

Flywheel, windmill explored as energy sources

By CORINNE ABATT

Some people talk about the energy crisis. Others investigate alternatives.

Bill McNaughton, member of the life science faculty at Oakland Community College's Orchard Ridge campus, belongs to the latter group. He's also a member of the New Alchemy Institute headquartered on Cape Cod. Among other things, this group is investigating alternatives to traditional sources of energy.

McNaughton leaves no doubt that there are alternative sources. He speaks first of flywheels, using the wheel of the old treadle sewing machines as an elementary example. Flywheels are the subject of the lead story in the December 1973 Scientific American magazine.

Concurring with the article, McNaughton sees the flywheel, with modern technological improvements, as a potential for the creation and storage of energy for everything from major power plants to electric powered automobiles.

Flywheels have been made much more efficient by constructing them of materials such as high strength polymers developed for the aerospace program. These, much lighter than steel, offer great tensile strength.

McNaughton says such flywheels are already being used in Switzerland to power buses and could be used in cars.

"Enormous" amounts of energy can be stored in flywheels. You can drive 200 miles at 60 miles an hour on the stored energy to power four little electric motors. When you decelerate, they turn into generators and the energy goes back into the flywheel.

"This is much more efficient than a gas engine where only one out of 10 gal-

lons of gas powers the car. The rest goes off as waste heat to pollute the air."

He continues, "Up until now I was thinking of using an electric car. I wanted to build a windmill in my back yard and power an electric car with the energy stored in the windmill."

He has forgotten the name of a man in Birmingham who was working on a high energy density battery.

"That would make electric transportation feasible. Then you wouldn't need a battery in the front seat, the back seat and the trunk to get enough energy."

Back to another kind of flywheel—the windmill. His dream to build one may come true, but it will be in the college's backyard. McNaughton would like to construct one this spring to

pump water uphill from the stream to irrigate an organic garden... if the class in organic gardening gets off (or under) the ground, as the case may be.

He pictures the course open to the community and garden areas being offered to local residents, "so they can come and stake out a plot."

"Geo-thermal energy is very worth exploring." This is the tremendous heat inside the earth's crust.

Tides are an untapped source of energy, and solar energy still another.

"For home heating, you could reflect sunlight into a sub basement of moist earth. With the stored energy accumulated you could heat a home. No furnace. And you'd

never have to pay for heat."

He sees the initial set-up as costing, perhaps, as much as a new furnace.

The wind, earth, sun and tides, McNaughton says, are all basic and good sources of energy.

Bloodmobile due Saturday

A public blood donor drive at the Wonderland Shopping Center in Livonia has been scheduled for Saturday, Feb. 16.

The blood drive will be conducted under the auspices of the Michigan Community Blood Center from noon until 8:00 p.m.

MCBC's 27-foot-long bloodmobile will be parked between the Farmer Jack's and Montgomery Ward stores at the center.

Married donors can insure themselves and members of their families against blood emergencies for one year with a single donation. Unmarried donors can designate three others besides themselves for the same protection.

Seventeen-year-olds may donate provided they have the permission of a parent or guardian.

Ladywood High sets 'haze'

Ladywood High School's class of '74 will present "The Final Phase of Purple Haze" Friday, Feb. 15, from 8 - 11 p.m. Hot Lucy will be featured. Tickets are \$1.75 pre-sale and \$2 at the door. The school is at 14680 Newburgh, Livonia.

Management group to meet

The North Detroit Management Chapter of the International Management Council will hold its monthly dinner meeting tonight (Wednesday) beginning with cocktails at 6:30 in Vladimir's, Grand River at Eight Mile, Farmington Hills.

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