Manuped inventors 'build a better bicycle'

New vehicle lures racers, investors

By BOB WAITE
Of the Emerald

While the Manuped may not be faster than a speeding bullet, its inventor believes that it is faster, more efficient and safer than a conventional bicycle.

The Manuped is a strange, low-profile, front-wheel drive, hand- and foot-powered bicycle that can often be seen on local streets.

The machine was invented by John Thomas seven years ago and is currently undergoing further development by Thomas and co-workers Fred Tach and Tom McCoy. Thomas recieved a bachelor's degree in physics from the University in 1972.

Last May 6, Tach proved the Manuped's speed by winning the 30-kilometer road race at the International Human-Powered Championships in Ontario, California. "The conventional bikes didn't have a chance," he says. Tach, an amateur racer, had a three-mile lead on the professionals.

Tach bought a license from Thomas to build his Manuped and designed an "air saddle" which, he says, increases comfort and decreases road shock. Using his kite-building skills, Tach fashioned a "fairing" from plastic and bamboo to decrease air drag during the race.

Thomas recently hired Tach to build two new Manupeds incorporating Tach's air saddle, one of which will be loaned to a professional cycle racer on the condition that the racer use it next year at Ontario.

Tach adds that Paul McCready, inventor of the human-powered Gossamer Albatross which recently flew the English Channel, has expressed interest in the Manuped's power train. McCready may seek to incorporate it into his machine. The Gossamer Albatross is the first human-powered aircraft to cross the English Channel.

Co-worker McCoy, a former Duncan Yo-Yo professional, met Tach and Thomas several years ago. McCoy was so impressed with the Manuped that he began investing his savings in the machine's development.

McCoy is currently assisting in researching the Manuped's efficiency and safety ratings. He is also working on a brochure that will explain the machine's concept to future investors and purchasers.

In a recent brochure draft McCoy writes, "The Manuped's greater comfort, power efficiency, speed, range and safety will . . . increase its use over current bicycle (designs)."

Thomas attributes these characteristics to the machine's low profile, which cuts wind resistance and places the rider closer to the ground, as well as to the increase in power through the use of the rider's hands.

"I see machines as an interface between people and the environment," explains Thomas.

While he is a motorist as well as a cyclist, Thomas believes that his manuped is a healthier and more energy-efficient means to interact with the environment. He uses his invention for city transportation and turns to his car for traveling longer distances.

Thomas further believes the general public will see the utility of the Manuped when it is made available commercially.

While he holds a patent on the Manuped's design and drive-train, Thomas says further studies must be made and more "bugs" must be eliminated before he will market his invention.

"We feel that if we do our groundwork well, everything else will fall into place," Thomas says. "It's a simple concept, but there are so many little things involved. We're still researching."

The managers of the new Willamette Institute of Science and Technology (WSTECH) have asked Thomas to donate a Manuped for public demonstration, to which they will attach an "ergometer" — a machine to measure power output.

Thomas has built seven prototypes (including the one to be displayed at WSTECH), and each one improved on its predecessor. He is currently using a home mini-computer to help design numbers eight and nine.

The inventor envisions a tricycle model for carrying purposes as well as two-wheeled street and racing versions when the Manuped eventually goes into production — financial backing willing.

The machines are expensive to produce because many of the components must be hand-made; a Manuped now costs about $1,500, Thomas says. He adds that the final production model should cost one-third of the present cycle.

Photos by Jeff Patterson

The Manuped is powered both by hand and foot, and holds the rider closer to the ground. Consequently, claim Manuped fans, the vehicle is more energy-efficient and less tiring to operate. Its Eugene inventors haven't gotten all the bugs worked out yet, but they predict the Manuped will someday be a popular form of city transportation.

John Thomas, University physics graduate, invented the Manuped seven years ago and has been improving on it ever since.