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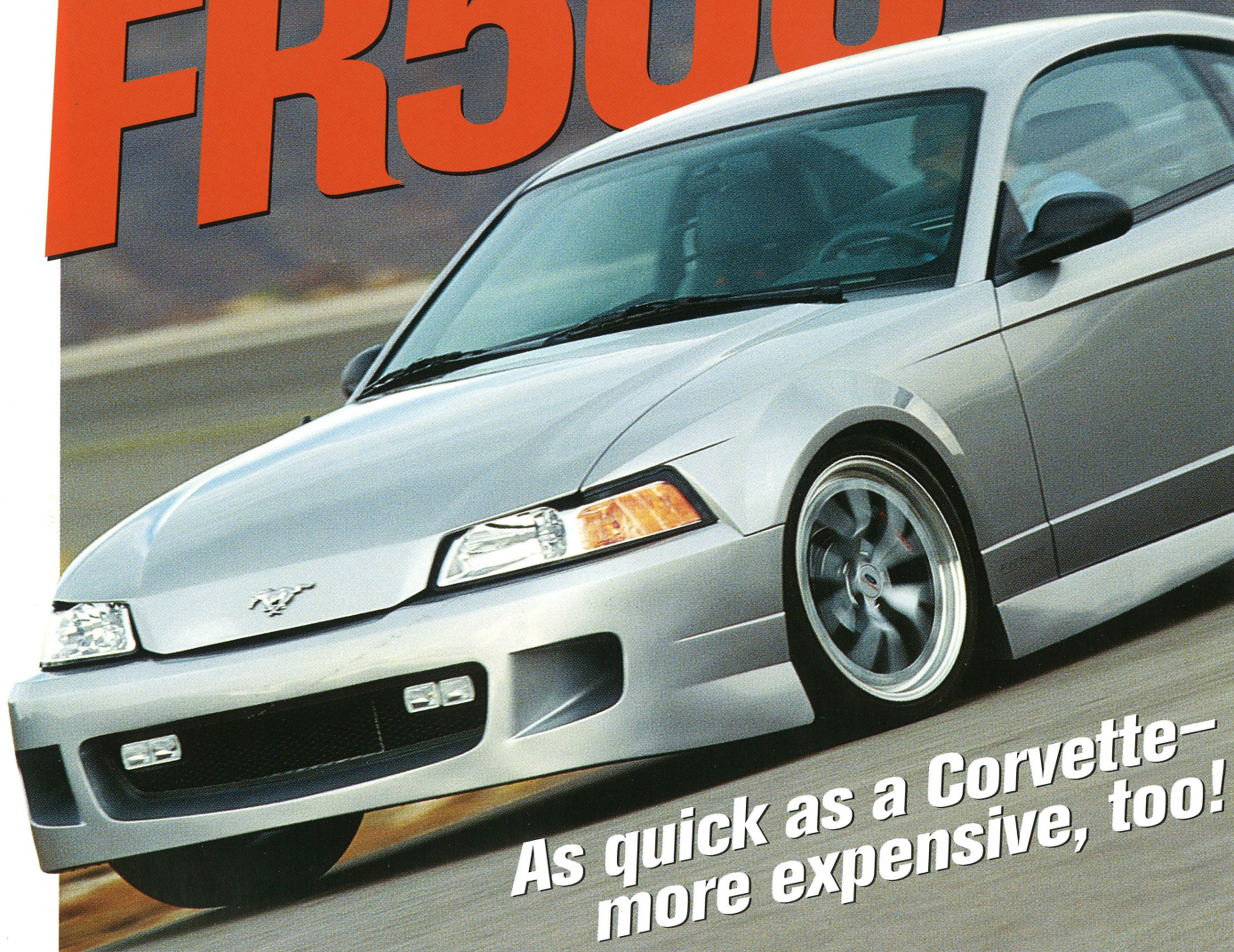
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bumped the compression ratio from 9.5:1 to 11.1:1. An electrically driven supercharger was installed. This novel device, from Turbodyne Technologies, is essentially a turbocharger with an impeller driven not by exhaust gas but by a brushless DC electric motor. The Turbopac 2500 is switched on at wide-open throttle and provides a maximum of 3.5 pounds of boost that trails off as engine speed rises. The students estimate the V-8 to be good for about 360 hp.

The Nebraska truck had a prototype Delphi catalytic converter that Rube Goldberg would have appreciated. It has a vacuum-insulated wall filled with an aluminum-silicon-zinc alloy that melts as the catalyst heats up. When the truck is turned off, the alloy cools very slowly as it solidifies, preserving the cat's operating temperature for up to four days. The transmission was rebuilt with stronger clutch packs and a Kevlar band. A Transgo shift kit was installed for firmer shifts. The truck was finished in a coat of DuPont Chroma-Lusion paint—the bed and cab in True Blasberry Prizm and the doors and hood in Pure Fire Prizm.

The Cedarville College Silverado lacked the visual punch of the Nebraska truck. But it made up for it under the hood. Like their Nebraska counterparts, the Cedarville engineers Corvetted the V-8, boring it to 5670cc and specifying a 10.6:1 compression ratio. But they went even fur-

ther, installing a forged steel crankshaft, Corvette connecting rods, and stainless-steel valves with titanium springs operating in ported and polished heads. Then they socked on twin AiResearch turbochargers blowing 5 psi of boost through a single intercooler. The result is 480 horsepower.

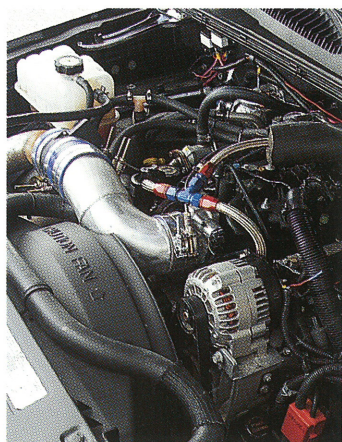
The transmission was blueprinted and subjected to a similar strengthening program, and a carbon-fiber driveshaft was fitted to reduce rotating mass. A distillation system was designed to separate out emissions-friendly fuel, and glow plugs were installed in the manifold to heat intake air. An electrically heated catalyst was also included to lower cold-start emissions. It caused excessive back pressure after the engine was warm, so the engineers incorporated a bypass valve to divert exhaust to a larger conventional catalyst, allowing the engine to make full power.

Both trucks drove with a surprising degree of refinement. The electric Turbopac supercharger in the Nebraska truck operated transparently, except for its obvious boost to acceleration. It helped rush the Nebraska truck to 60 mph in 8.1 seconds, 1.6 seconds quicker than a stock

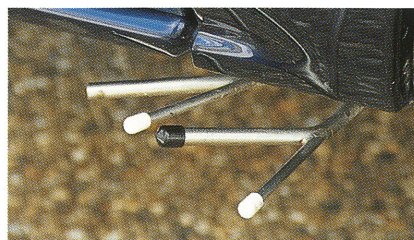
Silverado we tested that weighed 567 fewer pounds. The Cedarville truck was, well, more of an extrovert. It could restripe the pavement at the drop of the throttle and rocket to 60 mph in a mere 5.6 seconds, all the while emitting a bellow that would make a Corvette owner green with envy. To be fair, the Cedarville engineers had help from an unlikely source. Among the many sponsor decals on the Cedarville entry was one that read "Lingenfelter Performance Engineering."

In the competition at Milford, the Cedarville entry took top honors in acceleration. When the other tests were figured in, the judges scored this entry ninth overall. The Nebraska Chevy took prizes for Best Ethanol Conversion and Most Innovative Component (for the phase-change catalytic converter). The Nebraska team drove away with sixth place.

GM admits the Ethanol Vehicle Challenge is a great recruiting tool, and challenge sponsors say 64 percent of the graduating seniors who participated in the '98 event found jobs in the auto industry. Next year's challenge is already scheduled, with one more batch of new Silverados.



acceleration, seconds			top speed, mph	braking, 70-0 mph, feet	roadholding, 300-foot skidpad, g	C/D-observed fuel economy*
street start, 5-60 mph	top gear, 30-50 mph	top gear, 50-70 mph				
5.7	2.6	3.5	98 (governed)	208	0.70	6
8.5	4.4	5.6	96 (governed)	208	0.66	9
9.5	4.4	5.9	96 (governed)	207	0.70	10



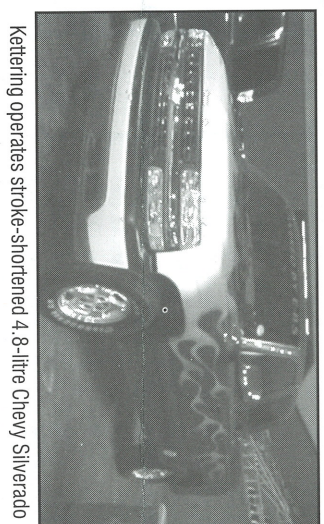
No, they aren't curb feelers. They're emissions-test pipes to monitor exhaust gas upstream and downstream of the catalytic converter.



WINTER
2000

Challenge NEWSLETTER

Kettering keeps on truckin' with smallest engine



Kettering operates stroke-shortened 4.8-litre Chevy Silverado

Last year's 3rd place Ethanol Vehicle Challenge contestant, Kettering University of Flint, MI., hopes to be in 1st place when this year's event is over — and plans on doing it all with the smallest engine.

This 25-member Challenge team, hailing from a city of great historical significance to competition Headline Sponsor, General Motors, has opted for a 4.8 litre, shortened-stroke version of the standard 5.3-litre, V-8 block engine found in each of the Chevy Silverados provided by the motor vehicle company.

"We're very fond of the 4.8 litre configuration," states Kettering team member, electrical engineering student, Kyle Schwulst. "We're the only team that runs one," he says, proudly noting too, that the truck was still the 2nd fastest entrant in the '99 competition.

"We're pretty happy with the power we can make out of our little 4.8," which is a real life-saver for Kettering, because it allows a bigger point total, once the rewards are factored in from having a smaller engine.

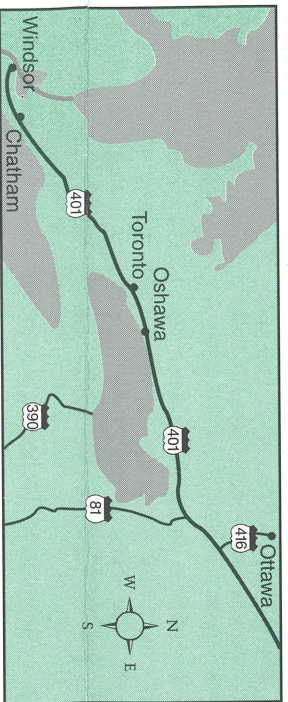
"The biggest area is emissions," says Schwulst, "because we get really great volumetric efficiencies with the 4.8 litre and that's really why we chose to do that (reduce engine size)."

Kettering came in 5th in emissions in 1999. "We could have done better," comments Schwulst. "This year, we will do better."

Being able to work on the same vehicle in 2000 is a big help, say team members, allowing refinements on what worked well last year and engineering of new systems to replace less productive ones.

A busy summer was also had by UNL touring rural Nebraska, including press conferences with Gov. Mike Johanns, a picnic with Sen. Bob Kerry, plus state fairs, harvest days and auto shows.

"The tour was very rewarding," comments Clark Otte, "since we were able to show many people that ethanol is a wonderful alternative to gasoline."



Y2K Ethanol Vehicle Challenge toughest yet

Second year on the same vehicle, and everybody knows what their competitors did last year: Throw in a big 20° F drop in Cold Start temperature and what you've got is the makings of the toughest Ethanol Vehicle Challenge yet.

Apart from pre-submitted design reports and pass/fail safety inspections, the 14 teams assembled in Canada's capital on May 13 will compete in the following events:

- **Trailering Fuel Economy**, May 13-14: On-road fuel mileage measured hauling a trailer with 6,000 lbs of ballast along a route into Quebec's Gatineau Hills north of Ottawa.
- **Emissions Testing/EPA Fuel Economy**, May 15-16: On a FTP cycle, total hydrocarbons, methane, carbon monoxide, oxides of nitrogen, carbon dioxide and aldehydes/ketones will be measured at Environment Canada's River Road Laboratory in Ottawa. Highway fuel economy testing on the U.S. Federal HWFET Schedule will follow.
- **Cold Start/Driveability**, May 15-16: After a minimum 12 hours of refrigeration at 0° F, each truck's start time will be monitored, after which warm-up

driveability will be assessed on a chassis dynamometer at Environment Canada.

- **Acceleration/Noise**, May 17: Elapsed time and maximum speed over a quarter-mile will be measured at Luskville, Que. dragway, near Ottawa. While there, decibel-level measurements will be taken, not to exceed Federal standard of 80 dB.
- **On-Road Fuel Economy**, May 17: Fuel mileage will be determined on a 210 km trip from Ottawa to General Motors of Canada in Oshawa, Ont. (See map above).
- **Oral Presentations**, May 18: While at GM, each team will highlight for a panel of industry experts their conversion, fuel economy, emissions, cold start, driveability and performance enhancement strategies.
- **Design and Appearance**, May 18: All vehicles will be displayed at GM's Oshawa Assembly Plant. A panel of judges will question each team on their E-85 conversion. Simultaneously, a separate panel of judges will assess vehicle appearance.
- **Off-Road Course**, May 19: Handling qualities are assessed along an off-road course in Southern Ontario.

Innovative Nebraska looking for even greater success in 2000



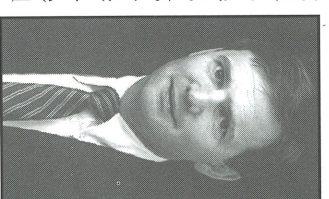
The University of Nebraska-Lincoln (UNL) showed some significant improvements in the 1999 Ethanol Vehicle Challenge over the 1998 event — rising from 12th to 6th overall and capturing both the Most Innovative Component and Best Ethanol Conversion awards.

"And we'll do better in 2000," says Team Leader, Clark Otte, whose 25-member UNL Mechanical Engineering squad under the guidance of faculty advisors, Dr. William Weins and Dr. Alexander Peters, has replaced 75% of its members this time around.

Too numerous to name, the 25-member Nebraska team has 75% new membership. Team Nebraska is particularly proud of its 1999 innovation award given for a phase-change, vacuum-insulated, catalytic converter. "It worked really well in reducing cold-start emissions," notes Otte, "and will be improved upon in 2000."

UNL also pioneered platinum sputtered pistons as a means of introducing platinum catalyst into the combustion chamber.

Ethanol Challenge dispells E-85 myths



Entering into its third year, the Ethanol Vehicle Challenge has gone a long way in dispelling historic concerns regarding the 85% ethanol blended fuel's utilization.

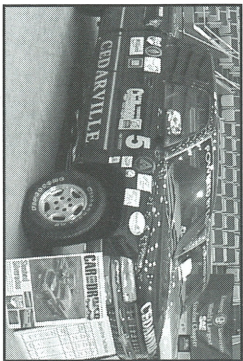
Fuel efficiency has been impressive, with many Challenge teams matching or exceeding gasoline fuel efficiency — this, despite the fact that ethanol contains less energy. Last year, for instance, the winning team's performance was 10.7% greater than its gasoline counterpart.

"The Challenge has clearly demonstrated E-85 optimized vehicles can be significantly more energy efficient than gasoline models," says Eric Vaughn, President of the Renewable Fuels Association in Washington, a major sponsor of the competition.

Equally impressive have been emission results with Challenge teams having shown they can surpass U.S. Federal Tier 1 emission levels. In 1999, several met LEV (Low Emission Vehicle) standards (See reverse)

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Cedarville proud of extraordinary effort

Without the possibility of earning a single course-credit for their efforts, a 25-member engineering team from western Ohio's Cedarville College will put in another strong effort in the upcoming 3rd Ethanol Vehicle Challenge.

Ninth overall in 1999, with the best acceleration of the bunch, the Cedarville group's Year 2000 plans include making use of excess power, improving efficiency and installing a more robust emissions control system.

Commenting on the two-year aspect of this year's Challenge, the team's engineering faculty advisor, Chuck Allport, says, "These vehicles are so complex and smart, and so much is hidden in the proprietary software, that the first year is just a battle to gain a basic understanding and implement a modification design."

"The second year," adds Allport, "allows more time for testing, component interaction and tuning."

Allport believes the Ethanol Vehicle Challenge is just that — a real challenge. "It is a set of real, very difficult problems, that takes time most engineering students don't have. It requires pushing the technical envelope to try and implement components that haven't yet been proven."

However, it is a challenge, that Cedarville students have risen well to in the past. In 1998, they were the first to use an electronic supercharger and, in 1999, they tried inter-cooled turbos, an engine configuration not normally found on this type of vehicle.

Publicity hounds to be sure, the team has visited many state fairs and auto shows — most recently the prestigious Detroit Auto Show. They've also been featured in several publications, the *Ohio Country Journal*, *Dayton Engineer and Car and Driver Magazine*.



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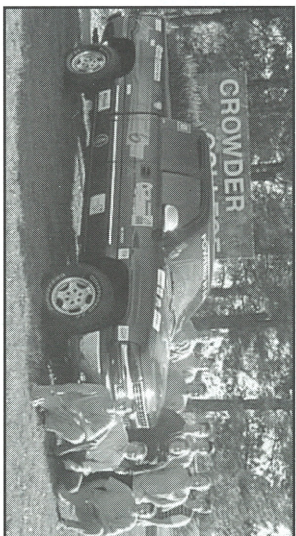
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Crowder's emissions crunching may return top fuel economy award

With just a 30% turnover from last year's Ethanol Vehicle Challenge, the 10-member Crowder College team from Neosho, MO hopes to have enough experience on board this year to substantially improve their emissions performance — an area where a poor showing kept them from the Top Fuel Economy Award in 1999.

In the end, Crowder came in 10th overall, "But we would've received 1st place for on-road fuel economy and EPA fuel economy, if not for failing the emissions test," comments team member Deanna Dozier.

Such will most certainly not be the case this time, though, she assures, because "We're spend-



Standing: Billy Walker (l), Nate Harvey, Clark Patrick, Chris Davis, Chris James, Garmon Alger, Deanna Dozier, Sherry McCormack (FA), Kneeling: Gary Hurst, Eli Bryant (FA), Ryan Cochran.

ing lots of time on the things we didn't have time for in the 1999 round." The whole project operates under the helpful guidance of Dr. Eli Bryant of Crowder College's Automotive Technology Department.

Team members report, that apart from raising money, one of the biggest challenges of the competition is that with a new

California squad hopes hard work will see return of First Challenge results

California's entry in the 3rd Ethanol Vehicle Challenge is piloting-up the work hours in an effort to regain a much-coveted top-five finish that they attained in the 1st Challenge.

Having come in fourth overall in the 1998 event, the University of California-Riverside (UCR) team is 15 members strong this time around, and despite being an all rookie group they say they will nevertheless give a good accounting of themselves.

"We've put in a tremendous amount of effort so far," comments team leader, Gary Nichols. "We've established goals for ourselves,

with refinements from the previous team's decisions and components — and so far we are very well ahead of schedule."

Working under the

auspices of the university's College of Engineering - Centre for Environmental Research and



California: Sean Lyons (l), Preston, Roach, Takeshi Furuya, Martin Tsai, Chad McCormack, Russ Messenger, Ryan Pak, Jayme Anderson, Tyler Pilgeram, Marc Chables, Simon Ghosli, Gary Nichols

Technology, the team has undertaken "a rather extensive re-design for the 2000 Challenge," says Nichols, "but we foresaw that from the beginning."

Eager to credit faculty advisor, Dr. Kent Johnson, with a lot of very valuable assistance, the team

Kansas team playing enthusiastic catch-up

The 1999 University of Kansas (UK) Ethanol Vehicle Challenge team blew the engine out of their



Kansas: FA Dr. Robert Sorem (l), Rusty Zimmerman, Mike Swiford, Jason Mullins, Bryce Baker, Bassam Delbany

Chevy Silverado en route to the competition at GM's proving ground in Milford, Michigan.

This unfortunate set of circumstances has left this year's team with some "catching up to do."

"We're basically a year behind," says team leader, Rusty Zimmerman, "but we've got a great bunch of guys this year, so we'll give it a good try."

An all new 11-member team from the university's Mechanical Engineering Department spent the better part of the autumn going over what went wrong last year, explains Zimmerman.

The previous group had supercharged the 5.3 litre V-8 engine and apparently had it "running great" by the time they left, but only got as far as St. Louis.

A replacement motor was ac-

quired, but there was little or no time left to adapt it properly — so the new team pretty well starts with a clean slate in 2000.

Christmas break was the first extended time the entire group was able to work on the project, comments the team leader. Since that time, there's been one or more members working on the truck every day.

On the public relations front, the University of Kansas team will again be attending one of the midwest's bigger auto shows this year — being held in March at Bartle Hall in Kansas City, Missouri.

Zimmerman and his 11-member team are not at all discouraged by the fact that other Challenge teams are probably ahead of Kansas at this point.

"We're getting a lot of support from our faculty advisor, Dr. Robert Sorem, and others, so I think we should do all right."

engine design it's more difficult to find aftermarket parts.

This is especially the case with a lack of funds, the need for which has sent the Crowder camp on a lot of public relations outings this past summer.

The vehicle was on display in the Missouri Corn Growers booth at the Missouri State Fair in Sedalia, as well as the Ozark Empire Fair in Springfield, two auto shows in Neosho, plus two Neosho parade appearances in the fall and at Christmas.

Team co-captains, Gary Hurst and Clark Patrick, found it "pretty neat to be parked amongst several race cars at some of the events."

leader adds that, "There won't be anything radically different from what's been submitted in the past, but we expect that what we do submit will be of a very high quality."

Challenge officials got a sense of the innovative capacity of past UCR teams at the 1998 Ethanol Vehicle Challenge.

This is when they were one of the first universities to introduce the use of small distillation columns as a means of enhancing cold-start capability.

"Overall, 85% ethanol blended fuels have turned out to be excellent," concludes Nichols. "It appears that based upon modest changes we can get an E-85 vehicle to perform equally or better than a gasoline vehicle."

E-85 myths dismissed

(Continued from front)

and in 2000 the same teams will strive to achieve ULEV (Ultra Low Emission Vehicle) status.

Students also made significant cold start improvements with the Malibus in the 1998 Ethanol Challenge and continue to make gains with the Silverados.

"These students are making a valuable contribution to the development of E-85 as an alternative fuel," Vaughn comments, "showing that, when using it, vehicles can perform as well or better and achieve improved fuel efficiency and emissions reduction over gasoline-powered models."

Flint Journal Jan. 20, 2000



JOURNAL PHOTO / JANE HALE

Students at Kettering University modified this Silverado truck to run on a mix of ethanol and gasoline. The truck is on display at the Detroit auto show.

Kettering University test truck mixes ethanol, gas technology

By James M. Miller
JOURNAL BUSINESS WRITER

DETROIT - Among the exhibits at the North American International Auto show is a pickup modified by students at Kettering University in Flint.

The four-wheel drive 1999 Chevrolet Silverado - modified to become sort of a rolling laboratory - is part of the Ethanol Vehicle Challenge display. The competition puts teams of university students in new trucks they have modified to burn E-85, a mixture of 85 percent ethanol alcohol and 15 percent gasoline.

In last year's challenge, the Kettering team finished third overall. Team members will use the same truck to compete in this year's version, scheduled for spring in Canada.

Kyle E. Schwulst, one of three team leaders on the Kettering project, is responsible for securing sponsors who will help pay the team's expenses.

He said Kettering is one of four colleges with trucks in the display on the lower level of the Cobo Center, where the auto show continues through Sunday. Last year, he said, the Kettering team exhibited a Malibu at the show.

Schwulst said team members will be at the show to talk about the competition. Kettering alumni also will be on hand to try to attract new students to the university - and to the annual challenges, which give engineering students hands-on, problem-solving experience.

In the 1999 competition, 14 vehicles were eval-

Kettering is one of four colleges with trucks in the display on the lower level of the Cobo Center, where the auto show continues through Sunday.

uated over a five-day period at General Motors' Milford Proving Grounds. This year's event will be more challenging, taking place at a series of locations as the 14 teams make their way across Canada.

Schwulst said the team is using the same engine - a supercharged 4.8-liter V-8 - but it has been slightly rebuilt and modified. One change is the use of a quieter supercharger.

Last year's E-85 team consisted of 32 members. Membership is voluntary and considered an extracurricular activity.

The team last year finished first in off-road handling competition and second in the acceleration contest, finishing the quarter-mile in 15.4 seconds by going 97 mph. Its emphasis was not on a stock truck, and it did better at towing and acceleration.

James M. Miller covers automotive and business issues. He can be reached at (810) 766-6318.

Labor lead celebrate membersh

THE ASSOCIATED PRESS

WASHINGTON - Labor leaders on Wednesday celebrated the largest increase in union membership in more than 20 years, saying they reversed a downhill slide by appealing to white-collar workers.

The number of union members was 16.3 million in 1999, an increase of 265,000 workers from the year before, the Department of Labor's Bureau of Labor Statistics reported. But while the country added 2.7 million jobs last year, the overall percentage of workers who carry a union card remained at 13.9 percent.

Nevertheless, union leaders said the numbers will translate into more political clout for organized labor in the presidential election.

"In the year 2000, you're going to see the largest and most significant activity that grassroots work-

To: Phil Kling 8-274-1804

Kristen DeLaRosa 512-481-9043

Mark Maher 3-3001

From: Jim Schell, GM Truck

Date: Jan. 24, 2000

*CC: Angela Grof, Cindy Svestka
Trans: V. Dierker, Tim Rosa

Warner-Lambert shops for better bid

Warner-Lambert, the pharmaceutical giant, is shopping for a better bid to acquire private sector workers.

It is too early for unions to de-

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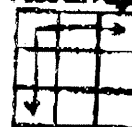
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Photo on Page



Partnership engineers a cleaner future

Students from Canada and the U.S. will cooperate in the Ethanol Vehicle Challenge 2000. Two teams, one made up of students from the University of Alberta and the University of Texas at El Paso, the other from Minnesota State University and the University of Windsor, will take part in the third and final year of the Ethanol Vehicle Challenge.

Engineering students have been competing in alternative fuels competitions for 10 years — the past three challenges have been specifically aimed at ethanol fuel.

"The students are gaining hands-on expertise and experience in ethanol, an important contributor to our effort to combat climate change," said Minister of Natural Resources Ralph Goodale. "To succeed in the knowledge economy, we must be prepared to innovate, quickly adopt the latest technology, invest in new skills, create ideas and put those ideas to work. This Challenge accomplishes several of these objectives, and helps build a stronger foundation for the use of cleaner transportation fuels."

Student teams have just six months to modify their trucks before gathering to compete in the 2000 Ethanol Vehicle Challenge from May 13 to 20, 2000. The competition consists of more than 10 technical events at various locations throughout Ontario, including Natural Resources Canada facilities in Ottawa and General Motors of Canada facilities in Oshawa.

Real-world issues

Students will tackle real-world engineering issues and incorporate cutting-edge technologies skills they may not gain in a traditional classroom setting. Each team must re-engineer a Chevy Silverado 4x4 pickup truck to run on E-85, a blend of 85% ethanol and 15% gasoline.

Like automakers today, the students will struggle to balance environmental concerns with the performance, cost and convenience that customers expect. Teams are expected to keep these goals in mind while refining designs to reduce the Silverado's emissions, increase its fuel efficiency and improve its overall performance.

"General Motors of Canada is delighted to be a key sponsor for this final year of the Ethanol Vehicle Challenge," said Joyce Wakefield, vice-president of corporate and environmental affairs at General Motors of Canada. "This challenge provides real-world training for our future engineers while supporting General Motors of Canada's commitment to create clean, efficient vehicles that meet customers' expectations. We see this year's challenge as a sort of 'homework' since the drive route passes through Oshawa, the birthplace of the Chevrolet Silverado pickup trucks used in the competition."

The Ethanol Vehicle Challenge is a co-operative effort among the U.S. and Canadian governments, academia and the automobile, ethanol, agriculture and petroleum industries. Sponsors include Natural Resources Canada; U.S. Department of Energy; General Motors and General Motors of Canada; Environment Canada; the U.S. and Canadian Renewable Fuels Association; Illinois Corn Marketing Board; the Ontario Ministry of Agriculture, Food and Rural Affairs; Petro-Canada; the Ontario Corn Producers Association; and IOGEN Corporation.

This is the final year for the Ethanol Vehicle Challenge. The challenge will continue next year using other alternative energy sources, such as natural gas and electricity.

— Canada Newswire

To: Jim Schell ✓
Phil Kling ✓
Lynda Palombo ✓

Kristen
From Angela
2 pages

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Jeff Passmore ✓
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Students to design ethanol Silverados

Competition draws teams from across North America

Engineering students from Canada and the U.S. will compete in the Ethanol Vehicle Challenge 2000, which runs next May 13-20.

Each team must re-engineer a Chevrolet Silverado 4x4 pickup to run on E-85, a blend of 85 per cent ethanol and 15 per cent gasoline.

Students will seek to cut the full-size truck's emissions, increase its fuel efficiency and boost road performance.

The overall objective is to balance environmental concerns with the performance, cost and convenience considerations that manufacturers must consider within the marketplace.

Students have six months to modify their Silverados. The truck is built in Oakville, Ford Wayne, Ind.; and Pontiac, Mich.

Making up the Canadian contingent will be students from the University of Waterloo, plus two new entrants for 2000. The entrants are from the University of Windsor (who will team a team with Wisconsin State University) and the University of Alberta (combining efforts with the University of Texas at El Paso).

Fourteen teams will participate in the challenge. The event is supported by the Canadian and U.S. governments, students and the automobile, ethanol, agriculture and petroleum industries.

Engineering students have been competing in alternative-fuel events for 10 years. The 2000 round will be the third and final year staged specifically at ethanol, which is derived from agricultural biomass.

The competition will continue next year using other alternative energy sources, such as natural gas or electricity.

"The students are gaining hands-on experience and exposure to ethical

an important contributor to our effort to combat climate change," federal Natural Resources Minister Ralph Goodale said in a statement.

Next May's competition will consist of more than 30 technical events at various locations throughout Ontario, including Natural Resources Canada facilities in Ottawa and the GM center in Oakville.

Tyger Whitefield, a GM of Canada vice-president, said his contest "provides real-world training for our future engineers while supporting the end Motors of Canada's commitment to create clean, efficient vehicles that meet customers' expectations."

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Partnership engineers a cleaner future

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Students will tackle real-world engineering issues and incorporate cutting-edge technologies skills they may not gain in a traditional classroom setting. Each team must re-engineer a Chevy Silverado 4x4 pickup truck to run on E-85, a blend of 85% ethanol and 15% gasoline.

Like automakers today, the students will struggle to balance environmental concerns with the performance, cost and convenience that customers expect. Teams are expected to keep these goals in mind while refining designs to reduce the Silverado's emissions, increase in fuel efficiency and improve its overall performance.

"General Motors of Canada is delighted to be a key sponsor for this final year of the Ethanol Vehicle Challenge," said Joyce Wakefield, vice-president of corporate and environmental affairs at General Motors of Canada. "This challenge provides real-world training for our future engineers while supporting General Motors of Canada's commitment to create clean, efficient vehicles that meet customers' expectations. We see this year's challenge as a sort of 'homecoming,' since the drive route passes through Oshawa, the birthplace of the Chevrolet Silverado pickup trucks used in the competition."

The Ethanol Vehicle Challenge is a cooperative effort among the U.S. and Canadian governments, academia and the automobile, ethanol, agriculture and petroleum industries. Sponsors include Natural Resources Canada; U.S. Department of Energy; General Motors and General Motors of Canada; Environment Canada; the U.S. and Canadian Renewable Fuels Association; Illinois Corn Marketing Board; the Ontario Ministry of Agriculture, Food and Rural Affairs; Feed-Canada; the Ontario Cereals Producers Association; and IOGEN Corporation.

This is the final year for the Ethanol Vehicle Challenge. The challenge will continue next year using other alternative energy sources, such as natural gas and electricity.

— Canada NewsWire

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