

Innovative Vehicle Makes Stop in St. Ignace During Loop Around Lake Michigan

Michigan Tech Students Display Their Design for 'Challenge X' Competition

By Paul Gingras

A flashy, black and white Chevrolet Equinox arrived at the Michigan Welcome Center in St. Ignace Saturday, January 12. With the exception of a large husky's head painted on the side and several decals, it looked like a standard sport utility vehicle. Under the hood, however, it was anything but a conventional SUV.

The engine was the result of four years of innovation by Michigan Technological University students, who are in the process of testing an environmentally friendly vehicle they created for Challenge X, an international competition involving 17 universities. Over the past four years, teams have taken standard cars and applied advanced technologies to create low-emission vehicles with good gas mileage.

To test their achievement, the Michigan Tech students took a 1,800-mile drive around the perimeter of Lake Michigan, making St. Ignace one of their stops, before meeting their 16 peer vehicles in May. Then, all teams will drive their creations through Philadelphia, New York, Baltimore, and finish at the White House in Washington, D.C., where the winning vehicle will be announced.

Four years ago, students at Michigan Tech and other chosen schools were challenged to redesign an Equinox. They had to find a way to cut fuel emissions in half, and increase gas mileage by 30%, while maintaining normal drivability.

According to team leader Todd Cimermanic, 23, a senior in mechanical engineering at MTU, the vehicle is well on its way to meeting the specifications.

The methods by which the

teams have gone about achieving their goals varies widely. All 17 vehicles have different power trains, Mr. Cimermanic said.

At MTU, students removed the vehicle's original six-cylinder engine and replaced it with a four-cylinder engine to power the front wheels. To power the back wheels, they installed a 55-kilowatt electric motor, enabling the vehicle to maintain all-wheel-drive capability, which they have needed during their trek around the lake.

Over the past four years, to earn eight credits, various students have labored to mount and integrate two very different power trains, Mr. Cimermanic said.

"It is a step forward," said team member Bill Bland, referring to MTU's vehicle.

Cars of the future must transition from standard gas guzzlers to vehicles that rely on alternative fuels, Mr. Bland said, although, currently, North America lacks infrastructure to provide for vehicles that rely completely on alternative fuels.

Recognizing the preference of drivers in North America, General Motors, a major promoter of Challenge X, has focused on larger vehicles first, Mr. Bland



At the St. Ignace Welcome Center Saturday, January 12, Michigan Technological University students present a unique hybrid vehicle they produced for Challenge X, an international contest involving 17 select universities from the United States and Canada. Every university involved has taken a different approach to reduce emissions and increase gas mileage on a stock vehicle. To test Michigan Tech's two-engine hybrid, which has taken four years to create, the students are on a drive around the perimeter of Lake Michigan, where they have been stopping to give lectures at high schools and to visit the homes of Tech students. Pictured (front, from left) are team leader Todd Cimermanic, Mindy Saxton; (back) Andrew Best, and Bill Bland.

added.

Mr. Cimermanic has been on the Challenge X team since the

beginning. This year, he picked up an extra minor to stay at school while the vehicle is finished. He

will be on the drive to the White House.

An important part of creating the vehicle has been to minimize the work the gas engine must do and to maximize the potential of the electrical engine, he explained. Tech's SUV is a parallel-through-the-road design, which means that the two engines have no mechanical connection to each other. The

only link, really, is the road they travel on, he said.

One aspect of the design that turned out to be especially tricky, he added, was synchronizing the two engines without reducing performance.

"We want it to drive just as it did when it left the factory at GM, but not to have anything in common with the original design," he said.

The team is working hard on the fuel economy aspect right now, he added. The 30% decrease in gasoline consumption has been attained when the car is driven at 50 miles per hour or less. A standard Equinox gets 16 to 18 miles to the gallon. Tech's car gets 20 to 25.

To achieve a 50% reduction in emissions, the team is working on a custom-built catalytic converter. Frequent emissions testing is too expensive, so the team is relying on estimates, but the vehicle showed a reduction in emissions when tested two years ago, Mr. Cimermanic said. The harder an engine works, the more emissions it produces. The challenge is to get the converter to align properly with the engine load.

Producing a vehicle that uses less fuel is the first part of Tech's method of reducing emissions. The right catalytic converter to remove unburned gasses is the second. Mr. Cimermanic said the team expects to meet its emission mandate by May.

The students also continue to work on drivability issues, he added.

"No one is going to buy a car that makes strange sounds, rattles, or thumps when it goes over bumps," which are complications

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Hagan To Lead EUP Regional Planning Board



Jeff Hagan

Jeff Hagan has been named the new executive director of the Eastern U.P. Regional Planning and Development Commission, where he has been employed since May 2000 as an economic development planner.

Mr. Hagan, 34, accepted the position as Interim Director following the retirement of Executive Director John Campbell, who retired in May 2007 after 38 years of employment with the Regional Planning Commission.

Mr. Hagan earned a Bachelor of Science degree in land use planning and area management from Lake Superior State University in 1997.

"I am honored to accept the position of executive director from Mr. Campbell, and am deeply indebted to him for the knowledge he imparted to me during the previous seven years," Mr. Hagan said. "It is my hope that I can continue on with the efforts he initiated during his tenure, while at the same time growing and diversifying the Eastern U.P. Regional Planning Commission to meet the current challenges and future opportunities before us."

The Eastern U.P. Regional Planning and Development Commission is in Sault Ste. Marie and serves Chippewa, Luce, and Mackinac counties. The Regional Commission was created in 1968 and provides land use planning expertise and technical assistance to the counties, cities, townships, villages, and various other non-profits in the area.



Les Cheneaux Library Program Draws 'Teens Only'

A group of young people (clockwise, from left) Karen Landreville, Daniel Landreville, Danny Hitchens, and Ian McGreevy play a game of Blokus at Les Cheneaux Community Library in Cedarville Saturday night, January 12, at one of the library's Teens Only nights. Under the supervision of Library Branch Manager Ronda McGreevy, students in middle school and high school can use the library on designated nights throughout the winter to play board and card games, use the computers, play the library's Wii game, and use high-speed Internet access to play computer games. The library's community room has multiple media capabilities, Mrs. McGreevy said, so movies and DVD games can be played there. The program is seeking donations of a cribbage board, decks of cards, and welcomes people to teach games. Teens can also use the time to check out books and participate in book clubs. The next Teens Only night is Saturday, January 26, from 7 p.m. to 9 p.m.

Brevort Township Sets Road Work Priorities

Revises Project List Through Year 2011

By Paul Gingras

To ensure that the Mackinac County Road Commission acknowledges Brevort Township's road work priorities for the next five years, the Brevort Township Board of Trustees met with Road Commission Manager Karrie Abbitt, members of the township's road committee, and the public Monday, January 7.

After hearing from all parties, the township board revised the list of roads it would like serviced from 2008 through 2011. This was done, in part, so the township would have an established list in hand before the January 15 Road Commission meeting, at which the road commission took public input to decide which roads are to receive federal and state funding, a major source of revenue for rural roads.

Road Commission Chairman Frank Luepnitz, who attended the meeting, stressed the importance of township representation at such meetings. Advocates for certain areas help ensure that their projects remain on the Road Commission's list, he told *The St. Ignace News*. Since the commission works for voters throughout the county, it responds to public pressure at meetings, sometimes leading commissioners to remove a project scheduled in a particular township and replace it with projects elsewhere, he said.

This has sometimes caused consternation among township

board members throughout the county, who have assumed that, once a local five-year plan is in writing, the list will be followed by the Road Commission.

Brevort Township Road Committee member David Craig pushed for township representation at the January 15 county road commission meeting, insisting that Black Point Road could be bumped off the list of federally funded roads without someone there to promote the project. Black Point, a major project for Brevort Township, is on the Commission's five-year plan for 2008, 2009, and 2010.

All federal projects are funded at \$105,000. The federal government contributes \$75,000. To receive the aid, local municipalities and the Road Commission are required to contribute \$15,000 each. The scope of each project depends on how much can be done within the funding limit, Mrs. Abbitt said.

A township's five-year plan for its roads is not the same as the Road Commission's five-year plan for federally funded roads, Mrs. Abbitt pointed out.

A township's five-year plan establishes which roads it would like serviced in the years to come, and notes how area residents would like to spend money gathered through road millages.

Although the Road Commission creates a plan regarding which roads will receive federal funding, it does not have a comprehensive plan that spells out every project to be done in the next five years using other funding

sources, Mrs. Abbitt said.

Township plans must be reviewed by the township and the

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All LaSalle Graduates Will Gather for Reunion July 25

The second all-class reunion for LaSalle High school graduates will take place Friday, July 25.

More than 750 people attended the first reunion in 2003.

Cost of the reunion is \$25 per person before July 1; after that date, it will be \$30.

This year's reunion will feature an open house at the high school, followed by a social gathering at Little Bear East Arena and Community Center. It will be the same weekend as the DARE golf outing and the second annual St. Ignace Fish Feast. Appetizers and non-alcoholic beverages will be served during the open house. A cash bar will be available at Little Bear East.

Members of the All-class Reunion Committee will send invitation letters and registration forms by mail to St. Ignace graduates, former staff members, and community members February 1.

A silent auction will be offered during the reunion. Anyone interested in donating an item of local interest can do so through committee member Pete Everson. All pro-

ceeds from the event will go toward the St. Ignace Area Community Foundation's alumni fund. The 2003 reunion raised \$10,956.

Those interested in attending can register online at the school's Web site, <http://stignace.eup.k12.mi.us>. Forms can be found under the Alumni section. Registrations can either be mailed or e-mailed to St. Ignace Area Schools. Confirmation of registrations will also be posted on the Web site.

The reunion committee is seeking addresses for graduates from the last 10 years. It has a list of graduates from as long ago as the early 1930s, but has little information from the Class of 1998 to the Class of 2006. Anyone who may have information from the past 10 years is asked to contact Mr. Everson, either by telephone at 643-9219, or e-mail at peverson@eup.k12.mi.us.

Committee members include Mr. Everson, Diggy Clement, Susan Tamlyn-Massaway, Dottie Glashaw, Ruth LaChapelle, Laurie Steiner, and Claudette Brown.

St. Ignace Students Enjoy Fresh Snowfall Monday



Students at St. Ignace Elementary School enjoy the snow Monday, January 14. Heavy snowfall caused a two-hour delay Monday and caused school to be cancelled all day Friday, January 11. Pictured (from left) are Peyton Belonga, Sierra Metz, Taylor St. Onge, and Lauren Yoder.