## POST STAR

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## A mission to build a better helmet



SCHENECTADY — Motorcyclist Jason Kirshon considers himself a rebel with a cause — making a safer helmet.

"I'm rebelling against the rest of the helmet industry," Kirshon said in an interview last week at the Schenectady offices of Kirsh Helmets.

Kirshon, who lives in Lake George, said he has spent a decade trying to design a better helmet.

That effort is coming to fruition, as Kirsh Helmets will begin manufacturing its helmets this summer in space at Seeley Machine's plant on Big Boom Road in Queensbury.

Kirshon's project started in 2008, when he attended the Laconia Bike Week in New Hampshire. The motorcycle he had borrowed to get to the event broke down. Instead of participating in the rally that day, he was stuck in a cabin overlooking the main drag and watching the bikers ride by.

"Every single one of them was not wearing a helmet," he said.

Kirshon said riders do not wear them because they are big, bulky and uncomfortable. That weekend, he started sketching out concepts for a more rider-friendly helmet.

He worked on the project off and on over the years. He had another breakthrough in 2010, after he injured two disks in his back while building boathouses and was laid up.

While looking at the lake, he noticed that, even though it was 12 degrees outside, the ice on one section of the lake was melting. The strong wind was pushing the water and that kinetic energy was causing the ice to melt.

Kirshon said he wanted to design a helmet that used that same concept. Using a fluid-containing material to absorb the impact would cause energy from an impact to be diffused throughout the helmet.

"The job of the helmet is to convert energy," he said.

The typical helmet has a softer shell and a hard foam installation. Kirsh Helmets are made of a tough outer shell and a honeycomb-shaped liner that is made of a platinum-cured silicone used in prosthetics. A proprietary fluid is inside the liner, he said.

Another issue with helmets is they only account for crashes from linear acceleration — from a straight-on impact. He also wanted to take into account rotational injuries, caused by the brain moving around in the skull.

"The current helmet technology has been good at protecting the skull but never went deeper than that to protect the brain," he said.

Kirshon is self-taught, which allowed him to have an open mind about how to design a more effective helmet, he said.

"If you're classically trained, you're going to be in that box," he said.

Kirshon spent 3-1/2 years perfecting the technology, then got the utility patent approved.

Once that happened, he was ready to tell people about his idea. He attended an entrepreneurial weekend at Rensselaer Polytechnic Institute in January 2017, where he met Donald DeVito, who has helped start up other businesses.

Kirshon said DeVito pushed him to refine his prototypes.

DeVito said the first step is to go into the motorcycle market, because they see a large need.

Motorcyclists are wearing novelty helmets that offer very little protection, according to Kirshon.

Down the line, the company hopes to expand into sports and military helmets.

After much work, the business is up and running and has been taking pre-orders on its website at www.kirshhelmets.com.

"We're about to move into production," DeVito said.

The helmets, which cost \$245 apiece, are available in matte black, gloss black, red, white, silver, blue, green and graphite.

DeVito said it is important for the product to be manufactured in the United States. Other helmet manufacturers have shifted production to places such as China and Singapore and quality control has suffered, he said.

DeVito said it is less about selling a product than becoming part of the motorcycle culture. Kirsh Helmets is partnering with motorcycle groups. It is the official sponsor of the Sturgis Motorcycle Rally in South Dakota.

"It's a no-helmet state and they value the quality of the ride," DeVito said.

Kirshon is very familiar with the area. He grew up in Poughkeepsie but he had visited Lake George since he was 3 months old, prior to moving there about 15 years ago. He said all the various jobs he had in construction, carpentry and automotive repair led him to this point.

"If I didn't have the skills I developed from all those other jobs, I would have never gotten this far," he said.

