I am from Brisbane and have an M5 Shockproof recumbent bike that I would like to sell. I actually bought the bike about six months ago from an advertisement on your website. Glen Weston - glenweston@adsl.on.net

M5 406 Shockproof: Dark blue frame, 105/Deore groupset, Velocity Aeroheat rims, Vredstein slicks. This bike is like new and has hardly been ridden (a couple of hundred kays only). Comes with a pair of brand new sidebags and a top bag too, all for \$3500 ono. Bike is in Sydney. Andrew Fatseas - andrewfatseas@hotmail.com

OzHPV Canberra Rally

Preliminary advice of the Canberra Mob's plans for a HPV get together in Canberra. More details as they become available. Potential for holding the 2004 OzHPV Annual General Meeting in conjunction.

Friday 12th and Sunday 14th November – OzHPV Rally Recumbent enthusiasts from around Australia gather in Canberra for a weekend of riding, racing, eating and talking. Events include rides around Canberra, technical presentations on recumbent construction techniques, a dinner, trike an bike races and much more. Entry fee for some events. More information available from http://users.cyberone.com.au/heal/rally Contact: Peter Heal 0422103139 heal@cyberone.com.au

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