



Canberra Rally October 2003

The Rally at Canberra was only the second OzHPV meet I have been able to attend and proved to be a most interesting time. Living in Tasmania we really don't get to see many HPV'ers and so very much appreciate the time spent as such events.

I was particularly interested in being a part of a noncompetitive event, meeting all the people we only read about in emails and articles.

Weather was fine right up until the last few hours of riding and it became clear that Canberra is a brilliant place to ride around -

Viva La Bent – Confessions of a Convert

Confession 4

Now I was well and truly exited. Building a chopper bent is a real challenge. Sketches of choppers were done with Adam's help. The best design had to be the Harley-Davidson look but what else. I welded the frame from three old racing bike frames and installed rear shock with the usual suspension axle in place of one of the frame bottom bracket. Making the seat was easy by now with 5 holes on the horizontal tube for x-seam adjustment. But the front forks were not easy to design. I made them from 22.2mm tubes with top spring suspension. I found old chopper handle bars at the Laverton Market, although they are not easy to find these days. The panniers' rack were welded from old metal outdoor chairs found around the Melbourne suburban nature strips. It was real fun to ride the chopper on monthly VICOZHPV rides. Everyone had a go and it bounced up and down too much according to some of my OZHPV friends.



OzChopper on the beach

cycles are catered for in many ways and the tracks reasonably flatish. Looking at the bike computer after the event this would have to be the longest distance I have ever ridden in a weekend. (about 100k's) Not much for some I know but I just do short trips.

Friday night was a (fast I have to say) ride in the dark along a few bike paths. I'm not sure we saw any kangaroos (the reason for the

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fun too. But there was something missing and Adam suggested...hey Dad why not get it motorised...Here we go again, another challenge is coming. I searched the Internet and had a closer look at the motorised scooters. I decided to mount a Honda GX31 four stroke as I was told the cheap brush-cutter motors are beyond repair if they malfunction. I decided on the rear wheel direct chain drive with the ex-BMX freewheel for coasting. Gary Richter, a brilliant electronic engineer and very mechanically minded friend calculated the primary and secondary drives ratios for best torque up-hill. I used the 11/4"dia and 8"dia v belt

Adam and his friends had a lot of

pulleys on the primary drive, and 18teeth and 52 teeth chain sprockets on the secondary drive. I have modified the front forks by using 1" tubes, as the 22.2 dia ones flexed too much. I also welded ex-MTB front shocks. Chroming the handlebars and front forks was not cheap, at \$60 total with a bit of price hunting around Melbourne. I got a slightly damaged petrol tank from Rotary Bikes Australia and my powder-coating man Clive did and excellent job by painting it in 'Easy Rider' American colours lively. In all it was a very satisfying experience, especially for Adam getting now much more attention from his friends and onlookers. Passing motorists photographed him and were curious of the chopper's origin.







I got really carried away this time and decided to experiment with a simpler and lighter chopper for myself as it was a real pleasure to ride on it along the Elwood beach bike path to the amazement of walkers and joggers. I had some experience by now, so the frame – although fiddly – cutting and fitting job was done swiftly. I mounted the Honda GX31 on the rear fork securing it with one spigot so it

could be swung on to a rear tyre with spring tensioning. I have installed a front derailleur indexing shifter for lifting the motor off the tyre during coasting. This time to be 'politically correct' for the occasion of the Iraqi war I had the tank painted Union Jack. The second chopper is much lighter then the first one but does not have that 'oomph!' This is due to the slippage of the motor roller on the tyre in acceleration. But with gentle acceleration the chopper gives assistance up-hill and it takes



Chopper Frame

one for a ride along a level path without pedalling. If anyone asks me how fast it goes the answer is: I will leave it for another confession by a total recumbent convert.

Ozchopper Lite: Models 1 & 2

by Robert Waryszak

Frame: Three ex racing bicycle frames welded together and powdercoated frame separates for ease of storage

on chopper-lite 1 **Wheelbase**: 1700mm

Seat: Fabricated 20dia tube and exercise bike seat

base, 650mm height

Fork: Fabricated with 25mmdia tubes and ex mtb front

shocks

Disc brake: New top gun mechanical **Rear shock**: Ex mtb spring shock

Derailleurs and all mountings: Recycled from used

bicycles

Motor: Honda GX31

Primary drive: 28dia x 200dia v belt drive

Secondary drive: 18t freewheel (ex bmx) x 52t chainring chain

drive

Drive on chopper-lite 2: Friction on back tyre with 1"dia

aluminium roller direct from the motor spindle.

For Sale

OZCHOPPER motorised recumbent as described in this issue of HUFF under Viva la Bent article. Honda motor, coasting free wheel, gears, rear shock and all accessories. \$2450. Robert Waryszak, phone 03-95781539.

robert.waryszak@vu.edu.au





Suggested Ride Protocols

During the recent gathering in Canberra some discussion occurred about conducting a ride for a group with varying abilities. I volunteered to write a few lines and do some research on 'best practice' as done by groups such as Bike North, who conduct many rides throughout any year. The following ideas were borrowed from a formalised document produced by Bike North. The complete article is available for review on their website at:-

http://www.bikenorth.org.au/rides/rideprotocols/ 5_for_participants.html

For a ride to be an enjoyable experience for all there are lots of things to consider. If I was asked to organise a ride these are some of the things I would [and I do] do...

Preparation

1) Get a few friends together and ride the whole route, taking into account any hazards, places where riders can go the wrong way, The sort of terrain, any short cuts for worn out riders to leave the ride, note where there are eating, water and toilet facilities available. I also would take traffic conditions and weather into consideration when setting the date for the event. I would also have a 'mud map' drawn up for the day of the ride to be used by any helpers.

2) Prepare and publish a briefing and short description of the ride so that riders can decide if they want to participate. The briefing would be given before the start of the ride.

On the actual day of the ride

3) Designate a ride leader and a sweep and introduce them to the assembled group on the day. Riders must agree to stay between the leader and the sweep at all times. Bike North also has a sign on sheet so that head counts can be done at regrouping points. The sign on sheet also asks for on ride mobile phone numbers to be listed as well as who to phone in case of accident.

This is also the time to visually check on the condition of bikes. I look for worn out tyres, rusty chains and brake cables before I say all bikes need to be in good repair to do this ride and I get all intending riders to do this. [check tyres, brakes and chains for wear]

4) During the ride, regroup as needed. Communication between the leader and the sweep is essential [mobile phones can be useful here], especially if there is a breakdown or puncture. Usually the sweeper will signal if everything is ok and the ride can restart. The sweeper carries a kit of tools to help with breakdowns, punctures etc. A first aid kit is also carried, usually by the ride leader.

Human signposts, Are usually used at any spot where riders may get lost through the group breaking up into smaller sections. The signpost people are faster riders who wait until the sweeper has passed before they move again towards the front of the ride. Signpost people often know the route to be taken but they don't get lost often because other human signposts are ahead at the next turn etc.

5) At the end of the ride thank all helpers and have some form of debriefing.

Below is a few paragraphs of the ride protocols now adopted by Bicycle NSW and are used by bicycle user groups as their guideline. Bike North has given permission to use this material as needed by any group of cyclists.

Information about the ride should include:

Day and date of the ride

- * A Title which is succinct, descriptive and catchy.
- * The Grade of the ride including total riding distance in kilometres.
- * The Name and contact details of the leader including phone and email details. (where appropriate)
- * A ride description of 20 to 40 words which indicates the type of riding, terrain, start point and route. It may include other details such as the starting time, estimated finishing time, type of bike or equipment expected.

Conditions of the ride

- * All persons must understand that riding on public roads is a potentially hazardous activity. Participants must be fit enough to undertake the activity. Participants under 16 must be accompanied by a cycling adult carer. A Standards Association of Australia approved helmet is legally required and must be worn correctly by all participants on all rides.
- * Essential equipment also includes a bicycle in good working order and a water bottle. Money, snacks, a tyre pump, a tube and/or repair kit and appropriate tools are recommended as well.

Best practice in leading a ride

- * The Leader must be a competent cyclist, know the route to be taken and be able to deal with any reasonable situation that can be foreseen. If a Leader does not have all the required skills, then they should arrange for help from other competent Participants.
- * Attitude is an important part of leading a Ride and the Leader shall always present a calming and competent demeanour where necessary. Patience shall always be demonstrated to the Participants, no matter what their ability or mis-match to the Ride.

- * Leaders shall come adequately prepared (see sections below) and brief the Participants at the start regarding route, highlights, hazards, major stops and return time. Leader shall adopt the most appropriate method for pointing out hazards depending on the group's competence and may consider shepherding selected Participants through perceived hazards on the easier level rides.
- * Leaders shall ensure that each Participant has signed on the Sign-On sheet for the ride and shall introduce new Participants and find out their cycling experience and expectations.
- * Leaders shall Regroup at regular intervals throughout (and at the end of) the Ride according to the grade and ensure that all expected Participants are present. If Participants are missing at a Regrouping point, then steps shall be taken to locate those missing while still managing the remainder of the group. Often a smaller Search Party will be sent to locate the missing Riders.

For The Ride Participants

Preparing for the ride

* Potential Participants should match their ability to the Rides by reading the Ride grade descriptions provided. Ride choice should be made from a combination of the grades and other descriptions which may including information about levels of fitness, cycling experience, traffic knowledge and competence, stamina and mechanical competence. If unsure please contact the Leader.

Participants shall bring along:

- * A bike in good mechanical condition suitable for the type of ride.
- * An approved safety helmet which is adjusted to fit correctly and properly fastened.
- * A water bottle filled with water.
- * Material for fixing a puncture consisting of a spare tube, pump and patching kit.
- * Appropriate clothes suitable to the ride and the weather conditions.
- $* Any \, medication \, necessary \, to \, cover \, known \, medical \, conditions.$
- * Participants should check their bike to ensure that it is mechanically sound for the ride including checks of the tyres, brakes, secure attachment of wheels, and loose bearings, bolts or fittings.
- * Participants shall inform the Leader of any medical conditions or injury that may become an issue during the ride.
- * Participants shall possess enough skills and experience suitable to the ride being attempted.

- * Where possible Participants should bring along a mobile phone and leave it turned on. They shall record the phone number on the Sign-On Sheet. A mobile phone is useful in case of emergency or separation from the group but remember that mobile phones are not always in range and should not be relied on
- * Where appropriate Participants should carry enough money for public transport home in case of the ride being delayed or the in case of mechanical failure or injury.

While on the ride

- * All Participants shall ride together as much as possible in a single Riding Group, suitably spaced to avoid collision.
- * Participants shall increase their effort and close up any gap that opens up in front so that two or more groups don't form.
- * Participants shall help others wherever necessary.
- * Participants shall follow instructions and directions given by the Leader and follow the group unless arrangements have been made to split the group.
- * Participants should know their position in the group and whether they are the last rider.
- * When reaching an intersection where they are uncertain of the route, Participants should look left or right. If the direction is uncertain they should wait for other Participants to come up to them from behind or a Participant to be sent back from in front.
- * Participants should inform the Leader if they are leaving the group to avoid lengthy and pointless searches.
- * Participants should develop a road sense awareness of what is around them. In particular, be aware of those around them know when others are coming up from behind.
- * The last Participant in any group, whether designated Sweep or not, shall not ride past and leave a single Participant broken down or injured at the rear of the group. The companion can then bring a message to the Leader if required when the group waits at a designated spot.

Communication on the ride

- * During a Ride the Leader and also other Participants shall communicate clearly in relation to hazards and the intention of the group.
- * Messages about cyclists or incidents should be passed up and down the group by voice and hand signals.
- * In addition to hazard briefings at the start of the ride, additional hazard briefings shall be given at the start of each section. Hazards briefings shall consist of identifying hazards

and recommended action.

- * While riding in a group some standard voice calls shall be made by all Participants.
- * "Car back!" Indicates a car is approaching from the rear in the cyclists' lane and that Participants should move over to accommodate it passing.
- * "Rider back!" Indicates a cyclist is approaching from the rear in the cyclists lane and that Participants's should move over to accommodate it passing.
- * "Car up!" Indicates a car is approaching from the front and that Participants should move over to accommodate it passing.
- * "Rider up!" Indicated a cyclist is approaching from the front and that Participants should move over to accommodate his passing
- * "Stopping!" Indicates that riders are coming to a half.
- * "Lights!" Indicates that riders are stopping at a red light.
- * "Clear!" Indicates that an intersection appears clear of traffic but that caution should still be used.
- * While riding in a group some standard hand signals shall be made by all riders.
- * Stop sign. Right hand at shoulder level, arm bent, palm open with fingers pointing up and palm facing forward.
- * Slowing sign. Right hand at hip level, arm extended, palm open with fingers pointing out and palm facing down. Arm is moved in an up and down motion.
- * Right turn. Right hand at shoulder level, arm extended, palm open with fingers pointing out and palm facing forward.
- * Left turn. Left hand at shoulder level, arm extended, palm open with fingers pointing out and palm facing forward.
- * Debris or pothole. Either hand depending on where the debris are, at knee level, arm extended, finger pointing down at the debris.
- * Glass. Either hand depending on where the debris are, at knee level, arm extended, palm open with fingers splayed and hand shaken horizontally.
- * Obstacle, parked vehicle or slow rider on the left. Same as for debris except that the arm is swung from pointing ahead past the left side of the body and behind the back. The arm ends up pointing to the right behind the back.

Ride and enjoy,

Kevin Mason - OzHPV President

kevmason@triode.net.au

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ride) as with marginal bike lighting it was difficult enough avoiding the person in front. (or a metal barrier in the middle of the track) A very enjoyable ride none-the-less and broke the ice for us newcomers.

Saturday and most of Sunday took us out riding to different locations around Canberra, splitting up into a few groups that represent ones riding style. At one stage we were pulled up by a security guard saying he had us recorded on camera for speeding and adding we were a danger to pedestrians. (Nothing became of it) I'll blame that on the low racers even if it wasn't them. Ha!



Canberra Bike Museum

Late afternoon we had a booking at the Canberra Bicycle museum. This is an enormous collection of all things cycle including many recumbents - well worth a visit if you are in Canberra and run by volunteers. I found it hard to take in all on show as there is just so many things to look at. For example, it is very easy to walk past a 'normal' looking bike but closer examination shows it to have shaft drive or be very old and yet sport a derailleur.

Saturday night the AGM was held followed by some instructional talks and demonstrations. I'd swear that Mike Dennis does teaching for a living as he brilliantly explained the concepts of building with carbon fibre. For those who haven't seen it yet mike's carbon fibre based trike is an excellent piece of work and a great demonstration of how to implement the technique. (Pic next page)

Ian Humphries represented the only HPV manufacturer/retailer at the event and he took us through several of the new products on offer through Flying Furniture Cycles. Ian is really building up a supply of cycles and accessories stocking not only Australian but items not previously available here.

Both days we all headed down to an area for the public to come and have a try. It wasn't looking too promising for a while but in time quite a few visitors turned up and made it all worth while. In a place like Canberra where there are many bikes around and several recumbent retailers I was surprised to see the public showing strong reactions to the machines. It's not just in Tassie where



Mike Dennis explaining carbon

people get a kick out of seeing a recumbent first hand!!

After talking to many of the participants at the Rally I would say that this is worth considering again as an OzHPV activity. The structured demonstrations on Saturday night were very well received even though we went till quite late (after 12) and the Rally could be considered a great complement to the annual competitive events we mostly hold.

Thanks for the effort put in to make this happen!!

Timothy Smith - tstrike@ihpva.org

And from Peter Heal...

The Rally concept was very well received with riders coming from as far away as Tassie and Brisbane.

Up to 30 different bikes on the rides at one time.



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Athol Read's Kotzur bike under examination

The weather was fantastic with sunny warm still conditions most of the weekend. We caught a bit of rain as we were finishing up Sunday. Lots of talking and "bike sniffing" was done. The "come and try" sessions were very popular not just with newbies but from participants trying out all the different bike concepts.

A stack more photos are available for viewing at http://150.203.47.54/rr/

When, where's the next one?

Peter Heal - heal@cyberone.com.au

At the Come and Try



Below - Mike Dennis's carbon fibre trike











OZHPV CHALLENGE March 6 & 7 2004

Schedule of events

Saturday		Sunday	
Registration	8:30	Concourse	8:00 -10:00
Hillclimb	10:00	Twin drag	10:30
Time Trial	10:30	MR Components Off-road Adventure	11:00
Road race	11.00	Criterium	11:30
Lunch	13:00	Lunch	13:00
200m sprint	14:00	Shopping Race	14:00
Bike Chameleon			
Twin Slalom	15:00	Awards Presentation	15:00
Last man out	16:00		

Rules

- 1. Helmets must be worn at all times during all events.
- 2. Participants must sign an additional track owner approved waiver form to participate This form will be supplied at Registration.
- 3. Vehicles must be safe and in good working order. Marshalls may request a demonstration of adequate control and braking at any time including Registration. Vehicles must not have dangerous projections likely to harm competitors or spectators.
- 4. Vehicles may be modified between events at the discretion of the chief marshal but once an event has started attached components must be carried for the entire event.
- 5. Vehicles are allowed to use energy storage devices only if they are charged during the event from human power. Such devices must be fully discharged before the event commences. Batteries for cycle computers are acceptable.
- 6. Vehicle / rider numbers must be adequately attached and clearly visible to timekeepers. Riders will not be able to race if their numbers are not clearly visible.
- 7. Entry is at the risk of the entrant. The safety of all vehicles is the responsibility of the entrant.
- 8. All types of human powered land craft are allowed. There are no restrictions on layout, fairings, drive systems, materials or number of riders. However, in crowded events, preference will be given to non-standard cycles.
- 9. Decisions of the judges will be final and all requests by the marshals must be obeyed promptly in the interests of safety
- 10. Points will be awarded for placings and participation in each event. Aggregate point scores will be based on the combination of rider and vehicle so if you want a better chance of a higher overall placing, ride the same vehicle in all events.
- 11. Smooth and safe competition. If a vehicle is slowed or fails to complete an event due to mechanical failure, misunderstanding or crashing, the rider may be given a second chance at the sole discretion of the chief marshal. Re-runs in the case of uncompetitive times will not be granted.

Annual General Meeting Of OzHpv Inc.

Saturday 18th October 2003 Lake Burley Griffin Sea Scouts Hall, Yarralumna ACT.

Attending:

Kevin Mason-President Rudolf Werner-Treasurer Jeannie Davidson-Secretary Timothy Smith-Huff/ Website Officer Pete Heal-ACT contact Matt Heal Brett Edwards David McCook William Reid

Darryl Shelswell

Ken Houghton

George King

Peter Hendriks

Mike Dennis

Ian Humphries-IHPVA Representative

Heliosa Mariath

David Cox

Andrew Stewart

Malcolm Butler

Stephen Davidson

Presidents Report

- * Had a good team helping me, haven't had to do much.
- * Everything is going well.
- * Membership is now due in January for everybody which seems to be much easier and better. You have until the end of the month to pay it. A reminder will then be sent out.
- * There have been two Challenges in the past twelve months. Last November in Canberra, ACT and the March 1-2 Broadford Challenge in Victoria. Both successful events.

Treasurers'/Membership Report

- * As of last years AGM membership went from a monthly basis to an annual basis. Membership is due on the 1st January with one month to pay. A reminder notice goes out if not paid.
- *98 members Australia wide. Approximately 80% now receive Huff by email which has reduced postage costs.
- * OzHpv Inc. financial statement tabled, copies distributed for perusal.

Direct debits have reduced costs. Increase in paid memberships, insurance costs (also for the year ahead 2003-2004), equipment purchased (approved previous AGM). Financial statement be accepted, moved by: David McCook, seconded: William Reid. Carried.

A vote of thanks was given to Rudolf for the excellent job he has performed. He acknowledged a member of his staff, Dave, for his assistance.

Business arising from Previous Minutes

- * Business cards have not been produced. This can be investigated further.
- * Software not purchased by Timothy Smith. Actual cost was higher than the \$500 approved. Timothy to get a costing on suitable software and advise at Broadford Challenge for consideration. Moved by: Peter Heal, Seconded: David Cox. Carried.

IHPVA Representatives Report

- * Communication between members has been very quiet.
- * Events are still happening.
- * A new American association is running most of them.
- * The World Championships, in Germany, were attended by a few Australians.
- * HPVA magazines (HPV News and Human Power Technical Journal) are sent to Timothy Smith.
- * CANTERBURY HPV in New Zealand is now HPV KIWI.
- * Executive are volunteers.

General Business

*OzHpv Pennant to publicise/acknowledge our group – There has not been a lot of interest though members thought they would be happy to fly one if it existed. We do not want to spent a lot of money on them to have them stored away not being used. Design suggested: OzHpv logo with a statement like "Australian Produced Trike/ Recumbent" or "Australian Human Powered Vehicle".

Another idea: An iron-on transfer that could be put on T-shirts/clothes/ flag/pennant by members or a sticker with the same design that can be put on our vehicles or anywhere else the member chooses. Treasurer will investigate and discuss with committee.

- *Huff/Website: Tim gave some background information about the website and Huff. He is happy to continue doing it but wanted people to know he would be happy for anyone to take it over. A vote of thanks was given to Timothy for all his work in putting Huff together, chasing articles, etc.
- * Donation to be given to the Canberra Bicycle Museum of \$150 (30x\$5) in appreciation for the special opening and tour of the annexe for our group this weekend. It was very interesting. Moved by: Peter Heal, Seconded: Ian Humphries. Carried.

Election of Executive

All positions were declared vacant. No nominations had been received prior to the meeting. Kevin vacated the chair and a visitor conducted the election.

President: Kevin Mason nominated by Peter Heal, seconded by William Reid.

Secretary: Jeannie Davidson nominated by Rudolf Werner, seconded by William Reid.

Treasurer/ Membership Officer: Rudolf Werner nominated by Jeannie Davidson, seconded by Peter Heal.

Other Positions

Website Officer: Timothy Smith

Huff: Timothy Smith

Huff Printing/ Posting: Bernard Weir

Public Officer: Chris Curtis

IHPVA Representative: Ian Humphries

State contacts

Vic - Damien Harkin

Qld - Duncan McDonald.

SA - Grant Sellek?

NSW - Rudolf Werner

ACT - Peter Heal

TAS - Timothy Smith

WA - Dennis Smith

Modular Bike

Here is a brief update on my modular bike design.

The concept for the bike is "a bike that can be converted into tandem, load-carrier and recumbent - style cycles, a more useful bicycle!"

A few months ago I was invited to exhibit my bike at the Melbourne "Fringe Inventions" exhibition which ran from September 25 to October 7. The start date gave me something to work towards: having a highly presentable bike ready by September 25. This took a bit of work and cajoling of my welder and my painter, but I was very pleased with the end result.

The bike that was on display was the third frame design for the bike, and it's evolving into a good, saleable design. Should know the results of my patent application in 6 - 12 months or so and I'm interested in hearing from anyone who could work with me to get the bike into production.

The bike was on display with serious & not-so serious inventions such as "The Hiccup Frightener", "Window Wipers for Spectacles", "The Claudatron" (Joystick controlled musical instrument) and "Kanga Krutches" (Fibreglass crutches) and a "swing for people in wheelchairs" and a "scent dispenser that fits in your bathroom door."

On the second Sunday of the exhibition, Damian Harkin organised a ride starting from Chapel on Chapel where the show was held, so various Vichpv members saw the exhibition. Claude "The Sonic Manipulator" Woodward was there, playing and demonstrating the "Claudatron". He was enthusiastic about the various HPV's that rolled up and had a go on Damian's MR Components trike.

Well, see you out there riding sometime!

Stephen Nurse - cesnur@austarmetro.com.au



Coming Events

RACV Maryborough Energy Breakthrough

20th -23rd November: Contact Martin Mark on 03 54 610 621, Po Box 194, Maryborough 3465, Ph 03 94890855, Fax 03 9 4 8 2 1 0 4 4, v o x b a n d i @ v i c n e t . n e t . a u http://www.racvenergybreakthrough.net/

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