



Michigan Technological University was one of two Michigan colleges that participated in the SAE Supermileage competition at Eaton's Marshall Proving Ground. Michigan Tech came in 10th overall and Calvin College - the other Michigan college - came in 8th.

# College Engineering Students Compete To Build the Most Fuel-Efficient Vehicle

by Christine Snyder Staff Reporter Tech Center News

The cars on Eaton Corporation's Marshall Proving Grounds June 10 weren't exactly burning rubber, but they weren't burning much fuel either. Southfield-based Eaton was sponsoring the 32nd annual SAE International Supermileage competition. College engineering teams compete against each other to make the most fuel-efficient vehicle. Eaton has been hosting the event since its inception. This year, teams entered, the furthest coming from the University of Hawaii, according to Jim Gluys, principal engineer at Eaton.

are inspected for safety and fairness and the teams are able to practice on the track. The second day are the fuel economy runs. The teams run six laps on the 1.6-mile track. The gas tank is measured before and after the run and the results calculated. The team that uses the least gasoline is the winner and presented with an award at that evening's banquet. Gluys said Eaton has two reasons for its continued participation in the competition: to advocate for fuel economy and to provide college engineering students with real-world experience. "We want them to get that experience of being a young engineer and having the opportunity to provide some leadership, do some planning and understand about financing," said Gluys. The competition mimics a work environment, said Gluys, in that the teams need to work

together to solve technical problems and meet deadlines. "We think these are important skills young people need so that when they enter the workforce they are ready to start doing those kinds of things," said Gluys. The team-oriented atmosphere is typical of most engineering jobs, said Gluys. "Working in small teams like we have here is the kind of teams Eaton puts new engineers on frequently," said Gluys. Supermileage is part of SAE International's Collegiate Design series, which includes Baja SAE; Clean Snowmobile Challenge; Formula SAE and Aero Design. Last year's winner was the Universite' Laval, Quebec, with a fuel economy of 2,340 mpg. That would get a driver from Quebec to Marshall and back again with plenty of fuel left over.

## Ford Sponsors Program to Support L.A. Community Improvement Efforts

LOS ANGELES - Following a successful pilot launch last year, Ford announced the return last week of The People's Fleet program to Los Angeles. The 13-week-long program engages four nonprofit organizations and equips them with resources to accomplish their philanthropic missions. Selected organizations participating in The People's Fleet will receive a 2012 Ford Focus, a team of filmmakers and additional resources to conduct their important work in the Los Angeles community. The work of each organization will be highlighted in the form of weekly webisodes on the program site www.thepeoplesfleet.com for individuals to follow along and learn how they themselves can engage more in their community.

require use of the 2012 Ford Focus. Throughout the three-month program, organizations will be tracked and measured on their success, with volunteers and members of The People's Fleet community being called on to help support those efforts. The community element, dubbed The People's Project, will serve as a call-to-action for members of the program community to rally around specific projects and tasks. The community will be continuously engaged through social media platforms adminis-

tered by Ford and the individual organization websites. Fresh content will be updated weekly for participants and followers to learn more about activities taking place. Individuals can also join in the activities and help their chosen organization accomplish specific tasks. A system of points will be assigned based on a ranking system for how engaged and active participants are in the program. Any organization that reaches 100,000 points will win the \$5,000 empowerment grant.

## Ford Continues to Work On Downsizing Engines

By DEE-ANN DURBIN AP Auto Writer

DEARBORN (AP) - Ford Motor Co. plans to introduce its smallest engine ever by 2013, part of the race to improve fuel economy across the industry. Ford said last week it's working on a one-liter, three-cylinder engine that will be available in small cars globally. Ford didn't say which cars will get the engine, but it plans to release more details this fall. Currently Ford's smallest engine available in the U.S. is the 1.6-liter, four-cylinder used in the Ford Fiesta subcompact. That engine has 120 horsepower and gets up to 38 miles per gallon on the highway.

biles - and gets 41 miles per gallon on the highway. EcoBoost technology is currently available on four Ford products - the F-150 pickup, the Ford Flex and Lincoln MKT crossovers and the Taurus SHO sedan. Ford is adding it to the lineup for the Edge crossover and the Explorer SUV this summer. The starting price of the Flex SEL with EcoBoost is \$40,080, or nearly \$8,000 more than a Flex SEL with the base engine. It costs \$4,400 to add EcoBoost to an F-150 XL. Still, the option has been popular with some customers looking for fuel economy. Forty-one percent of individual F-150 buyers chose the EcoBoost option in May, the company said. Ford said there are currently 180,000 vehicles in North America with EcoBoost, which was introduced in 2009.

The four participant organizations selected to join The People's Fleet for 2011 are: Pablove, an organization dedicated to the daily fight against childhood cancer; Keep A Breast, dedicated to eradicating breast cancer by exposing young people to methods of prevention, early detection and support; A Better LA, focused on mobilizing the knowledge and skills of the Los Angeles community to inspire everyone to dream, work and play without fear; Stoked LA, committed to empowering youth from underserved communities to achieve a more successful future by providing programs based on the action sports culture. In order to be selected, all four participating organizations had to identify specific projects and tasks that would

## U.K. Official Visits Ricardo In Van Buren

VAN BUREN TWP. - Ricardo, Inc., the U.S. subsidiary of Ricardo plc, last week welcomed U.K. Secretary of State for Business and Innovation Skills, the Rt. Hon. Vince Cable MP. Cable visited Ricardo as part of a series of automotive meetings in the Detroit area. the visit to Ricardo's North American headquarters focused on Ricardo's low carbon emissions technology. "Ricardo's advanced engineering approach allows us to quickly meet the demand to develop low carbon-emission technology," said Kent Niederhofer, president of Ricardo, Inc.

Ford said it aims to have 1.5 million on the road globally by 2013. Ford product development chief Derrick Kuzak said the company is exploring whether it could use EcoBoost technology in hybrid vehicles for even more fuel savings. Ford also said last week that it's developing its first eight-speed transmission, which will get up to 6 percent better fuel economy than its six-speed. General Motors Co. and Chrysler Group LLC have also said they are developing eight-speed transmissions, which are already available on luxury brands like Lexus and BMW.

work (in the classroom). Other Ford educational initiatives in Southeast Michigan include Ford Partnership for Advanced Studies, a national award-winning high school curriculum, and support for local education institutions including the Henry Ford Academy: School for Creative Studies, a partnership with the College for Creative Studies, located in Detroit's New Center area.

## Ford Challenges Toyota in Hybrid Van Market with Its Latest C-Max Entry

By DEE-ANN DURBIN AP Auto Writer

STERLING HEIGHTS, Michigan (AP) - Ford Motor Co. will sell a hybrid-only minivan in the U.S. next year in a bid to challenge Toyota's hybrid dominance. The five-passenger van will come in two versions: A gas-electric hybrid, like Toyota's Prius, that gets more than 41 miles per gallon and a plug-in hybrid, like the Chevrolet Volt, which will run on electric power but have a backup gas engine that kicks in when the power runs low.

that falls far short of Toyota Motor Corp., which recently sold its 1 millionth Prius in the U.S. Customers seem to prefer hybrid-only cars like the Prius, which has a unique look that can't be confused with a gas-powered car. Ford wants to jump in before Toyota gets too far in its planned expansion of the Prius family. Toyota has a five-passenger Prius wagon, the Prius V, going on sale in the U.S. later this year. Toyota also is planning to sell a plug-in hybrid version of the Prius next year.

Ford did not give out many details about the C-Max Thursday. It didn't give the exact date it will go on sale, how far it will go in all-electric mode or how much it will cost. But Farley said Ford can bring down the cost considerably because the hybrid and the plug-in hybrid share many parts. The Volt, for example, starts at \$40,280, but it doesn't share its hybrid system with any other General Motors Co. vehicle. Aaron Bragman, an analyst with IHS Automotive, thinks Ford could sell the C-Max hybrid for as low as \$25,000 and the plug-in hybrid for a few thousand dollars more, making the cost more comparable to the Nissan Leaf electric car, which starts at \$32,780. Both the Leaf and the Volt are now eligible for a \$7,500 tax credit.

"By combining the effective utilization of power and the development of fuel efficient solutions, Ricardo helps automotive, military and clean energy clients meet the need to maximize fuel efficient systems." Cable personally inspected a series of vehicles and systems on hand at Ricardo, including a Fuel Efficiency Demonstrator. "Ricardo is a great example of the many innovative and successful British businesses at work in Michigan and across the U.S. I was very impressed with the ideas and industry of the company," Cable said. "It is clear that there are huge opportunities for new technologies to reduce carbon emissions and create jobs in both the U.S. and the U.K."

## Ford Awards Scholarships to Detroit-Area Students

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CIS provides operational support for the Blue Oval Scholars program. Pamela Alexander, director of community development at the Ford Motor Co. Fund, reflected on the growth of the Blue Oval Scholars program. "We're the philanthropic arm of Ford, we invest in nonprofits and in people via nonprofits throughout the nation," she explained. "Throughout the past years, it's in the hundreds of millions of dollars that we have awarded to nonprofits throughout the country for various areas of focus. "You were having dinner in the Ford Motor Co. Rotunda, named for Ford. "But (back in 2008), we decided to start this program, Blue Oval Scholars, in Southeast Michigan . . . we (Ford Motor) posted billions in losses. These billboards were going up all over the city and I thought, 'Oh my goodness, is this the right time to announce it?' "Then I realized, as did all

of us at Ford, that was the exact time that we needed to launch this program, to award \$100,000 in scholarships. "Ford is the funder of the scholarships but (Community Services) does all of the hard

Gas and diesel versions of the minivan, called the C-Max, went on sale late last year in Europe, where they have been a hit for Ford. But the company decided to make the C-Max a hybrid-only vehicle in the U.S. after seeing buyer demand for fuel-efficient vehicles spike in the last few months. Gas prices are up 20 percent since February, although they've come down in recent weeks. Ford is eager to have a hybrid-only vehicle. The company has sold more than 140,000 hybrid versions of some of its vehicles, like the Fusion sedan and Escape SUV, over the last six years. But

Hybrids use a combination of an internal combustion engine and a battery pack to power a car or truck. Ford originally planned to sell a seven-passenger gas version of the C-Max in the U.S. in 2012. But it's scrapping that vehicle for now because customers have expressed far more interest in a five-passenger hybrid. "Customers have really changed in the last 120 days," Ford marketing chief Jim Farley said during an event at the Sterling Heights, Michigan, plant that will make parts for the C-Max. Ford will build the vans at its Michigan Assembly Plant outside Detroit and export some to Europe.

Wanna Cool Off? - Ford Says Get In Focus Electric CONTINUED FROM PAGE 1

## Plex Is Cruise Sponsor

The 2011 Woodward Dream Cruise presented by Chevrolet (WDC) has announced that Plex Systems, Inc., located in Auburn Hills, has signed on as an entertainment sponsor of the 17th annual Woodward Dream Cruise. In commenting about agreeing to become a WDC sponsor, Patrick Fetterman, vice president of marketing at Plex Systems, said, "The Woodward Dream Cruise is an amazing event that brings many communities together, celebrating everything automotive. "It is a great fit for Plex Sys-

tems and we are proud to be an entertainment sponsor of this year's Dream Cruise." Greg Rassel, president of the WDC, added, "Live entertainment at the Dream Cruise is something that everyone looks forward to. The support of Plex Systems will help cover costs that go along with providing fun, family-friendly entertainment for those who attend." The addition of Plex is good news for the overall Woodward Dream Cruise, which lost a casino as a sponsor but of course last month gained Chevrolet main sponsor.

all over the vehicle let the cooling system know when it needs to kick into action. The cooling system can even work when the car is charging, so it can help reduce the charge time in hot climates because the battery will be kept at a desirable temperature. "Batteries can heat up when they're charging or being used, and it's made worse by ambient temperatures," said Fabricatore. "Controlling the temperature lets us deliver the best range and power for the customer, while improving the longevity of the battery."



Local high school students who are 2011 Blue Oval Scholars received their scholarships at the Charles H. Wright Museum of African American History in Detroit last week.

PHOTO: GERALD SCOTT