

Electric car batteries a challenge for Peoria firm

Firefly Energy expands research effort for lighter power source

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PEORIA - At Firefly Energy, batteries are definitely included.

The Peoria start-up firm, using technology initially developed by Caterpillar Inc., is expanding the research effort to produce a lighter, more powerful lead-acid battery.

That's what brought a representative of Myers Motors, a small electric-car company in Tallmadge, Ohio, to Firefly last week. The firm produces a dozen egg-shaped, one-passenger cars a year.

Although the vehicle can achieve speeds up to 70 miles an hour, it would be hard pressed to make it from Peoria to Bloom-

ington on a single charge.

One of the problems is battery weight. The vehicle's 13 lead-acid batteries weigh almost 600 pounds, more than one-third of the car's 1,500-pound weight.

"Right now (electric car) applications are throttled by a lack of battery power," said Mil Ovan, Firefly senior vice president.

That's something Firefly is working on, but don't look for a highway roadster to run on batteries quite yet.

The company, housed at Illinois Central College's North Campus, hopes to first offer a lightweight battery for the Swedish-based Electrolux company, the world's largest maker of outdoor power products.

"(Electrolux) likes the seasonal component. The (Firefly) battery still runs after a six-month layoff," said Ovan, noting that many existing batteries fail and

can't be revived after a long period of inactivity.

While electric and hybrid vehicles are destined to be a part of the U.S. automotive scene, Firefly CEO Ed Williams believes it will be several years before a battery meets the demands of distance and performance needed for highway driving. "It will be a while before there's mass acceptance of electric vehicles but the popularity of the hybrid is a move towards that acceptance," he said.

Meanwhile, the U.S. military has shown a great interest in battery development, said Williams. "The military is historically an early adopter when it comes to technology. We've had a number of interfaces with the Army," he said.

With the worldwide lead-acid battery market estimated at \$30 billion, Williams and Ovan are optimistic about Firefly's future.

The company, which started with just three employees two years ago, now boasts a work force of 18, including researcher Boris Monahov, who came to Firefly last year from the Bulgarian Academy of Sciences.

Monahov was among the Firefly employees to take the Myers minicar for a test spin. Like office manager Holly Schmitt, who also got behind the wheel, Monahov called the driving experience a positive one.

Williams is also positive about the company's newest board member, Glen Barton, retired Caterpillar chairman. "We sought him out," said Williams. "Not only will (Barton) help us with strategic planning but he's recognized throughout the world by industrial customers. He can help open some doors."