

SUMMER 2012 VOL. 86 NO. 2

MISSOURI  
**S&T**  
MAGAZINE

# *Hot* *and* *Cool* RODS / CARS

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'UNTIL WE HAVE  
FLYING CARS'

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GROOVIN' IN  
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HOMECOMING  
2012

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## ◀ ON THE COVER

George, ME'74, and Joy Stegner bought their first Mustang in the 1990s. Today they own a custom-built garage full of them.

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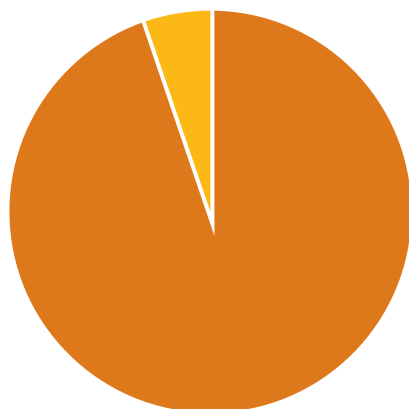
Square feet in the proposed design of S&T's new chemical and biological engineering building, James E. Bertelsmeyer Hall. (Groundbreaking information on page 14).

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Students vying to be the St. Pat's Queen of Love and Beauty. **Emma Johannes**, a sophomore in information science and technology, was chosen.

1,044

Seniors who earned degrees in May. S&T held two commencement ceremonies to accommodate the largest graduating class to date.



95

Percentage of student organization leaders who reported in a recent student life survey that they are more productive leaders because of their involvement as officers of their respective organizations.

35

Students dubbed Student Knights of St. Patrick during the 104th annual Best Ever celebration. See a list online at [bit.ly/knights2012](http://bit.ly/knights2012).

## MISSOURI S&T MAGAZINE

Produced by the University Advancement Division  
of Missouri University of Science and Technology.

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Dick Elgin, CE'74, MS CE'76, with his 1967 Morgan Plus Four (left) and 1976 Alfa Romeo GT Junior (right).

#### Dear fellow alumni:

This issue of *Missouri S&T Magazine* features a common and widespread affliction. It affects both men and women and can begin at any age. It is very common among baby boomers. There is no known cure.

This affliction, which is enjoyed by millions of Americans, is cars. "Car guys" and "car gals" are the focus of this issue.

Everyone needs a hobby. Hobbies bring enjoyment, build knowledge, reduce stress and garner pride. In the car hobby, the passion of one generation frequently passes on to the next. It is a hobby that the whole family can enjoy. In this issue, you will read about Miner alumni afflicted by the car bug.

For some, the hobby involves maintaining and caring for grandma and grandpa's great old car, or getting a "barn find" running. Others enjoy participating

in one of the many popular car tours for all types of vehicles over the most scenic routes in America, or even a form of motorsport racing. Some have small (or large) car collections. Others enjoy showing off their beloved car — whether at the local "shine and show" or a Saturday morning "cars and coffee," or the ultimate, showing a car on the lawn at Pebble Beach. This wonderful affliction manifests itself in many ways.

Please enjoy this issue and the fascinating stories of Miners and their cars. And get out there and enjoy yours. At this year's Homecoming, the Miner Alumni Association will bring these stories and pages to life. Bring your car to Homecoming and show it at the Miner Cruise-In, which will be held before the football game on Saturday, Oct. 13. See you there. *Vroom, vroom.*

#### Dick Elgin

CE'74, MS CE'76

guest editor

1967 Morgan Plus Four  
1976 Alfa Romeo GT Junior  
1967 Mini Cooper S  
1967 TR4A  
1963 Austin Healey Sprite

## EDITOR'S TOP FIVE PICKS

- 1 After this issue, *Missouri S&T Magazine* will change its publishing schedule. See page 36 for details.
- 2 Plan a road trip to campus in October for Homecoming 2012: Destination Rolla. The schedule of events is on page 18. We've even included a postcard reminder to hang on your fridge.
- 3 What's your favorite car tune? Check page 4 to find out if yours made our list of the best car songs ever, according to Miner alumni. Join the conversation. Watch for a different question in each issue.
- 4 The power grid of the future will be a lot like the Internet, complete with the threat of terrorists and other malicious folks. Turn to page 10 to learn what S&T's cyber-security experts are doing to protect the grid.
- 5 **John Weaver**, ME'09, quit his job to hike the Appalachian Trail. Turn to page 42 to read his story.

Q

## What are your favorite car songs?

Chances are, even if you don't own a Hot Rod Lincoln or a Little Deuce Coupe, you still have a favorite song about cars.

Check out the *Missouri S&T Magazine* playlist at [grooveshark.com/MissouriSandT](http://grooveshark.com/MissouriSandT) for alumni and staff suggestions.

Watch for the next question in your Miner Alumni Association eNewsletter.

A

**No Money Down**, Duane Allman and the Allman Brothers Band. Because if that car existed, it would be Rolla-style "high technology" with Rolla's laid back country rock sound.

**Bruce Bowermaster**, MinE'80  
Wood River, Ill.

My favorite car song is **Mercury Blues** by Alan Jackson. I'm crazy about the Mercurys I've driven for the past 26 years, first a Mercury Lynx from 1968-1999 and a Mercury Topaz from 1999 to the present. These have been good, reliable cars and inexpensive to operate. Too bad the Mercury car line has been discontinued.

**Donna Riggs**, Math'94  
Rolla, Mo.

**I Can't Drive 55** by Sammy Hagar. I started driving during the 55 mile per hour maximum speed limit and to this day, I grumble when I encounter interstate highways that are still posted at 55 or 65 instead of 70.

**Curt Schroeder**, CSci'88  
Bicester, United Kingdom

"Son you're gonna drive me to drinkin' if you don't stop drivin' that **Hot Rod Lincoln**." Recorded by many.

**Len Stout**, EMgt'70  
Orinda, Calif.

**Jerry Was a Race Car Driver**, Primus, and **Dead Man's Curve**, Jan and Dean.

**Scott Preston**, CE'97  
Elizabethtown, Ky.

**Rev It Up and Go Go**, Jesse James Dupree and Dixie Inc.

**Derek Snyder**, CSci'11  
Platte City, Mo.

Even though it was before my time, I always liked **Beep Beep** by the Playmates.

**Arnold Hart II**, ChE'03  
Florissant, Mo.

**Take Me for a Ride in Your Car**, Peter, Paul and Mary. This one used to play quite often on the campus radio station in the mid-'60s, when the campus station was called KMSM, had studios in the "temporary military buildings" and ran a whole 10 watts at 88.5 FM.

**Conrad Otto**, EE'69  
St. Louis

\* **Editor's note:** Due to overwhelming response to our question, we had to limit the submissions included in this print edition. But you can find everyone's suggestions online at [magazine.mst.edu](http://magazine.mst.edu).

Email your answers to [alumni@mst.edu](mailto:alumni@mst.edu), or post to Facebook or Twitter, by July 1, 2012.



I am gravely concerned about a photo on page 17 of the Spring 2012 (Vol. 86, No. 1) Missouri S&T Magazine.

It appears that a student is using a grinder while holding the piece against himself. Not only is this action very dangerous but the student is not wearing a face shield to protect his eyes and face. I hope that this is not the sort of behavior that is taught, condoned, or even tolerated at the university. As an employer, this is not the type of behavior that I tolerate in any employee, let alone an aspiring engineer. Perhaps if the picture is as it appears, you should get back to the basics and start with safety!

**Michael X. Schlumpberger**, MinE'85, Lima, Ohio

Dear Mr. Schlumpberger,

Thank you for your comments regarding safety procedures within S&T's Student Design and Experiential Learning Center (SDEL). You very accurately assessed the safety issues in the photograph published in the Spring 2012 issue of Missouri S&T Magazine and I'd like to update you on the measures our staff has been taking to change the safety culture, not only among student design teams supported by the SDEL, but in the campus community at large.

The SDEL was established 12 years ago to support and grow multi-disciplinary teams, and as the center expanded so did our awareness of the importance of workplace

safety. For years, SDEL associate director and center co-founder **Paul Hirtz**, EMgt'95, MS EMgt'97, PhD EMgt'02, worked with Chancellor **Jack Carney**, Provost **Kent Wray** and other campus departments to identify and fund a position that would focus on workplace safety, not only for SDEL students but university employees as well. That goal was met in 2009 with the hiring of **Richard Dalton** as the SDEL shop and safety manager. At that point we began to implement an intensive effort to change the entire culture of SDEL operations.

We saw our upcoming move to the new Kummer Student Design Center as the perfect opportunity to mandate formal safety training specifically to prevent the kinds of errors you identified in the magazine photo. That training, required of any student to gain access to our work areas, covers general shop safety, basic machine shop, composite safety, lathe and mill operations, welding techniques, and electronics classes. All of these classes focus first on safety issues and how to properly use each piece of equipment. Students are even offered OSHA certification classes and first aid and CPR/AED training, which they may voluntarily take. We strive to hold the students using our facility to standards they will find after graduation.

The choice of the photo in question, taken a few years ago in the old shop facility, may seem unwise, but it was chosen for its striking visual impact and to highlight the differences between our previous operations and our current high standards. Our current facility was designed specifically to improve oversight of student work habits and reinforce proper safety habits so we could eliminate the kinds of problems you noticed. In the future we'll take a careful look at all of the images we use, in print or online, to be sure that the photos do not imply acceptance of unsafe work practices.

Sincerely,

**Roger LaBoube**

CE'70, MS CE'73, PhD CE'77  
Director, Student Design and  
Experiential Learning Center

**\* Editor's note:** Schlumpberger has accepted our invitation to speak to students about the importance of safety in the workplace.



**@AbbeyCampbell1**

Abbey Campbell, senior in  
mechanical engineering  
Jefferson City, Mo.

Trying to wire a circuit and write a program so I can go out for #50DAZE. Definitely what you call a #rollaproblem.

**@NathanAyres**

Nathan Ayres, NucE'07, Rolla

Gotta love watching fireworks from @MissouriSandT on your front porch. Thanks guys!

**@JaneseSilvey**

Janese Silvey, Columbia Tribune  
reporter, Columbia, Mo.

**@MissouriSandT** has a camp that lets kids blow things up.

Wish they'd had that when I was growing up here.

**@sanjay\_t555**

Sanjay Tadepally  
Hyderabad, India

Admitted ☺ Fall 2012! Really excited! Thank you so much. Looking forward to make the opportunity count.

To stay connected to your alma mater through these online social media resources, **search MissouriSandT** or follow the link through **mst.edu**.



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## MELISSA MORRISON: LOW-IMPACT DAY

*For 24 hours last fall, Melissa Morrison gave up some of her favorite things — chewing gum, toasted Pop-Tarts, the Internet and texting — all in an attempt to minimize her impact on the environment.*

The sophomore civil engineering major went without prepackaged foods, soda, elevators, television and computer games. She ate no meat, poultry, fish or seafood.

In other words, Morrison tried to do in 24 hours what author Colin Beavan attempted for a year.

Beavan is the author of *No Impact Man*, the book all 440 students enrolled in English 20 (Exposition and Argumentation) were assigned to read last year through Missouri S&T's One Book Program. This year's English 20 classes will also read the book. In it, the New York-based author chronicled his year-long "lifestyle experiment" to answer the question, "How truly necessary are many of the conveniences we take for granted but that, in their manufacture and use, hurt our habitat?"

Morrison's course was taught by **Fred Ekstam**. He challenged his students to attempt to follow Beavan's human guinea pig approach to low-impact living — but only for 24 hours — and then to write about the experience.

Morrison (pictured above at the Rolla Recycling Center) survived the day without many of the conveniences we take for granted. She also discovered that minimizing her environmental impact wasn't as hard as she thought it would be.

"When I first heard about the assignment, I thought it would be fun, but I also thought it might be kind of hard," she says. "It turned out to be easier than I'd expected."

"We use so many resources," Morrison says. "It showed me how much we could live without." ■



## ONE BOOK PROGRAM

The One Book Program connects new S&T students by giving them a common reading experience during their first year. For information on supporting the program, contact **Joan Nesbitt**, vice chancellor for university advancement, at 573-341-7808 or [nesbittj@mst.edu](mailto:nesbittj@mst.edu).

[onebook.mst.edu](http://onebook.mst.edu)

## FIRST IMPRESSIONS FORM FAST ON THE WEB

*As more people use the Internet to search for information, a user's first impressions of a website can determine whether that web surfer forms a favorable or unfavorable view of that organization, according to researchers at Missouri S&T.*

Eye-tracking research conducted by **Hong Sheng**, assistant professor of business and information technology, and **Sirjana Dahal**, MS IST'11, could help web designers understand which elements of a website's design are most important.

Sheng and Dahal enlisted 20 Missouri S&T students to view screenshots of the main websites from 25 law schools in the United States. The researchers chose law schools because that degree is not offered at Missouri S&T.

After each viewing of a website, the students were asked to rate sites based on aesthetics, visual appeal and other design factors. "The longer the participants stayed on the page, the more favorable their impressions were," says Sheng, whose specialty is human-computer interaction. "First impressions are important for keeping people on pages."

Sheng and Dahal found that seven sections of the reviewed websites attracted the most interest from users: the institution's logo, the main navigation menu, the search box, social networking links, the site's main image, written content and the bottom of a website. The participants spent an average of 20 seconds on each website.

Although use of color was not part of the eye-tracking study, participants indicated that it did influence their impressions of websites. The use of images was also found to be an important factor in web design. "You must choose your main picture very carefully," Sheng says. "An inappropriate image can lead to an unfavorable response from viewers." ■

Nick Lockwood, assistant professor of business and information technology, Sneha Pochinapeddi, a graduate student in information science and technology, and Hong Sheng track the way our eyes move around a website.



## FROM ELVES TO ANGELS:

### RESEARCHER STUDIES CHRISTIANIZATION PROCESS

During medieval times, the spread of Christianity was one of the most significant developments in Europe. From 400-1400 AD, societies slowly went from believing in giants and magic to being mostly Christian.

But how did missionaries manage to convert entire nations or groups of people? The popular answer is that leaders saw the benefits of unifying their land under the banner of Christianity. **Eric Bryan**, assistant professor of English and technical communication at Missouri S&T, wants to know more about the history of the conversion process among common people in Scandinavia.

"Try telling a medieval farmer that he can't worship his ancestral gods anymore, and he'll ask you how the crops will grow, who will take care of his children, and where will he go when he dies," Bryan says. "You'll be lucky if you don't find out what a sword in the gut feels like. Plenty of missionaries died very unpleasant deaths."

In order to study Christianization, Bryan spent the spring semester in Iceland. "It has a fairly homogeneous society and is separated from the rest of Europe, which helps reduce many of the variables that might interfere with a clear look at this particular cultural development," Bryan says.

The research is focused on the ways literature and folklore of the period portray things like death, churches, gender and mythological beings, like elves or angels. "If we can find evidence in sources from early, middle and late Christianization, then we can learn something about how belief changes over time," Bryan says.



## HONORARY KNIGHTS

Eight S&T alumni and friends kissed the Blarney Stone after St. Pat dubbed them Honorary Knights of St. Patrick during knighting ceremonies on March 16. **Thomas Markowski**, a junior in petroleum engineering, portrayed St. Pat. **Tom Green**, president and owner of Key Sport Shop in Rolla, was named Honorary St. Pat.

### 2012 HONORARY KNIGHTS

- **David Bernhard**, EMgt'92, technical sales representative for Seltec Sales Corp.
- **Dan Brown**, Missouri senator in the state's 16th senatorial district and longtime Rolla veterinarian
- **Charlotte Divincen**, executive staff assistant to the chancellor at S&T
- **John Eash**, AE'79, MS EMgt'90, director of F/A-18 production operations for The Boeing Co.
- **Greg Gelles**, professor and chair of economics at S&T
- **Jeanie Hofer**, Econ'90, director of international affairs at S&T
- **Bob Hribar**, senior laboratory mechanic in the mechanical and aerospace engineering department's machine shop
- **Kevin Mullally**, owner of Mullally Distributing Co.



## THE CHANCELLOR IS IN THE HOUSE

*Cheryl B. Schrader (pictured outside the Chancellor's Residence) began her new duties as Missouri S&T chancellor on April 2. Once on campus, she wasted no time representing the university to students, alumni and university leaders.*

Schrader spent the afternoon of her first day meeting with students, faculty and staff. On the second day, she was with alumni in Jefferson City talking to key legislators. Just a few days later, she attended her first meeting of the University of Missouri Board of Curators. By the end of May, she had also been inducted to S&T's Eta Kappa Nu honor society, met with the Missouri S&T Board of Trustees, attended several alumni gatherings, and presided over a groundbreaking ceremony for the campus's new geothermal energy system (see photo on page 12).

Schrader was named chancellor on Jan. 19. A former dean of engineering at Boise State University and former president of the IEEE Control Systems Society, with more than 10,000 members worldwide, Schrader is one of the few female engineers to ascend to the top leadership position of a U.S. college or university. She is the 21st leader of Missouri S&T in the campus's 141-year history.

"Cheryl has consistently been viewed as one of America's best engineering teachers, and she's also excelled in research and public service at the university, state, national and professional level," says UM President **Timothy M. Wolfe**.

During the formal announcement in January, Schrader told faculty, staff and students that she is "deeply honored" to be selected as Missouri S&T's next chancellor. "I choose to lead at institutions that are on the move," she says. "Missouri S&T's legacy and potential is truly remarkable. I see an innovative, results-driven academic and administrative leadership team — and very bright, capable students."

Schrader will be featured in the Fall/Winter issue of *Missouri S&T Magazine*. ■





## ◀ CAREER FAIR CONTINUES TO GROW

Career opportunities and employer relations hosted the Spring 2012 Career Fair on Feb. 21 with 178 employers in attendance. That's a 17 percent increase over last spring, and 29 of the employers were new. S&T students visited with more than 500 recruiters representing 29 states in hopes of landing a job, internship or co-op opportunity.

Prior to the Spring Career Fair, alumni recruiters were treated to a continental breakfast courtesy of the student alumni association, Students Today, Alumni Tomorrow (STAT), and Engineers Without Borders. A list of alumni in attendance is available at [magazine.mst.edu](http://magazine.mst.edu).



## ◀ NOBEL PRIZE WINNER VISITS S&T

Daniel Shechtman, professor of materials science at Technion-Israel Institute of Technology and the current Nobel Prize recipient in chemistry, delivered the 23rd A. Frank Golick Lecture in Materials Science and Engineering at Missouri S&T in February. Shechtman won the Nobel Prize for his discovery of quasicrystals.

Created in 1969 through a memorial fund established to honor **A. Frank Golick**, MetE'18, the series attracts nationally recognized metallurgical engineers to interact with the faculty and the students, and to present a lecture series.

### Distributed grid intelligence ▶

The smart grid of the future will allow homeowners and businesses to buy and sell power among themselves as easily as Internet users transfer files. The key is distributed grid intelligence, or DGI, that monitors all the homes and businesses in a neighborhood or even an entire community.

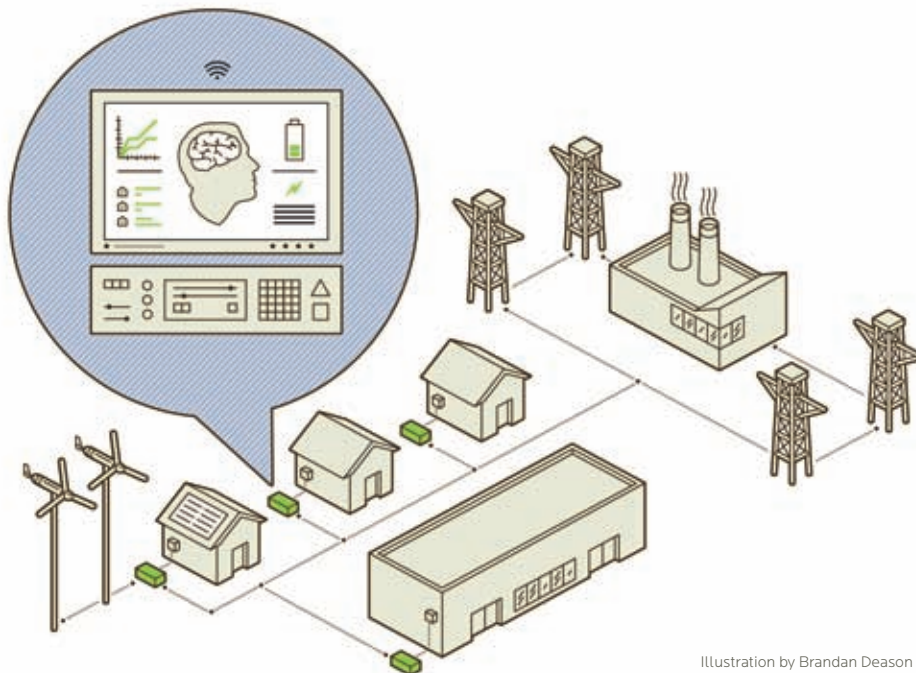


Illustration by Brandon Deason

## SMART AND SECURE

*In a new twist on cyber-security, S&T computer scientists work to protect the future power grid.*

Researchers working on a future power grid for the United States envision a network similar to the Internet. On this future smart grid, users and utility companies interact to share and swap energy from distributed systems, much like computer users tap into the web to transfer files.

But just as malicious Internet users can spread harmful viruses through computer networks, this future power network could be vulnerable to outages and other disruptions caused by terrorists or other attackers.

A small group of computer science researchers at Missouri S&T is trying to prevent such a scenario.

The S&T computer science department is one of only a few in the nation working on cyber-security issues for the smart grid. And the university, as a member of the National Science Foundation's FREEDM Systems Center, is among the nation's leaders in the field. Ultimately, the computer scientists' research could result in technology that stands between a major disruption and a secure source of electricity for businesses and homeowners.

It's a new twist on cyber-security, says **Tom Roth**, CSci'11, a Ph.D. student working on the project.

"We're usually concerned about who can access our data," Roth says. "But on the smart grid, we're not actually dealing with mainstream cyber-security. We're looking at what an attacker could do to the physical side of the system to compromise security. For instance, a malicious resident on a smart grid could affect the stability of the power network in such a way that it could cause a blackout."

"We're asking, 'Can an attacker figure out, from the information being released on the grid, what part of the network might be most stressed and most vulnerable to attack?'" Roth says.

Missouri S&T is one of seven universities involved in the NSF's FREEDM Systems Center, a nationwide effort established in 2008 to begin building the smart grid. The FREEDM (Future Renewable Electric Energy Delivery and Management) Systems Center is based at North Carolina State University.

The project's significant computer science component has to do with

something called distributed grid intelligence, or DGI. The effort is led from Missouri S&T by **Bruce McMillin**, professor of computer science. DGI is a crucial component for making the smart grid work. It is essentially the "brains" of the operation — the command and control center.

Working with McMillin are five graduate and Ph.D. students, one undergraduate student and one post-doctoral researcher, all from Missouri S&T. Faculty and their graduate students at institutions in Florida and Auckland, New Zealand, are also involved with this project.

Roth is funded through the FREEDM System Center Graduate Fellowship and fellow researcher **Michael Catanzaro**, a senior in computer science, is funded through the FREEDM Undergraduate Research Scholars Program. ■



More information about FREEDM is available at [www.freedm.ncsu.edu](http://www.freedm.ncsu.edu).



## BRIDGES IN MISSOURI

<b>23,945</b>	Total bridges
<b>42</b>	Average age in years
<b>4,071</b>	Structurally deficient
<b>17%</b>	Structurally deficient

*Data is per the Federal Highway Administration's 2012 National Bridge Inventory*

◀ Jeffery Volz (front) is looking for new lightweight and inexpensive materials to replace deficient bridges.

# BRIDGES THAT SHOULD LAST 'UNTIL WE HAVE FLYING CARS'

*With 17 percent of Missouri's bridges deficient and not enough funding available to repair and rebuild them, researchers at Missouri S&T are more determined than ever to develop innovative and inexpensive materials that can replace these structures.*

"A common saying for civil engineers is that we could build bridges that last forever, but we can't afford to," says **Jeffery Volz**, assistant professor of civil, architectural and environmental engineering.

The majority of the nation's 600,000 bridges were built nearly 50 years ago using traditional materials like steel, concrete and rebar. The strength of these bridges has been greatly reduced due to weathering, wear from vehicle traffic, de-icing chemicals and reduced maintenance.

Over the last 15 years, newer designs have called for replacing the concrete and rebar with fiber-reinforced polymers (FRP). But despite offering a longer life and

lower maintenance costs, fiber-reinforced bridges come with a higher price tag up front — nearly twice the cost of traditional structures — because the honeycomb structure is extremely expensive to construct.

That's where Volz sees an opportunity. Using a \$120,000 grant from the Missouri Department of Transportation and \$60,000 from the U.S. Department of Transportation, he and other S&T researchers are exploring how high-density polyurethane foam could eliminate the need for the honeycomb structures. Sandwiched between FRP facings, polyurethane foam is often used in cars, planes and prefabricated buildings.

Working on the project with Volz and his students are **K. Chandrashekhara**, Curators' Professor of mechanical and aerospace engineering, and **Victor Birman**, professor of mechanical engineering and director of S&T's Engineering Education Center in St. Louis. They're working with a formulation of polyurethane foam that can withstand compression beneath a truck wheel. By adding glass fibers to the polyurethane foam, it can withstand up to 1,000 psi.

"The foam and FRP panels offer the same cost as concrete but could live forever," Volz says. "It should last until we have flying cars and don't need bridges anymore." ■



## GEOTHERMAL GROUNDBREAKING

S&T officials broke ground April 17 on a new geothermal energy system that will save more than \$1 million a year and cut energy use in half. S&T Chancellor **Cheryl B. Schrader**, assisted by Joe Miner, flipped the switch for the ceremonial ground “drilling.”

## SCHOLARSHIP BANQUET

Miner Alumni Association scholarship recipients (pictured below) and their donors celebrated together on April 20. The evening was filled with recognition and fellowship as donors dined with the students who benefit from their generosity. About 140 students, alumni association directors, OGS members, donors and staff attended. An anonymous donor generously paid for students to attend the banquet.





## WHAT'S IN YOUR POCKET?

*Ronald Kohser has been keeping a close watch on coins during his career. According to Kohser, a professor of metallurgical engineering at Missouri S&T, it currently costs the U.S. Mint about 1.7 cents to make a penny and around 7 or 8 cents to make a nickel. The amounts include metal content, tools and dies, and labor.*

But that's not a cause for concern.

"The problem is when the value of the metal exceeds the face value of the coin," says Kohser. This happened in 1964, when the value of the quarter, which was 90 percent silver, exceeded the value of the coin. People started to melt down quarters for a profit. "The solution was to create a sandwich coin that contained a core of copper with a silver-appearing copper-nickel alloy on the outside," says Kohser, who adds that the same thing was done with dimes.

The penny has gone through several changes in constitution, according to Kohser. Shortly after World War II, pennies were minted from spent shell casings. For a while in the 1970s, the U.S. Mint began making pennies out of aluminum, but that idea was scrapped for various reasons. In 1982, the penny was changed to its current configuration of copper-plated zinc, resulting in a significant reduction in cost and a reduction in weight of almost 20 percent.

Now, it might make sense to eliminate pennies altogether. The down side is that most prices would tend to get rounded up slightly.

With the prices of metals on the rise in general, the U.S. Mint has been taking action. In 2006, it became a crime to melt pennies and nickels. "Both nickels and the older copper pennies have a metal value greater than the face value of the coins," Kohser says.

Last year, Concurrent Technologies Corp. was awarded a \$1.3 million contract to investigate more economical alternatives to the entire range of circulating coins. But Kohser says solutions are evasive. For instance, weight and materials are problematic when it comes to things like vending machines. And those are the kinds of problems that metallurgists will have to solve, while making sure the coins are also acceptable to the public. ■

## A PENNY FOR YOUR THOUGHTS?

Today a nickel costs more than it's worth. Here are the approximate metal values of U.S. coins per [coinflation.com](http://coinflation.com) (as of press time):



(Stock images)

### IS THE PENNY WORTH KEEPING?

Take this short survey and tell us what you think.

To take the survey, scan the QR code below with your smart phone or visit [bit.ly/pennypoll](http://bit.ly/pennypoll)





## BREAKING GROUND

### BERTELSMEYER HALL

Missouri S&T will break ground on the 68,500-square-foot James E. Bertelsmeyer Hall at 11th and State streets in April 2013. The building is named for **James E. Bertelsmeyer**, ChE'66, who made the lead gift toward the project. More than 50 other donors also contributed.

Watch for details about the groundbreaking in an upcoming issue of *Missouri S&T Magazine*.

## MAGNUS EARNS TITLE IX HONOR

### NAMED TO TOP 40 LIST OF WOMEN IN ATHLETICS

NASA astronaut **Sandra Magnus**, Phys'86, MS EE'90, was named to the Women's Sports Foundation's list of the 40 most influential women in athletics over the past 40 years. The list recognizes women who have made a significant impact on society after playing high school or collegiate sports in the 40 years since Title IX was enacted in 1972. Other honorees include Jackie Joyner-Kersey, Mia Hamm and Condoleezza Rice.

## ALUMNI ASSOCIATION

### HOSTS GRADUATION CELEBRATIONS

A record 250 students celebrated their graduation with the Miner Alumni Association at Grad Finale events on May 1 and 3. **Bryan Decker**, ChE'12, and **Kyle J. Cooper**, NuCE'12, each won a 32" LG HDTV generously donated by **Susan Watson-Hajjar**, CSci'83.

## SPORTS BY THE NUMBERS

12' 1 1/2"

School record-setting height cleared by **Rachel Ederle** in the pole vault. She broke the record twice during the 2012 outdoor season.

4

**Dan Hellwig's** finish in the pole vault at the NCAA Division II Outdoor Track and Field Championships.

Players in the history of the men's basketball program who have scored 1,000 points in their career, a mark reached by current Miner **Bryce Foster** — who also wears No. 23 — on Feb. 18.

23

191

Assists dished out by Lady Miner senior **Julie Meyer** over the last two seasons.

6

Consecutive New South Intercollegiate Swimming championship meets won by Missouri S&T's swimming team after it captured the 2012 title.

51.80

**Terry Robinson's** time in seconds for the 400-meter hurdles at the NCAA Division II Outdoor Track and Field Championships — his final race as an S&T hurdler. Robinson finished in 7th place.

8

Home runs hit by softball player **Kaylea Smith** in the 2012 season, tying the seventh-highest single-season total in school history.

22

Wins posted by baseball pitcher **Zack Gronek** over the last two seasons. As of May 13, he is the only pitcher in Division II to have won at least 10 games in each of the last two seasons.



# GROOVIN' in a GREMLIN



*When he was 14, Carl Lacy found what would turn out to be his first car in a Kansas City junkyard. It was buried under lots of, well, junk. Lacy could only gain access to the gas cap, which had a little gremlin figure on it. He pocketed the cap.*

After doing some research and saving some money, he went back and bought the whole car, such as it was, a year later.

The first concept sketch of the Gremlin was done by Richard Teague on a barf bag during a flight in 1969. The vehicle was officially introduced to the buying public on April Fool's Day in 1970. It had a hatchback and was America's first subcompact car. The Gremlin's aerodynamic properties were engineered so poorly that, if it reached 140 mph, the rear glass would explode.

The Gremlin from the junkyard is now Lacy's parts car. He currently tools around campus at Missouri S&T in a different Gremlin, a 1974 model. And this one is purple. That's right, a purple 1974 AMC Gremlin X. It has fewer than 64,000 original miles on it somehow. "I guess

it sat outside a lot," Lacy says. "The AM radio still works."

He's used to people yelling things at him when he's driving around town in his odd car, but Lacy has a sense of humor about it. And actually, according to him, the Gremlin has good power and compares favorably in many ways to the old Volkswagen Beetle. "People either love it or hate it," he says. "A lot of times I hear things like, 'That's one ugly car!'"

Lacy likes to tinker with cars and other things. He's a senior studying to be a mechanical engineer. He recently made the finals in a Lego contest. "In the final round, we were asked to build something that we felt best described us," Lacy says. "So I built a Gremlin throwing flames out of its hood. Then I lost." ■

**"SO I BUILT  
A GREMLIN  
THROWING  
FLAMES OUT  
OF ITS HOOD ..."**

— Carl Lacy



MINER ROAD TRIP  
*Destination*

# ROLLA

OCTOBER  
11-13



## HOMECOMING 2012 AT MISSOURI S&T

Pack your bags and load the car. It's time for a road trip to Missouri S&T Oct. 11-13 to celebrate Homecoming 2012: Destination Rolla. Join hundreds of alumni, family and friends for a stroll across campus, gather with old friends and cheer the Miners on as they battle the William Jewell Cardinals. Gear heads and car enthusiasts, display your ride at the first-ever Miner Cruise-In.

## REGISTRATION INFORMATION

Register online at [mineralumni.com/homecoming](http://mineralumni.com/homecoming) or call 1-800-JOMINER. All alumni should pick up their registration packets at the Homecoming Welcome Desk:

• **1-7 p.m. Friday, Oct. 12**

Leach Theatre Lobby, Castleman Hall

• **10:30 a.m.-1 p.m. Saturday, Oct. 13**

Alumni Tent, Gale Bullman Multi-Purpose Building parking lot

# HOMECOMING HIGHLIGHTS

Turn the page to see the full schedule.

## SILVER AND GOLD GATHERING



**Friday, Oct. 12**  
**5-9 p.m.**

**Leach Theatre Lobby, Castleman Hall**

*Bring a postcard from your hometown to pin on our road trip wall, enter to win A Slice of Pie gift certificate for the alumnus or alumna who traveled the farthest, visit the archives display and meet the student design teams.*

Social Hour: 5 p.m.  
Dinner: 6-7:30 p.m.  
Social time continues until 9 p.m.

### **Tickets for event**

- \$20 for adults
- \$10 for children ages 6 to 12
- Free for children under age 6

## KICK-OFF TAILGATE PARTY



**Saturday, Oct. 13**  
**11 a.m.-1 p.m.**

**Alumni tent, Gale Bullman Multi-Purpose Building parking lot**

*Join us for an authentic tailgate party and classic car cruise-in. Grilled hot dogs and hamburgers, \$1 beer and other tailgate goodies will be served.*

### **Tickets for event**

- **FREE** for those who pre-register online or call by Oct. 5, 2012

### **Tickets purchased at the door**

- \$10 for adults
- \$5 for children ages 6 to 12
- Free for children under age 6

## CRUISE-IN



**Saturday, Oct. 13**  
**10:30 a.m.-1 p.m.**

**Gale Bullman Multi-Purpose Building parking lot**

*Cruise in with your hot rod, classic car or cool ride. Or just stop by and enjoy the cars! All models are welcome and entry is free. Register your ride and get more information online at [mineralumni.com/cruisein](http://mineralumni.com/cruisein).*

## FOOTBALL GAME



**Saturday, Oct. 13**  
**1 p.m.**

**Allgood-Bailey Stadium**

*Miners vs. William Jewell College*

### **Tickets for event**

- \$8 for adults
- \$5 for students (K-college) and seniors 65 and older
- Free for children under age 6 and S&T students with a valid student ID

## DESIGN CENTER OPEN HOUSE



**Saturday, Oct. 13**  
**10:30 a.m.-1 p.m. and 3:30-5 p.m.**

**Kummer Student Design Center**

*Visitors can tour the new facility at 1051 N. Bishop Ave.*

## MINER LEGENDS BANQUET



**Saturday, Oct. 13**  
**6-9 p.m.**

**Havener Center, St. Pat's Ballroom**

*Some of our most distinguished alumni will receive prestigious Miner Alumni Association awards. See page 19.*

Reception: 6 p.m.

Dinner: 6:45 p.m.

### **Tickets for event**

- \$30 for adult dinner with cash bar available
- \$15 for children ages 6 to 12
- Free for children under age 6



# 2012 HOMECOMING SCHEDULE

## THURSDAY, OCT. 11

- **Geology and Geophysics Advisory Board Meeting**  
9-11 a.m.  
Havener Center, Mark Twain Room
- **Academy of Mechanical and Aerospace Engineers Board of Directors Meeting**  
1-4 p.m.  
Havener Center, Silver and Gold Room
- **Academy of Mechanical and Aerospace Engineers Social and Induction Dinner**  
5-7 p.m.  
Havener Center, Miner Lounge and St. Pat's Ballroom
- **Academy of Computer Science Banquet**  
6 p.m.  
Matt's Steakhouse  
12200 Dillon Outer Road  
  
Reception: 6 p.m.  
Dinner: 7 p.m.
- **Geology and Geophysics Homecoming Banquet**  
6-9 p.m.  
Havener Center, Missouri and Ozark rooms  
  
Cost: \$25  
  
*Send RSVP to Patty Robertson at [patty\\_r@mst.edu](mailto:patty_r@mst.edu) or call 573-341-4616 and indicate if a vegetarian meal is desired.*
- **Jackling Jocks Kick-Off Party**  
6-9 p.m.  
Benton Square, Miller's Grill  
400 E. 6th St.

## FRIDAY, OCT. 12

- **Academy of Mechanical and Aerospace Engineers Annual Business Meeting**  
8 a.m.-3 p.m.  
Havener Center, St. Pat's C
- **Academy of Mechanical and Aerospace Engineers Spouse and Guest Event**  
8 a.m.-3 p.m.  
Location TBD
- **Miner Alumni Association Committee Meetings**  
8 a.m.-4 p.m.  
Havener Center
- **Academy of Computer Science Meeting**  
8:30 a.m.  
Room 327 Computer Science Building
- **Academy of Engineering Management Business Meeting**  
8:30 a.m.-noon  
Location TBD
- **Academy of Mines and Metallurgy Meeting**  
8:30 a.m.-2:30 p.m.  
Havener Center, Missouri and Ozark rooms  
  
*Continental breakfast followed by 9 a.m. meeting and working lunch at noon.*
- **Order of the Golden Shillelagh Executive Meeting**  
10-11 a.m.  
Room 107 Castleman Hall
- **Jackling Jocks Luncheon**  
11:30 a.m.  
Sybill's Saint James  
14502 N. Highway 68  
St. James, Mo.
- **Academy of Miner Athletics Committee Meetings**  
Noon-4 p.m.  
Hall of Fame Room, Gale Bullman Multi-Purpose Building
- **Rollamo Online Reception and Official Launch**  
Noon-4:30 p.m.  
Havener Center, Meramec and Gasconade rooms
- **Homecoming Registration**  
1-7 p.m.  
Leach Theatre Lobby, Castleman Hall
- **Biological Sciences Department Homecoming Picnic**  
2:30-4 p.m.  
Schrenk Hall front lawn
- **Department Open Houses**  
3-4 p.m.  
  
*For a current list of participating departments go to [mineralumni.com/homecoming](http://mineralumni.com/homecoming)*  
  
*To date, those hosting are:*
  - Chemical and Biological Engineering
  - Curtis Laws Wilson Library
  - Electrical and Computer Engineering
  - English and Technical Communication
  - Engineering Management and Systems Engineering
  - Mechanical and Aerospace Engineering.
- **HD Screening of Tom Benton's Missouri presented by James Bogan**  
4-5 p.m.  
Leach Theatre, Castleman Hall
- **Men's and Women's Soccer vs. Kentucky Wesleyan College**  
5 p.m. and 7:30 p.m.
- **Jackling Jocks Dinner**  
5 p.m.  
Choir Room, Room 138 Castleman Hall
- **Silver and Gold Gathering \***  
5-9 p.m.  
Leach Theatre Lobby, Castleman Hall
- **Academy of Miner Athletics Banquet and Induction Ceremony**  
6-8:30 p.m.  
Leach Theatre stage, Castleman Hall



## SATURDAY, OCT. 13

- **Alumni Association Board of Directors Meeting and Miner Alumni Association Annual Meeting**  
8-11 a.m.  
Havener Center
- **Homecoming Parent Meeting and Reception**  
10 a.m.  
Havener Center, St. Pat's Ballroom C
- **Homecoming Registration**  
10:30 a.m.-1 p.m.  
Alumni tent, Gale Bullman Multi-Purpose Building parking lot
- **Kummer Student Design Center Open House \***  
10:30 a.m.-1 p.m. and 3:30-5 p.m.  
*Visitors can tour the new facility at 1051 N. Bishop Ave.*
- **Cruise-In \***  
10:30 a.m.-1 p.m.  
Gale Bullman Multi-Purpose Building parking lot
- **Missouri S&T Athletic Hall of Fame open to visitors**  
11 a.m.-12:30 p.m.  
Gale Bullman Multi-Purpose Building
- **Kick-Off Tailgate Party \***  
11 a.m.-1 p.m.  
Alumni tent, Gale Bullman Multi-Purpose Building parking lot
- **Football Game \***  
1 p.m.  
Allgood-Bailey Stadium
- **Mass**  
5 p.m.  
St. Patrick's Catholic Church
- **Alumni Association Miner Legends Banquet \***  
6-9 p.m.  
Havener Center, St. Pat's Ballroom

- **Jackling Jocks Annual Banquet and Business Meeting**  
6-9 p.m.  
Havener Center

*Reception: 6 p.m., Miner Lounge  
Dinner: 6:45 p.m., Carver and Turner rooms*

## SUNDAY, OCT. 14

- **Jackling Jocks Breakfast**  
8 a.m.  
Comfort Suites, Hospitality Room
- **Men's and Women's Soccer vs. University of Southern Indiana**  
Noon and 2:30 p.m.
- **Chancellor's Advisory Committee on African-American Recruitment and Retention Meeting**  
1-3 p.m.  
Havener Center

## SPECIAL CELEBRATIONS

- **Beta Sigma Psi 60th Anniversary**  
*For more information contact Elliot Gross at 314-363-9737 or w00t3n4t0r@gmail.com.*
- **Jackling Jocks 15th Annual Reunion**  
*For more information contact Delbert Day at 573-364-5569 or day@mst.edu, or Newton Wells at 979-690-3650 or mnwells1@verizon.net.*

\* See page 17 for details

## 2012 AWARDEES

**Selected by the Miner Alumni Association**  
The following individuals will be recognized for their achievements during the Legends Banquet on Saturday, Oct. 13.

**Forrest Breyfogle III**  
ME'68  
president and CEO,  
Smarter Solutions  
*Alumni Achievement Award*



**Harry Laswell**  
Phys'78  
managing partner,  
American River Ventures  
*Alumni Achievement Award*



**Joel Burken**  
associate chair  
and professor,  
civil, architectural and  
environmental engineering  
*Alumni Merit Award*



**Jason Brinker**  
ChE'97  
Vistamaxx PBE  
brand manager,  
ExxonMobil Corp.  
*Distinguished Young Alumni Award*



**Preston Carney**  
CE'02, MS CE'03  
estimator/project manager,  
Sheehan Pipeline  
Construction Co.  
*Distinguished Young Alumni Award*



**Milt Murry**  
EE'64, MS EE'80  
adjunct professor,  
Jefferson College  
*Frank H. Mackaman Alumni Volunteer Service Award*







# MISSOURI S&T

# *Hot* *and* *Cool*

## RODS CARS

THE AUTOMOBILE HAS BEEN AN ICONIC SYMBOL OF AMERICAN CULTURE EVER SINCE THE FIRST ONE ROLLED OFF OF THE ASSEMBLY LINE. MORE THAN JUST A MODE OF TRANSPORTATION, A CAR EMBODIES ITS OWNER'S PERSONALITY. CARS GIVE US A CHANCE TO REMINISCE, TINKER AND HELP US CONNECT WITH OTHER ENTHUSIASTS. ON THE FOLLOWING PAGES YOU'LL FIND STORIES ABOUT MINERS WHO DO ALL OF THESE THINGS. THEY LOVE THEIR CARS. AND WE LOVE THEIR STORIES.



**"WHEREVER WE GO, WE ALWAYS GET A WAVE  
AND A SMILE FROM THE PEOPLE AS WE PASS."**

— BARBARA SKAGGS, ME'85

"We call her Ol' Smokey — for obvious reasons when you start her up on cold days."

**Barbara Skaggs**, ME'85, is referring to her family's 1942 Dodge WC52, better known as a "weapons carrier" in the military. Years ago the veteran vehicle found a new life with the family.

Skaggs says the vehicle came to them as "a basket case of rusty old parts." Currently equipped with an Army-issue replacement engine, an original engine will soon be installed. "It's taken a lot of TLC (and some good old-fashioned reverse engineering and elbow grease), but Ol' Smokey gets around pretty good these days," she says.

Her husband and 10-year-old son love driving the vehicle to old pot-holed country roads to test out its 4-wheel drive capability. "Ol' Smokey was used to haul weapons and troops out to the field and can go anywhere," says Skaggs.

A senior tool design engineer with The Boeing Co., Skaggs and her husband, **Kirk**, belong to a World War II living history group — The Friends of Willie and Joe — in the Puget Sound area of Washington State. "We're a bunch of historical collectors who set up displays and participate in events to share our love of history and help remember our military heroes," she says.

According to Skaggs, her "big ol' honkin' monster truck" has hauled Scouts and adults alike in parades and was a big hit at her son's school during a Veteran's Day display.

"Wherever we go, we always get a wave and a smile from the people as we pass," she says. ■

# MILITARY MONSTER TRUCK

| BY LINDA FULPS, FULPSL@MST.EDU | PHOTO BY BRYAN ILYANKOFF |



**THE DODGE "WEAPONS CARRIER"**  
BARBARA SKAGGS, ME'85, DRIVES  
CAN — AND DOES — GO ANYWHERE.



CHEVROLET  
FLEETMASTER

## KEEPING IT IN THE *family*

| BY LINDA FULPS, FULPSL@MST.EDU |



MONTIE, CSCI'73, MS EMGT'74 (IN SUNGLASSES), AND CARYN (SEATED) GAUSS POSE WITH THEIR THREE CHILDREN AND THEIR FAMILIES. (PHOTO SUBMITTED)

**M**any cars have a series of owners before they are scrapped or otherwise retired. It's rare for a vehicle to find a permanent loving home that spans generations. **Montie Gauss's** 1948 Chevrolet Fleetmaster is one of the lucky ones.

"As long as the '48 has been around, it's been with our family," says Gauss, CSci'73, MS EMgt'74. "My granddad bought it brand new and drove it until he died. When I got my driver's license at 16, my grandmother gave me the car, but I had to ride a bus from Springfield, Mo., to Ault, Colo., to get it."

After learning how to use the foot starter, Gauss drove the '48 back to Missouri and used it throughout high school and college. "The motor held up well at 50 mph but would loosen rods at any speed higher. I can remember many times pulling the oil pan and tightening the connecting rods outside Kelly Hall and other places," he says.

His entire family learned to drive a stick shift in the car. "My wife, **Caryn**, used it during her student teaching days at Fort Leonard Wood," he says. "The car created quite a stir with the guards at the gate who wanted her to stop so they could see it."

The '48 even played a part in each of his three children's weddings.

The Fleetmaster has gone through two major restorations and is now equipped with a 350 motor, four-speed automatic transmission, cruise control, air conditioning and a CD player.

It may look the same as when his grandfather owned it (except for the recently added flames), but Gauss says it's a whole new car inside. "It runs much better now than when I got it in '68." ■

## ON THE ROAD

Whether they drive sports cars, muscle cars or classics, one thing is true. Miners love their cars. Here are a few more of their stories.



1



2

1. **William**, ME'50, and **June Kelly**, of Independence, Mo., bought their 1912 Ford Model T Touring Car in 1971 and completed restoration to its original condition in 1997. June did the top and upholstery. Bill did all the other work, including engine, transmission, woodwork and paint. The four-cylinder engine exhibits 22 horsepower and gets about 25 miles per gallon at a cruising speed of 30.

2. **Mike Welsh**, ME'E'67, of Kansas City, Mo., has belonged to the Veteran Motor Car Club of America since 1979, when he and his wife bought a 1939 Buick Special from a friend. In 2009, they added a 1976 Lincoln Continental to their car collection.

(continued on page 25)





# A Meant-to-be MG STORY

| BY MINDY LIMBACK, LIMBACKM@MST.EDU | PHOTO BY DAVID BENTLEY |

LOVE AT FIRST SIGHT ISN'T  
SOMETHING THAT HAPPENS  
ONLY BETWEEN PEOPLE.  
IN 1952, THE U.S. AIR FORCE  
STATIONED MILTON HIEKEN IN  
SOUTHWEST FRANCE, WHERE  
HE BOUGHT HIS FIRST CAR,  
A 1953 MG-TD ROADSTER.

After he returned to the U.S., he brought the car back home to St. Louis, keeping it just one winter before selling it.

"It is a lot of fun to drive when the weather is right, but the MG is not a very comfortable all-season car," he says.

Over the next several years, Hieken tried out other cars, including an MG-A coupe, an Austin Healey 3000-6 and a couple of different Porsches. But his affinity for the MG, "a true 'sports car' classic," remained.

Fast forward to 1992, when he met **Barbara**, a widow who would become his wife. As they were talking, the subject of cars came up and she mentioned she had a two-seat MG roadster.

"Their good friend was a Ford dealer in Litchfield, Ill.," Hieken says. "In 1957, a 1952 MG Model TD was being driven from

Chicago to someplace when it broke down in Litchfield. The original owners decided to sell it and move on."

Barbara's first husband bought the car from the Ford dealer and worked with a mechanic to get it running. Five years after her husband passed away in 1977, she brought the car back to her dad's house, where it remained on blocks until 1994.

"When we got married, we decided we ought to do something with it," Hieken says. "It took some professional work to get it running again. Those cars are very persnickety."

Hieken retired from McDonnell Douglas as a laboratory branch chief in 1995. He received a professional degree in engineering mechanics from Missouri S&T in 1975. ■





FORD  
MUSTANG



# CORRALLING THE HERD

| BY MINDY LIMBACK, LIMBACKM@MST.EDU | PHOTOS BY SPENCER CHAPIN |

SOME PEOPLE COLLECT TRINKETS, OTHERS COLLECT BOOKS.  
GEORGE, ME'74, AND JOY STEGNER COLLECT MUSTANGS.







**W**ith their two sons grown and on their own, **George**, ME'74, and **Joy Stegner** were determined to find a hobby they could enjoy together as empty nesters. They decided to buy a classic Mustang and join a club.

"When George and I made the decision to buy a car, we weren't initially looking for a particular year," says Joy, who remembers carpooling with her friends in the back of her neighbor's brand new 1965 Mustang. It took several months, but in the late 1990s they eventually bought a 1968 Brittany Blue coupe. They enjoyed it so much that two years later they bought a red and black 1968 convertible for Joy.

Joy isn't the only one with fond memories of the "pony car." Just before George turned 16, he remembers spotting a 1967 Shelby being driven through his hometown.

"I was riding a bicycle," he remembers. "All the cool kids in high school were driving Mustangs, Camaros, Chevelles, GTOs, and I got to drive my dad's old 1959 Chevy Nomad station wagon. Not cool."

Their nest continued to fill with the purchase of a third Mustang, a 1968 GT convertible, a gift for George's 50th birthday.

"Based on the production statistics, the blue '68 convertible is one-of-one," he says. "It's the only car I have with the original build sheet and it's a matching-numbers car."

In addition to their first two convertibles, you'll find a whole herd of Mustangs inside their custom-built garage in Kearney, Mo., including a limited-edition 1968 GT Fastback with a 428 Cobra Jet engine, a 1968 Shelby GT500KR, a 2005 GT convertible, and a 2008 Roush 427R.

"I like things about each of the cars, but my red '68 convertible will always be my favorite," Joy says. "It's everything I could want." ■



1. **Mike "Tad" Tucker**, GGph'81, of Wayland, Mass., bought a 1941 Chevrolet Special Deluxe Coupe in the summer of 1975. He's done most of the restoration work himself. "I drive the car nearly every weekend, weather permitting, and never plan to sell it," he says.

2. Visit Cumming, Ga., and you might catch **Tom Hoppe**, ME'70, cruising around in the 1949 DeSoto his parents bought in 1953 – the first car they ever owned – complete with its Missouri Miner window decal. Hoppe got the car in 1964 and it has been a daily driver, although rebuilt a few times.

3. When **Leonard Wolff**, MinE'78, of Indianola, Iowa, turned 50, he bought his dream car – a 1956 Thunderbird, produced the year he was born. He scoured the country, but found it less than two miles from home. The car's license plate, AA 1111, is the first license plate issued in Utah in 1956.

4. When **Don Ostmann**, ME'61, of St. Peters, Mo., was in school, he couldn't afford a car, but one of his Sigma Phi Epsilon fraternity brothers gave him rides in his Austin Healey 3000. "I fell in love with that low-riding, noisy sports car," Ostmann says. In 1964, he found a 1961 Austin Healey Bug Eye Sprite for sale. "It was like new and I had to own it. The car is now in my heated garage and almost in original condition."

*(continued on page 26)*



# MODEL CITIZENS

First sold in December 1927, the Ford Model A was the second huge success for Ford Motor Co., replacing the Model T, which had been in production for 18 years. The car came in four standard colors, but not black. By the end of production in 1932, nearly 5 million Model As had been sold.

1. **Gene McFarland**, Econ'70, bought his first car, a 1928 Ford Model A Special Coupe, in 1959 from Diehl Montgomery Ford in Rolla. "My dad sold cars in Rolla when the Model As and Ts were new and always talked about how improved the A was over the T," McFarland says. "Over the years, the Model A was a very forgiving car and very dependable."

2. This 1929 Ford Model A was **Wesley Scott's** first car. Scott, ME'68, of Eugene, Mo., has owned it for 51 years and he and his wife, Betty, still drive it. That's her pushing it in the photo. "We also still own the 1940 Mercury convertible that we drove on our honeymoon 40 years ago."

3. Brothers **Brad Ziegler**, EE'04, and **Bryan Ziegler**, ME'04, enjoy working on a 1930 Ford Model A Coupe, one of the vintage Fords they grew up watching their father and grandfather restore. "Everyone else has muscle cars," says Brad Ziegler, "but when you roll up to a stoplight or a car show in a Model A, you'll turn some heads."



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4. **Tom Shepard**, ME'67, bought a 1930 Ford Model A Tudor Sedan and he does all the mechanical work required to keep an 82-year-old car on the road. His previous car was a 1931 Standard Coupe with a rumble seat.

5. **Jack Jones**, Phys'62, bought his 1931 Ford Model A 4-door Town Sedan in 1991 as a pile of parts loaded on a trailer. "Bumpy" was finally built, titled and on the road by 1997. "The inventory of parts included an original '31 Ford body, rebuilt Chevrolet small block V-8, Ford 8-inch rear end and GMC van steering assembly," Jones says. "My sister-in-law, Catherine, upholstered the Ford Mustang seats and step-son, Doug, applied the paint."



5

## ON THE ROAD (CONTINUED FROM PAGE 25)



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4

1. **Rick Erder**, Phys'75, of Plano, Texas, drives a 1964 Azure Aqua Chevrolet Impala Super Sport that his grandfather bought new after retiring from Falstaff Brewing Co. in St. Louis. He remembers riding in the back seat as a kid on Sunday drives. The car is 100 percent original and has only 38,000 miles.

2. **Bill Schlittler**, ME'77, of Colorado Springs, Colo., bought his '65 Mustang at age 16. He drove it to college, where he met and married **Cheryl (Westphal)**, EMch'77. He has rebuilt every component and system, performed a lot of body work and repainted it several times. But the rear window still sports the original UMR and Pi Kappa Alpha decals.

3. **Kurt Schriewer**, ME'88, and his wife, **Sharon**, of Highland, Ill., built this 1966 AC Cobra replica in 1995. Sharon assembled the engine and Kurt did the rest of the assembly in six months.

4. **Bob Moehlenkamp**, AE'87, bought a 1967 Plymouth Satellite when he graduated from Missouri S&T. He moved to Florida and drove it daily until 1990, when he started a complete restoration. "I disassembled the entire car and cleaned, restored or replaced every part," Moehlenkamp says. "I did all the work myself except for the body and paint work."

(continued on page 30)



## "I WANTED TO BE SANDRA DEE, I GUESS."

— NICOLA UTTERBACK NELSON, EE'66, MS EE'71

Since she was a young girl, **Nicola Utterback Nelson**, EE'66, MS EE'71, has wanted to own a convertible.

"I always thought they were glamorous and sophisticated, driven by movie stars," she says. "I wanted to be Sandra Dee, I guess."

Her wish came true in 1968, when Nelson and her then-husband, **Donald R. Nelson**, MS EE'66, PhD EE'73, purchased her first and only convertible, a 1969 Dodge Dart GT.

Many car enthusiasts might not think of the Dart as a "glamorous" ride. Reliable, yes. But it wasn't a luxury car, nor was it a classic muscle car like the Chevy Camaro, Pontiac GTO or Dodge's own Charger.

But if most Darts were humble vehicles, the '69 GT model was an exception. With a 318 horsepower V-8 engine and four-speed manual transmission, Nelson's car matched up well with the hot rods of that era.

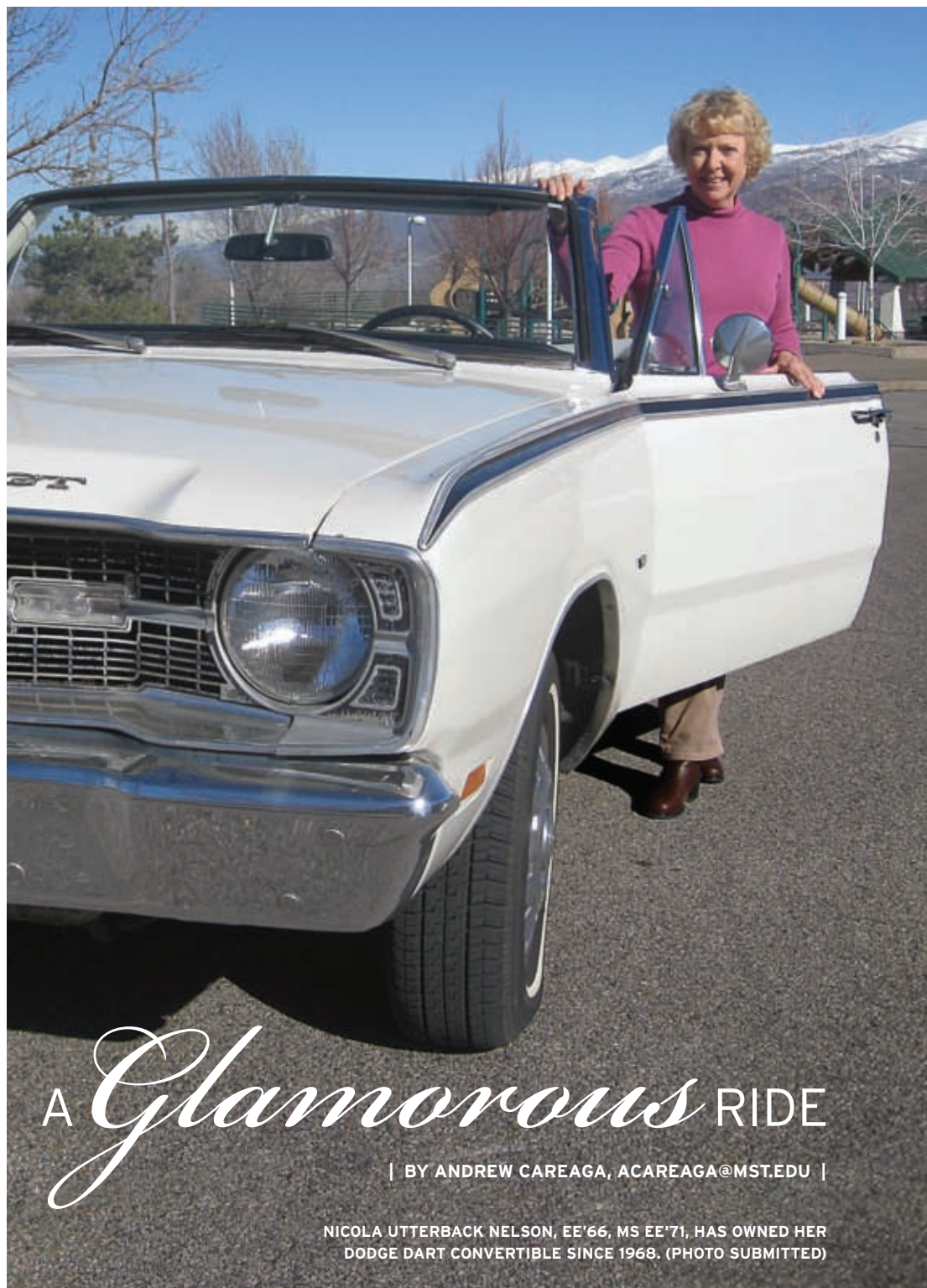
Plus, her Dart was a convertible. For Nelson, that's what mattered most.

"It's the convertible I've always wanted," she says. It's also special because 1969 was the final year Dodge made Dart convertibles.

More than 40 years later, Nelson and her Dart have traveled from Rochester, N.Y., where she bought the vehicle, to California, New Jersey, Virginia and now, northern Utah. "I just never saw any reason to sell it, as it has been a reliable car," Nelson says.

Now a semi-retired systems engineer from the Aerospace Corp. of El Segundo, Calif., Nelson drives the Dart only during warm weather. Otherwise, she's behind the wheel of a Toyota Sienna minivan. It's good for hauling around skis, bicycles "and all my sisters and brothers-in-law when they come to town."

Recently, Chrysler announced plans to revive the Dart nameplate on a new compact car. Perhaps the model isn't so forgettable after all. ■

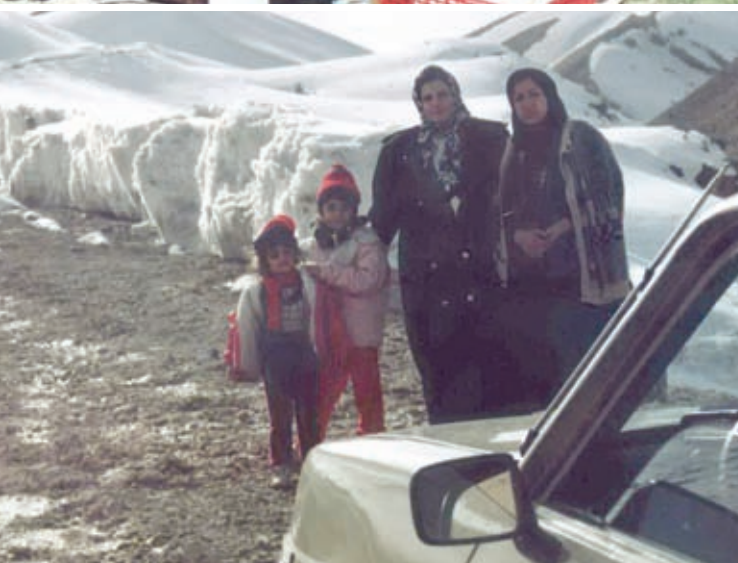


*A Glamorous* RIDE

| BY ANDREW CAREAGA, ACAREAGA@MST.EDU |

NICOLA UTTERBACK NELSON, EE'66, MS EE'71, HAS OWNED HER DODGE DART CONVERTIBLE SINCE 1968. (PHOTO SUBMITTED)





GHASSEM TAKMIL, CHE'77, SNAPPED THE TOP TWO PHOTOS OF HIS RENAULT WITH FAMILY MEMBERS IN THE IRANIAN COUNTRYSIDE. THE BOTTOM PHOTO SHOWS TAKMIL, RIGHT, WITH HIS WIFE. (PHOTOS SUBMITTED)

# IT RAN IN IRAN

## — FOR 33 YEARS

| BY LANCE FEYH, LFEYH@MST.EDU |

About five years ago, **Ghassem Takmil**, ChE'77, reluctantly turned in his 33-year-old French Renault to an Iranian junkyard. The government gave him the equivalent of roughly \$1,200 — about what he originally paid for it — to junk the car, under the condition that Takmil purchase a vehicle made in Iran.

A retired chemical engineer, Takmil defiantly used to pack his wife and two daughters (raised during Iran's war with Iraq, they are both doctors now) in the Renault and drive all over the country on various trips. "The only problem I had with the car was it was not very strong and could not go very fast, which probably was a plus for me — since I was not a very careful driver," Takmil says.

During the time he owned the Renault, Takmil's wife had three different vehicles. "Meanwhile, I pimped my ride somehow by renovating this car every 10 years," he says.

After retiring, Takmil started to reflect increasingly on the roles of engineers, and people in general, in society. "I was missing the point regarding the environmental concerns — things intentionally kept back since the majority of consumers do not observe the standards needed to save the world for future generations," he says.

Takmil started writing articles about the environment for newspapers. He even ran for public office. He considers himself a life-long learner.

Before he got the Renault, and while he was in college in Rolla, Takmil drove a Buick LeSabre around the U.S. "My aim was to learn about your culture and become familiar with your country," he says. "You have a beautiful country and lovely people."

Takmil closes with one last thing that is very important to him. "I want to mention that Iranian people want to live in peace," he says. ■



# NORTH TO Alaska

(VIA ROLLA)

| BY LANCE FEYH, LFEYH@MST.EDU |

BRIAN MULLEN, GEOE'08, LOVES HIS 1989 4RUNNER BECAUSE IT'S DEPENDABLE, CAPABLE OF DRIVING OFF-ROAD AND HAS A REMOVABLE TOP FOR BALMY ALASKAN SUMMERS. (PHOTO SUBMITTED)

**Brian Mullen**, GeoE'08, bought his 1989 Toyota 4Runner off a gas station parking lot for \$2,000 back in 2002.

During college, Mullen liked to explore the back roads and trails of south central Missouri in the vehicle. One weekend, a couple of his buddies who were majoring in mechanical engineering helped him install a heavier suspension. In 2007, he got a summer internship in California's Sierra National Forest. Of course, he drove the 4Runner all the way there.

"After graduation, I packed up all my belongings, installed an engine block heater, and drove it north to Alaska," he says.

Now a staff geotechnical engineer for R&M Consultants, Mullen still drives

his 4Runner around Anchorage and on adventure trips around Alaska. One of these trips included a drive to the Miles Glacier Bridge near Cordova, Alaska. Not to be confused with the infamous "Bridge to Nowhere," this structure was built across the Copper River in the early 1900s for approximately \$1.4 million. It was used to ship about \$200 million worth of copper ore by rail.

Although the bridge failed during the region's 1964 earthquake (with a magnitude of 9.2, it was the strongest quake ever recorded in North America), it has since been repaired to allow for public vehicles — including one very well-traveled 4Runner. ■

**"I PACKED UP ALL  
MY BELONGINGS,  
INSTALLED AN  
ENGINE BLOCK  
HEATER, AND  
DROVE IT NORTH  
TO ALASKA."**

— BRIAN MULLEN, GEOE'08



# 'VETTES

Designed by Harley Earl, the Chevrolet Corvette was first introduced as a concept car at the GM Motorama in 1953. It came in polo white with a red interior and a black top – and that was the only option.

1. **Mike Persson**, EE'62, saw his first Corvette in 1953 and wanted one of his own. "During my senior year, I put a picture of a 1962 Corvette over my desk and dreamed about getting one when I graduated," he says. He drove one until the 1965 Corvette Stingray came out, and then he ordered a Glen Green convertible with a 350 engine, transistor ignition, an AM/FM radio and four-speed transmission. "When we began discussing marriage, I told my girlfriend, **Eydee**, that the Corvette had to be part of the deal. She agreed and after 45 years, I still have Eydee and I still have the '65."

2. **Roger Keller**, MinE'75, MS MinE'82, of Las Vegas, says that a ride in the 1966 Corvette owned by his uncle, **Jerry Smith**, ME'66, may have been the single influencing point in his decision at age 13 to follow in his uncle's footsteps and become a Missouri S&T graduate, an engineer and the owner of a 1975 Corvette.

3. **Ken Brugioni**, ME'78, sold his 1942 Ford Army Jeep to buy his dream car, a 1967 Corvette. "The 300 horsepower 327 runs fine on premium gas, without adding octane boosters, and is not cluttered with emission controls," Brugioni says.



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4. **Jeff Boschert**, CE'96, **Jeff Bohler**, CE'94, and **Tricia Bohler**, CE'93, took this photo of their Corvettes at the October 2011 Memories Car Cruise in Sunset Hills, Mo. Boschert bought his 1972 Ontario Orange Corvette in 2006. The Bohlers bought their 1970 Marlboro Maroon Corvette in 2005.

5. **Jeff Ivers**, CSci'74, has a 2005 Corvette. He also has a Lotus. See below.



4



5

## ON THE ROAD (CONTINUED FROM PAGE 26)



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1. As an early member of the university's Sports Car Club, **Jeff Ivers**, CSci'74, of Broken Arrow, Okla., learned to autocross, rally, fix his Triumph Spitfire, and dream of owning a better sports car. Years later, he rebuilt a 1967 Lotus Elan from a pile of disassembled parts. "It is an adrenaline rush to compete in an autocross with this car, pulling 1.2 g in a corner on three wheels," he says.

2. **Lloyd A. Meffert**, ME'88, of Hettick, Ill., was dating his future wife, **Deanna**, when her grandparents gave her a 1968 Ford Galaxie XL for her 16th birthday. They drove the car through college, but parked it in 1985. In 2008, Lloyd began restoring it with their son, Andrew, who plans to attend Missouri S&T in the fall.

3. **Stephen Rode**, ChE'84, bought this 1969 Chevrolet Camaro Pace Car the summer before he graduated. "It was brown primer colored and needed pretty much everything redone," he says. "My parents thought I was crazy, but appreciated it much more once it was painted a couple of years later."

4. Fraternity brothers **Jason George**, ME'98, of Grandview, Mo., and **Scott Preston**, CE'97, of Elizabethtown, Ky., love classic cars. The photo shows George with his 1971 Volkswagen Camper Bus – one of three Volkswagens he owns – and the 1979 MGB Preston bought in high school.

(concluded on page 35)



“I didn’t pick my major for a good job or a membership to the country club,” says **Bob Toy**, ME’72. “I did it so I could race.”

Toy’s passion for drag racing developed long before he came to Rolla in 1967. “I became aware of mechanical engineering at 15,” he says. “From that point on, there was no question what I wanted to do.”

Now an information technology supervisor with West Lake Co. in Calvert City, Ky., Toy says nearly everything he learned in his classes had racing applications. He likens successful drag

racers to “someone in the lab doing R&D — just finding out how to get from point A to point B quicker.”

After years of racing on his own, he formed a partnership in the 1990s with two friends, Gordon Holloway of Memphis and Gary Frantz of Louisville, Ky.

With Frantz’s son, Todd, as driver, their car raced from 1995 to 1998, originally with a 285-cubic-inch Chevy V-8, and the last two years with a 262-cubic-inch Chevy V-6. In 1997, it set a national record in the D/Econo Dragster class at Quaker City Dragway in Salem, Ohio, with an elapsed

time of 7.62 seconds, topping 171.42 mph. That year the car also finished seventh in the world in overall points and won the Competition Eliminator title at the National Hot Rod Association’s U.S. Nationals in Indianapolis.

“It was a perfect bluebird day on Labor Day weekend,” Toy recalls. “We were sitting there waiting for our turn to be interviewed by ESPN. My partner Gary said, ‘I don’t care if this day ever ends.’”

It turned out to be Toy’s last race. “What we accomplished took the killer edge off me. God let me play out my fantasy,” he says. ■

# ENGINEERING A DREAM *DRAGSTER*

| BY LINDA FULPS, FULPSL@MST.EDU |



BOB TOY, ME’72, AND HIS RACING TEAM SET A NATIONAL RECORD IN THEIR DRAGSTER IN 1997. (PHOTO COURTESY AUTO IMAGERY INC.)



CHEVROLET

CORVETTE



# ***BUILD-A-VETTE***

| BY MARY HELEN STOLTZ, MHSTOLTZ@MST.EDU | PHOTOS BY B.A. RUPERT |

**"WE STARTED WITH JUST AN  
ALUMINUM FRAME AND THREE  
DAYS LATER, KARLA WAS THE  
FIRST TO START THE CAR."**

— GREG BIER, EMGT'86, MS EMGT'95, PHD EMGT'97



**G**reg Bier, EMgt'86, MS EMgt'95, PhD EMgt'97, and his family have owned three Corvettes. But the 2012 Z06 is the special one. That's the one that Bier built with the help of his wife, **Karla**, ChE'88, MS ChE'94, PhD ChE'98; son **Brandon**, EMgt'10; daughter **Kirstin**, a freshman in chemical engineering, and daughter **Bridget**, who is seriously thinking about enrolling at S&T in the fall of 2013.

The Biers hand built the 7.0-liter, 505-horsepower engine at Chevy's Performance Build Center in Wixom, Mich., as part of the company's Engine Build Experience.

Z06 Corvette engines are normally hand built, but as an option, you can go to the facility and build it yourself, under the instruction and watchful eye of the professionals.

"We were the 21st Corvette owners, the first family, and the youngest builders to ever do this," Bier says.

A few weeks after the engine was completed and tested, it was sent to Bowling Green, Ky., where the Corvettes are assembled.

"Karla and I walked down the assembly line with our car over three days," Bier says. "We started with just an aluminum frame and three days later, Karla was the first to start the car."

Once the car was assembled it was transported to the National Corvette Museum in Bowling Green, where it sat on display for about a week.

"When it was time to pick our car up, we drove to the museum and took delivery of the car while family and friends watched on webcams the museum had set up on the car." ■

THE BIER FAMILY CORVETTE MAKES ITS WAY DOWN THE ASSEMBLY LINE IN BOWLING GREEN, KY. (SUBMITTED PHOTO)







SUBARU  
RALLY CAR

RON ERICKSON, IST'11 (LEFT), AND  
MATT CONTE, ME'10, SIT ON THE HOOD  
OF CONTE'S SUBARU RALLY CAR AT THE  
2012 RALLY IN THE 100-ACRE WOOD. ►



# RALLY RACERS

| BY MARY HELEN STOLTZ, MHSTOLTZ@MST.EDU | PHOTOS BY TIM WILLIAMS, IST'08 |





Reaching speeds upwards of 95 mph, **Ron Erickson** and **Matt Conte** raced their Subaru to a third-place finish in the open light class at the Rally in the 100-Acre Wood in February. The national championship performance rally in Salem, Mo., led drivers through the Ozarks wilderness over unpaved county roads.

"We weren't as quick as we wanted to be," says Erickson, IST'11, rally co-driver, or navigator, and a business analyst in Anheuser-Busch InBev's information technology division in St. Louis. "Racing is really close, which makes it really cool. It's all about skill."

During a race, Erickson guides the driver, Conte, ME'10, over unfamiliar terrain. Some years, the drivers are plagued with mud. This year, the biggest obstacle was dust. It was unnerving, Erickson says.

"Knowing what's over the crest is so important," he says. "We had a lot of problems with dust. We really couldn't see well."

Erickson and Conte, best friends since their high school robotics team days, started backroading on weekends during the fall of 2006 when they were S&T freshmen.

"We didn't know it was a sport," Erickson says. "We just liked going out to explore Phelps County."

They began as spectators at a rally race and then volunteered during races. Last fall, the pair raced in the Perryville Farm and Forest Rally in southeast Missouri.

"We came really close to rolling the car," Erickson says. "We hit a steep ditch at 65 mph and the car came to rest on its side. No one was hurt — safety has come a long way."

"We had the car prepared again for another event in the snow and ice of Atlanta, Mich., with a new engine, new suspension and the body work completed," says Conte, who works for Boeing as a structural design engineer on the F-15 fighter jet. "Lots of body panels had to be replaced after that one." ■



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1. In 1979, **Bill Stone**, CE'84, bought a brand new Pontiac Trans-Am. He still drives it around Jefferson City, Mo. "I really love the look and feel of the car and it still has the original bird on the hood," Stone says. "It looks great, is fun to drive and you turn a lot of heads and get a lot of compliments when pumping gas."

2. **Scott George**, CSci'72, owns a British Racing Green 1997 Jaguar XK8 convertible. "It is fun to drive with the top down on pretty days," George says. "Usually, it wins hardware in charity car shows. And it goes like the wind."

3. **Patrick Tibbits**, MetE'76, of Aberdeen, Md., saved up his overtime pay working on the Constellation Project at NASA Marshall Space Flight Center to buy a 2000 BMW Z3. "For a given engine displacement, what gets there fastest on a winding course is a low center of gravity, stiff suspension and gearing that keeps the engine in its powerband at a variety of speeds," Tibbits says.

4. **Rich Henry**, CE'83, of Lafayette, Calif., bought a new Meteor Gray Porsche 997 Turbo in 2007. "It's very fast and very fun to drive on the California coastal highways and on our favorite road course track, known as Thunderhill, against other fanatic sports car drivers," Henry says. ■

## MISSION, GOALS AND BENEFITS

### MISSION

The association proactively strives to create an environment — embodying communication with and participation by Miner alumni and friends — to foster strong loyalty to the university and growth of the association. The association increases its financial strength and provides aid and support to deserving students, faculty and alumni.

### GOALS

- Increase alumni pride in their association with Missouri S&T and the Miner Alumni Association
- Increase alumni involvement, especially that of young alumni
- Increase alumni contributions, both in the number of alumni making a financial commitment and in the dollars raised to benefit Missouri S&T and the Miner Alumni Association
- Strengthen relationships with faculty, staff and students on behalf of the alumni association.

The officers and other members of the association's board of directors provide leadership and personal participation to achieve these goals and fulfill this mission. For their efforts to be a success, they need YOUR active participation as well, in whatever alumni activities you choose.

### BENEFITS

#### CAREER ASSISTANCE

Missouri S&T's career opportunities and employer relations will help you in your job search. For information, call 573-341-4343.

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including searchable directory at mineralumni.com

##### Access to alumni office

via email (alumni@mst.edu)

##### Address update service

so you don't miss your Missouri S&T mail

##### Insurance discounts

##### Travel opportunities

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## POLICY FOR SUBMISIONS

- We are happy to announce weddings, births and promotions, after they have occurred
- We will mention a spouse's name if it is specifically mentioned in the information provided by the alumnus/alumna
- We will print addresses if specifically requested to do so by the alumnus/alumna submitting the note
- We reserve the right to edit alumni notes to meet space requirements
- We will use submitted photos as space permits
- Due to the production time required for each issue, submissions may take up to six months to appear.

Your patience is appreciated.

## MISSOURI S&T MAGAZINE TO CHANGE PUBLISHING SCHEDULE

*Missouri S&T Magazine*, which is a joint publication of Missouri University of Science and Technology and the Miner Alumni Association, will change its publishing schedule with the next issue (Fall/Winter 2012). Alumni and friends will now receive the magazine in November, March and July. The new delivery schedule will be supplemented by monthly email newsletters from the Miner Alumni Association. Make sure you're up-to-date on all the news from Missouri S&T by updating your contact information, including email address, by emailing [alumni@mst.edu](mailto:alumni@mst.edu) or calling 573-341-7677.



## SECTION WRAP-UP: MEETING OF THE “MINES” IN SEATTLE

More than 80 engineers from across the country met in Seattle on Feb. 21 for the 2012 Society of Mining, Metallurgy and Exploration Annual Meeting and Exhibit. At the exhibit, alumni, students and friends gathered to tell old Rolla stories and network with their peers. Platinum event sponsors included Barrick and the Missouri S&T mining and nuclear engineering department. Diamond sponsors included The Doe Run Co., the Miner Alumni Association and the Missouri S&T geology and geophysics program.

Nearly every year, a reception is held with free hors d'oeuvres and a campus update from **Samuel Frimpong**, professor and chair of mining and nuclear engineering. Watch for next year's announcement and a chance to meet with your fellow alumni.

## UPCOMING SECTION EVENTS

### Air Capital

*Student Send-Off Picnic*  
11 a.m.-1 p.m. Saturday, July 14  
Location TBD

### Alaska

*Student Send-Off Picnic*  
6:30 p.m. Thursday, July 19  
Home of Ken '73 and  
Pat Thompson  
12031 Lilac Drive  
Anchorage, Alaska

### Austin-San Antonio

*Student Send-Off Picnic*  
11 a.m.-1 p.m. Saturday, July 21  
Home of Marc '76 and  
Barbara Smith  
3 Remington Circle  
San Antonio, Texas  
210-269-7930

### Bay Area

*Student Send-Off Dinner*  
Saturday, July 21  
5 p.m. Cocktails, 6 p.m. Dinner  
Frankie, Johnnie & Luigi Too!  
5245 Prospect Road  
San Jose, Calif.  
408-446-9644  
fjlsanjose.com

*Section Dinner*  
Saturday, Oct. 20 (Tentative)  
5 p.m. Cocktails, 6 p.m. Dinner  
Teske's Germania  
255 N. 1st St.  
San Jose, Calif.  
408-292-0291

### Central Ozarks

*Shrimp Feed*  
Saturday, Aug. 25  
5 p.m. Social Hour  
6 p.m. Dinner  
Lions Club Park, Pavilion 7  
Rolla, Mo.

### Chicago

*Student Send-Off Picnic*  
Noon-2 p.m. Sunday, July 29  
Whitlock Park  
40th Street and  
Fairview Avenue  
Downers Grove, Ill.

### Dallas-Ft. Worth

*Student Send-Off Baseball Game*  
6:30 p.m. Thursday, July 19  
(Gametime is 7 p.m.)  
Dr. Pepper Ballpark  
7300 Rough Riders Trail  
Frisco, Texas

### Falls of the Ohio

*Baseball Game*  
6 p.m. Thursday, June 21  
Louisville Slugger Field  
Meet at the entrance  
401 E. Main St.  
Louisville, Ky.  
Gametime is 7:05 p.m.

*Section Dinner*  
Friday, July 13  
6:30 p.m. Cocktails  
7 p.m. Dinner  
Captain's Quarters  
5700 Captain's Quarters Road  
Harrods Creek, Ky.

### Flint Hills

*Student Send-Off Dinner*  
5 p.m. Saturday, July 14  
Puffy's Steak House  
213 Main St.  
Maple Hill, Kan.  
785-256-4329  
puffyssteakhouse.com

### Houston

*Student Send-Off Picnic*  
5-8 p.m. Saturday, July 21  
Home of Dan '73 and  
Delores '75 Hinkle  
22 Elderberry Trace  
Sugar Land, Texas  
281-980-6229

### Kansas City

*Student Send-Off Picnic with S&T design teams*  
11 a.m.-2 p.m. Saturday, July 28  
Home of Jim '74 and Ann Foil  
1812 SW Summit Valley Drive  
Lee's Summit, Mo.

### Lincolnlnd

*Student Send-Off Picnic*  
3-8 p.m. Sunday, Aug. 5  
Dinner begins around 5 p.m.  
Home of Rich '69 and  
Carolyn Berning  
10 Beach View Lane  
Springfield, Ill.  
217-529-7833

*25th Anniversary Dinner*  
Details TBD

### Motor City

*Student Send-Off Picnic*  
Saturday, July 28  
Time TBD  
Home of Dale '79 and  
Debora Morse  
573 Cumberland Trail  
Milford, Mich.  
248-685-8941

### Rocky Mountain

*Student Send-Off Dinner*  
Noon-3 p.m. Saturday, Aug. 4  
Las Brisas  
6787 S. Clinton St.  
Englewood, Colo  
303-792-3212

## UPCOMING EVENTS: JOIN THE ST. LOUIS SECTION FOR A NIGHT AT THE RACES

Don't miss this opportunity to meet your fellow alumni, watch a professional horse race and participate in the trophy presentation at the winner's circle with the jockey, horse and trainer. For \$22 per adult and \$10 per child, you get admission to the track, official racing program, free general parking and a buffet dinner. Additionally, you will receive a color photo of the award presentation.

To register online for this event, go to [mineralumni.com](http://mineralumni.com). Click on "Events" tab, select July 14 from the calendar on the right and click "Registration" for the St. Louis Section: Night at the Races event. Advance payment is required to "Miner Alumni Association, St. Louis Section."

*Night at the Races*  
Saturday, July 14  
6 p.m. Buffet, 7:30 p.m. Races

Fairmount Park, Black Stallion Buffet Room,  
located on the second level of the clubhouse  
9301 Collinsville Road, Suite 40  
Collinsville, Ill.  
618-345-4300  
[fairmountpark.com](http://fairmountpark.com)

For more information on this and other upcoming events, visit [mineralumni.com](http://mineralumni.com) or call the Miner Alumni Association at 573-341-4145.

## GET MORE INFORMATION

*Want to know who else is planning to attend a section event in your area? Need more details about an upcoming event? Just click on the link at [mineralumni.com](http://mineralumni.com) and register online to see a list of other attendees in the online community. The attendee list is also available by clicking on the events tab.*



## AN AUTO INSTITUTION

**Dick Burdick**, ME'52, is well known in the car world as being "the car guy." He began collecting cars in 1948 when he purchased a yellow '48 Buick Roadmaster convertible after he got out of the Army. From there, his diverse collection of classic and vintage cars has grown significantly — to include cars once owned by famous individuals: Johnny Cash's 1970 Rolls-Royce Silver Shadow Limousine and Lyndon B. Johnson's 1964 Lincoln Continental convertible, to name a couple.

In 1980, Burdick opened the Central Texas Museum of Automotive History (CTMAH) in Rosanky, Texas, a non-profit educational foundation, which housed the bulk of his 250-car collection. Burdick, who is the founder of Thermon Industries Inc., recently auctioned off 90 vehicles from his collection and moved the remaining cars to Dick's Classic Garage Car Museum, which he opened in 2009 in San Marcos, Texas, as an affiliate to the CTMAH. The newer museum (complete with a restoration area) still encompasses the same mission: to bring an understanding of the automobile history and its relationship to society.

◀ '57 Chevrolet Bel Air convertible. Pictured above is Burdick's '30 Duesenberg Model J Willoughby. (Photos from [dicksclassicgarage.com](http://dicksclassicgarage.com))



More information at [dicksclassicgarage.com](http://dicksclassicgarage.com).



# RICK JORDAN: SHIFTING<sup>by</sup> SOUND



Rick Jordan, ME'70, in front of his 2007 Corvette (left) and his 1966 Corvette Stingray. (Photo by B.A. Rupert)

**“YEAH, MY FUEL INJECTED STINGRAY AND A 413, REVVIN’ UP OUR ENGINES AND IT SOUNDS REAL MEAN.”**

— Beach Boys (“Shut Down”)

**Prized possession:** A 1966 Corvette Stingray. During the winter, Jordan, ME’70, keeps it stored at the same auto museum in St. Louis where he bought it.

**New vs. old:** He bought a 2007 Corvette new and, before that, he owned a 2003 model. “I love the new Corvettes, but the older ones are legendary,” Jordan says. “Have you ever heard a song about a new Corvette? The old ones were simple enough for the average guy to understand.

Now you would have to be mechanically inclined and also a computer genius to really know your car.”

**Cool quote about his Stingray:** “There is nothing like the old side pipes. I shift by sound.”

**Campus connections:** A member of the Claghn of the Claddagh in the Order of the Golden Shillelagh major donor society, Jordan has been active in the Academy of Mechanical and Aerospace Engineers.

“This is a great group of alumni making a difference in the mechanical and aerospace engineering department,” he says. He was awarded a professional degree by the university in 1995. His giving supports the academy, the Miner Alumni Association and the mechanical engineering department. He also supported the Toomey Hall renovation.

**The good life:** Jordan is retired and serves on the board of directors of the company he co-founded in 1979, Paric Corp., based in St. Louis. “I have been married for 41 years to the girl I met in Rolla, LaVona,” he says. “We have four adult children and four grandchildren, so far. Life is good.” ■

► DONE!

Garrick Johnson, ME'12, is an engineer with John Deere & Co.  
(Photo by B.A. Rupert)





# MISSOURI S&T

Miner Alumni Association  
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Rolla, MO 65409-0650

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## HOT RODS AND COOL CARS

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# Cruise in

Put the pedal to the metal and take a road trip back to Rolla for the first-ever Miner Cruise-In Saturday, Oct. 13. Cruise in with your hot rod, classic car or cool ride. Or just stop by and enjoy the cars! All models are welcome and entry is free. The car show will be held from 10:30 a.m. to 1 p.m. in the parking lot of the Gale Bullman Multi-Purpose Building. Register your ride at [mineralumni.com/cruise-in](http://mineralumni.com/cruise-in).