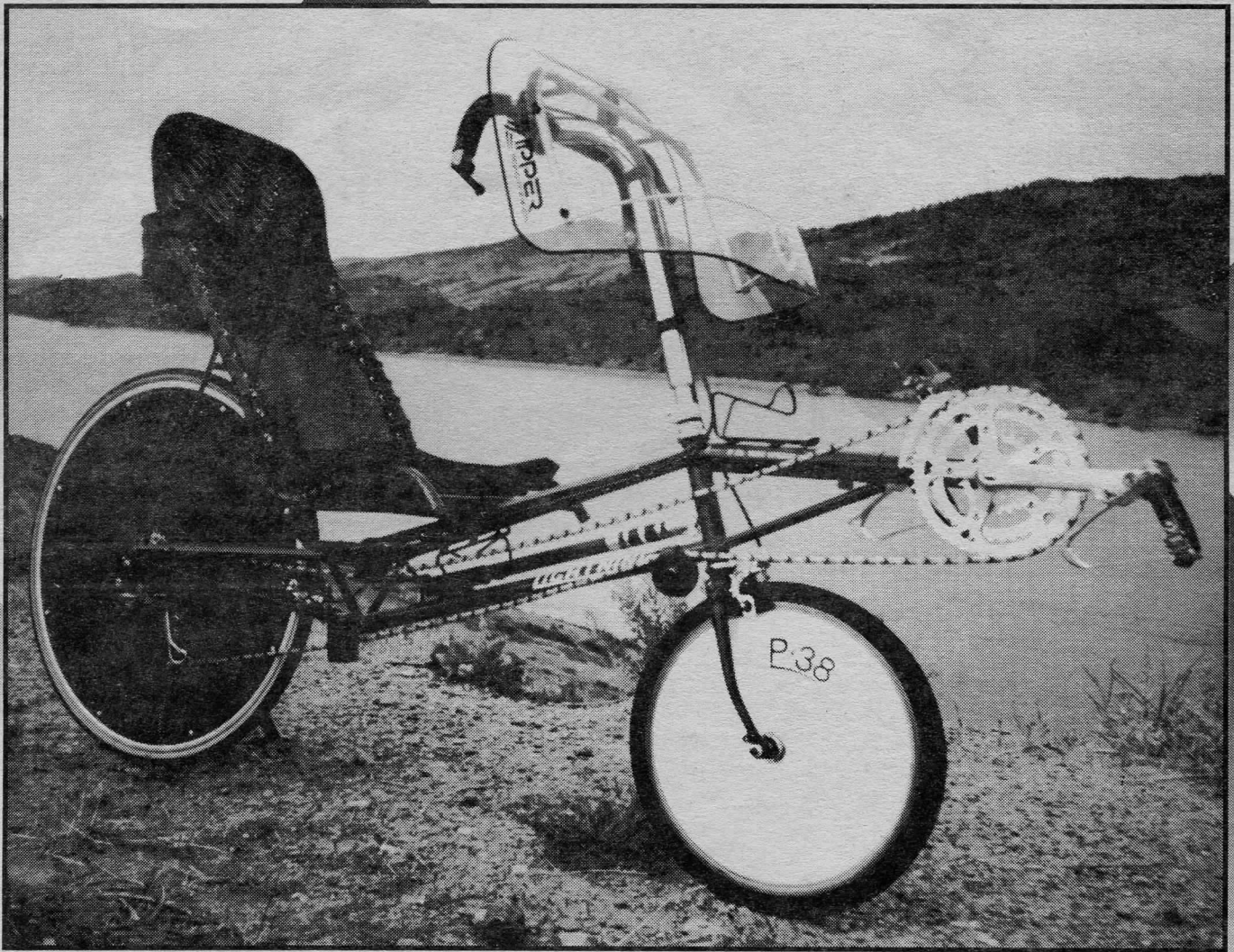


THE RECUMBENT CYCLIST

August-October 1991 The Official Magazine of the Vol. 2 No. 7 \$3.00
Recumbent Bicycle Club of America



Cover Story: The Lightning P-38 Recumbent

THE LIGHTNING P-38 RECUMBENT

by Robert J. Bryant

When the subject of high performance recumbents is presented, the Lightning P-38 is sure to come to mind. Considering all of the recumbents currently marketed in the USA only a few are really built for performance and only two designs really have the speed records to back up the claims. These qualities are not an after thought with the Lightning, but the purpose in which the bike is designed. It is apparent through our interviews with RBCA member/Lightning owners that they know what they want in a recumbent bicycle. Lightning owners seem to be among the most loyal owners of any brand of recumbent that we've tested.

AEROSPACE BEGINNINGS

Tim Brummer and Company build the Lightnings in Lompoc California. Tim's background is Aerospace Engineering, the names of his bicycles reflect his interest in aircraft: the P-38, P-39, F-40 and X-2. Tim started experimenting with different designs as far back as 1980. A major part of his testing was to find a frame design/geometry that had better power generation qualities. The P-38 prototype was completed in 1983 and the first commercially built bike came out of the Lompoc shop in 1984. The Lightning design is continuing to evolve; many design changes and upgrades have been made over the last seven years.

SPACE FRAME

The compact Lightning frame is a complex and intricate design. The reason for the "space" frame design is to produce a lightweight and extremely stiff frame that directs all energies to the rear wheel. The frame is made from different sizes of 4130 Chro-molly steel tubing and is hand brass-brazed in the Lompoc shop. Lightning has enjoyed a reputation for impeccable construction quality. The P-38 frames were built by Stephen Delaire of Rotator Cycles in Santa Rosa. This spring production was moved back to the Lompoc shop. Our test bike was the first one with the brazing done inhouse and the braze quality was not up to their previous standards. Tim was very honest about the problem and said that future frames would be improved.

The P-38 comes with a host of standard braze-ons: two

waterbottle mounts, a pump peg and dropout eyelets. The Lightning's paint is among the finest found on any recumbent. It is electrostatic baked on urethane powder and comes in red, or royal blue. This finish is extremely durable and looks great. We have found powdercoat much more durable than Imron, but not as glossy a finish. The difference becomes apparent when the bike is a year or so old and the Powdercoat still looks new. The new aluminum seat frame is anodized silver and much lighter than the previous chro-molly seat frame.

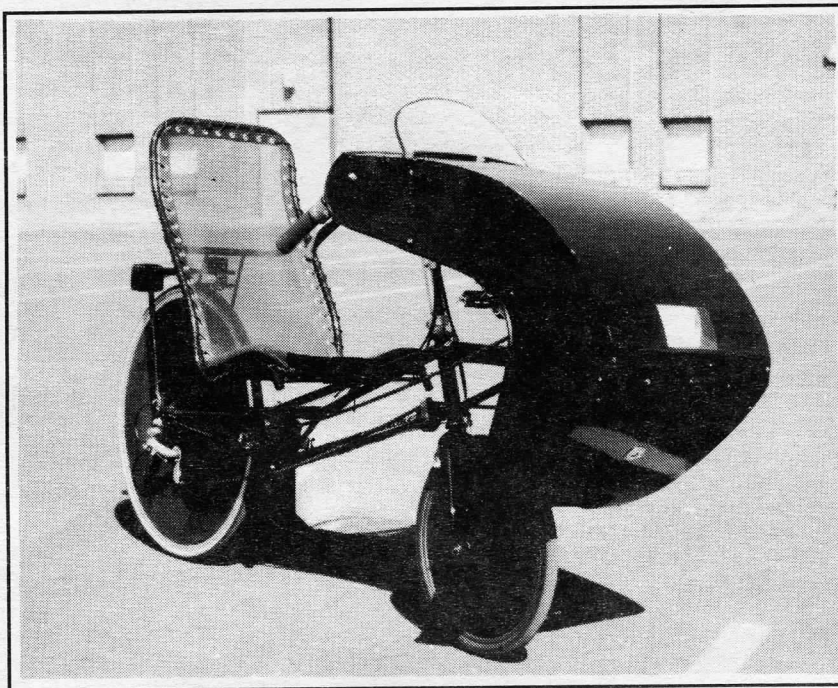
When Tim shipped the test bike he also included some of Lightning's new custom cast lugs. The lugs were part of the new seat design. The heat treated anodized aluminum seat bolts onto the lugs at the frame and to the seat stays at the seat cross support. This makes it much easier to ship

and transport. When the seat is off the bike you must be careful not to bend the stays which stand alone without the seat. The other custom lugs are for the fork-crown. Like the frame, the fork is intricate in design and impressive. It was nice to see a custom built fork on a SWB recumbent. Similar bikes depend on stock BMX steel or chro-molly forks which are do not work as well. Lightning is also developing a front suspended fork for the top of the line F-40. This fork will be in the \$300 range and will retrofit to existing P-38's and F-40's. This should

make the bike ride much better with the stiff Moulton 17" wheel.

LIGHTNING ORIGINALS

The Lightning has many original details. The seat is as good as recumbent seats get and is extremely comfortable with its high back and curved tubes that make up the lumbar support and finally the pad on the bottom portion.



Jack Schaffeus' Custom Lightning P-38
Lexan fairing with PVC tube supports,
weighs 6.5 lbs, giving a 10 mph speed increase!

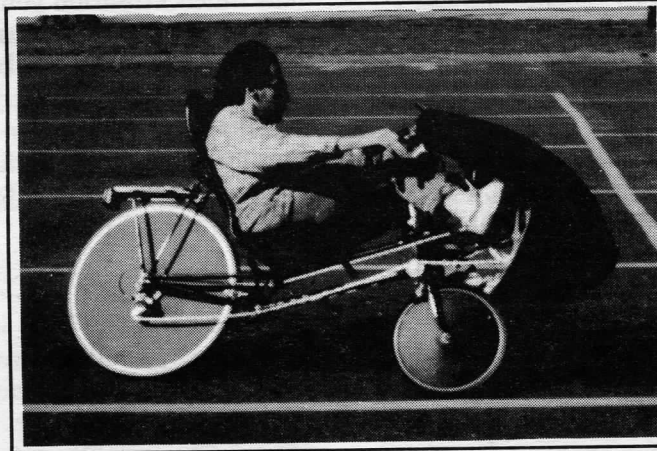
Cover: The cover photo taken by RBCA member Lightning owner Dave Yust.

Yust Studio
1301 Patton St
Ft. Collins, CO 80524
(303) 484-0675

The P-38 also has custom built bonded and welded aluminum stem extension and handlebars. The bike offers your choice of road pedals or Lightnings modified platform/heel sling pedals. The consensus is that the higher the bottom bracket the more you need something to hold you in the pedals, whether it be a clipless system (which we highly recommend for recumbents) or the heel slings. We had the chance to try out the slings last summer; they are wire hoops that are attached off of the back end of platform pedals. For me they worked fine; however one of my assistants almost immediately got caught in the wire hoop and fell over onto the ground. So caution should be in order. Also special for the Lightning are custom machined delrin precision bearing chain-idlers. They enable the bike to have the smoothest drivetrain of any of the short/ medium wheelbase designs available.

COMPONENT SELECTION

The component selection on the P-38 is very good. The bike comes with an Sakae alloy triple crank with 28/46/50 chainrings. Also included is a 12-32 7 speed free-hub that makes for a wide range drivetrain of 24-112 gear inches. The headset (which is modified with a steering dampener) and the hubs are Shimano 105. The brakes are Dia Compe 500GX polished alloy side pulls with a quick release feature. These brakes come with Aztec pads and modified (curved downward) SunTour XCM mountain bike levers. The stopping power was excellent, especially with the Aztec pads, but if the you want to upgrade, Mathauser Hydraulic brakes are a \$240 option.



Jack's Customized P-38

Photo by Jack Schaffer, 512 Bourbon St,
Haure de Grace, MD 21078 (301) 939-9168

The P-38 comes with a SunTour rear derailleur, a Shimano Deore front derailleur, a SunTour bar-end shifters, and a Sachs-Sedisport chain. The 700c X 28 rear wheel features a Sun Rim and a 105 psi tire. The mix of SunTour, Shimano and Dia-Compe components is very well thought out. However, we did have some trouble with the indexing and rear derailleur. The derailleur listed on the spec-sheet was not the same as on our test bike. The specs call for a SunTour XCD rear derailleur but a newer model XCLTD was substituted. After 1-1/2 grueling hours, we were unsuccessful at getting the bike to index shift satisfactorily. We finally had to call in the pro-mechanics. They also had a tough time, but were able to improve the shifting.

THE "BUILD"

The Lightning has a first class owners manual. It is easy to read and mentions most everything you need to know about the Lightning including many helpful hints and cautions. There is even a section on adaptable accessories. The P-38 came in two surprisingly small shipping boxes.

Most of the assembly was straight forward and covered by the instructions, although it was a more involved "build" than some recumbents we've tested. If you purchase your bike from a bicycle shop there is no problem, but if you plan to do it yourself you should invest in a home bicycle maintenance and repair book to get you through. We were disappointed that the bike had not been preassembled or adjusted. By this we mean cables connected, derailleurs and brakes adjusted. The first impression a manufacturer-direct customer has with his new bike is during assembly. It can make or break the experience. We feel the more expensive the bike, the more preassembly should be done. We feel this is a vital service that manufacturers need to consider.

Even though the P-38's configuration is similar to that of a short wheelbase with the pedals ahead of the front wheel, the Lightning is actually a medium wheelbase recumbent. At 44" the design offers near perfect weight distribution-44/55. With this design comes inherent front wheel-heel interference. This is only a problem at very low speeds and the manual offers both warnings and instructions for a successful first ride. Getting used to this can take some time. A P-38 veteran said it quickly becomes second nature, however, another P-38 owner told me that every once in a while he forgets and is quickly forced to learn all over again.

FRONT WHEELS

With many short/ medium wheelbase recumbents, there is a question over front wheel size. With many of these designs, a 20" wheel will not work. Regrettably, a smaller diameter substitute must be used. The P-38 comes stock

with a 16" X 1-3/8" wheel and tire. This is usually a 60psi touring tire made by Michellin. Many riders use and enjoy this recumbent tire, mainly because it is fairly inexpensive. Most recently, availability of both the rims and tires has become somewhat of a problem. Our test bike was delivered with a 50 psi tire called a "Golden Boy". This is not the kind of tire that we would expect to find on a performance bicycle. Tim Brummer has assured us that more Michellin tires and Sun 16" rims will be available for future bikes. For those dedicated to performance there is only one choice, Lightning offers a Moulton 17" 100 psi tire available with either a Campagnolo or a Shimano 600 hub. This tire offers a firmer less comfortable ride, but with a big performance increase. The Moulton is also difficult to find at your local shop and is very expensive.

PERFORMANCE ACCESSORIES

There are several performance options available for the P-38. The stock P-38 Zipper Fairing is a \$150 option and

mounts to the handlebars. We were not able to test the Zipper, but Lightning states that you can expect a 6% increase in speed. Also available are Lightning's custom fiberglass wheel covers. These are \$100 per wheel and offer a 3% performance increase. It is also possible to upgrade your P-38 to an F-40. The fiberglass nose cone, aluminum rear frame and Lycra Spandex center section are available as a package upgrade, although it is easier if you order it all at once. The F-40 is priced around \$3800 and comes with higher gearing, clipless pedals, hydraulic

intrigue me. The Lightning also has some unique strong points. It offers better than average (for a recumbent) hill climbing abilities, however I again found myself paying more attention than usual. Most impressive is the acceleration of the P-38, which is immediately noticeable. These traits are due to the P-38s SWB geometry, light weight and very stiff frame.

POWER OUTPUT

Lightning designers and many riders believe the P-38's riding position offers superior power output, for me it did not. In theory or scientific testing, it is certainly possible. My theory is not so scientific; the more comfortable you are, the more efficient you will be. For some this can be the P-38, for others something different. My advice to would-be high performance riders is to try both the long wheel base and short wheelbase bikes before your decide on one. I am often asked what the difference is between the two types of performance recumbents (SWB/ MWB vs. LWB). In the simplest of terms, you need to decide: 1) How quick handling and stable you want the bike to be; 2) in what body position you want to pedal (high bottom bracket vs. low), 3) how much attention you want to focus towards riding the bike, 4) the final consideration should be on whether or not and at what stage the bike is to be faired. This is more important than you may think. You can choose between small and large Zipper Fairings, experimenter kits, custom fairings, Lycra bodies and finally the full F-40 style body. With all of this information you are all set to come to your own conclusions.

PRACTICALITY

In some ways the P-38 is a much more practical vehicle than a long wheelbase, most apparent in transporting. The P-38 is only 72" long, compared with LWB recumbents that are significantly longer. For suburban riding the bike is very maneuverable in traffic. However, if you don't pay attention it can get away from you. Lifting your legs to the pedals at stop lights can be more difficult if you are not used to it. With the 16" front wheel in mind, I found myself



Photo by David Yust,
Ft. Collins, CO

brakes and a freewheel with cogs of 11-32 making for the extreme high performance gear range of 24-133 gear inches! The F-40 is the most advanced streamlined street recumbent available. Brummer says that you can expect cruising speeds 40% faster than your normal bike, or 4-6 mph faster than your unfaired Lightning. We have not had the opportunity to test an F-40, although undoubtedly it's one of the fastest recumbents available today. With this in mind, we would jump at the chance to test ride an F-40.

THE RIDE

There is no doubt that the P-38 is an original total performance bicycle. A veteran Lightning rider described the seating position as a high-performance-crouch. The bottom bracket/ crank is slightly higher than other similar recumbents and significantly higher than LWB recumbents. The steering is light feeling and ultra-quick; some have said responsive, others say overly sensitive. The Lightning's handling has been compared in the past to that of a criterium racer. With these attributes, the Lightning is a bike that takes some time to get used to. New riding and handling techniques must be learned. Along with the inherent heel interference, you need to watch the bar-end shifters so they will not touch your knees in low speed turns. The handlebar height adjustment is also crucial, especially if you plan to use the Zipper Fairing. The P-38 required more effort and attention to the road than I was accustomed to. In some situations, usually longer rides, the riding position caused my feet to numb. A few Lightning riders said they had experienced this and others said they had not. Even though I had some difficulty getting used to the P-38, the design continues to

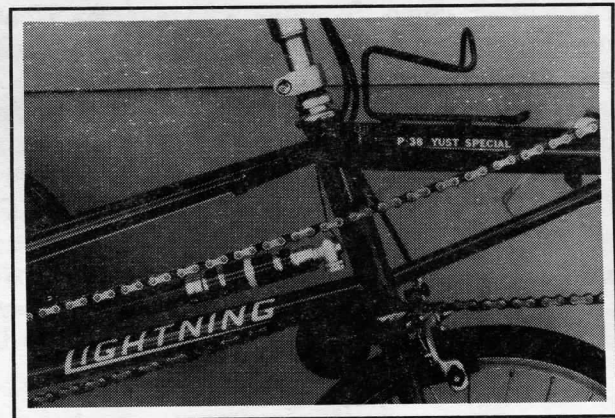
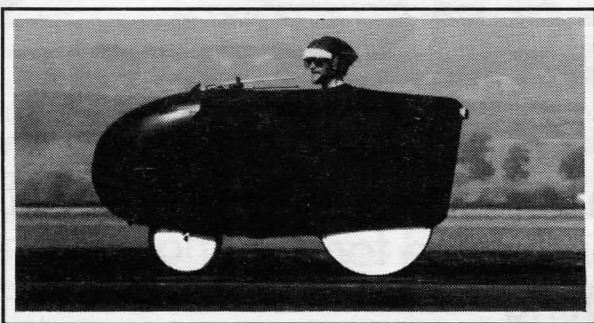


Photo by David Yust
Ft. Collins, CO

paying more attention to chuck holes and bumps in the road. Load-carrying capacity is limited to 30 pounds; this is listed in the Lightning brochure. Towing my Burley

trailer was also more difficult because of the bike's sensitive handling. Lightnings have been successfully used for touring-one RBCA member rode his across the USA. His only complaint was an inordinate amount of flat front tires.

38 is a fast, quick feeling and intense performance bicycle. The bikes are known for their excellent quality, reputation and race and speed achievement. Currently P-38's are \$1700. With the Zipper Fairing, Performance (Moulton)wheel option and a rear disc wheel cover the price is just over \$2100. Contact Tim Brummer and Company at: Lightning Cycle Dynamics, 1500 E. Chestnut Ct. #E, Lompoc CA. 93436, Ph.# (805)736-0700.



Tim Brummer on his Lightning F-40
Photo by Bernie Mittelman

For me, the P-38 seemed more suited towards sport or high-performance riding than to practical daily transportation, although what is practical to one person may not be to another.

What impressed me most about the Lightning is the enthusiasm that the P-38 and F-40 riders have for this bike. Throughout the road test, I talked to and corresponded with many owners who love their bikes. The Lightning P-

LIGHTNING X-2

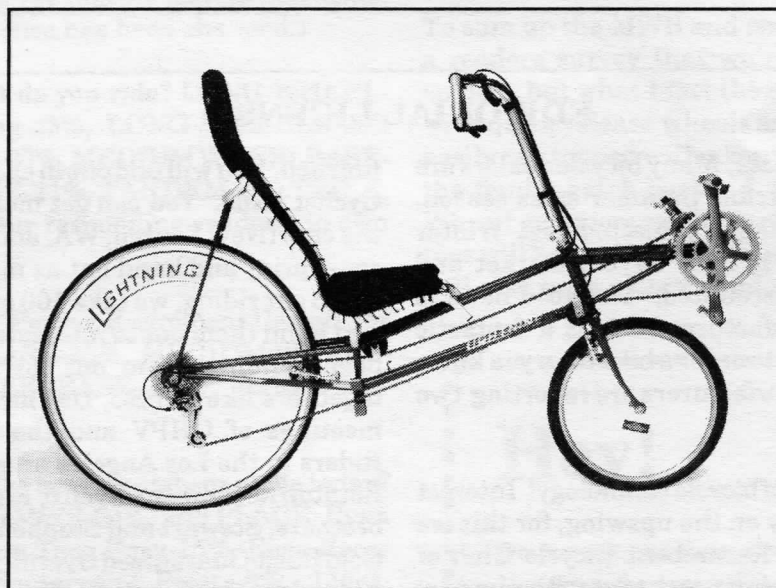
- *JPMS Prize attempt: San Francisco to Los Angeles in 18 hours and 4 minutes. (X-2)
- *STP Record(Seattle to Portland),192 miles in 7.5 hours, avg. speed 26 mph, (X-2)
- *1/4 mile drag record, 41.47 mph.
- *IHPVA Road Race Champion 1983 & 1984
- *IHPSA 200 Meter Winner 1984

LIGHTNING F-40

- *HPV RAAM WINNER: Race Across America, 2910 miles in 5 days, avg. speed 24 mph. (F-40)
- *Argus Tour 3 time winner

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EDITORIAL LICENSE:

Welcome Recumbent Cyclists, Many bicycle dealers are saying this has been a terrible Summer sales season. The mountain bike shortages projected last Winter never happened, instead it is a buyers market and many prices have been discounted. The good news is that for recumbent manufacturers this is a fantastic Summer. If you have tried to order a bike then you know what I mean. Several manufacturers are reporting two month 30 order back logs.

We are on the cutting edge of bicycle technology! Interest in recumbents is definitely on the upswing, for this we can thank ourselves-The Recumbent Bicycle Club of America, Dick Ryan for being persistent with our new friends at Bicycle Guide Magazine and finally a special thanks to Ted Constantino Bicycle Guide's fine editor for the Ryan Road test in the June 1991 issue. After you renew your RC subscription, give BG a try and drop Mr. Constantino a line to thank him for the recumbent coverage.

Our new RBCA/Recumbent Cyclist flyer, "**HAVE YOU EVER CONSIDERED A RECUMBENT BICYCLE**" is

finished. You will find one in each copy of this Recumbent Cyclist issue. You can get more by sending a SASE to the club (New Renton, WA. address). Please feel free to copy, print and hand out as many as you like. When we go out riding, we take 100 or so in our Burley trailer and hand them out to interested parties. We also have been sending them out for special recumbent get togethers like IHPSC, DaVinci Days and the monthly meetings of OHPV and the South Bay Recumbent Riders in the Los Angeles area. Special thanks to the Rotator/Recumbent Cyclist Racing Team (The Delaire brothers, Stewart and Stephen) and to the Easy Racer/Gold Rush/Guaranteed Overnight Delivery Racing Team (Garnder Martin, Fast Freddie and Company) for promoting the RBCA/ Recumbent Cyclist while in Milwaukee for the IHPVA speed championships this August. Thanks again, to all of our members who are passing around their RC copies and helping to spread the word.

Robert J. Bryant
 Editor and Publisher

Letter to the Editor

Dear Robert,

I enjoyed reading your test reports and history on the Easy Racers built by my company. However, there are a couple of corrections needed concerning speed records that you mentioned, in order to give credit where credit is due. On page 4 you listed Easy Racers as holding the "Worlds one hour record at 45.3 MPH." Recently this record was broken by an English team with a recumbent called the Kingcycle Bean built by Miles Kingsbury, with Pat Kinch riding. They went 46.9 miles in an hour. Also on page 7 you stated we won the 78 Speed Championships. We only won one of three events, the Road Race. We placed second in the hour and second fastest single rider. It is necessary to expand on your statement of Fast Freddy winning the speed event in 1979. You are correct that Fred was the single fastest rider by breaking 50 MPH, but a recumbent tandem and a triple in the multiple rider class went faster than 50 that year.

I would like to commend you for the quality of your excellent unbiased articles and for supplying much needed information on recumbents in your publication, "The Recumbent Cyclist".

Gardner Martin
Easy Racers, Inc.

We apologize to Miles Kingsbury (owner) and Pat Kinch (rider) for not publishing their new record. The Kingcycle "Bean" went 46.960 MPH on September 8, 1990 at Millbrook Proving Ground in England. The record is the: HPV 1-Hour Standing Start. - Robert Bryant

FIRST ANNUAL READER SURVEY RESULTS

Thank you for the excellent response. Compiling this information and writing about it was the hardest article that we have done. The information is invaluable and we have learned a great deal from it. We will plan to do a yearly reader survey to make sure that we are offering exactly what you want in a recumbent bicycle magazine. (Question numbering sequence has been changed.)

1.) What Kind of recumbent do you ride? LONG WHEELBASE / underseat steering-43%, LONG WHEELBASE upright handle-bar steering-27%, MEDIUM WHEELBASE-10%, SHORT WHEELBASE-11%, TANDEM-4%, TRIKE, 5%. Related note: 12% of our responding readership own two or more recumbents.

2.) What do you think is the "Perfect Recumbent Design" for the 90's? LONG WHEELBASE-46%, MEDIUM WHEELBASE-27%, SHORT WHEELBASE 11%, MISC. DESIGNS-2%, NONE-7%.

3.) In your opinion, what is the best recumbent made today?
1st PLACE: Lightning P-38 MWB-21%, 2nd PLACE: Ryan Vanguard-16%, Easy Racers Tour Easy-15%, Easy Racer Gold Rush Replica-7%, Counterpoint Presto-8%, Lightning Cycle Tailwind-7%, Infinity-5%, Lightning F-40-5%, Radius-3% (Europe-similar to Avatar but has rear suspension), DH 5000-2%, Fateba-2% (Europe-similar to Avatar), Kingcycle-2% (Europe-SWB), "Prone" -1%(yeah right!). A few readers responded that there was no "best" recumbent-6%

"Which is the best" is a very complex question. Many readers in the two above questions were looking toward a more compact, portable, and nimble recumbent. The trend

is definitely in the direction of a more compact recumbent design for the future. The Lightning P-38 (a true MWB), DH and the new Infinity "Bulldog" (shorter-long wheelbase bikes), as well as many FWD and new homebuilt recumbents are all headed in the right direction.

To sum up the MWB and shorter LWB idea here is part of a readers survey that we received. "I'm no pro on the subject, but what I feel the public needs <is a recumbent> with quick release wheels and a seat so the vehicle can be easily car-topped with a conventional rack or get stuffed in the family hatch-back. I want <to build> a MWB unit. When I get it you can be sure that neither my heels nor my toes will be tapping that front wheel, even at low speeds! It will also have plenty of adjustments for different height

Hey!



Do you ride one *them there* funny bikes?

You know the ones with the itsy-bitsy front wheel, a lawn chair for a seat, they call em 'recumbents'. If you do and find no one talks your language (HPVese).

You'd best *git* our '91 HPV Parts Catalog. It cost only a buck and find all 'bout the special parts that we have for your recumbent. (no we really don't talk like this)

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riders. Oh and one more thing, no more "morf", 'oddball' or 'can't find it in a lifetime' special parts either! Sounds impossible, but if I don't do it someone else will."

—Leonard Brunkalla

4.) What could recumbent manufacturers improve upon? Here are a sampling of answers: better literature & brochures, better <or a> manual with pictures, improved delivery time, better pre-assembly (a more ready-to-ride bike) and accept Visa & Mastercharge.

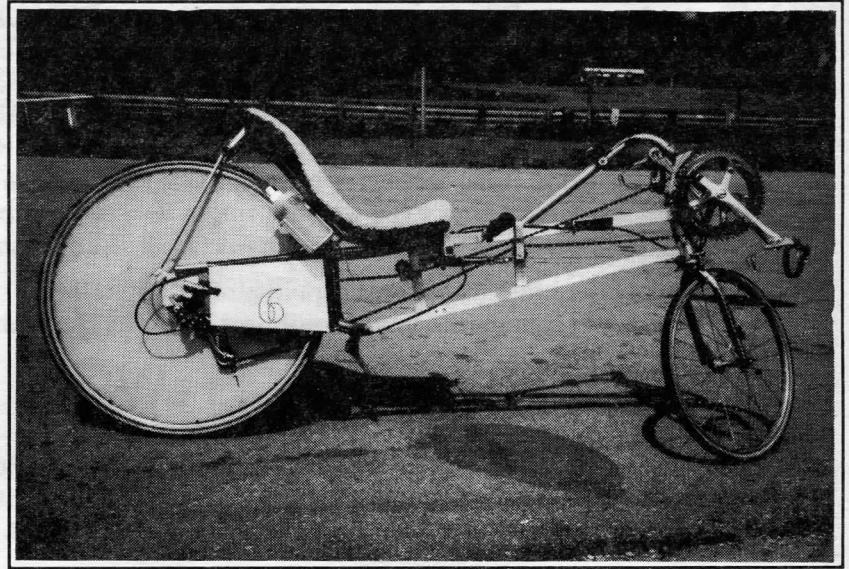
5.) What would help attract recumbent bicycles to the mass market? The leaders were: lower price, more media attention and ways to get recumbents into bike shops or available for test rides. Here are a few more unique ideas: "appeal to yuppies who are afraid to be different," "let customers try them out for three days," "TV and movie attention," "Get Bo Jackson to ride on," "offer 100mph recumbents," "cheap versions for discount stores," "a new ad campaign featuring sex, wealth and youth," "Style. I think recumbent riders are generally regarded as nerdy techno-wimps; what is needed is an image of good clean American-style fun with an attitude of independence and fearlessness," and finally, "I am not sure recumbents are for the masses".

6.) Will Lower prices help? Yes-67%, No-29% and Not sure-4%. Of those answering yes, the following results were compiled: The price that it would take to get recumbents to the masses is: \$501 to \$749-33%, \$199 to \$500-52% and \$750 and up-15%.

7.) What is the primary reason you ride a recumbent? Comfort-50%, Speed-22%, Novelty-18%, Health-7%, Safety-1%, Fun-1% and for Touring-1%.

8.) What services can the Recumbent Cyclist provide for you? The leaders were more home-builder profiles and stories along with more buyers information. Here is a sampling of other ideas: "Honest pro & con articles," "recumbent modification tips and recumbent braking," "articles on transporting your recumbent," "analysis of different designs," "riding and touring info," "more trike stuff," "more International news," "publish a buyers guide,"

"a very informative newsletter-don't change anything!" and "stay afloat and keep publishing".



The Infinity "Bulldog" Prototype

Photo by Mike Eliasohn

9.) What would you like to see more of in the Recumbent Cyclist? These are some of the more interesting responses: More weird upright bicycle information-37%, More RBCA Club News-63% (these percentages are of those who answered question #9).

10.) What would you like to see less of in the Recumbent Cyclist? Weird upright bicycle news, less-75%, Club News-18%, Editorials-29% and finally Robert Bryant's name-4% (these percentages are of those who answered question #10).

11.) Recumbent Cyclist speed information: Riding up Hills: slower-67%, the same 23%, faster-5% and uncertain-5%. For down hill recumbent riding the answers were overwhelmingly faster-some speeds of 65+mph were suggested. Riding on the flats: faster-65%, slower-15%, the same-15% and uncertain-5%

Compiled by the staff of the Recumbent Cyclist

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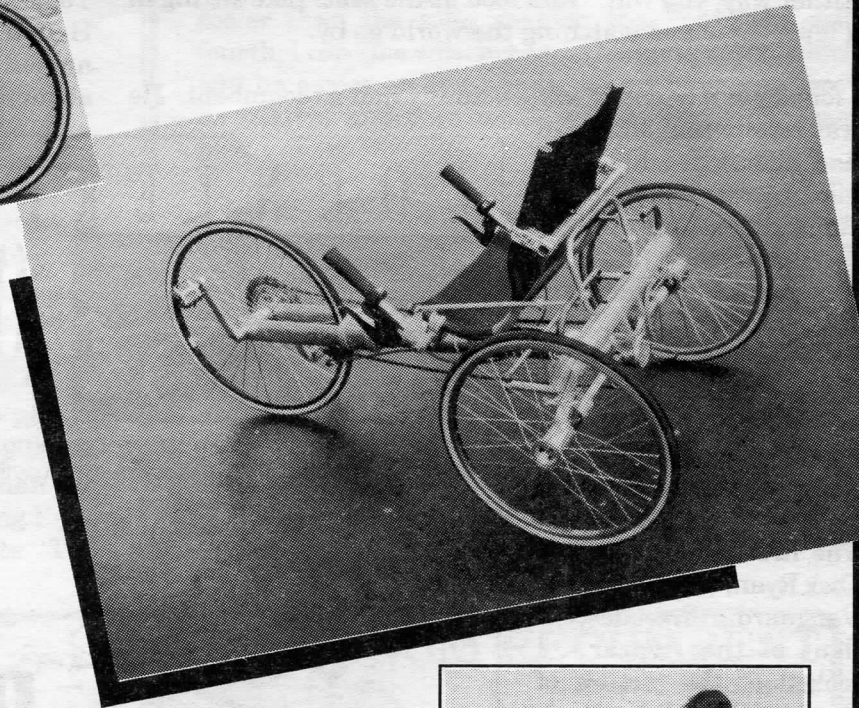
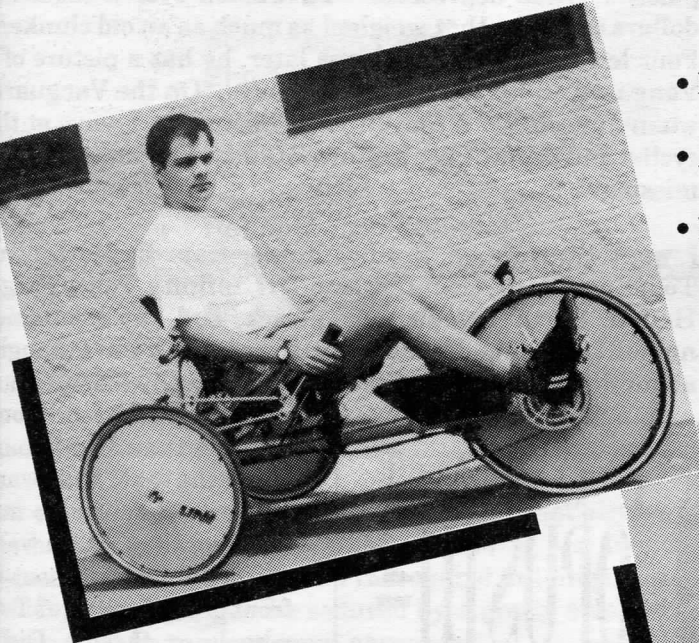
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RECUMBENT-QUEST

I'm definitely a fun guy, and when I bike, I bike for fun. An unrepentant Fred, I don't shave my legs. I like to go fast and blast up hills, but I don't care who gets up the hill first. I belong to the LAW and subscribe to *Bicycling*, but I have never been to a race in my life, not as a spectator, much less a participant. I'm what they call a recreational and commuting cyclist, whom no one will ever take seriously, except me.

I've owned a long succession of bikes, from the one gear clunker made of lead alloy I rode as a kid, to the aluminum Cannondale I could afford in middle age, forever on the search for the ultimate bike, the 10, the perfect blending of man and machine.

I don't remember when I first started thinking about a recumbent. Maybe a picture of an Avatar I saw in *Bicycle Science*. It certainly looked different—the front end extended out like the front end of a Jaguar XK-E, and it had no apparent means of steering to interrupt the sweep of its lines. Definitely a slick looking machine. Considering its aerodynamics, it should be speedy, so either you go faster than you did before, or you go just as fast and work less. Either way, you win. And look at the seat! Like sitting in a lawn chair and watching the world go by.

I found out a friend of mine actually had a recumbent. He was totally sold on it and had abandoned his road bike. I wrote to all the recumbent makers who advertised in *Bicycling* and *Bicycle USA*, and added to those names some others on the list of manufacturers I received from the RBCA. Over the next couple of weeks I filled a folder with a dozen replies.

The first one came from Dick Ryan, who makes the Vanguard, a direct descendent of the Avatar. I looked at the picture of the happy cyclist standing next to his Ryan and read the headline: "Do you think the distance you travel should be by determined by the amount of discomfort you can endure?" I remembered the last century I rode, and how at the end, although my legs had some miles left, my arms and back and butt were done for.

Something inside me clicked.

I read the rest of the material in the packet. There were letters from satisfied (of course) customers. Vic Sussman wrote that "riding the Vanguard was an experience similar to the first time I sat down at a Macintosh computer—an overwhelming sense that this device fits my need perfectly." As a Mac owner myself, I understood exactly what he meant.

The last sequence was from Kurt Jensen. He described how he bought a Ryan and hated it at first. "When I got home [from my first century], I was ready to kick the bike and wondered why the hell I'd bothered with 'bents in the first place.... I was depressed. I'd wasted over a thousand dollars on a bike that weighed as much as an old clunker." Four letters and eight months later, he has a picture of a Vanguard on his letterhead, and says, "On the Vanguard, when I encounter a conventional bike rider, I wave at the cyclist and think, 'Poor bastard. He doesn't know what he's missing.'"

I went through all the brochures, from Ryan, Linear, TourEasy, Rans, Counterpoint, DH, Infinity, Peach Ridge, Hudyn, Earth Traveler, Laid-Back, and two companies named Lightning. I looked at all the pictures, and I thought about the bikes, trying to imagine if under the seat steering

was going to be more comfortable than handlebars above the seat. Did I want a short wheel base, medium, or long? Did I want my pedals sticking out in front of the front tire? Two wheels or three? Did I want it to fit in my car? The more I read, the more confused I got. The article on recumbents by Harold Wooster in the March issue of *Bicycle USA* pointed out that all the designs have their strengths and weaknesses: it all depends on you, your needs, where and how you are going to ride, etc, etc, etc.

Some people said that it might take six months to get used to a recumbent. Add the fact that I didn't live in a region where I could test-drive one for even 5 minutes, and it was no wonder that I was at a loss on how to make a decision. Maybe I should

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other machine we discussed in detail was the Ryan. Robert liked the Ryan, too, but he told me that the set up could be a bit tricky, whereas I would be riding a TourEasy in less than an hour; though most of the Ryan's parts are standard, the steering linkage and, of course, the seat are not. On the other hand, he assured me, the Ryan is an excellent bike, and a very good value. However, Dick Ryan was just then in the process of moving from Massachusetts to Oregon so delivery time on a Vanguard was a bit uncertain, while I could get a TourEasy in about 4 weeks.

I listened to all this good advice, which strongly indicated I should order the TourEasy. I understood its practical advantages, but what could I do? I didn't really like the way it looked.

After I made my decision, I made a list of all the reasons why, so that I could tell myself that my decision had been well thought out. First, the Ryan was cheaper than the TourEasy. Second, it has a very flexible seating. One size fits all, so everyone in my family could try it out. Not only does the seat move forward and back, but you can adjust the recline. Third, the seat is mesh, which I figured would be cooler than the solid seat on the TourEasy. And fourth, I can ride with my arms hanging down, which will be easier on my hands, which have very poor circulation and turn white and numb at the least provocation.

A few days later I had made up my mind: I called and ordered the Ryan Vanguard. Delivery was estimated by the end of the month, three weeks away. I sent in my check, and began to wait. It seemed like forever, and as you might expect, there were a few delays. But one Friday afternoon, when I get back from lunch, I get the message: There are two large boxes for me down in the shipping room....

by Tim Larkin
Brooktondale, NY

just close my eyes and point. Still, there was that picture at the back of my mind of a Vanguard, looking just like the beautiful Avatar. But I am a reasonable, intelligent guy. No way was I going to be seduced by a pretty steel body. There must be some rational approach.

I called the Recumbent Hotline and talked to Robert Bryant. We discussed the strong points of many of the different bikes. He said Tour Easy was faster than the other bikes, except maybe the fully faired Lightning F-40; it's easy to set up; and it uses only standard parts. The

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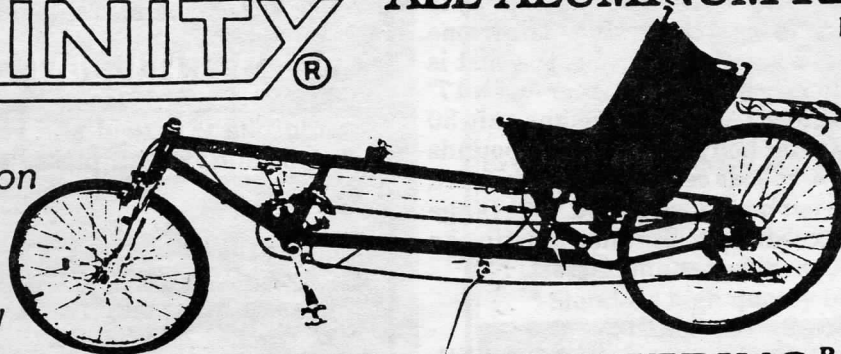
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RECUMBENT HAPPENINGS:

Gold Rush Letour at the Tour de France:

On July 4, 1991 during the Tour de France in Villerbanne, Fast Freddy Markham pedalled a new version of the Gold Rush Streamlined bicycle, to a new worlds record for the flying kilometer. Freddy averaged 53.42 mph and beat the fastest French HPV and the fastest English team who placed second at 51.07. The three competitors raced on the main street of the city of Villerbanne in front of 6000 spectators.

Fast Freddy's new record was an amazing accomplishment, especially considering that the previous record was set in Lapaz Bolivia at about 13,000 ft. elevation where the air is only 1/2 as dense as at sea level. Computer simulations predict about a 5 mph increase at 13,000 feet. The old record was 52.76 mph. set by a German team in a streamlined trike in 1987.



Fast Freddy and the 1991 Easy Racer Gold Rush LeTour
(Photo courtesy of Easy Racers Inc, Watsonville, CA)

The New Letour:

The new Gold Rush LeTour was designed by Gardner Martin of Easy Racers Inc., in Watsonville California. The LeTour is a racing model only and no production version is planned. According to Gardner Martin the LeTour is to low, uncomfortable and unsafe for street riding. The frame is a mono-tube design with a 2-1/4" main tube, the seat is made of Carbon Fiber. The wheels are a 20" rear and a 17" Alex Moulton in front. The new Gold Rush weighs only 30 pounds with the Dupont Kevlar body and under 20 pounds with it. The drivetrain is a 4-speeds center-frame mounted derailleur with no front or rear derailleurs used. The range is 140-220 gear inches. According to Gardner Martin the four gears are fast, faster, even faster and fastest.

Streamliner Racing bike Sponsorship:

The Recumbent Cyclist Magazine in cooperation with Millennium Recumbent Cyclist (a mail order recumbent dealer) has sponsored Stewart Delaires Rotator Super-7 Streamliner. The fully faired long wheelbase was built in

Santa Rosa California by Stewarts brother Stephen Delaire who is probably the finest HPV framebuilder in the country.

Southbay Recumbent Riders:

As some of you know, we hold a Semi-Annual Meeting at Burton W. Chase Park in Marina Del Rey. There was a good turn out and some unusual bikes showed up. Paul Hayes showed up with his Lightning P-38 with a Piper Cherokee aircraft front cowling/ fairing. A real attention getter. There was also a Sinclair English pedal/ electric recumbent tricycle. Tom Traylor and his wife had their back to back recumbent tandem. After a good look-see and some "how did you do that?" discussions we all went for a spin down to the Steam Plant. I suggested to Gerry Pease that we meet every month for an informal picnic/ ride/ update meeting. Being the president, he delegated the organization of the meetings to me. If you want to meet at Burton Chase Park every third Sunday of the month at 10-11am please feel welcome to come. Tom Howe (213)838-8634 or (213) 377-8081

Da Vinci Days in Corvallis (OR):

This is a festival to watch for next year. All reports have said that Paul Atwood put on a great show with the largest gathering of HPV's since IHPSC last Summer. 45 HPV's were in attendance and many were on display Saturday. On display was the Ryan tandem, new Ryan trike, the Oregon built Trice and Don Harse's new three wheeler.

Redmond Derby:

The Northwest Streamliner Racing Series held its third race in Redmond Washington in conjunction with a USCF event. **FIRST PLACE:** was Stewart Delaires "Recumbent Cyclist/ Millennium Recumbent Cycle" Rotator Super-7, **SECOND PLACE:** Joe Kochanowski **THIRD PLACE:** unknown Presto rider, **FOURTH PLACE:** Alan Mikoleit riding "Spectra".

RBCA CALENDAR

SEPTEMBER 7

*** CANCELLED*** OHPV RECUMBENT MUSTER/ Streamliner Racing Association Event, (the SRA event may be rescheduled—call Stewart Delaire 206-692-9738) Oregon Human Powered Vehicles: Contact: Jake Jacobsen (503)644-7038 or Rick Pope (503)244-0908, OHPV membership is \$8 @ yr.

SEPTEMBER 20-22

INTERBIKE 1991 to be held in Anaheim CA. If you would like to attend and report this event for The Recumbent Cyclist, please call Robert at (206)255-9479.

OCTOBER 13

STREAMLINER RACING ASSOCIATION RACE: For more information contact: SRA, 1365 Fox Run NW, Bremerton WA 98310. Call Stewart Delaire for more information and late race date information. Ph#(206)692-9738 eves.

RECUMBENT NEWS

"LWB COMPOSITE" the name and address was left out by mistake in RC#6: The plans are \$14.95 and available from: Dennis Kerns, 2751-Union St. (RC), Lake Station Ind. 46485. **LIGHTNING CYCLE INC.** in Swanton Ohio is currently working on a new "Micro" version that incorporates the "Hyperdrive" dual chain drive system marketed by Cyclopedia. This system works great on bikes with two 20" wheels. Hopefully we will be testing this bike in the very near future. Oregon recumbent designer **DON HARSE** has started offering trike plans. This is a two wheel in back design with 96 speeds! The plans/info packet is \$25: Don Harse, 790 Commercial Ave. Coos Bay, OR. 97420 or (503)267-7255. More in RC#8. **PEACH RIDGE PEDAL POWER** is a fairly new manufacturer of the following recumbents: a side by side tandem (4-wheeler), a pickup trike and the "Slingshot." The medium wheelbase Slingshot is a most unusual design with an intermediate freewheel along with a (second) rear derailleur mounted in the middle of the bike under the seat and a triple crank up front. Let's see 6 X 6 x 3=108 speed recumbent—that's got to be record! Peach Ridge, PO Box 1222, Athens Ohio 45701. There is a new 20" **recumbent tire** available. It is an ACS 20" X 1.75" 100 psi and has a little more tread than the Haro 1.5 slick. Rolling resistance is said to be almost as good as the IRC 20". Many bike shops should carry this or give CycloPedia a call.

EURO-RECUMBENTS: Neatwork in Scotland is currently the only dealer who will ship bikes to the USA and beyond. We recently inquired about prices for the following bikes, prices do not include shipping which could cost upwards of \$200 or more and duty. These prices are also based on 1.70 US dollars (USD) to the pound: The Kingcycle SWB base price is \$1260 (USD), The German Radius Recumbent Dino model is \$1260 (USD) and the Radius Peer Gynt which comes with many options including a rear suspension is \$1845. For more information contact: Neatwork, The Lees Stables, Coldstream, Berwickshire, Scotland TD12 4NN. Phone # +44 890 3456, FAX +44 890 2709. **ECO CYCLE'S**-Peter Ross designed **TRICE** Recumbent Trike: This vehicle is proving to be very popular here in the states. Ken Trueba has recently started building them in Oregon. Possible sightings of a Peter Ross full body for the Trice? Be sure you write down our new address, **The Recumbent Cyclist/ RBCA**, 17650-B6-140th Ave SE Suite #341. Please direct all club/ newsletter business to this new address.



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FOR SALE: 1991 Kingcycle Demo. This is the new SWB recumbent from England. This road test bike has all of the options: Magura Hydrostop hydraulic brakes, front nose cone, rear tail fairing, trunk and a center fabric body section. **SOLD** (This is the bike that was at the '91 IHPSA ridden by World Record Holder Pat Kinch. US Agent wanted. Please send SASE to: Kingcycle, c/o The Recumbent Cyclist, 17650-B6-140th Ave SE Suite #341, Renton, WA. 98058.

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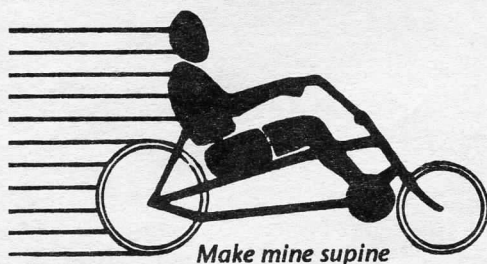
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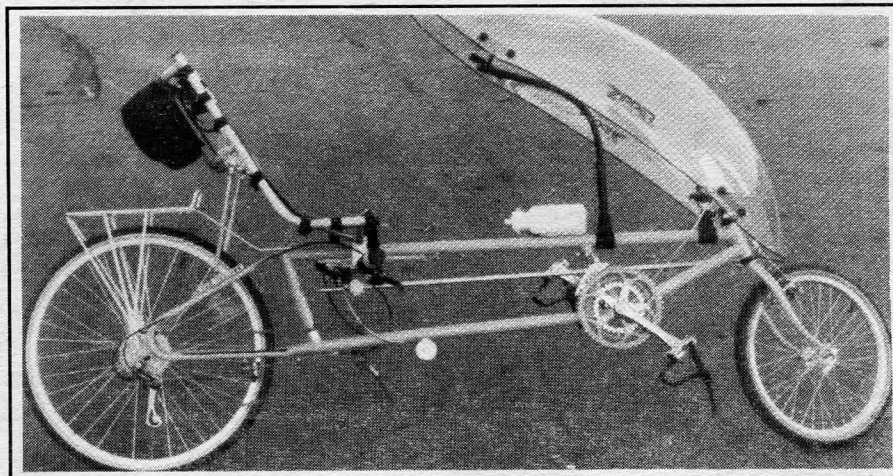
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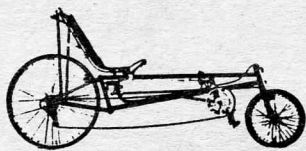
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- _____ **RC# 7** Lightning P-38 available as a BC - Sept. 1991
- _____ **RC# 8** Available as a back copy - Nov. 1991

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