## Made In Michigan Recumbent Products & Services

While there are not too many of them, there are companies and home businesses that produce recumbents or recumbent parts. A big "thank you" to Mike Eliasohn of the Michigan Human Powered Vehicle Association (www.mhpva.org) for information in this article.

<u>TerraTrike</u> - Probably the biggest recumbent company is Terra-Trike, maker of recumbent trikes, which started up in Hastings, Michigan during 1995 as Whiz Wheelz. For more on their history, as well as links to their latest product line-up, visit <a href="http://www.terratrike.com/history.php">http://www.terratrike.com/history.php</a>.

<u>AeroSpoke</u> – Located in New Hudson, Michigan, the company produces a variety of wheels, most very aerodynamic, specifically geared towards recumbents (i.e. includes 20" sizes). For more about the AeroSpoke wheels visit <a href="https://www.aerospoke.co/about-us">https://www.aerospoke.co/about-us</a>.

<u>Day 6 Bikes</u> – A sub-company of AeroSpoke and the producer of the Day6 semi-recumbent - <a href="http://www.day6bicycles.com">http://www.day6bicycles.com</a>.

<u>Thundervolt</u> - John Morciglio is the builder of over five entirely different high-end carbon fiber race recumbents including the M1 lowracer plus the Apache 650/700 midracer, a back to back carbon fiber recumbent with independent drive, a carbon fiber swing boom front wheel drive recumbent, and currently building a two wheel to three-wheel leaning convertible all-purpose bent.

John has experience with carbon fiber, mold making and can provide to customers (besides whole recumbents) carbon disk wheel covers, various components (carbon handlebars, stem, and tailboxes) and is working on an eventual design for a velomobile. Photos of Thundervolt recumbents can be seen at <a href="http://thundervoltman.com/Home\_Page.html">http://thundervoltman.com/Home\_Page.html</a> and contact information is <a href="mailto:kmorciglio@comcast.net">kmorciglio@comcast.net</a>. Breaking News: John Morciglio is moving to Colorado sometime in the near future.

<u>Don Smith</u> – Don, living in Southeast Michigan, has sold close to a thousand zote-foam seat-pads for dozens of seat-shapes to customers world-wide. Perhaps the number one supplier of seat-pads in the world. Has rebuilt nearly 100 RSX4 Rotor Cranks (the unique cranks with independent crankarm travel that saves knees and helps increase power output), Has worked on dozens of one-of-a-kind specialty machining projects for customers including shocks for velomobiles, complete streamliner overhaul of Norus streamliner, including design and fabrication of new mid-drive unit, new brake mount

Talents and experience with: machining, lathe, design work, weight reduction of parts. small carbon parts. Services provided to customers: seat pads, Rotor Crank overhauls, narrowing of hubs, machining, powder coating, complete bike assembly, design and fabrication of specialty parts, flagholder mounts, frame straightening. Contact information for Don is <a href="mailto:bbmracing@yahoo.com">bbmracing@yahoo.com</a> or call 586-337-7027

<u>Rick Wianecki</u> – Living in mid-Michigan, Rick is the builder of the Great White streamliner, FranknLiner streamliner (Michigan's fastest streamliner), and Velomobile6. Rick has loads of experience with electric assist, body on foam construction, trike suspension, full-size CAD plots of streamliner cross-sections, carbon fiber shell and frame construction, streamliner mockups and test fitting, brazing method of joining tubes, documentation of builds. Services provided to customers: design of streamliners and fabrication, nose-cones and machining.

To look over some projects Rick has been involved with visit...

Discussion Forum: <a href="http://www.wisil.recumbents.com/forums/topic.asp?TOPIC\_ID=2510">http://www.wisil.recumbents.com/forums/topic.asp?TOPIC\_ID=2510</a>
Velomobile Project: <a href="http://www.wisil.recumbents.com/wisil/wianecki/yelomobile/default.htm">http://www.wisil.recumbents.com/wisil/wianecki/yelomobile/default.htm</a>
FranknLiner Project: <a href="http://www.wisil.recumbents.com/wisil/wianecki/frank-n-liner/default.htm">http://www.wisil.recumbents.com/wisil/wianecki/frank-n-liner/default.htm</a>
Lowracer Project: <a href="http://www.wisil.recumbents.com/wisil/wianecki/andrea\_lowracer.htm">http://www.wisil.recumbents.com/wisil/wianecki/andrea\_lowracer.htm</a>
To contact Rick, email <a href="mailto:rwianecki@comcast.net">rwianecki@comcast.net</a> or call 517-775-2783.

<u>Love Seat Recumbent Seat Covers</u> – Based in Laingsburg, Michigan and run by Dick Janson, this small business produces a seat cover (loads of fabric designs, some waterproof) for recumbents with the seat separate from the back (i.e. RANS, Tour Easy Cool Back, Sun EZ-1, Burley, Linear, Cycle Genius, Barcroft, and others. And while not strictly a recumbent product, Dick also produces the RealLite, a super bright rear light. For more information, visit <a href="http://necessaryoptions.com/">http://necessaryoptions.com/</a>, email <a href="mailto:lnfo@NecessaryOptions.com">lnfo@NecessaryOptions.com</a> or call 517-675-7340.

## Michigan Recumbent History

Most recumbent riders would not think of Michigan as having much of history of recumbents, but this is not really the case. Thanks to Michigan Human Powered Vehicle Association member Mike Eliasohn, the following is a brief history of past recumbent makers in our state...

<u>Tiara Recumbents</u> – This long wheelbase underseat steering recumbent, similar to the Ryan Vanguard design, was made by Doug Kelly in the Southeast Michigan in the early 1980's but never went into known production. A few years ago one did pop up on Craigslist for sale.

<u>Brampton Bikes</u> - Tom Bell Jr., who after building some prototypes, built and sold three of his Brampton Bikes, but then decided he didn't want to keep building the same bike, so quit. That was about 1994.

<u>Crank-It</u> – In the 1990's Robert Kay, living in the Washtenaw County, MI area, produced the Mountain Quad, a four-wheeler intended for off-road use. It had features such as 4-wheel full suspension, hydraulic disc brakes, 14 speed transmission, carbon fiber seat and heat treated aluminum frame, weighing in at 58 pounds. After he stopped making the Quad, Robert concentrated on being a dealer for Greenspeed and KMX trikes.

<u>Chavis</u> – Designed by Charles Schreiner and Travis Randolph of Saugatuck in the mid-1980s, it was a two-wheels in front, front-wheel-drive trike, with the rear wheel doing the steering. The intent was to sell the production/marketing rights, but it's a pretty safe guess no one ever produced it. The Chavis was an example of a solution in search of a problem. A chain went back from the chainring to a jackshaft, from which a chain went forward to each front wheel – that is, a total of three chains. And to overcome the limitations of having the rear wheel doing the steering, there was a complicated system that used two pivots.

<u>R & D Tech</u> – This was a company in Jackson that produced recumbents, some as adult-size pedal cars (one looked like an MG TD British sports car). The company consisted of Thomas Stachnik and Michael Kella, which made 3- and 4-wheelers. The 3-wheeler had the two wheels in back. Apparently the MG was the only one body, which fit on the 4-wheeler (of course). Prices started at \$449. In an article by Mike Eliasohn in a January 1992 MHPVA newsletter it said they started the company about a year earlier, and so far had sold 28 vehicles for what was, at least until then, a part-time business.

<u>Tandem Recumbent Cycle</u> – Out of Monroe. Michigan, the company consisted of Alan Matthes and Brian Piggott, who made recumbent trikes (two wheels in front), both a solo and tandem version, in the 1980's.

<u>PPV (People Powered Vehicle)</u> - In Sterling Heights, they manufactured a side-by-side two-seater trike with the two wheels in the back and a very stylish body. They used motorcycle wheels and tires in the back, so for that and other reasons was heavy. When the company folded they seemed to have sold the manufacturing rights to the International Surrey Company in Texas - <a href="www.internationalsurrey.com">www.internationalsurrey.com</a>. This new company is now selling one of the old PPV models as the Impello – 7 speeds, 125 pounds and \$2,395. For more on the history of PPV, there is this Wikipedia entry (with photos) at <a href="http://en.wikipedia.org/wiki/People\_Powered\_Vehicle">http://en.wikipedia.org/wiki/People\_Powered\_Vehicle</a>.