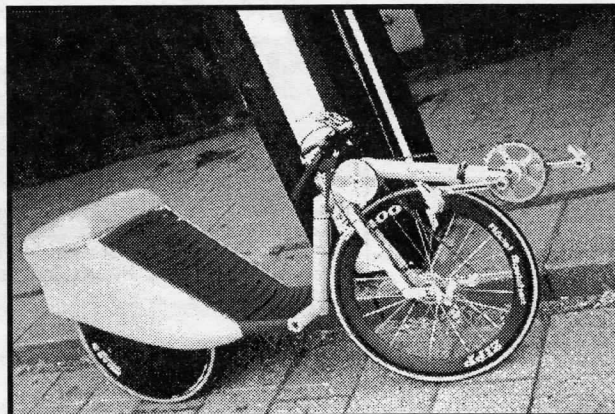
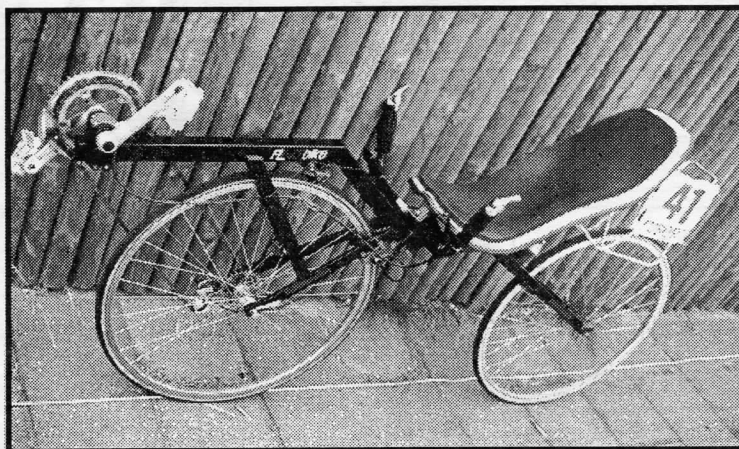


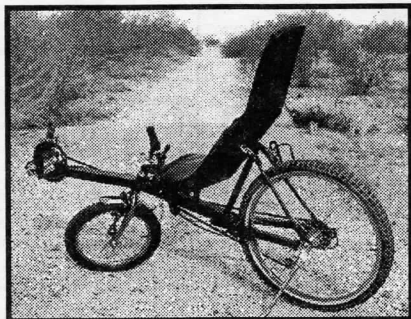
**\* RECURRENT MAIL \***



**Prototype Kingcycle FWD racer**  
(Photo courtesy of Mats Nilsson)



**Flevo-Racer**  
(Photo courtesy of Mats Nilsson)



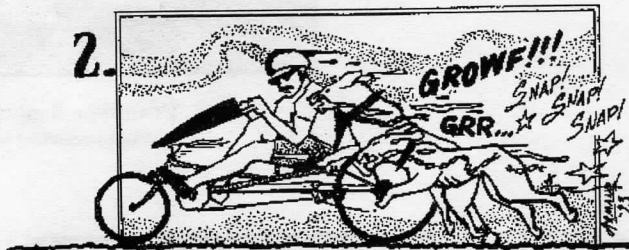
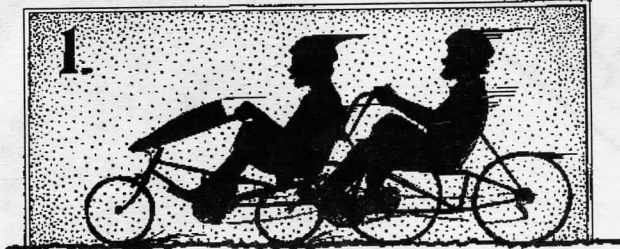
**World's only offroad recumbent (?)**  
(Photo courtesy of Turner Enterprises)



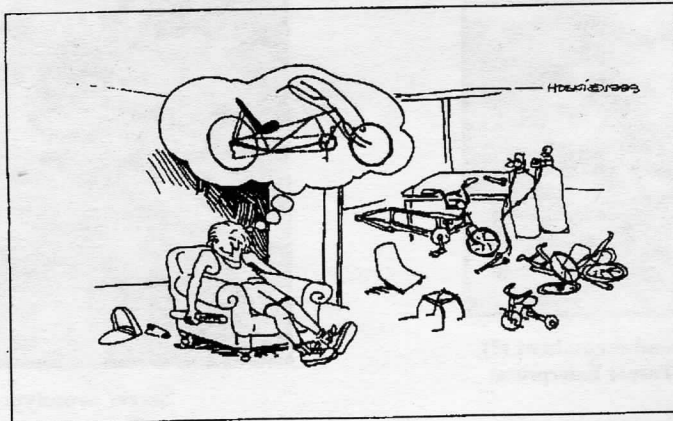
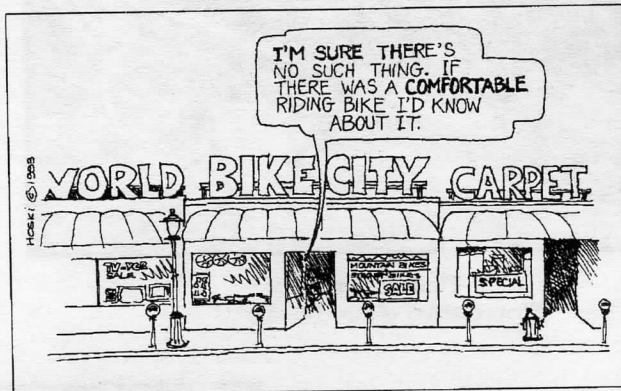
**Secret prototype with three wheels**  
(Photo courtesy of Don Hoskisson)

# The Lighter Side

"I really prefer the lower profile of a long-wheelbase recumbent."



"except for being eyeball-to-eyeball with the junkyard's HELL-HOUNDS!!!"



# Recumbent Cyclist NEWS

RCN #17 Sept-Oct '93

**BIKE EVOLUTION**

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Inside:

- Homebuilder Hybrid
- 5 new Recumbents you haven't seen before
- Gold-Rush Colorado
- Cannondale's Interbike surprise!

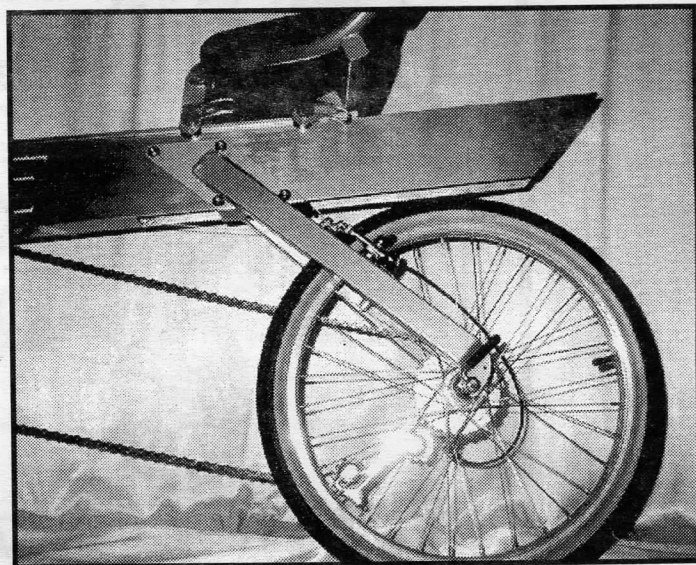
# The BikeE



**BikeE with panniers & rack**  
(Photo courtesy of BikeE Corp.)

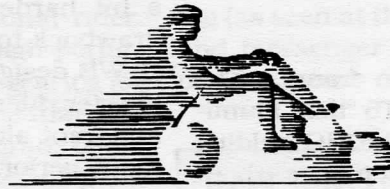


**BikeE fork**  
(Staff Photo)



**BikeE supported, but not triangulated stays**  
(Staff Photo)

# The BikeE



What is a BikeE? (BikeE, rhymes with ....., er-a, some shoe company.) OK, let's start again; BikeE defines a popular new recumbent from that hot-bed of recumbent activity, Corvallis, Oregon. O.K., how about two out of three? The BikeE is a neat new recumbent CLWB (Compact Long Wheelbase) with a amusing name. I guess the name must have come about at a late-night corporate strategy meeting. I can picture four vibrant but exhausted company principals trying to find a name that exudes the energy that most recumbent riders feel when trying to describe their passion, "BikeEEEE!" So maybe they should have waited until the next morning to pick a name. All kidding aside, the BikeE offers recumbent consumers a straight forward design, and a bike that is easy to balance, ride, shift gears and stop—the ultimate up-scale user-friendly recumbent cruiser.

## Who is the BikeE Corporation?

Inside the worlds most perfect shop for building recumbents, Richard Rau's Pedalcraft, located on the highway between Corvallis and Philomath, near the scenic Oregon coast, four men with a corporate mission build and market the BikeE. The BikeE Team members are qualified, professional and have the knowledge to get the job done. I guess you could say that we put them through the ringers during the test period, and I am proud to say, that they survived and passed all of our tests with flying colors. This means

they still answer my calls and (maybe) I can still show my mug in Corvallis.

The BikeE Corporation consists of the following principals: Professor Dave Ullman, PhD Mechanical Engineering OSU (Oregon State University). Dave has taught and written extensively on the design/ production process. He is a BikeE co-designer and has been a bicycle commuter since 1962. Paul Atwood has relied on bicycles as a primary means of transportation for 17 years. This led to his own HPV design fabrication company, Root's in the Sky. Paul is a BikeE co-designer. Richard Rau operates the Pedalcraft shop where the BikeE and Quadraped are built. Richard has been building recumbents for eight years, riding 11 years and has seven years of design fabrication school, mostly in automotive technology. Richard played a part in initial designing of the BikeE. Jim Boeder is BikeE's Marketing and Sales Director. Jim has a Graduate education from OSU specializing in Management and Communication. He has run his own photography business for ten years, has been a bicycle commuter for 20 years and averages less than 5,000 miles per year on his '68 VW Bus. Jim comes from outside of the recumbent or bicycling industry, but is nonetheless, very knowledgeable about his product.

The BikeE was designed in the Fall of 1992 with the production models being introduced at the Portland Bicycle Show in March of this year.

## BikeE Specifications

Wheelbase:	54 inches	Drivetrain:	Suntour XC Expert/ 8 spd. w/ Twist Grip shifters
Overall Length:	72 inches	Crankset:	170mm 54T. single (8 spd.) 42T./54T. double (16 spd.)
Seat height from grd:	26 inches	Cassette:	Suntour 8 spd. 11-28
Factory adv. wgt:	32 pounds	Brakes:	Suntour XC Cantilever
Frame material:	6005-T5 alum.	Pedals:	Odyssey Svelte
Fork material:	1026 steel	Price:	\$895-8 spd./ \$1015-16 spd.
Front wheel:	16" X 1.75"/ 18 spokes		
Rear wheel:	20" X 1.5"/ 32 spokes		

**The BikeE Frame:**

The BikeE has a very unique main frame. The unconventional looking, hollow 6005-T5 "box" aluminum maintube has two welds on it. The TIG welding & frame craftsmanship on our first test bike is about average, which is what we would expect on a sub-\$1000 recumbent. BikeE has since hired a new welder with 25 years experience TIG welding and the welds & craftsmanship are excellent. The head tube and bottom bracket shell are welded onto the frame. The bottom bracket is a standard off-the-shelf Tioga, but the head set is fabricated by BikeE, utilizing oversize cartridge sealed bearings that are pressed into the head tube. The unsupported\* rear stays are bolted to the mainframe. The front fork is custom fabricated for the BikeE. We see this as a strong point in the design. Many recumbents are built around an off-the-shelf fork. This is well and fine, but does not allow for the dialing-in of your steering and front end geometry. BikeE's frame finish is anodized in violet, red and blue and the colors are gorgeous. Our test BikeE's were a blue 8 spd. and a violet 16 spd. These colors were attention getters to say the least. Our black and white photo reproductions do not do justice for these beautiful anodized colors.\*(by unsupported—we mean the lack of triangulation)

I could never advise recumbent manufacturers to build bikes with unsupported\* rear stays. Why? RCN readers and recumbent consumers will always question their structural integrity. The BikeE has steel stays that are bolted to an aluminum main-frame. BikeE co-designer, Prof. Dave Ullman assured me that the BikeE stays are strong enough. Jim Boeder also added that if you look closely, the stay main support point is where the frame meets the stay flange, thus taking the pressure off the bolts. The BikeE frame has supported stays, but lacks triangulation. One benefit of this design is that it's a natural for suspension and due to the BikeE's modular design, upgrades are most likely to be retrofitable.

**Sit on the BikeE**

The BikeE seat slides on top of tracks located on the main frame. Through the use of two quick releases (Odyssey brand), the seat will easily adjust to suit most riders. The seat conveniently quick releases off of the frame for easy transport. The seat frame is chromoly and is powdercoated a golden silver to match the stem and handlebar. With my height of 6'1" tall, I would have liked the seat-back to be higher. The seat also does not have an adjustable recline angle, but you can make minor changes by the tension of the seat straps. The base of the seat is dual density foam, covered with Darlexx (like a water resistant Lycra material) and was

a bit harder than I would have liked. The one drawback to the more upright seating position of the CLWB design is more weight on your tail-bone. For shorter rides, this is no problem, but it becomes more apparent after several hours. This is also why some more performance or touring recumbents have the seat angles more laid back. The BikeE Corporation has come out with an upgraded seat cushion since our test bike was delivered last May. We have not yet tried the new seat, but we've been told that it is more comfortable. BikeE Sale Director, Jim Boeder, rode the 200 miles of STP (Seattle To Portland) on a BikeE. He had this to say about the seat, "I can attest to the comfort of the current seat-2 days of jammin' on the STP, and only a wee bit 'o lactic acid build up a time or two. I finished not feeling like I'd biked much at all."

**One-Size-fits-Most**

The advertised rider dimensions of the BikeE are height: 4'10" to 6'1" (approx.). I am at the top of the one-size-fits-most range, at 6'1" with a 32" inseam. I was easily able to get the proper leg extension with the seat 80% of the way back the seat track, but this moves the center of gravity further back than the bike was designed for. (Weight distribution will change for every rider due to the sliding seat adjuster.) I would not have noticed this if it wasn't for my attempt to climb the steepest hill just off of the world famous Soo's Creek Trail. With large and/or tall riders and under heavy pedaling pressure in the lowest gear, the pedaling force makes the front wheel ever-so-slightly lift off of the ground with each pedal rotation. If you are concerned that this could be a factor for you, give BikeE a call. BikeE Sales Director, Jim Boeder, has an extended frame BikeE. The actual frame is no longer, but the rear stays are positioned further back on the mainframe. According to BikeE, "We are proposing to offer a longer version in the future, and initiation of this model depends in part on dealer and customer requests." BikeE has recently modified their warranty, and there is no longer a rider weight limit.

**BikeE Drivetrain:**

The BikeE is the first recumbent that I have ridden where the Suntour XC Twist Grip shifters shifted properly. The cable runs are direct through the inside of the mainframe. This makes for fantastic index shifting. The Twist Grip shifters do not have a friction mode, which to us retro-grouches, is a slight detractor. Both right & left shifters come on the standard 8 spd. version even though there are no multiple chainrings and front derailleur. We give the BikeE's shifting a five star rating, besides operating flawlessly, this is the easiest recumbent to shift. The stock gear range for

the BikeE 8 speed is 37-94 gear inches. This provides gearing suited for the casual or recreational rider. Problems arise when you want to practice high-performance riding. The BikeE does not have the gearing for climbing steep hills or pedal down hills faster than you really need to go. The optional 16 speed upgrade offers a lower hill climbing gear to 29 gear inches. Again, serious hill climbers will still need a lower gear. When asked about recumbent gearing applications, I always recommend lows in the 22-26 range and sometimes lower. I regularly tow kids in a trailer, and our bikes have lows from 19 to 23 gear inches. In response to my query, BikeE had this to say, "it is the range and increments that are important, not the number of chainrings. We are designing a bicycle that is easy to shift and use." Jim and another BikeE employee did STP (Seattle To Portland) with standard 16 speed models. Only on the Puyallup hill did they need to use granny gear (Jim was carrying 20 lbs. of gear). Some dealers and customers report positive results using a triple crank (Dave Sader, Bicycle Rx/ Brent Adams, Rainbow Cyclery). The brakes are Dia Compe cantilevers, are of high quality and offer excellent braking power. We did notice an occasional cable drag over the back inside lip of the mainframe. Again, the brake cables are run through the BikeE's frame. On the three bikes we rode, only one had this problem. The front cantilver brake is mounted on the backside of the unique BikeE fork and performed flawlessly.

### Compact Small Wheels

The BikeE uses a unique radially spoked 16" X 1.75" 18 spoke front wheel. The tire used is basically a kids bike tire that is widely available. In most cases, I would count the 16" size as a detracting factor because of the lack of good performance tires, but the BikeE has a lightly loaded front wheel, which makes the fat 16" tire a fair choice for the BikeE. Even though I had no complaints about performance, I did not care for the lack of a matching set of tires; however, this is common on recumbents using two different sized wheels.

### Accessorize your BikeE!

The modular design of the BikeE recumbent allows you to upgrade at any time to a 16 spd. version. The 16 spd. option is an additional \$120. This includes the bolt-on derailleur post, front derailleur, cable and housing. The shifter is already on your 8 spd. BikeE. Other options include: Tool Kit, Kickstand, Foul weather kit (front fender, rear mudflap and chainguard), a custom handlebar stem and a specially designed pannier low rider rack that mounts under the seat. The BikeE frame design will not accept a bike trailer of any kind; however, a trailer-hitch option is due out

soon. Future accessories will include a Zipper Fairing (as seen at the Portland Bike Expo), a trailer hitch and messenger bag. Due to the BikeE's modular design, future updates should be retrofitable.

### RCN Can't Leave Anything Alone.....

How would RCN set one up a BikeE if given the opportunity? First, I'd change the gearing right away, I want loooow gears. I'd would exchange the 11-28 cassette, with an 11-32 8-spd. Dura Ace freewheel (rare & expensive). This would give us the perfect low gear of below 24 gear inches—all of this with the simplicity of a double crank. I'd then use a Shimano XTR long cage rear derailleur along with the new Grip Shift 8 spd. shifters. (I know, I know, this exemplifies our love/ hate relationship with Shimano. The real low end stuff is OK & cheap. The mid-range suffers, I wouldn't take some models if they were free, but I always come back to the high end because no other components shift like top line Shimano.) I'd then change the rear tire to a Avocet Fasgrip 85 psi 20" X 1.75" slick and the front to a 16" X 1-3/8" more performance oriented front tire. I'd then send our Ace Detectives out to hang around the back door of BikeE and get them to drill a 16" narrow rim for 18 spokes, just as they do on the stock BikeE front wheel. Next, I'd beg, borrow or pay for a Zipper fairing for this baby. Lights, CD stereo, Birkenstock-compatible pedals, UNI Discs and look out Corvallis. Oh yeah, one more thing, a holder for a coffee cup or Latte.'

### Out of the BikeE Box

The way the BikeE arrives to its destination is well thought out and reminiscent of recumbents costing twice as much. The "QC" process starts at the factory where the BikeE is assembled, rack tested, tested on



**BikeE X-3**  
(Photo courtesy of BikeE Corp.)

a training stand and then actually road tested for 10-15 minutes. A five-point safety check and other supervisory checks are also included. The bike is then packed into a UPS'able box and shipped. When arriving at its destination, the BikeE can be assembled by an inexperienced customer or a bike mechanic in less than twenty minutes. It almost takes longer to unwrap the packing material than it does to set up the bike. You lift the BikeE out of the box, mount the front wheel onto the fork, slide on the seat, insert stem/steering strut and ride away. In all of the tests we have done, we have never come across a "QC" pre-assembly process this good. If this was on any \$1800 bike we'd be impressed, but on a bike that sells for \$900, we can RAVE about it!

**Ride 'em BikeE**

The compact long wheelbase seems short when compared to my LWB. The BikeE feels compact and maneuvers better than most SWB/ MWB recumbents due to its low bottom bracket height and ease of use. The front end steering geometry is really dialed-in—near perfection. It is well balanced and extremely predictable. Some recumbents use self-centering mechanisms or have built in fork-flop to aid in bringing the steering back to center. The BikeE has a more responsive steering geometry with no self-centering device, but with some fork-flop. This makes for very direct, but predictable low speed handling. The overall performance and handling is very good, but tall or heavy riders will notice a tendency for the front wheel to be light during aggressive riding. This is actually a trait quite common for a CLWB recumbent which usually has the seat mounted higher and further back on the frame. The handlebars felt a little close to my body and on the narrow side. For those who want more selection and adjustability, a custom stem option is available. At 32 pounds, the bike did not feel heavy at all. The "box" aluminum frame was rigid and flexed little and the unsupported stays along with the fat tires provides the BikeE with a luxurious ride. Many riders agree that this design format "is the easiest recumbent to ride." And this applies to novices and enthusiasts alike. Whatever your recumbent experience, you will adapt to this bike quickly and effortlessly.

**BikeE Defined: E-Z to Ride**

We sometimes forget how hard it was learning to properly use 21 gears, or balancing and riding a SWB, MWB or even LWB for the first time. Think about what is involved, relearning balance, shifting 21 gears with strange buttons or levers, bikes that are as long as a

tandem or real short with heel interference on the front wheel, too high or too low and this is what we enthusiasts sometimes take for granted. The BikeE designers have succeeded in building a recumbent that is built with the same standard of quality we are accustomed to seeing in USA-built enthusiast level recumbents, but doing it with ease of rideability as the #1 goal. The BikeE is the same size as a conventional bike, but most riders can easily sit on the seat with feet planted flat on the ground. The controls are well thought out and a no-brainer to use, the bike is light enough to lift onto a car-rack and most will enjoy BikeE's somewhat futuristic look.

The BikeE could not have been built a few years ago. BikeE designers were clever enough to take advantage of bicycle and recumbent industry advances, the most predominant is the ReBike-like CLWB format. The BikeE takes this design format one step further, advancing it into a true multi-use serious bicycle. The BikeE really shines for commuting, city riding, and even quiet country roads on varied pavement. The high seating position makes the BikeE easy to see and be seen in traffic and the compact wheelbase makes it agile—this could be the ultimate recumbent city-bike.

Naturally, I put myself above the BikeE, why I'm not sure. My classic, wonderful, legendary, ego-trip \$3000 racer recumbent sits in a heated garage, gets babied and pampered like a member of the family and I constantly worry about it. Recumbents like the BikeE are meant to be used in everyday situations. An investment of \$900 is not to be taken lightly, but compared to some of the \$3000-\$7000 speedsters in RCN, it's a bargain. I was thinking about my own personal riding. 15-20 mile rides, mostly all in the city or on bike trails, light hills and fat tires and a rack or bag is a necessity. Funny thing, I always buy a bike worthy of circumnavigating the world—and then never do. Then I compared the bike I rode, to how I use it. Honestly, I could replace my personal bike with a BikeE and it would suit me better for 90% of my riding. Think about it.

*O.K., so you won't be trad'in in your Presto or Vanguard anytime soon, but just because you are a serious-gonzo-die-hard recumbent enthusiasts does not mean there is not room for a BikeE in our garage. Stephen des Jardins of Elliptic put it best when he named his BikeE his "Burrito Bike." This is the bike that is most likely to be climbed on for spur-of-the-moment rides, such as down to the Burrito joint for lunch. Brent Adams from Rainbow Cycles told me a story about riding his BikeE across a grass field with one hand and his morning cup of coffee in the other hand. Brent also mentioned that half of the BikeE's that he has sold are used for daily commutes in and around Corvallis.*

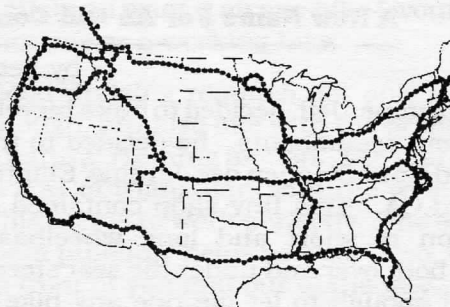


**The BikeE Market**

If there is a down-side to this bike, it's that the BikeE couldn't be built to sell for \$600. Some may feel the BikeE is overpriced in its market. Most recumbent dealers had favorable opinions of the BikeE, but many would like it see it in a lower price range. This probably has more to do with market competition than the BikeE itself. I do not have any problem with the BikeE's chosen price range, however, that \$600 mark would reach many more customers. When you take a look at the component level and amount of custom fabrication that goes into a BikeE, the value is more defined.

The BikeE is the most deluxe recreational/ city bike-recumbent built. It is designed to be as simple and easy to use as possible. BikeE has come up with a truly unique recumbent bicycle offering with an ingenious user-friendly design premise. If you would like to experience the BikeE for yourself, call or write to: BikeE Corporation, 5460 SW Philomath Blvd. Corvallis, OR 97333-1039. Ph:#503-753-9747, Fax:#503-753-8004.

*Editor's note: If you are interested in the CLWB design and affordable recumbents, see "Recumbent News" in the back of this issue.*



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## DRAISING

**A New Name For An Old Concept That is Making a Comeback**

by Peter A. Sharp

Recently, a friend of mine, Jeff, decided to buy a bicycle and I told him about recumbents. he decided to try some and we ended up at Stephen des Jardins' Elliptic Cycles in Hayward, CA. This tiny shop contained a good cross section of short and long wheelbase recumbents, with both over and under the seat steering. He was kind enough to let me ride any bike I wanted to try. My own bike is a Tour Easy, so I tend to get a bit snooty around other recumbents.

Jeff and I were unexpectedly impressed with one of the bikes: the BikeE Motion. It took no practice whatsoever to ride it. It was also the most comfortable by a long shot. Both of these attributes surprised me. I had seen pictures of the BikeE in **RCN**, but the bike had not appealed to me. Aesthetically, I don't like the look of wheels smaller than 20" in diameter (the BikeE's is 16"), or wheels of different widths. Jeff thinks its a terrific looking bike, but then, what does he know? I'm skeptical because the bike has no down stays to triangulate the chain stays. Also, I need lower gearing (than 29 gear inches) for the killer hills around where I live. And frankly, I couldn't imagine a worse model name for a recumbent than "BikeE" (Ugh). I still can't

figure out how to say it without sounding affected. I figured that anyone who would pick a name like that must have made some other mistakes as well. But when finished riding the BikeE, I expressed my surprise and pleasure to Jeff and Stephen. They agreed. Stephen said that the BikeE is the bike in his shop that he naturally grabs whenever he has to run a quick errand.

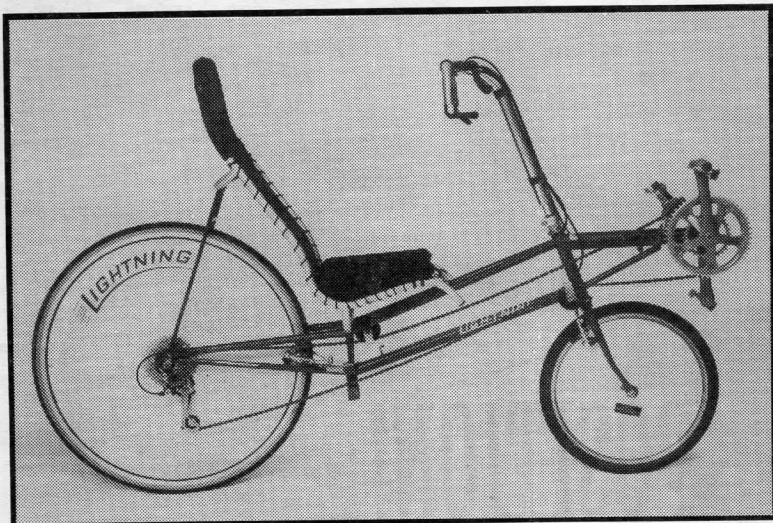
The BikeE offers unusual control. It is a very compact long-wheelbase recumbent with a high seat and narrow up-front handlebars. A big plus is that it can be moved along at quite a rapid clip without even using the pedals. I just sat on the seat and started running. In fact, since the handlebars are at the balance point of the bike, I could stand, lift the bike without taking may hands form the handlebars, spin 180 degrees, and take off running in the opposite direction! What fun!

Of course, I recalled that this combined sitting and running was the method of propulsion used for the very first bicycle - - the steered and balanced "Fahrmaschine" (travel machine) patented by Karl

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## **LIGHTNING**

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Von Drais in 1815. Von Drais demonstrated that he could outrun runners with his "travel-machine," and he probably did it while wearing a top hat. He could maintain speeds of 8-10 mph for long distances. Now, I know exactly what that original experience was like, and why it eventually became all the rage among the young gentlemen of the time. Since I didn't know what to call this half-riding/ half-running, I decided to name it after good old Karl, the father of cycling. So, I call it "draising" (pronounced "dray'zing"). The verb to be "to drais" (pronounced, "to drayz.").

Draising is very useful for making quick maneuvers in crowded situations. I have often used it. For instance: when I have to cross a street quickly through traffic, or when I'm on the sidewalk and squeezing past baby carriages and shoppers. I am able to drais a bit on my Tour Easy, but the low seat makes it somewhat awkward and slower. I feel more like a crab than a marathoner. Some recumbents, lay-back type seats make draising almost impossible. Frankly, those seats make me worry about getting caught in some awkward traffic situations without being able to get my feet on the ground for quick maneuvers. (In fact, Jeff fell down just trying to get out of one of those seats). Draising could also come in handy on really rough or slippery roads, or when the chain goes kaput. It would make

slow stop-and-go sight seeing much more convenient as well. Now that I have experienced really good draising, I want it on any bike I would use as a general purpose or a working bike.

Good draising requires not only a seat that is high enough, but also one with the proper shape to permit a natural running motion. The seat base on the BikeE is sort of triangular, with the wide part at the back. This seems to work perfectly. The softness of the seat foam probably helps as well. Also, the pedals are out in front of you and out of the way. Try draising on a conventional bike, and you'll find that the pedals serve as good ankle bangers unless you are mighty tall and bow-legged. Of course, it is possible to use a conventional bike sort of like a scooter by standing on one pedal and using the opposite leg for propulsion, but that offers much less control. I guess that would be called "scoozing" (just kidding).

I haven't yet had the opportunity to ride a DH recumbent or Alternative Bikestyles recumbent, but both look like they might have the right height and shape of seat, and handlebar placement, for good draising. The ReBike allows adequate draising for safety. For a touring or commuting recumbent, draising is probably less important. But for an all-around recumbent, I will compare every bike from now on to the BikeE for comfort, control, and draising ability. Obviously, the designer understood what he was doing when he selected the ergonomics of the bike. Let's hear from other readers about the draising abilities, and other unique capabilities, of their recumbents.

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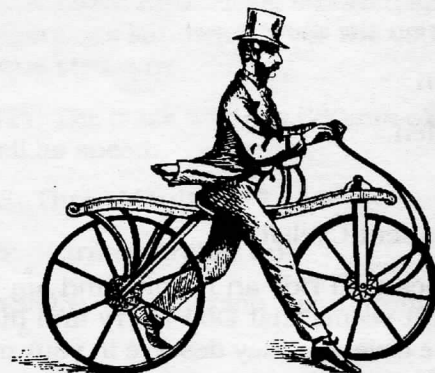
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Gentleman draising along, circa 1819, from ref. 1.

Dear Recumbent Cyclist,

For eight years, I have been setting up indexing 6 spd. 11-32 or 11-34 rear (freewheel) clusters. For the last two years, I have been doing eight speed Hyperglide Cassette hubs clusters, 11-34, 11-32, 11-30, etc. These can be conversions of any Shimano cassette hub (6/7/8). Lube inject hub conversions which allow the interior of the hub and freewheel body to be lubed from one lube point. Also available in tandem version with drum or disc brakes. Zach Kaplan has seen & ridden these hubs and he tells me they are the best shifting he has ever tried. I believe every bike you own/ review could benefit from my custom drivetrain wizardry.

Hope to meet you sometime,

Conrad Oho

*Readers can get in touch with Conrad at PH:415-924-9143.*

Hallo Robert,

Done a bit of cycling since my last letter. I cycled down from Umea to Gothenberg (on my P-38 Lightning) and ferried to Harwick England. I cycled to Lands end and then up to John O'Groats it's a bike Classic here in Britain. I passed Neatworks and Mike Burrows, but nothing to report to **RCN**. So far I've done 5500KM since starting 5.5 weeks ago. I have been staying mostly in a tent. Later today will ferry to Denmark and the European HPV Championships and I hope to have something to report from there.

Your swede on the move,

Mats Nillson

Umea Sweden.

Dear Recumbent Cyclist,

Probably because I ride an Infinity and am therefore biased, but it seems that Don Barry and his Infinity don't get the coverage they deserve in your magazine.

Some years ago at a bike rally on Long Island (Gear '87), I decided that I really needed a recumbent, in response to a presentation by a young women who was

## RECUMBENT MAIL-BOX



at the tie, the president of the IHPVA. At the rally, there was a display (by a recumbent dealer), and on his advice, I ordered an Infinity. His advice was simply based, the Infinity is so much less expensive and yet so close in quality and performance to any other recumbent that it was the clear choice as a starting bike. So far as I

have seen to date, this is still the case

Since the bike was delivered, I estimate that I've logged over 15,000 miles on it. Over the years, I have suffered a couple of frame cracks in my Infinity. Both times when I was on tour and I had to find a welder to repair the frame. These crack are a negative and an inconvenience to say the least, but I was able to find someone who would and could weld aluminum and was back on the road with an interesting experience to relate. Recently, I called Don Barry because of a third crack and mentioned my problems. Don instructed me to send the frame back to him for inspection, repair and upgrade. I did send in the frame, and in short order, it was returned with the repairs and upgrades done, all at no cost to me.

Although I've read about other recumbents, and they seem interesting, I can't develop the conviction that it is worth spending the money to replace my Infinity. With the price of the Infinity so low compared to to the other recumbents and with the follow up and support so good, it seems that it is still the clear choice.

Sincerely,

Gene Stucker

*Gene, let me set the record straight. We have always liked the Infinity. We have owned four in the past few years. No other production recumbent can beat, let alone meet Infinity's value for the recumbent enthusiast dollar. Besides that, the design is very good and Don Barry and crew take great care of their thousands of satisfied customers. We've had a road test tentatively scheduled since the fall of 1990. We were supposed to get Bulldog #1, then the first 21st Century, now we finally have the first short model 21st Century. When the Bulldog project did not materialize last summer, we rescheduled for this year. Look for your favorite bike to grace the pages of **RCN#19**.*

*Infinity Owners: We could use your input, comments and photographs for the upcoming issue.*

Dear Recumbent Cyclist,

For my 40th birthday(!) I bought myself my first recumbent: a vibrant purple anodized BikeE with all of the trimmings—under the seat pannier racks (nice touch!), speedo, fenders, rack, lights, and mirrors. It's a great looking bike and I think it will look especially striking with yellow bags against that purple (frame). I added Fractovision reflectors to the chain stays for safety and to enhance the psychedelic look. Any Grateful Dead fan recumbent jockeys out there?

I was a bit concerned about my weight (260) on the chain stays, but rutted gravel roads have proved to be no problem, and the fat tires make good shock absorbers. Climbing in the lowest gear (16 speeds) produced no hint of weight-shift wheelies, and not much sweat either. So, I think I like being part of the "over the hill gang." Frankly, that seat is like riding a magic carpet with pedals, so relaxing! The brakes are strong. And the twist grip shifters are the doorknobs to cycling heaven.

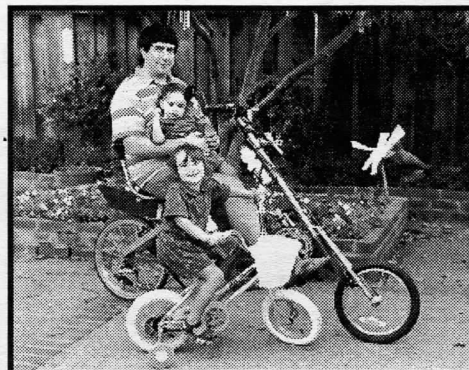
Lots of admiring looks as I cruise the neighborhood. The kids tell me I'm the coolest thing in town. There's always a small group waiting with questions as I pull

into my driveway after a sunset ride through the countryside. Next comes a trailer for the wee ones in diapers. All in all, my BikeE has transformed the stress of entering into middle age into riding pleasure. Congrats to BikeE makers, to the helpful dealer—Elliptic (Stephen des Jardins)—and special thanks to you for honest and accurate advice.

Viva Recumbents!

Jeff Wolfish

Dublin, CA.



BikeE owner, Jeff Wolfish  
(Photo courtesy of Jeff Wolfish)

## DR. RECUMBENT

Dear Dr. Recumbent,

In the July/ August '93 issue on page 14, there is a trike called the Kingcycle K-3. I am interested in obtaining more information on this masterpiece, however, there is no address for getting in touch with the manufacturer. Please help me in my quest.

Sincerely,

Peter J. Marcucci

Sarasota, Florida

Dear Peter,

**RCN** has TRIED to make it a rule not to cover too many bikes that are unavailable in North America, but the Dr. has lots of pull with the **RCN** staff, and there IS a chance that the K-3 may be imported if there is enough demand. The "K-3" is a revolutionary new trike designed and built for the Fiets HPV contest in Europe. It appears that the K-3 will not be imported into the USA. Linear Mfg. Inc. has an exclusive agreement with Kingcycle in the USA.

In order to satisfy our readers interest for the new and

*different in the HPV world, here is what we know: The K-3 is advertised as a 365 day oil-proof weatherproof commuter. The advanced construction techniques and the cycloidal drive system have combined to provide a vehicle which is exceptionally clean, aerodynamic, and with a driving "compartment" which is totally free of oily bicycle components.*

**COMFORT:** The fabric seats offer armrests for an unusual level of comfort.

**CONSTRUCTION:** Frameless, stressed skin of honeycomb/ fiberglass sandwich gives the vehicle a rigid monocoque structure.

**STABILITY:** The track width is 680mm offering stability as well as speed.

**WHEELS:** Three Moulton 17."

**BRAKES:** Sturmey Archer hub.

**SUSPENSION:** MacPherson strut front, swing arm rear.

**TRANSMISSION:** The reciprocating cranks of the cycloidal drive transmit power to a lay-shaft behind the seat and then to the 8 speed derailleur which drives the rear wheel. The cycloid drive system provides a

further 2:1 ratio by altering the stroke used. A lever on the floor in front of the seat disengages the drive, and operates a reverse gear.

**DIMENSIONS:** Length: 2.2m, Width: 690mm, Height: 1.02m, Weight: 22.5kg,

Price: £2800 est.

The K-3 also has a windscreen wiper arrangement, adequate ventilation, twin head-lamps, turning indicators as well as solar panel chargers. There is also luggage storage behind the seat. You may write Kingcycle at: Kingcycle, Lane End Road, Sands, High Wycombe. Bucks HP12 4JQ. England. We suggest that you send at least one USPS International response coupon for a reply.



The Kingcycle K-3  
(Photo courtesy of Kingcycle)



# RANS

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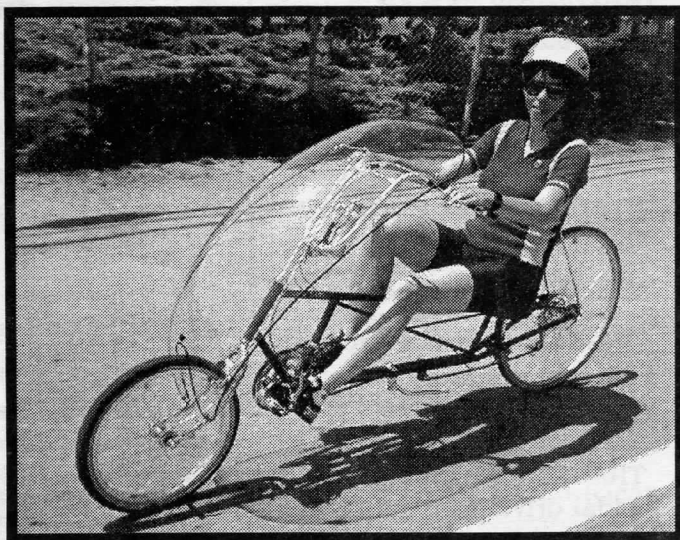
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## **EDITORIAL LICENSE: RCN ROAD TEST FACTS & MYTHS**

by Robert J. Bryant, Publisher

### **HOW TO GET YOUR BIKE ROAD TESTED**

The most common way is for manufacturers to arrange with us for a road test on their bicycle. Currently, there is an 6-8 month wait for "feature tests" as they have been known in the past. **RCN** currently has a tentative plan for more issues in 1994. With this plan, there will be more reader submitted articles printed and the road tests will be shorter in length. Staff-written tests will only appear in every other **RCN** issue. This leaves the door wide open for new writers. We also hope to have more diverse **RCN** covers.

If a manufacturer requests us to test their bike, they must understand that their bike will be highly scrutinized and/or praised by one or more **RCN** testers. The manufacturer should be open to comments, suggestions and recommendations for their bike. The manufacturer must ship a test bike postpaid round trip to Renton, WA. for a minimum of 60 days, however, we prefer 90+ days. In some cases, we may ask that a local shop set up the bike or that the bike be shipped, fully-assembled by truck. We can also travel to your location with expenses paid by the manufacturer.

We invite all manufacturers to submit their own tests or personal history articles to **RCN**. These are extremely popular with readers and make it to press quickly. Another option for road testing is to find someone to test their bike and submit it to **RCN**. This is perfectly acceptable. We will be doing more of this type of thing starting in early '94.

We currently have only one test bike at our offices and could use more for '94 tests. If you are interested, please let us know. **RCN** office PH:#206-852-8149.

### **WHAT WE LOOK FOR**

We are comparing your bike against its peers. We look at material and component quality, craftsmanship, how the bike rides, how easy is to ride, who & how does it fit, how does it adjust, how does it assemble and how it is shipped. We also compare it against its market competitions for all of the above. **RCN** pet peeves: we believe that bikes costing upwards of \$2,000 should be damn near perfect; enthusiast recumbents costing downwards of \$399 or \$600 will be judged accordingly, or in other words, more leniently. We also feel that bikes being sold manufacturer-direct should be preassembled and bench or road tested prior to shipment. This is very important to us, and becomes even more-so as the price and the number of wheels on the recumbent increases.

### **HOW TO GET YOUR RECUMBENT ON THE COVER**

It has been our policy that **RCN** covers are for sale and available to any reader or manufacturer. (The current cost for a cover is \$550. We have never sold one at the listed price.) If there is no sale of the issue cover, it is up to the editorial staff as to what we put on. In the past, we have "showcased" the feature test bike on the cover of **RCN**. After Feb.'94, our plan is to make the covers more diverse which means less "showcasing." We also plan to continue the use of our "false/ protective covers" on most **RCN** issues. Reader submitted photos will decorate this cover. If you have any recumbent photography, send it our way.

### **COMMON MYTHS & FACTS ABOUT RCN ROAD TESTS**

**MYTH #1:** **RCN** road tests are bought and paid for advertising packages. This is not so. We have never accepted payment for an **RCN** road test editorial. The criteria for an **RCN** test is to make prior arrangements with us and pay round trip shipping on the test bike. We do not guarantee cover-shots, article length or outcome of the road test. Road tests are strictly editorial by **RCN**, Robert Bryant and our writers. The placing of advertising in the test issue is appreciated, but not mandatory. Articles in which the ad-space has been PAID FOR, would have a "paid advertisement" caption above the article, although we have never done this.

**MYTH#2: RCN** accepts bikes as payment for road tests. In the past, we have accepted the road test bikes in trade for advertising. We do not or have never charged for a road test. In the past, Bike-for-**RCN**-ad trades have made it easy for new or small manufacturers to purchase advertising and they do not have to restock or or reship the used road test bike. We do this occasionally as a courtesy to manufacturers.

**MYTH#3: RCN** is just sales propaganda to sell bikes for the Millennium Cycles. Millennium officially ceased operations Jan. 1, '93 and **RCN** Bike Sales Outlet as of July 1, '93. Catalogs & price lists are no longer available. Millenniums sole purpose was to subsidize **RCN** early on. We understood there was potential for conflict of interest—and this kept us honest. Our #1 priority is and always has been a commitment to our readers.

Our goal here at **RCN** is to promote recumbent bicycles by offering communications between recumbent manufacturers, dealers and enthusiasts. We are 100% committed is to **RCN** readers. We are bicycling's future! If you have any ideas on how we can serve therecumbent enthusiast better, please feel free to write us at **RCN**, PO Box 58755, Renton, WA. 98058-1755

Thank you all for your loyal support,

Viva Recumbency!

Robert J. Bryant, Publisher

## FYI:

### RECUMBENT CYCLIST CORRESPONDENCE:

Have you had poor luck getting through to us on the phone? Have you been mistreated by our voice mail system? Well, here are all of your **RCN** Correspondence questions answered: If you have called our **HOTLINE** number (Old PH:#206-630-7200) you will find out that it has been disconnected. This low-tech system was expensive to maintain and about 50% of the callers immediately dialed our office to ask the same questions. Some readers were downright upset with the voice mail miracles of ma bell. Our new office number is: PH:#206-852-8149.

**OFFICE HOURS:** Do we ever actually answer the phone? Many readers who call us must think they are dealing with a major magazine. Well they're not. **RCN** has no paid staff and this is a part time venture for us (at least for now). Our overworked Publisher, Robert Bryant works for the areas second largest metropolitan newspaper and publishes **RCN** in his spare time. **RCN** office hours are for the most part, 10:30am-3pm Mon.-Thurs. (The new **RCN** Office number is: PH:#206-852-8149.) This means we answer the phone unless we are: road testing, mailing issues, doing final editing or on the beach in Maui-or daydreaming of riding our 'bents down Haleakala (delusions of grandeur....). Our new phone system has only one phone line with voice mail. We apologize that we cannot return calls for bike purchase advice—most every question has been answered in print—back issues of our publication, all of which are available for sale. The reason for this is not because we don't like talking to readers, because we do, it's the sheer amount of time this takes, the high cost of returning calls and the high volume of calls we receive (up to 150 calls per week). We can answer quick questions through the mail with **SASE (ONLY)**, or we can offer verbal advice or written reports on a consulting fee basis.

**THE HOT-LINE:** What is it for? The main use of our office telephone is to keep in contact with recumbent manufacturers, dealers, writers and readers with hot-tips for the next issue of **RCN**. We pride ourselves on being able to take a phone tip and incorporate it into a story going to print within hours. The steps we are taking to streamline our office procedures are part of a long term plan to continue publishing **RCN** well into the future and to make Recumbent Cyclist International a profitable company. We appreciate our loyal readership and thank you all in advance for your understanding.

Viva Recumbency!

Robert J. Bryant  
Publisher

Marilyn J. McKee-Bryant  
Circulation & Office Manager



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**RECURBENT SATURDAY: OCTOBER 23rd in Kent, WA.** Check out the Calendar section of this issue to find out about this **RCN** sponsored recumbent get-together!

**WANTED: YOUR RECURBENT PICTURES & FEEDBACK:** We are working on articles on the following bikes and subjects. If you would like to be involved, We need your photo's and feedback on the following bikes: The Infinity (ASAP), A.T.P. Vision, Haluzak or Pursuit. Easy Racer vs. P-38, P-38 vs. Presto, Infinity vs. Vision/ BikeE, Ryan vs. Linear vs. Infinity. Have you purchased a new '93 model recumbent? Let us know how you like it.

**WEATHERPROOF LOW BUDGET STREAMLINER:** We are working on a low-budget weatherproof commuter streamliner project/ story. If you have any ideas, advice or experience in this area, please drop us a line. Write to **RCN**, Streamliner project, POB 58755, Renton, WA 98058-1755, USA.

**ALERT! STOLEN RECURBENT** Presto #122 was stolen in Los Angeles, California in early September. This black Presto is very custom with a leading link front suspension, TNT hubs, Grafton cranks, Deore XT/ Campy derailleurs, Titanium BB, Speedplay X-2 pedals and Magura Hydraulics. This bike also was outfitted with a prototype Presto Zzipper fairing and a Root's trunk. If you have seen

this bike or know if its whereabouts, please call COLLECT: Ph:#415-982-0336.

### ON-LINE NEWS:

As many of you know, we are online on the GENie computer network. The bulletin board (BB) topic is in the sports area under cycling (Type M215, select Cycling, topic 11) and our topic area is called, "Recumbents & Cycling." We are considering an online move to Compuserve as our GENie home was recently rocked by a large price increase by the GENie beauracracy. If you have any comments on Compuserve, please let us know. Many of our readers are also on the Internet HPV mailing list. To access this, send a message to Brian Wilson to get on the list: Majordomo@zippy.sonomo.edu@INET.# Frequent internet users will get this, others (like me) will be stumped for months. In other on-line news, J. Gaerlan wrote to say that there is a amateur frame-builder's forum under Bike Net on America On Line (AOL). Mr. Gaerlan invites **RCN** backyard homebuilder to this BB. We have considered and declined using AOL for an **RCN** online home, however, we invite you online recumbent hackers to tryout this BB and report back to us.

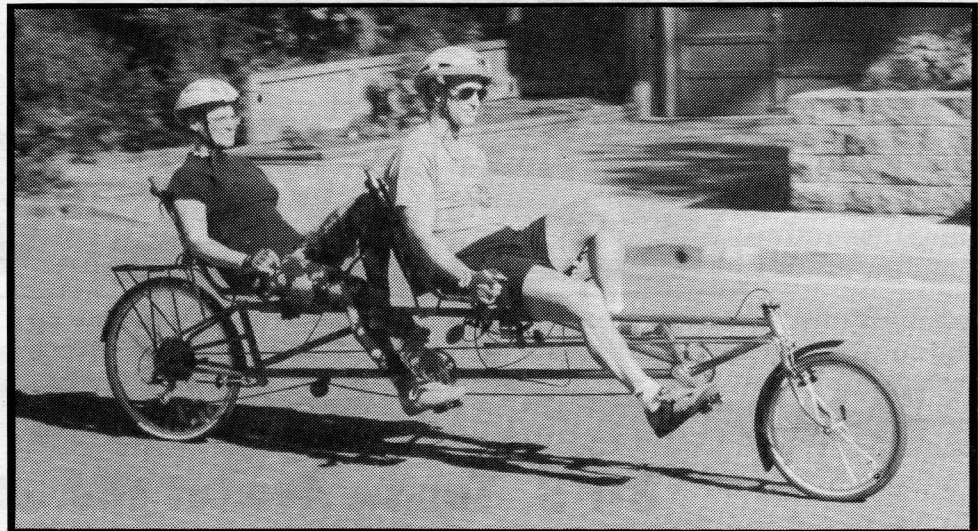


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## RCM INFORMATION

Recumbent Cyclist International is dedicated to promoting recumbent bicycles and providing and encouraging communications between HPV enthusiasts, home-builders, dealers and commercial manufacturers of recumbent bicycles. We are cycling's future.

**SUBSCRIPTION INFO:** The Recumbent Cyclist is published six times per year. To subscribe to the Recumbent Cyclist, please send \$25. USA Subscription. \$30 USA First Class mail, \$35 USA First Class-Rush (mailed in a flat envelope), and \$35 Canada, pmt. in US funds (or add 30% for pmt. in Can. funds) and \$45 (US funds) International Subscription. The First class subscription will get you your issue 2+ weeks earlier than the standard rate. First Class-Rush and Jr. & Supporter memberships are mailed the day we get the issue back from the press. They are mailed in a 9" X 11" flat envelope. If you are interested in upgrade information for your subscription send your inquiry with a SASE or leave us a voice mail message at Ph: # 206-852-8149.

**ARTICLE SUBMISSIONS:** Starting in early 1994, the new RCN format will allow for much more reader submitted material.

**ARTICLES:** Road tests, reviews, comparisons, shoot-outs, event report or home-builder story. We recommend 1-2 pages (400-1400 words). Remember, if you want to do a feature story, the article should be complete and with pictures.

**RECUMBENT NEWS, F.Y.I. & CALENDAR:** This can be as short as one line or as long as a few paragraphs. Around 100 words is best.

**LETTERS TO THE EDITOR:** This is your forum to comment or react to RCN articles, policies or anything else. If you disagree with us, let us know.

**SUBMISSIONS:** RCN is produced on a Mac IIfx with MacWrite Pro, Write Now, Publish It! Easy! and Pagemaker. We accept 3.5" discs in Mac or ASCII text files. Please send a hard (printed) copy and label all discs with article name, format and software used.

We accept letters, articles or any type of submissions on anything from the backs of candy wrappers, to scratch paper or what have you. It makes our job easy if you can at least type the article and submissions on computer disc make our day.

Do not send us originals. Make copies of what you send. We cannot return articles, letters or photos unless it is a very special situations. In special cases, please call our offices for approval.

**PHOTOS & GRAPHICS:** We scan all photos into the computer, so sharp and crisp B/W is best, color is OK, but we do not need negatives. Computer art should be output on a laser printer and hand done art should be clean and crisp black ink on white paper.

**READER WRITTEN ROAD TESTS:** If you own and ride a particular recumbent bicycle, you are the perfect candidate. If you have owned more than one brand of recumbent and want to do a comparison—this is even better! During 1994, we plan to do more reader written road tests, however, we cannot supply test bikes to readers. Writers should obtain the bike themselves, through a dealer or manufacturer. We can sometimes arrange the purchase of a bike to be used in a road test. Please do not represent yourself as an RCN recumbent road tester to manufacturers. We advise anyone with questions regarding this to call our office.

RCN recommends that writers who are interested in doing a feature road test write us with an outline and a few sample paragraphs of the article that you intend to write. From this, we can give you some ideas. Please include an SASE. Remember that not all articles submitted are guaranteed to get published in RCN. We cannot guarantee how long it will take to get your article into print. RCN retains copyright of any articles that get printed in RCN. The only exception to this will be with prior arrangements. We will not consider an article for print if we are aware that it has been submitted to other publications. If timing is a concern, we request that writers offer us a six month right of refusal on all articles and enclose a return SASE for the article.

**RCN ADDRESS:** Please send everything except for UPS deliveries to this address:

**Recumbent Cyclist International**  
P.O. Box 58755  
Renton, WA 98058-1755

**RCM#17 COVER:** Cover graphics provided by Mark Colliton of Kensington Design in Kensington, MD. BikeE graphics courtesy of the BikeE Corp.

**DEVOTED PRODUCTION STAFF:** Publisher: Robert J. Bryant, Circulation/ Business Manager: Marilyn J. McKee-Bryant, Production Assistant: Jeanene Smith, Graphic Services & Printing provided by Desktop Publishing & Printing in beautiful downtown Renton, Washington. RCN is written and produced exclusively on an Apple Macintosh computer system.

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## RECUMBENT CYCLIST CALENDAR

**OCTOBER 23rd 1993 NW RECUMBENT RIDERS "RECUMBENT SATURDAY"** 1pm Meeting We will have first ever REAL meeting at the Kent King County Public Library meeting room on Saturday at 1 PM. This meeting will be to discuss our rides & (Nick Hein) homebuilder seminars and Robert Bryant will be bringing his pictures and homebuilt/ European recumbent files and foreign newsletters. Attendees are welcome to bring HPV/ recumbent sketches, drawings and photo albums for show & tell as well as refreshments. The address at the Library is 212 2nd Ave. N., Kent, WA. Directions: Take Central Ave. to Smith and go west over the R.R. tracks. The Library is on the left side on the corner of 2nd & Smith. Rain will not cancel this event. Questions? Call **RCN** Ph:#206-852-8149.

**OCTOBER 23rd 1993 NW RECUMBENT RIDERS**

**"RECUMBENT SATURDAY"** 9am ride. For those of you who would like to go for a quick spin down the Interurban trail and grab a burger before the meeting, riders can meet at the Library (as above) at 9am. This will be a "no-host" kind of ride—which means riders who show will ride with or without a host. The ride can be 10-25 miles through the Valley. Rain cancels the ride. Questions? Call **RCN** Ph:#206-852-8149.

**JULY 18-24, 1994 IHPVA SPEED 20TH ANNIV. CHAMPIONSHIPS** These are the tentative dates for next years event to be held in Eureka, California (not to be confused with Yreka, Ca.). The newly formed official IHPVA Chapter Redwood HPV Assoc. is the host chapter.



## HOMEBUILDERS CORNER

### The Hybrid Recumbent Bike

by Steve Smith

The SS15 is a Hybrid recumbent designed for riding in rough conditions as well as paved roads. My wife, Kathryn, and I spend much of our recumbent riding time exploring the unpaved mountain roads in our home state of Colorado, with ghost towns and old railroad passes as frequent destinations. When your bike can travel on a variety of surfaces, a host of new options open up for riding, most of which get you away from the dreaded auto traffic. Sure, you can do this on a mountain bike, but you have to hunker over and sit on that little seat (ouch). A comfortable seat, good suspension, and the trademark recumbent panoramic view spoils you.

The SS15 is the most recent in a series of recumbents that I have built over the last ten years. The designs have progressed from an original Avatar-like road bike design and have since incorporated suspension, sturdier frames, and mountain bike tires. I was hooked on

recumbents from the first ride in '83, especially on dirt trails. The addition of suspension is as equally profound of a step forward as was the original switch from a hunker to a recumbent. Gravel roads are a breeze, and urban features like potholes and curbs hardly slow one down. Throw on the high pressure slicks and you're ready for a century ride. The design prioritize good control and a comfortable upright sitting position over aerodynamics and speed capacity. The highlight for us of a recent bike tour in Europe was riding a beautiful stretch of unpaved mountain roads in Corsica that our road bike friends had to pass up because their bikes were to delicate for the rough surface.



Steve Smith's homebuilt Hybrid Recumbent  
(Photo courtesy of Steve Smith)

## SS15 Features:

### **Frame:**

The SS15 has a rigid, highly trussed, fillet brazed frame made of large diameter 4130 steel tubes. Four major tubes intersect at the bottom bracket to give superior stiffness at the crank.

### **Suspension:**

A swing arm rear suspension uses elastomer springs for damping. The geometry moves the rear wheel perpendicular to the chainline during suspension travel, so energy from pedaling can not work the suspension. Two inches of travel are available. Elastomer springs are a simple and effective way to provide both spring loading and damping because the flexure of the material is inefficient, absorbing energy. This system doesn't provide a big, swaying, Cadillac style ride. It simply absorbs the high frequency input and takes the edge off of big jolts.

The front end has an effective passive damping feature. A long steerer tube inside the head tube flexes between widely spaced bearings. This absorbs shock,

while the long, large diameter head tube provides rigid steering control.

### **Seat:**

The taut sling seat design creates a hyperbolic paraboloid-like shape with the back seat mesh. Not only is this stiff, but it has a natural lumbar support shape. The complete seat folds to 2 inches thick for traveling. Seat fabric is polypropylene trampoline cloth.

### **Front Fork/Steering Geometry:**

The bike has a 60 degree head angle, shallow by most bike standards. The advantage of the low angle is that the handlebars are close to the rider while minimizing the tiller effect that is present on other long wheelbase, high handlebar bikes. My experience is that trail (caster) has a more significant effect on a bike's handling than does head angle. The SS15 has a horizontal pivot clamp connecting the front fork to the steerer tube, furnishing an infinite trail adjustment range. Having experimented with various settings of trail, I find there is no universally appropriate trail setting. Trail can be varied to cause the handling to be fast and aggressive or easy and straight running. The choice is more a matter of the rider's mood and riding needs than any other criteria. I often make changes just for variety.

## **Specifications:**

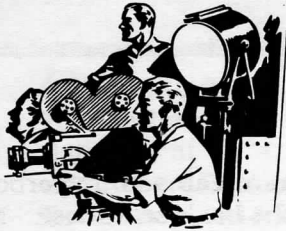
Type:	Long Wheelbase, hig handlebar recumbent
Tubaset:	1 1/8 to 1 3/8 inch OD 4130 steel
Wheelbase:	62 inches
Front Tire:	20 x 1.75 ACS RL Edge 100 psi
Rear Tire (Mountain):	24 x 1.95 Specialized GroundControl 65 psi
Rear Tire (Road):	24 x 1.25 Specialized Fat Boy 100 psi
Front Brake:	Sturmey Archer alloy drum brake hub
Rear Brake:	Cantilevers
Gear Range:	20 inches to 96 inches
Components:	Shimano Ultegra /Deore 18 speed
Weight:	36 pounds
Seat Height:	23 inches
Crank Height	13 inches
Head Angle:	60 degrees
Weight distribution:	60% Rear
Can It Climb Hills?:	Yes
Even With a Low BB?:	Yes

### **Folding:**

This long wheel base recumbent can be folded into a relatively small package for shipping. The front fork folds back at the clamshell, the rear triangle folds forward, and the seat folds flat. In folded condition, two of these bikes fit inside my Honda Civic and they also easily fit into airplane bike boxes.



Steve Smith's homebuilt Hybrid Recumbent  
(Photo courtesy of Steve Smith)



## RECUMBENT MEDIA WATCH

**BICYCLING MAGAZINE Aug. '93:** We are now indebted to our wonderful friends at Bicycling magazine. Here is what they had to say about us, "WHERE TO BUY A 'BENT: Our annual preseason buyer's guide covers more models every year, including recumbents. But sorry supiners, we don't have the space to bring you full information on every one (not yet anyway). But we can point you toward the BEST SOURCE. Recumbent Cyclist Magazine (now Recumbent Cyclist News)

buyer's guide lists "every known recumbent built or available in North America." The editors also select the best 'bents of '93, the best components groups for these bikes, best upgrades, and other handy info. Get this 48 page guide for \$7.95 from RCM, Box 58755, Renton, WA 98058-1755." Wow! Needless to say, this has been an incredible and needed boost for us. Since this appeared, we have now delivered nearly 2600 of our buyer's guides and we've gone into our second printing. Version #2 is slightly different with two pages of updates and some other minor changes. If subscribers would like a second copy of the latest version, please send us a photocopy of your mailing label and \$6.

**BICYCLING MAGAZINE Oct. '93:** This issue of Bicycling Magazine spotlighted Richard Rau's Quadraped recumbent trike.

**BICYCLE GUIDE Oct. '93:** This issue has the first printed picture of Ryan's new suspended top-of-the-line model. Bicycle Guide scooped us on this one.

**BICYCLE GUIDE Oct. '93:** A great article about Greg Fisher, a Tucson, AZ HPV tinkerer and his four wheeled offroad quad. Greg is a neighbor of newly relocated recumbenteur Milton Turner. This article is worth the cover price and has some great rebel quotes from Greg and Milt. In one line, Milt makes the comment, "when they outlaw cars...." (Milt has been keeping me aware of the goings on in the desert offroad recumbent scene).

**MARKETPLACE, AMERICAN PUBLIC RADIO, Aug. 18, 1993:** East coast writer, and recumbent enthusiast/promoter, Vic Sussman had this to say about our favorite subject:

"It's hard to think of a more technologically elegant invention than the bicycle. No other machine delivers transportation, fitness, and fun. Unfortunately, the one thing that hasn't changed much about the bicycle in more than a century....the stupidly designed seat. Balancing your bum on the padded bricks that pass for bike seats is guaranteed to leave your gluteus in maximus distress.

But baby boomers buy bikes by the millions, hoping to whip their aging bodies into cardiovascular shape, only to give up after a few months of whipping their butts on bike seats that generally produce saddle sores and chaffing.

So how come nobody has ever told these people about the recumbent bicycle? The what? Recumbent describes how you sit on these bikes—reclining, sitting on a bike seat that resembles a webbed lawn chair or a foam-padded seat with back support. It's the ideal bike for anybody who wants to ride without hurting, yet recumbents are virtually unknown in the U.S., even though there are at least a dozen independent manufacturers of these laid-back bikes.

Aside from the comfort, recumbents are safe. Unlike standard bikes—derisively called "launch vehicles" by recumbent enthusiasts, which you probably guessed includes me—recumbents won't throw you head-over-heels in a panic stop. You'll land on your side instead of on your head.

But if recumbents are so great, how come most people can't find one at their local bike shop? Because the bicycle industry and its retailers are notoriously conservative. They even fought the introduction of the mountain bike back in the early 1980's.

There's probably an untapped market for rider-friendly recumbent bikes, so where are all the hungry entrepreneurs and venture capitalists looking for a niche to exploit? I guess we're waiting for the Japanese again. Until then, when your local bike shop asks you what kind of bicycle you want, tell them—in the words of one leading recumbent manufacturer—to "make mine supine." A recumbent bicycle will make you happier—in the end.

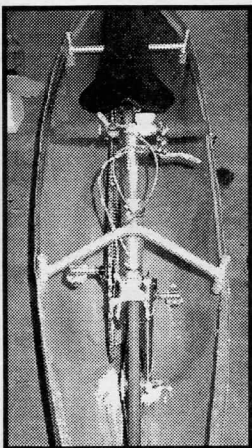
For Marketplace, I'm Vic Sussman in Washington (D.C.)

**FUTURE MEDIA:** Dick Ryan reports that the October '93 Men's Fitness Magazine has an article on the Ryan Recumbent. **RCN** was interviewed by USA Weekend (in your local Sunday paper) for the October 17th edition. USA Weekend has 350 million readers!

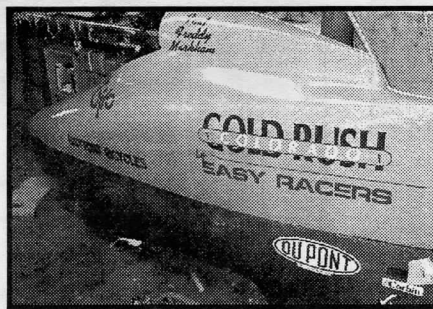


## RECUMBENT NEWS:

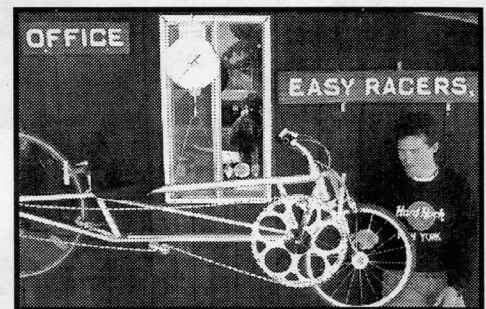
**A.T.P. VISION UPDATE:** ATP reports a doubling of their production capability this summer. Six Vision R-40's completed STP (Seattle to Portland) this year. One had a great custom head rest. Introspect owner B.J Straus's wife rode the Vision on a Summer tour from Victoria BC home to Sacramento and reports that it performed flawlessly! ATP is hard at work on new Vision options for this fall and the '94 season, a new upright steering kit, chainguard, computer mount and possibly some new light-weight replacement components are in the wings. The new hot-rod version of the Vision was on display at the Interbike trade show. This new racer has upright steering, a 17" front wheel and weighs just 23.5 pounds (the show-bike weighed 22 lbs). This is a '94 model and will not be available until February '94, but the model designations the "R-45" and the price should be under \$1800 with upper-line components. **COUNTERPOINT:** The new Presto/ Opus Super Zzipper is completed and final testing is being done as you read this. We have ridden the prototype and it gets two thumbs up! The new Zzipper bubble and mount system are among Zzip Designs best and are near perfection. The mounts are silent and the large fairing gives a 1-2 mph speed advantage. **EASY RACERS LOST ARTWORK** Easy Racers has just unveiled new head-tube badges for Tour Easy & Gold Rush models. Gardner Martin originally designed this logo back in the early 1980's, but lost the original artwork. Preparations for a new four-color brochure unearthed the lost head tube badge logo. Here's how to order your own head-tube badge: 1) an SASE gives Tour Easy owners a free badge. (specify silver or gold) \$1 gets an owner both badges via 1st Class mail. Please include serial number of bike to get this offer. Easy Racers, Inc., 2891 Freedom Blvd., Watsonville, CA. 95076 **EASY RACER:** From the shop that does the composite magic with the "Cobra" seats and Gold Rush bodies comes a new composite front fender for Tour Easys and Gold Rush Replicas. The fender mounts easily to the front fork with no stays. **GOLD RUSH COLORADO:** In other news, Gardner Martin has unveiled the new Gold Rush Colorado, the lightest racing HPV-EVER! GR Colorado is not a low design like the GR LeTour, but has a more upright configuration like the GR Dupont prize bike. GR Colorado will weigh only 17 pounds unfaired and the target weight for the faired version is less than 30 pounds. Gardner has moved the rear wheel backward into the frame to put more weight on it. This will keep the bike from going airborne at high speed. The GR Colorado has a mono-blade (one-sided) fork to allow for the 96 Tooth front chainring to clear. As with two fork blades, the chainring would hit the fork blade. Titanium parts have been used throughout. It sounds like Fast Freddie and Gardner Martin's Easy Racer Team are ready to go break some records.



Gold Rush Colorado with lower body mounted (Easy Racers, Inc.)



Gold Rush Colorado body (Photo courtesy of Easy Racers, Inc.)



Fast Freddie & the Gold Rush Colorado (Photo courtesy of Easy Racers, Inc.)

**INFINITY:** Terry Hreno, Infinity's race rider (of Moby fame), has developed a body made of fan-foam (1/4 polystyrene). The body will be based on the Moby 2C body. The commercial version will fit DeFelice, Infinity and other similar bikes. **RYAN RECUMBENTS:** Congratulations to Dick Ryan and company who unveiled their new suspended model with a picture in the Bicycling Magazine—Bicycling? Come on

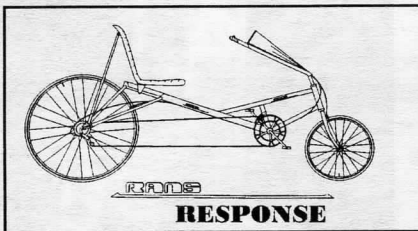
guys! **LIGHTNING CYCLE DYNAMICS:** Tim Brummer & company are busier than ever with fantastic summer sales on the P-38. Tim called to let us know about the new Lightning Action Video (\$10) and the new Lightning Racing Team T-shirt which are both now available. **WINDCHEETAH/ SPEEDY:** We will see the US Speedy & Kingcycle models at Interbike! **RCN** Subscriber John Stegmann of South Africa sent us a sample of his new "IZIZI" brand of HPV rims. John makes the rims in 17" (Moulton) and 20" sizes with a brushed aluminum finish

and holes for a Presta valve. Our sample was not drilled, so it will not likely be used or tested, but it looked good. The minimum order is 20 rims. Contact John at Ph:#27-21-641469 or FAX to:#27-21-644757.

**Weinmann** recently sent us a sample of their new 16" X 1-3/8" alloy rims. They are very nice and worthy of just about any HPV application calling for this size. What we really need now is a good high psi tire. **Magic Motorcycle** designers of the futuristic CNC machined aluminum cranksets have worked out a manufacturing/ distribution deal with Cannondale USA's component line, "**CODA.**" The custom cranksets will be marketed only under the CODA name. The upside to this is availability, which should be excellent knowing Cannondale. The new reorganized **Schwinn** Bicycle Company just unveiled its new "PT 201 Recumbent Exerciser. Edward Schwinn, Jr. once told me "he'd never build a recumbent." The new machine has a suggested retail price of \$299.95. **REBIKE** announced at the Interbike trade show its donation of a ReTrike to the Rehabilitation Hospital of Nevada in Las Vegas. We have seen and heard but are sworn to secrecy.

**RECUMBENT MANUFACTURERS & DEALERS**, Joe at J & B Importers Pacific in Kent, Wa. called to say that he has boxes full of the new production 20" chromoly recumbent forks available for your bikes. He also mentioned a hot new 16" version that is being stocked in limited numbers at J & B in Miami. Sorry no phone numbers; this is a wholesale source only. Homebuilders, have one of the recumbent specialists in the classified ads of this issue order one for you.

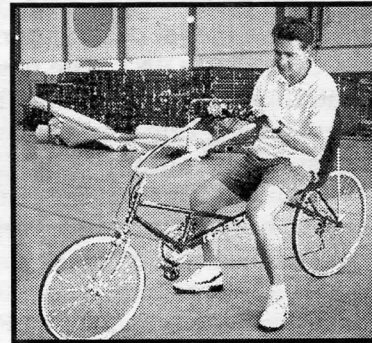
**RUMOR MILL:** just before going to press, we received a mysterious phone call from a European dealer who specializes in USA-built aluminum mountain bikes. The rumor persists that this company will have a recumbent at the Interbike Las Vegas show.



**THE ALL NEW RANS "RESPONSE"**

The Rans company, recumbent builders since 1974, unveiled their new model at the Minnesota IHPVA (IHPSC) Speed Championships. The "Response" has a thru-frame design built with Rans aerospace streamline production process. This is Rans "Response" to HI-COST recumbents! "Ride a Response and save, without losing ride or quality." The new frame is built of MIG/TIG welded chro-moly and mild steel with a chro-moly unicrown fork. The totally new frame design has elevated chain stays and the Rans shock absorbent seat. The Response is sold as a 14 speed for \$895 and a frameset for \$490. We had heard for some

time that Rans was working on a new lower price bike. We are really **EXCITED** about this one. A CLWB with a tubular frame that comes from an accomplished recumbent manufacturer. There is a lot of value in this bike. Sources from IHPSC say the new bike comes with an updated version of the Rans "closed-loop" handlebars, but all of the controls are mounted on the bars. Our Ace Detective Recumbent Reporter had nothing but positive things to say about the Response ride and workmanship. Rans recumbents are available in your choice of nine colors, many of which are new for '93. Tell them you heard about it first, from Recumbent Cyclist News. For more information, write or call: Rans Company, 4600 Hwy. 183 Alt., Hays, KS, 67601. Ph:#913-625-6346.





The '94 Rans Response  
(Staff Photo)

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## C O U N T E R P O I N T

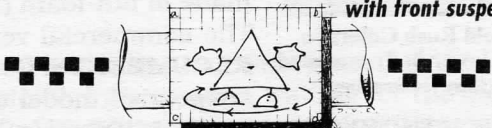
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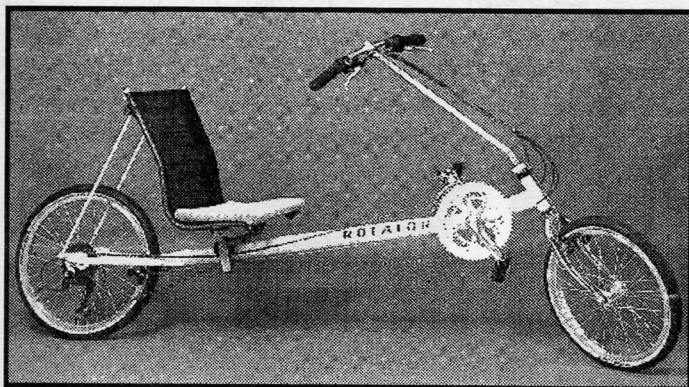


**BUYERS GUIDE UPDATES:**

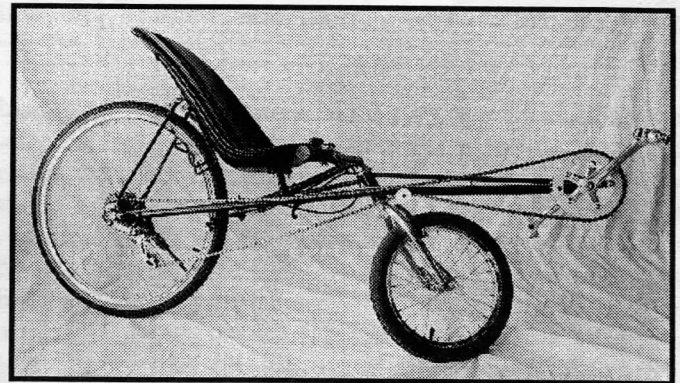
**ROTATOR:** The new "Pursuit" is a monotube 20" wheeled LWB that is introductory priced at \$995. The bike comes equipped with a 21 speed Sachs drivetrain and a custom vented nylon adjustable seat, all of this with Steve Delaire's legendary Rotator quality. Ph:#707-539-4203. **SPECIAL PURPOSE VEHICLES:** 120 Prospect St. Somerville, MA 02143. Product: Bill Darby builds a custom MWB called the Genie and a new entry level bike called the "Sprite." This bike has a 20 speed index drivetrain and sells for just \$595. The Sprite has an overall length of 61," a wheelbase of 39" and the 20 speed drivetrain offers a wide range of gearing. This new low-priced recumbent has a mild-steel frame, weighs 39 pounds and has a powdercoat finish. The drivetrain is full Shimano-index. *The above companies are not regular Recumbent Cyclist advertisers. Please let them know you read about their new bike in Recumbent Cyclist News!*

**DOPPLER:** 52 Walnut St., Kitchener, Ontario N2G 1P6: The Doppler recumbent offers a 64" wheelbase

with a conventional upright steering arrangement. This new suspended aluminum recumbent is priced from \$1600 Canadian. **S & B Recumbents:** 1607 E. 126th St., Compton, CA 90222. This new SWB is a distant relative of the original Hypercycle and Laid Back recumbents. One of the designers, "Smitty," was a co-designer of the Hypercycle years ago. The S & B recumbent has underseat steering, a 36" wheelbase, comes in a 6,12,18 and 24 speed versions and is affordably priced. *The above two companies are not regular Recumbent Cyclist advertisers or subscribers. Please let them know that you read about their new bikes in Recumbent Cyclist News!*



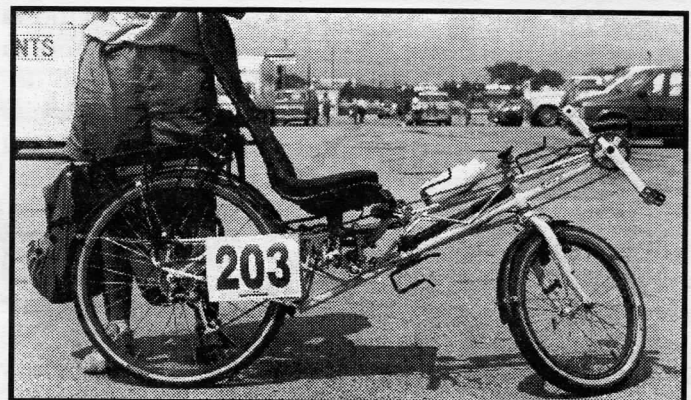
**Rotator Pursuit**  
(Photo courtesy of Rotator)



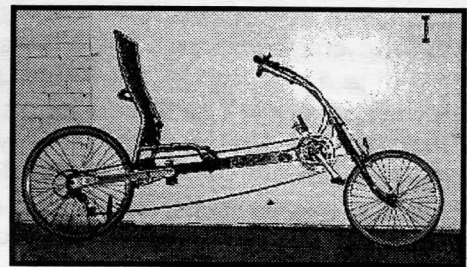
**The S & B**  
(Photo courtesy of S & B Recumbents)



**The Sprite**  
(Photo courtesy of Bill Darby)



**The Genie**  
(Photo courtesy of Bill Darby)



**The Doppler**  
(Photo courtesy of Doppler)

## PROUD TO FINISH LAST PLACE IN THE TOUGHEST BIKE RACE IN THE WEST

by Gardner Martin, Freedom, CA.

It's had many names: "Hell of the West," "Death Valley 500," RAAM Qualifier West" and now "The Furnace Creek 508, and it's 48 hours of hell on wheels. Here's a story of a bicycle race across some of the most forbidding landscapes in the world; a story of bitter cold, scorching heat and sandstorms; a story of scorpions, giant tarantulas and rattlesnakes; in the end, a story of human perseverance, physical deprivation and guts overcoming handicaps.

Imagine its midnight on a steep windy mountain pass. You are flying down a rough bumpy road ~ 50-mph, sometimes taking curves faster than a sane man would take them in a car. You have been on the road for 15 hours with no sleep. You have already climbed over 10,000 vertical feet. You're so tired that you have trouble keeping your eyes open. Your muscles ache, your whole body trembles in the cold dark. A desert sandstorm with winds of 40-mph swirls around you. Ahead in the dark looms another 4,000 ft. pass to climb, its curves lettered with rockslide debris, then 10 miles of rock-strewn downhill. Is this a bicyclists worst nightmare? Or is this hell? It's hell alright, the Hell of the West: the Furnace Creek 508....where you will burn.

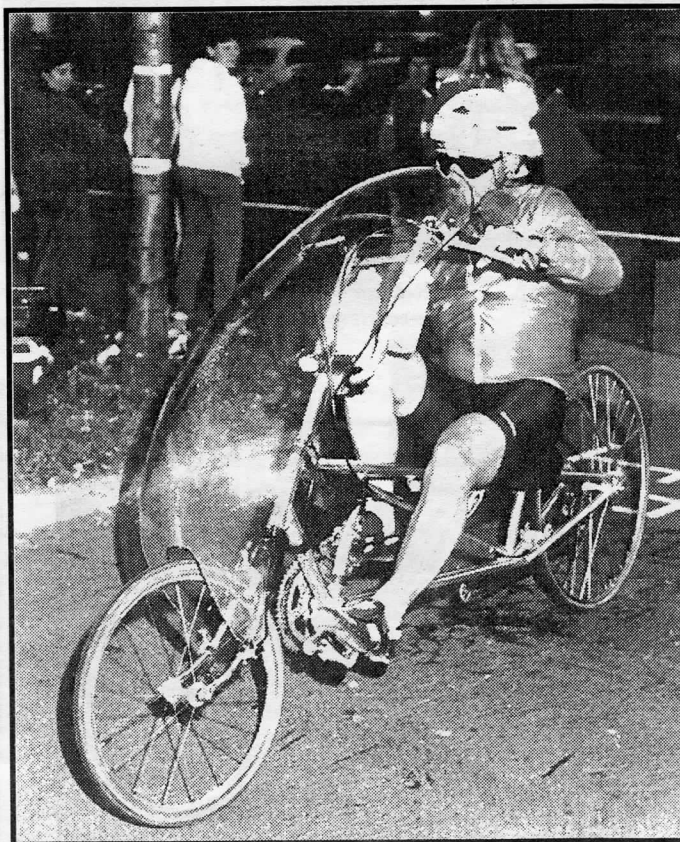
You peddle on, but you have a touch of the trots and there are no bathrooms on Death Valley backroads. You do it in the desert, next to a rock with a scorpion under it and maybe a rattlesnake behind the bush where you bare yours. You take another drink of milky, nasty tasting biker's brew, you can't have any real food for fear of the "bonk." You pedal on. You're behind schedule. The road cranks right 90 degrees, right into a brutal headwind. It's been steep uphill for the last five miles with no end in sight. Ah, but sometimes even in Hell you get lucky: you've finally reached the summit, now just the 10 mile downhill with an unabated 40-mph tailwind to send you flying. But that wind is still a desert sandstorm. The road surface shimmers in your faint headlight like a snake. Th your sleep deprived mind the snake-road rides like an ice rink or like a million silicon marbles under your tires. What a rush! If only you can keep from crashing. You pedal on.

Your bike is the ultimate dream machine: lightweight, streamlined, long and low. Polished, black aero wheelcovers, full Zzip fairing on a hand polished frame that shines like the moonlight. You're riding a Gold Rush Replica, a production version of the legendary recumbent that broke the 65-mph speed barrier and won the \$18,000 Dupont Challenge Prize....and you're

riding this dream-bike in Hell. You pedal on.

You have been on the road for more than 30 hours. You feel it as you keep trying to put on a glove over a cold-cramped hand. You realize that life in Hell is extra tough when you only have one arm.... Have you fallen asleep in the saddle? Dreaming? Unfortunately, no. You stare ahead at the all-too-real outline of a night-shadowed, jagged mountain: another 3,000 ft. ascent. A gruff, grisly man materializes out of the murk: a race official. A full head taller and 100-lbs. heavier than you, he says flatly you won't finish under the time limit if you can't do the last 100 miles faster than the previous 100. Exactly 32 hard-core racers started this course 35 hours ago; 12 riders have already dropped out. You finish 18th in 47.10 hours. You have cycled 508 miles and climbed over 35,000 vertical feet.

Sometimes truth is stranger than fiction. So if you think this story is fiction, start training now to ride the Furnace Creek 508 with 51-year-old Don Gray next year and maybe we'll see in Hell.. .of the West.



Don Gray on his dream-bike from Hell  
(Photo courtesy of Gardner Martin)

# HEY! CAN THOSE THINGS CLIMB HILLS?

by Luke Howe

That's the question and it usually comes down at you as you pass some diamond-frame on a grade. The answers are many, but here's some recent, real-life recumbent climbing lore to know and share.

"The Terrible Two" is put on by the Santa Rosa Cycling Club. The 1993 "Hillier than thou" ride took place June 17th with air temperatures mostly in the 90-100F range, with road surface temps 150F at times. Don Gray was one of 50 starters and the first-ever recumbent rider to complete the ride (17hrs 10 min.). More than a dozen riders dropped out. Don, a veteran marthoner and hill climber, rates "The Terrible Two" above Markeeville's "Death Ride-Tour of the California Alps." Definitely the toughest 211.5 miles most riders will do "from can to can't."

Crew support makes a differences on these tough rides. Al LaSpina and Ralph Page fed and sprayed Don down for this recumbent first. Bill Oetinger was the race organizer who made it all possible.

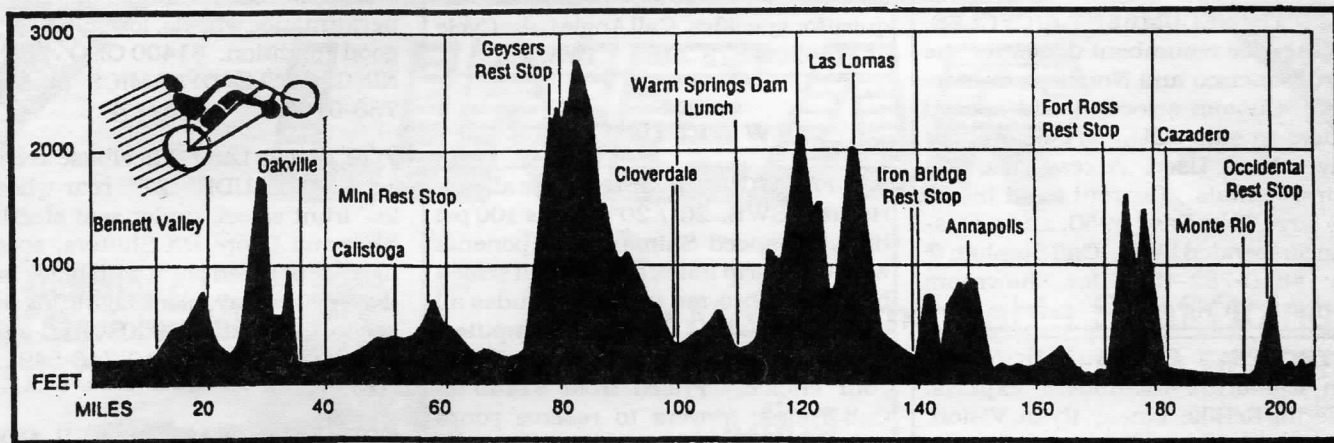
Equipment makes a difference too. Consider Bryne Speed Plan pedals; they're about half the weight of other systems and are especially good for recumbents because the cleating system sits well back of the metatarsal reducing toe point, flattening the foot

for more power on climbs. You may not be ready to spring for a White Industries titanium bottom bracket or Top Line milled aluminum, chrome-plated cranks....but then not everyone is looking to climb 16,025' up Skagg's Hill and Trinity Grade either.

Hard on the rear wheel of Don Gray is Watsonville's own Ron Bobb who completed all five passes in the Markleeville ride this year to become the first, two-armed Easy Racer rider to do than fun thing: 128.5 miles and 15,000 vertical feet. Ron and Dave have ridden together and get a kick out of burning lycra-heads on and off the hills. Don is a light-weight at about 130 lbs; Ron weighs in around 175. Once you've ridden a low center of gravity, reduced your frontal area and put an efficient fairing on your recumbent, the final step is the aluminum Gold Rush Replica cutting about 3 lbs. On the hills, weight-to-power ratio tells the story just like your physics professor said.

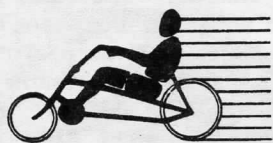
Recumbent riders who've crossed the continental divide on the highest paved road in the USA like to say: "Recumbents don't climb hills, recumbent rider's climb hills."

Luke Howe, an occasional contributor to RCN is the Operations Manager for Easy Racers, Inc. in Watsonville, CA.



(Elevation Profile courtesy of Santa Rosa Cycling Club)

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**FOR SALE:** 16" and 20" Recumbent Performance Road Wheels, Deore XT Hubs, 36 hole, Sun Mistral or Arai rims with quick release axles. \$69.95 TO \$79.95 each plus shipping. Call People Movers Ph#714-633-3663 (CA/17)

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**INTROSPECT CYCLE:** Your Northern California recumbent experts. Offering ReBike, Linear, Ryan, Vision, BikeE and others. Recumbent accessories and custom modifications. Used recumbents available. Showroom hours by appointment only. 1029 Amberwood Road, Sacramento, CA. 95864. Call B.J. at Ph#916-973-1945. (CA/17)

**PEOPLE MOVERS:** We specialize in Ryan, Linear, Rans, Infinity, A.T.P. Vision, Haluzak, BikeE, Rotator, Land Rower & ReBike recumbent bicycles. Drop-ship anywhere in the USA. People Movers, 811- So. Tustin Ave. (At 22 Fwy. in Orange) Phone# 714-633-3663. Your full service recumbent shop. (CA/17)

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**FOR SALE: TIME TWT ACTION CLIPLESS PEDALS and TIME CENTURY SHOES** (mens Euro-size 45). These are "walkable" with recessed cleats and have less than 300 dry miles and are in excellent condition. Replacement cost is over \$300. Now only \$149 for both. rare 20" UNI DISCS: We have two rare 20" UNI discs for sale: They are brand new 20" UNI Stealth discs custom ordered with no logo. These discs are new and in the box. We will let them go at our cost for \$35 + \$4 S/H each or two for \$60 + \$4 S/H. Call the Recumbent Cyclist at 206-852-8149 (WA/17).

**FOR SALE:** Recumbent Custom Fender-Mixed Sets: 700c/27"/26"/20"/17"/16" sizes In stock and available ready to bolt on or kit form. Inquire for specifics. Call Angle Lake Cycle at Ph:#206-878-7457 (WA/16)

### NEW RECUMBENTS

**PEOPLE MOVERS** presents the all new Haluzak SWB. 26"/20" wheels 100 psi tires, 21-speed Shimano components with twist grip index shifting, all sealed bearings, chro-mo tubing, includes all braze-on mounts for lights, computer, and racks. Painted any Imron color of your choice. Priced from \$1149.95 Call People Movers to reserve yours today. Ph:# 714-633-3663. (CA/17)

### USED RECUMBENTS

**FOR SALE: EASY RACER-1987:** Lt. blue, large size brazed frame, Campy brake and rear hub, Blackburn rack and a tri rack, \$85 + shipping People Movers, 811- So. Tustin Ave. (At 22 Fwy. in Orange) Phone# 714-633-3663. Your full service recumbent shop. (CA/17)

**FOR SALE: TURNER LAID BACK SWB:** fits 32"-35" inseam, 18 spd., very good components, computer and rear rack. \$500. Call Dave Ph:#205-492-3454 (AL/17)

**FOR SALE: GEORGIEV BUILT VARNA FWD TRIKE:** As seen at Yreka '92. This new trike has three 20" wheels with drum brakes, front wheel drive and is in mint condition. Complete trike \$1199, or available as a frameset for \$599. Call Mark Colliton Ph:#301-933-2176 after 7:30 pm EST or leave message. (MD/17)

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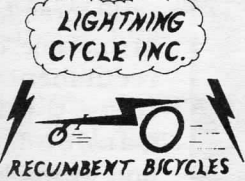
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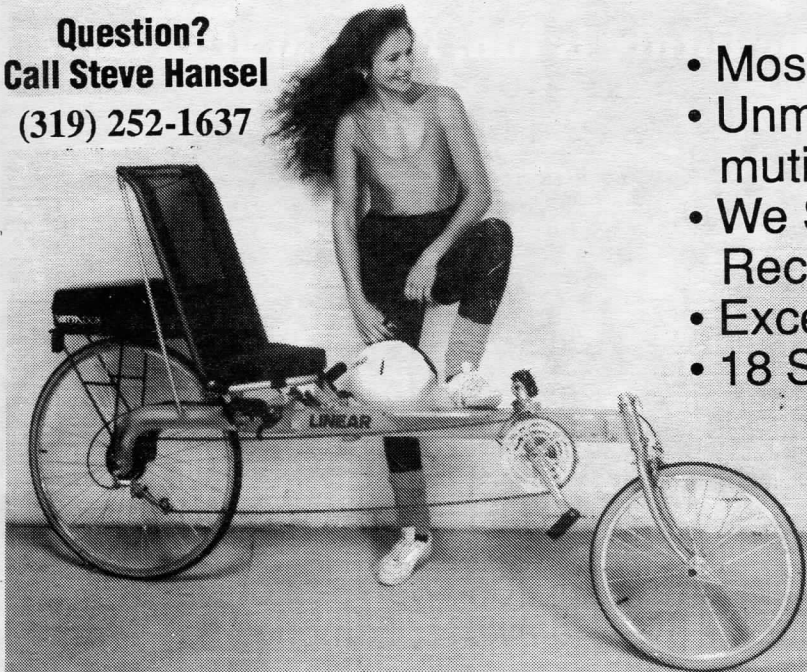


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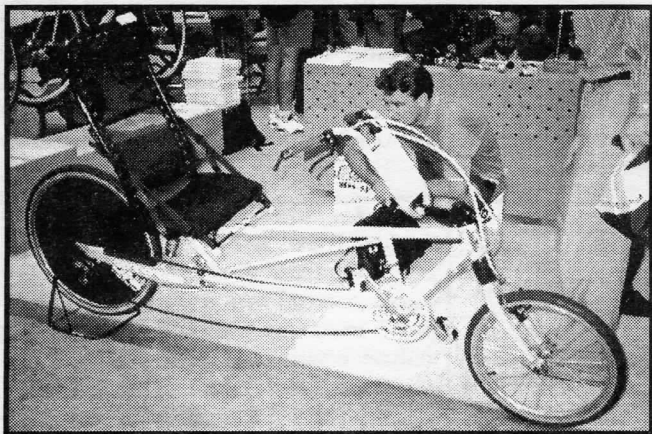
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**Late Breaking Story — The long rumored Cannondale Recumbent**

Monday, Sept. 21, 1993, Las Vegas, NV. In a late breaking story from the Interbike trade show, the Cannondale Bicycle company displayed a recumbent prototype. This is most definitely the story of the year for recumbent enthusiasts. For the first time ever, a mainstream bicycle company had a recumbent displayed. The show was a buzz with rumors and cycling industry personnel swarming to the Cannondale booth to see the prototype from the company that beat all others to the punch. The Fully suspended long-wheelbase prototype has upright steering with handle-

bars from Easy Racers and a mesh/ sling seat from Lightning Cycle Dynamics. Components were of the MTB junk-box/ prototype variety and suspension components were from Cannondale's critically acclaimed fully suspended MTB's. The bike was unpainted but had Cannondale decals on the frame. This was a working/ riding third or fourth generation prototype that the "RCN Las Vegas Crew" was able to

test ride. Running off to your local Cannondale dealer may be a little premature at this time. If the recumbent becomes a part of Cannondale's line, we would expect it to be a '95, but probably a '96 model bike. We will have a full report on this exciting news in the next issue of RCN.



RCN Spy photo of Cannondale's fully suspended recumbent prototype at Interbike. (Staff Photo)



RCN Crew secretly tests the new Cannondale prototype (Staff Photo)

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## RECUMBENT RIDER GROUPS

**GREAT LAKES HPV RACING**, 1345 University Ave., Adrian, MI, 49221. (Newsletter available)

**H.P.V. SOUTHERN ONTARIO**: Dennis Taves, 7-Claremont St., Toronto, Ontario, Canada, M6J 2 MI. (Newsletter available)

**INDIANA HPV**, David Pearson, PO Box 46158, Mooresville, IN 46158.

**LASERR**: Loose Assemblage of SouthEast Recumbent Riders: New rider group now forming in Florida, Georgia and Alabama. Drop a line to: Fred Ungewitter, 1964 Forest Ave., Daytona Beach, FL., 32119 and Larry Wilkinson, 3069 Wilkinson Rd., Mt. Olive, AL., 35117.

**MICHIGAN HPV ASSOC.** Meetings, race events and a quarterly newsletter Contact: Linda Jayne, 2878 Renewal, Troy, MI, 48098. (Newsletter available)

**MINNESOTA HPV ASSOC**: This is a very organized IHPVA Chapter that has a newsletter, meetings, rides, homebuilder workshops and is putting on the 1993 IHPSC! Write to: MnHPVA, 4139 Brookside, St. Louis Park, MN. 55416. (Newsletter available)

**OREGON HUMAN POWERED VEHICLES**: (Portland area) Meetings, Muster's and a bimonthly newsletter. Contact: Rick Pope, OHPVA, PO Box 614, Beaverton, OR 97075. (Newsletter available)

**RECUMBENT BIKE CLUB OF ORANGE COUNTY**: Cautious rides through pot-holed filled, drug infested and crime ridden back alleys of Orange County. Contact Jim Wronski at People Movers, Ph:# 714-633-3663.

**SOUTHBAY RECUMBENT RIDERS**: (Los Angeles area) Riders meet at Burton Chase Park every third Sunday of the month at 10-11 am. Contact: Tom Howe, 10634 Valparaiso #23, Los Angeles, CA 90034. Ph# 310-838-8634 Eves. or 310-798-5850.

**SACRAMENTO VALLEY HPV & RECUMBENT**: B.J. Strass, Introspect Cycle, Ph:#916-973-1945

**WISL HPVers: The Wisconsin HPV Chapter**, 260 S. Channing, #2, Elgin, IL 60120-6619. (Newsletter available)

**WASHINGTON DC AREA: W.H.I.R.L.** (Washington's Happily Independent Recumbent Lovers) The folks meet at the Viers Mill Rec. Center. MD, north end of Beach Dr., weekend mornings, weather permitting, 9 am (winter hours). For more info contact: Vic Sussman at Ph:# 301-565-3050 or Allan Pollock at 202-363-2244.

**NW RECUMBENT & HPV RIDERS**: New rider group attempting to form. Are there any NW riders interested in weekly rides in the Green River Valley between Renton/Kent & Algona? We will not hold it against you if you ride a Moulton or upright bike. Contact: Robert Bryant, Ph:#206-852-8149.

**BRITISH HUMAN POWER CLUB**, John Kingsbury, 22 Oakfield Rd., Bourn End, Bucks, SL8 5QR, England. (Excellent publication available/ send \$3 for sample issue).

**HPV NZ New Zealand**, Paul Dunlop, 4 River St., Matura, Southland, 03 203 8050 New Zealand. (Excellent publication available/ send \$3 for sample issue).

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