



Missouri S&T Magazine, Spring 1996

Miner Alumni Association

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A PUBLICATION OF THE MSM-UMR ALUMNI ASSOCIATION

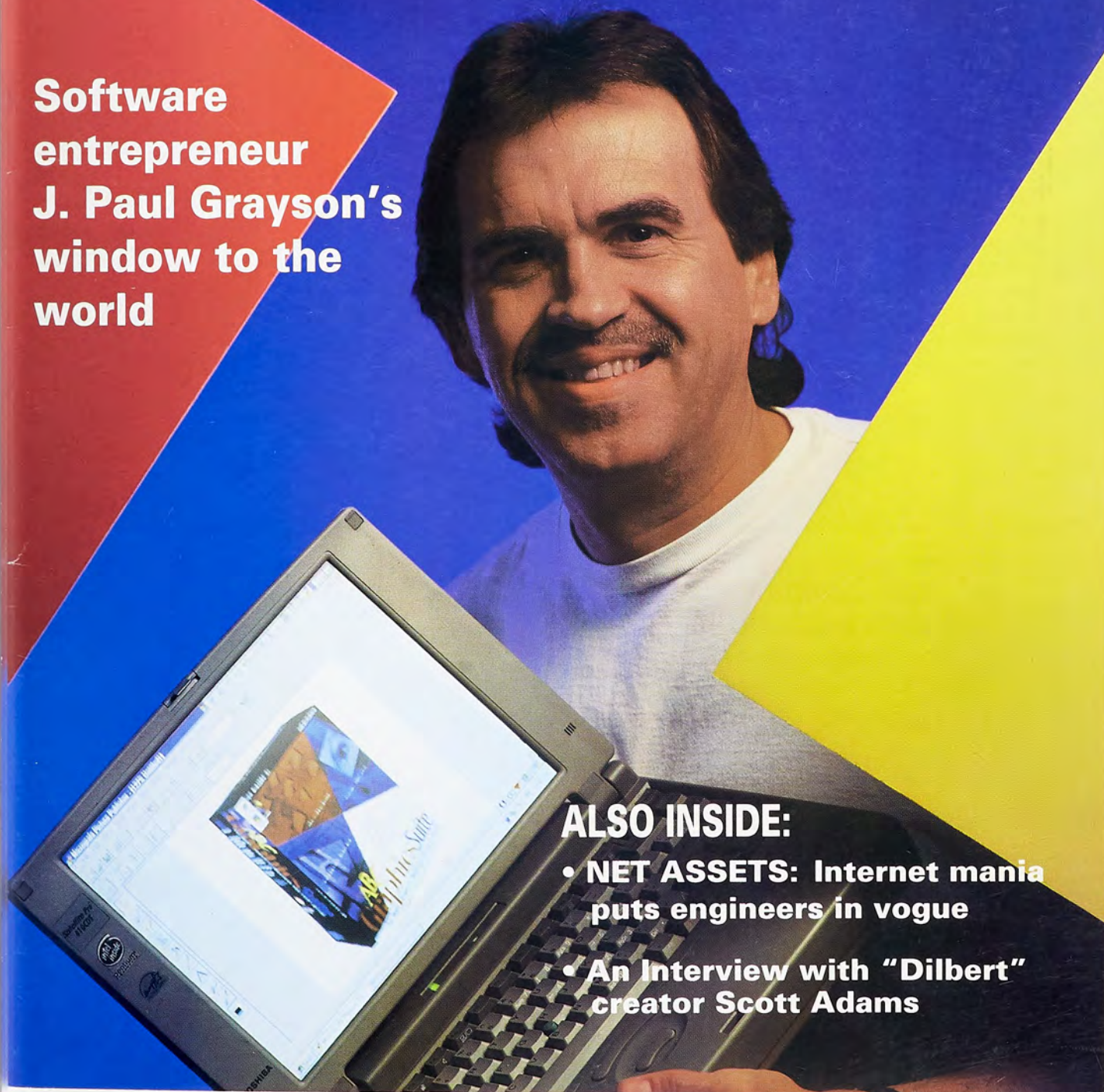
**MSM-
UMR**

ALUMNUS

SPRING 1996

VOL. 70, NO. 1

**Software
entrepreneur
J. Paul Grayson's
window to the
world**



ALSO INSIDE:

- **NET ASSETS:** Internet mania puts engineers in vogue
- **An Interview with "Dilbert" creator Scott Adams**

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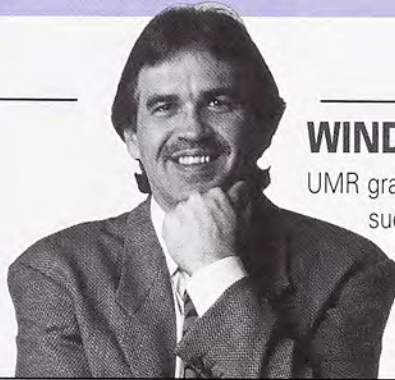
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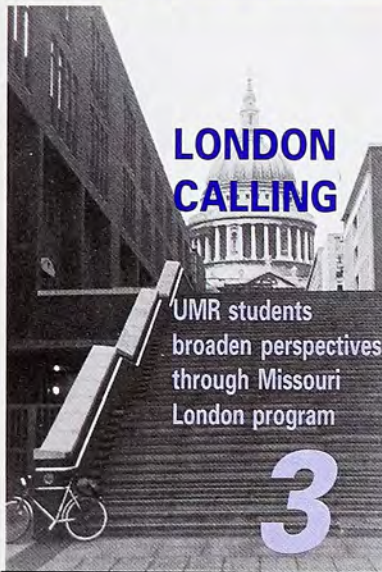
FEATURES



WINDOWS OF OPPORTUNITY

UMR graduate J. Paul Grayson's Micrografx Inc. finds success with software giant Microsoft

6



LONDON CALLING

UMR students broaden perspectives through Missouri London program

3

GEEK IS CHIC AND AT ITS PEAK, SO TO SPEAK

Internet mania puts engineers in vogue

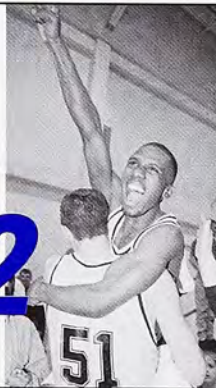
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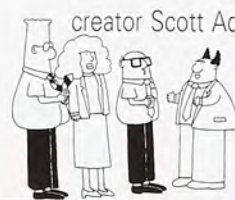
The Miners and Lady Miners earn a share of the 1995-96 crown—a first for the Lady Miners, and the first in 20 years for the men

52



SCOTT ADAMS AND THE GEEK MYSTIQUE

An interview with "Dilbert" creator Scott Adams



17



DEPARTMENTS

- 2 LETTERS TO THE EDITOR
- 23 CAMPUS NEWS
- 27 ASSOCIATION NEWS

- 34 ALUMNI NOTES
- 46 SECTIONS NEWS
- 55 SPORTS UPDATE

On the cover: Software entrepreneur J. Paul Grayson. Photo by Steve McAlister/Burkey Studios

LETTERS TO THE EDITOR



CORPORATE LEADERSHIP



I congratulate each of you for the "Alumnus" magazine. You folks have accomplished the impossible in identifying and publicizing our many successful graduates. I found the earlier Special Edition to be great, but this latest issue is outstanding. I read every word starting from the front cover and imagine my surprise when I reached the back some hour and a half later and saw the smiling Brackbills.

We are indeed grateful for the honor of this wonderful recognition. Hopefully it will inspire some of the successful entrepreneurs and corporate executives, whom you have written so elegantly about, to match or better Catherine's and my gift.

Thanks for a job well done.

Robert Brackbill, PE '42

Clarification—

Karen Daily Clifford, Engl '77, Hist '77, was the first female Air Force ROTC cadet commissioned at UMR in 1977. Her name was inadvertently left out of a story about ROTC on the UMR campus in the Winter 1995 issue of the Alumnus. The editors regret the oversight.

A tribute to Sally White, former MSM-UMR Alumnus editor



Sally (Sarah Katherine) White of Rolla, Mo., former editor of the *MSM-UMR Alumnus* magazine, died Monday, Jan. 1, 1996, at age 66.

Ms. White joined the UMR staff in 1969. She worked in the office of public information and later the office of publications. She was instrumental in producing the February 1970 centennial issue of the *MSM Alumnus* magazine and was editor of the magazine from 1979 through 1988. She retired from UMR in May 1992.

Ms. White was active in campus and community organizations. She was a founding member of the Phelps County Alumnae Panhellenic Society and also was an Honorary Knight of St. Patrick in 1980 in recognition of her work with the St. Pat's Board. She was responsible for publicity and publications of St. Pat's celebrations for 25 years.

Ms. White also edited "The Story of Rolla" for Rolla's Bicentennial Commission in 1975.

Ms. White was named a life member of the MSM-UMR Alumni Association in 1991. She also recently received a 50-year membership pin from Kappa Alpha Theta sorority.



Sally White was knighted in 1980 in recognition of her work with the St. Pat's Board.

Ms. White held a bachelor of arts degree in history and political science from Washburn University in Topeka, Kan. She taught high school English and journalism for two years, then worked for Kansas Blue Cross-Blue Shield from 1951 through 1960. She then joined Ayres Advertising Agency in Lincoln, Neb., and later joined the staff

at the University of Nebraska-Lincoln, where she served as editor of the school's alumni magazine.

MSM-UMR

ALUMNUS

Mission of the MSM-UMR Alumnus magazine

The MSM-UMR Alumni Association publishes the *MSM-UMR Alumnus* to communicate and reflect the past, current and future interests of the alumni of the Missouri School of Mines and the University of Missouri-Rolla.

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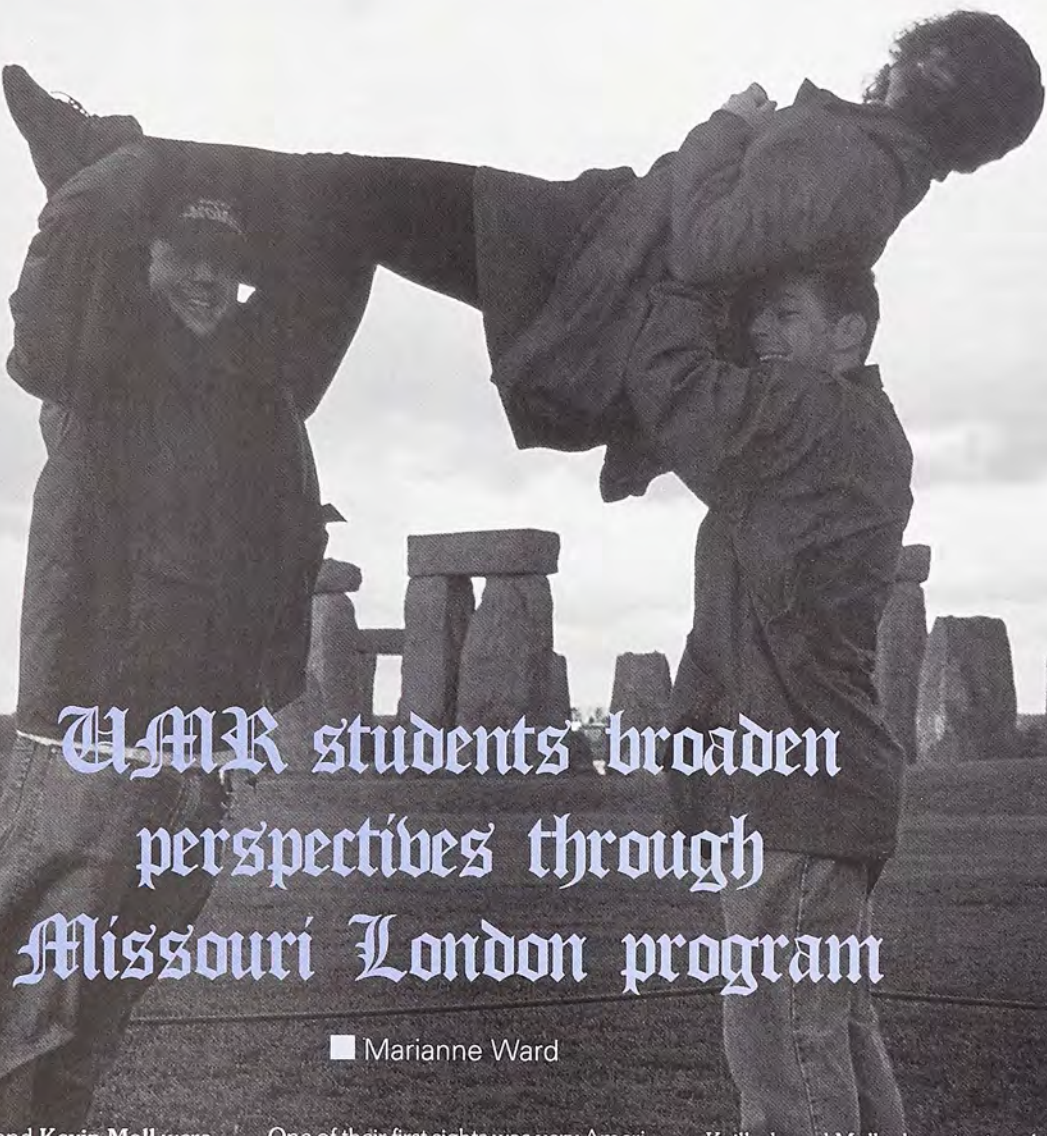
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PHOTO BY JAMES BOGAN
Spring 1996

London Calling



UMR students broaden perspectives through Missouri London program

■ Marianne Ward

Sheila Keilholz and Kevin Moll were bubbling with excitement when their plane landed in England.

"I had wanted to go to England for a long time, and there I was," says Keilholz, a junior physics major.

Within minutes, however, the UMR students' enthusiasm turned to disappointment. Where was the postcard, picture-perfect London?

One of their first sights was very American: a Burger King, which they passed on their way from the airport to the train station. Then, once on the train to Imperial College, they passed row upon row of dirty, narrow buildings and trash-littered lots. It seemed everything was paved.

"I thought it was a dump," Keilholz says. "There was soot on all of the buildings, and junk was lying around everywhere."

Keilholz and Moll, also a junior physics major, felt they had been deceived. It turned out, however, that their first impression was misleading.

"It was a wonderful experience," says Keilholz, who spent the winter 1995 semester at Imperial College in London through the Missouri London Program.

The program allows students from UMR and other Missouri universities to

(Continued on the next page)

PHOTO BY JAMES BOGAN

Spring, 1996

spend a semester of study taking American courses at Imperial College, located in the South Kensington area of Central London. The semester abroad changes students forever, says **Jack Ridley**, a Distinguished Teaching Professor of history who has spent some time teaching in the Missouri London Program.

"Students come back different people," Ridley says. "They're more sophisticated and more mature. They experience a much different culture than they anticipated. And they probably appreciate America a little more when they come back."

For Keilholz and Moll, the semester turned out to be a blitz of experiences they will treasure forever. Now back in Rolla, their eyes light up as they fire off the names of the landmarks, performances and museums they saw: St. Paul's, Westminster Abbey, the Tower of London, Stratford-on-Avon, Arcadia, "Les Miserables," Picadilly Circus, Victoria and Albert Museum, Kensington Palace, Canterbury.

And with each site comes a special story.

"Picadilly Circus was one of the most interesting places I've ever seen," says Keilholz, who is from tiny Frankenstein, Mo., with a population of about 30. "We'd go there just to watch the people. We called it freak-watching. It was amazing to see how many body parts they had pierced."

Moll, a native of Oakville, Mo., near St. Louis, was just as amused. "We could spend hours walking around, listening to the people playing music and watching people going to the night clubs," he says.

London was just the beginning of their adventures. During semester breaks and after the semester ended, they travelled to Ireland, the Canary Islands and throughout Europe—to the Netherlands, Switzerland, Germany, Belgium, Italy, France, Austria and Hungary.

Traveling throughout Europe was an education in itself, says **Teresa Heithaus**, a senior civil engineering major from Springfield, Mo. "You learn so much about other cultures," she says. "I had developed some perceptions, but it was totally different than what I thought it would be."

First-hand fun

Books, movies and even three-dimensional multimedia presentations about London cannot replace experiencing London first-hand, say students who participate in the Missouri London Program.

Studying abroad adds an extra \$4,000 to the semester's tab, but the students say it's worth it.

"The professors made the courses come to life," says Heithaus. "I could sit

something, you see and experience it. Besides, you can only get so much from books and movies."

Sue Kellems, Hist '91, agrees there is no substitute for the real thing. Kellems, who is now the assistant to the director of the Missouri London Program on UMR's campus, attended the 1987 intersession course, "A Medieval Window: The Gothic Cathedral," where she studied cathedrals and abbeys as symbols.

"To stand on the steps where Thomas Becket (the archbishop of Canterbury) was murdered—you can't get that out of a book or movie," Kellems says. "It's a hair-raising experience."

As part of the course, she studied the art of cathedrals. "There are hundreds of stained-glass windows in cathedrals, and each has a message. It was wonderful to learn how to read them."

"At Canterbury, we went to a stained-glass restoration site where they clean and repair the windows," Kellems says. "We actually got to hold pieces of stained glass that were hundreds of years old. It was fantastic."

"Of all the experiences during college, this is the one I will always remember most."

A 4,300-mile tune-up

Teaching in London is a 4,300-mile tune-up a professor needs every decade or so, says **James Bogan**, professor of art, who spent time in Europe as a student but had not been back in 30 years.

Bogan's winter 1995 semester in London "revived much of what I had studied and learned, not only with the architecture, but also with the great art and museums."

"You can learn a lot from books and slides, but the opportunity to be in London certainly enhanced my capabilities as an art history teacher," Bogan says.

Bogan incorporated London's surroundings and treasures into his courses. "In my art history class, we would talk about Gothic architecture and then go to Westminster Abbey. When we were studying baroque, we went to St. Paul's," Bogan says. "At Stonehenge, students imitated the architecture, making human trilathons. It was wonderful to let the students experience it."



St. Paul's Cathedral was one of the stops for James Bogan, professor of art, who retraced via bicycle the route of the mythic character Los, the hero of William Blake's epic poem, "Jerusalem" (1805-1820).

PHOTO BY JAMES BOGAN

and listen to their lectures forever." Between the lectures and the travel, she says, "I learned so much it was incredible."

Students took regular classes on Mondays, Tuesdays and Thursdays, with Wednesdays devoted to field trips that were part of the British Life and Culture course. Stops included the Houses of Parliament, Tate Gallery with Turners, the London Museum, Museum of the Moving Image, Oxford, Stonehenge, Stratford-on-Avon and Blenheim Palace.

"Studying in England is better because the history happened there, or the artist lived there or the playwright lived there," Heithaus says. "You not only hear about

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High-spirited fun came to Bogan's class on William Blake, author of "Songs of Innocence" and "Songs of Experience." One day Bogan invited guests to his class and conjured up "Blake's spirit" in one of the guests. After telling the author's likes and dislikes and singing a couple of Blake's songs, the "subject" revealed his true identity. He was Michael Loughnan, a British actor who does one-man Blake performances. The hoax was a great hit.

On a more serious note, Bogan says studying abroad is not only important for students, but also faculty. "A real university creates opportunities for all its faculty to have international experience," he says. "International experience is a privilege, but it's not the stereotype of going and being a tourist. It has to do with enlarging your horizons, learning from other cultures and working. (Most professors teach three courses while they're in London.) The enthusiasm of learning ends up back in our classrooms at UMR. It's contagious."

Ridley was so enthused with his first winter semester there in 1990 that he went a second time in 1994 as director for the Missouri London Program.

"For me, it was an opportunity for a European historian to visit Europe," Ridley says. "That was a selfish motive, but I also thought it sounded like a good idea for students to be introduced to a foreign culture in a gentle sort of way. That is, they can go to an English-speaking country, but yet a foreign country."

The first semester, Ridley taught Political Exiles in London, a course about 19th century Europeans who had been driven from their countries and settled in London. The exiles included such historical figures as Karl Marx, Charles X, Napoleon III and Louis Philippe.

"London was sort of a political asylum for exiles at the time," Ridley says. "When we talked about Karl Marx, we paid a visit to his grave. When we talked about Charles X, we went to his home where he lived in exile."

The ability to step into a piece of history is one of the advantages of teaching in England, Ridley says. "On campus, you rely on your library for your research material. In London, you rely on London to be your laboratory."

"You can walk a mile in any direction from Imperial College and virtually every home is historic. Hundreds of great historic characters lived in the region," Ridley says.

Faculty members not only have to teach courses, they also must conduct research while they are in London. For his research, Bogan retraced (on a bicycle) the route of the mythic character Los, the hero of Blake's epic poem "Jerusalem" (1805-1820).

"This never would have happened had I not participated in the Missouri-London program. It gave me the chance to do brand new, innovative, experimental teaching and research," Bogan says.

The essay that resulted from Bogan's adventurous excursion will be published in the Blake Society Journal. At the society's invitation, Bogan will return to London to deliver his slide lecture, "Blake on a Bike," to the society.

Culture shock

While Great Britain and the United States share a common language, the cultures are noticeably different, the students discovered.

At the beginning of her semester in London, Keilholz says, she and the other Americans stood out like tourists. Their brightly colored clothes, constant eye contact with strangers and volume of speak-

"Studying in England is better because the history happened there, or the artist lived there or the playwright lived there. You not only hear about something, you see and experience it. Besides, you can only get so much from books and movies."

—Teresa Heithaus, senior civil engineering major

ing shouted out their nationality.

"After a while we became more adept at blending in," Keilholz says.

Aside from culture, art, architecture and history, students learned a big lesson in economics. They learned to budget their money so they could afford to make the trips they wanted. Eating out in London is more expensive than cooking in, so "we

bought our own food—mainly fruit and vegetables," Heithaus says. "We never bought meat. We did, however, splurge on an Eric Clapton concert in Barcelona."

Nuts and bolts

UMR first got involved in the Missouri London Program with one student in 1984. Eight other Missouri universities participate in program. Four students are enrolled this semester.

The program is a resident program. Students sign up for courses and pay their fees at UMR but study in London, says Wayne Cogell, director and founder of the program on UMR's campus. Students also may borrow money from the Gold Fund, a new loan/work program for students who pursue leadership opportunities. The MSM-UMR Alumni Association provided \$8,000 to the Gold Fund for Missouri London Program students.

Courses are taught by American instructors who become adjunct UMR faculty. Thus, students earn credit and are unaffected by the differences in academic years between London and Missouri.

Cogell's own experiences as a college student led him to get UMR involved in the Missouri London Program.

"I spent a year at the University of Bristol, England, as an undergraduate and it changed my life in a positive way," Cogell says. "I come from a working-class family, and my experience changed my perspective, my life and my attitude. I want the same opportunities for UMR students."

The university pays \$1,000 a year to be a member of the Missouri London Program consortium.

"We tried a couple of other programs, but they didn't work as well. What makes this one work is the students are able to take the courses as if they are at UMR," Cogell says.

It's a toss-up of who benefits more, the students or the faculty.

"I'm an enthusiastic advocate of the Missouri London Program, both for faculty and students," Ridley says. "The opportunity to live in a 2,000-year-old city—one of the world's great cities—and the opportunity to explore historic London is an enriching experience." ■

On page 3: Todd Robenson, Amy Spiegelglass and Andrew Schwartz, participants in the Missouri London program, imitate Stonehenge architecture, making human trilathons.



PHOTO COURTESY OF MICROGRAFX INC.

Windows of opportunity

■ Andrew Careaga

UMR graduate

"We saw Bill Gates coming down the hall, and so George and I grabbed him. We said, 'Bill, we want to do a drawing program for Windows, and we want to make sure you're not doing one.'"

—Paul Grayson, CSci'74

J. Paul Grayson, a transplanted Missourian who now calls Texas home, had Texas-size plans for his small software firm when he and brother George strolled the halls at Comdex, the computer industry's biggest trade show, in the fall of 1983.

The brothers, co-founders of a fledgling company called Micrografx Inc., had come to Comdex to find a graphics environment for their new software package. During the trade show, Bill Gates, the founder of Microsoft, announced his company's newest product, the now-famous Windows operating software.

The Graysons were intrigued by Gates' plans. Less than three months later, they attended the first-ever Windows developers conference in Seattle. And there the Graysons got the chance to sell Gates on their new product.

"We saw Bill Gates coming down the hall, and so George and I grabbed him," says Grayson, CSci'74. "We said, 'Bill, we want to do a drawing program for Windows, and we want to make sure you're not doing one.'"

Gates hesitated, suggesting that the Graysons develop a painting program instead. But the brothers insisted on creating graphics software that would build on their first product, PC Draw, a DOS-based program for the personal computer.

Gates agreed to the brothers' plan. So the Graysons got busy, and in July 1985 their company became the first to release a product for the Windows environment. The company even beat Microsoft, shipping its product six months before Windows was on the market.

A Silicon Valley success story

The rise of Paul Grayson's Micrografx Inc. sounds like a Silicon Valley success story:

A successful computer whiz leaves the security of corporate life to pursue his software dream. Short on cash, he buys a computer on credit, coaxes his younger brother to drop out of college and invest in the venture, and sets up shop in his kitchen. There the brothers begin writing

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Ban Grayson, a broader vi-

Spring, 1996

a computer program that will forever change the software business.

Grayson's ambitions were as big as his new home state. And his timing was perfect.

It was 1981. IBM's PC and the Apple II were the latest computer innovations, and their advent helped make computers a more popular household item.

"It was a very stimulating time," says Grayson. "Everybody was predicting a great time for the software industry. It was kind of like a gauntlet being thrown down. I felt like I had to take this challenge."

In those days, few people dreamed of the many ways computers would be used

his small venture on Microsoft and its plan to develop a new operating system for personal computers. He and brother George hitched their wagon to Microsoft's rising star and sweated it out while the word on Windows slowly caught on. When Windows took off in the mid-1980s, so did the fortunes of Micrografx.

Today, Micrografx, a Richardson, Texas, firm of 250 employees, is recognized as one of the pioneers in the software industry. And thanks in large part to its partnership with Gates' firm, Micrografx manages to stay cutting edge in today's cutthroat software business.

Last year, Micrografx sold more than



PHOTO COURTESY OF MICROGRAF X INC.

J. Paul Grayson's

Micrografx Inc. finds success with software giant Microsoft

today. Grayson, however, was among the few who saw that PCs could be used for more than word processing. He saw computers as a common artistic tool, and he envisioned a future in which business people would use computer-generated flowcharts, diagrams and other graphic art for their presentations.

Banking on Microsoft

Grayson, now 45, also demonstrated a broader vision by banking the future of

\$60 million in software products and services. This year, with three new offerings designed specifically for Microsoft's popular Windows 95, Micrografx is poised to continue its success.

Tired of death marches

Grayson developed his vision for Micrografx while he was employed by KPMG Peat Marwick, the huge accounting and financial services firm. Grayson was a senior consultant and development

manager in the company's software development group, which worked with the accounting and auditing systems of many Fortune 500 companies. Much of his time there was spent on what he calls "death marches." If Peat Marwick would fall behind on a big project, Grayson and his staff would be called on to clean up the mess. "I got pretty good at bringing in the software Marines," he says.

But the work was stressful, and Grayson was itching for a new opportunity. Always interested in developments in the computer industry, he followed advances in the PC field intently. At the same time, he saw at Peat Marwick the need for a software product that would help people create slides, flow charts and other graphics for business presentations. He saw the niche for a new kind of software application, and he pursued it.

He set up shop in Richardson, near Dallas, where Peat Marwick had stationed him at the time. Grayson, who was born in Searcy, Ark., and raised in Cape Girardeau, Mo., quickly put down roots in Texas soil. His company headquarters remains in Richardson, and every year a non-profit group established by Grayson conducts a Texas-style shindig at Comdex. The party, which features live music, a chili cook-off and armadillo races, is the biggest charity fund-raising event in the information technology business (see related story on page 9).

Early success

In January 1983, Grayson shipped the first copy of his graphics presentation software, PC Draw, and brother George started selling the product full time. The Graysons sold \$10,000 of the software in the first month, and sales hit \$250,000 by the end of the first year. Sales reached \$1.2 million in 1984 and \$2 million in 1985.

Even back in those early days of PC software development, when the field was relatively free of competitors, the Graysons saw the need to improve and refine their product if they were to stay on top. "We knew we weren't the world's greatest pro-

grammers," Grayson says, so he and George hired better technical people and focused their efforts on sales and support, and on strengthening their market niche.

Their niche expanded after they hitched up with Microsoft.

Although Windows didn't take off right away, the Graysons stuck with Gates' company through the lean times. "We knew their vision was the right one," Grayson says. Current events, such as sales of Microsoft's Windows 95 and the company's recent move to develop products for the Internet, have proved Grayson's foresight. "Today they're driving this industry forward much faster than anyone ever imagined," he says.



Software programs created by Micrografx Inc.

By 1987, sales for Windows started to kick in. Micrografx was well-positioned, shipping three different products for Windows at that time, and the fortunes of Grayson's company soared along with Microsoft's. In 1989, Micrografx's earnings hit \$1 million on revenues of \$11.8 million, and the company caught the interest of some venture capitalists. "We became the seven-year overnight success story," Grayson says jokingly. In 1990, Micrografx made its first public stock offering.

Rough road

The company continued to prosper until 1992, when a fourth-quarter loss forced layoffs. The brothers decided it was time for some changes in leadership. George Grayson resigned as chief oper-

ating officer (he now has his own company, 7th Level, which creates multimedia software for children), and Paul Grayson voluntarily stepped down as CEO but retained his position as board chairman. Gordon Tucker, a marketing ace from PepsiCo, became CEO but held the position for only 10 months. Grayson returned from his brief hiatus, determined to become more of a hands-on manager.

Today, Grayson continues his close relationship with Windows. Micrografx' three main products all carry the Windows 95 logo. The products are ABC Graphics Suite, which offers a gamut of diagramming, flowcharting, clipart, painting, image-editing, drawing and three-dimensional presentation tools; Crayola Art Studio 2, described as a "multimedia art playroom" for children; and Micrografx Windows Draw 4.0, the latest successor to the company's original product. Windows Draw 4.0 features diagramming and photo-editing capabilities, thousands of clipart and photo images, and hundreds of type fonts.

Other Micrografx products are more whimsical. These include Hallmark Connections, a joint venture with the greeting-card company that allows users to create customized greeting cards on their computers. But the company's core business remains business graphics, Grayson says.

Punch cards to greeting cards

Today's sophisticated software has come a long way from the days of Grayson's first programming experience. That was in Cape Girardeau, while Grayson was studying at Southeast Missouri State University. (He attended SEMO for two years and earned an associate degree in data processing before transferring to UMR.) A computer operator position opened at the local Procter & Gamble plant, and Grayson got the job.

"There were probably only two computer jobs in Cape at the time, and one was at Procter & Gamble and the other was at SEMO," he says.

Grayson's job was to run punch cards through the computer. One day he dropped several cards, effectively spoiling

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the program he was running. His boss told him to fix it.

"So I put it all back together and had the program running the next day," Grayson says. "He was so impressed he gave me a real programming assignment."

Grayson is positioning his company to be a leader in providing graphics packages for the World Wide Web, which Grayson expects to continue its explosive growth.

The result was a quality assurance program for the company. Grayson "got a fair amount of recognition for it, considering I was a computer operator."

Interested in continuing his computer science education, Grayson transferred to UMR. "It was a real challenge for me," he says. "People kept telling me that Rolla had a reputation as a very tough school, and I had no idea at the time how right they were."

He spent most of his time at Rolla studying. He went home most weekends. That left little time for a social life while at UMR. "It was a great place to stay focused on your education."

After graduating in 1974, Grayson went to work as a programmer for the Iron Workers Union headquarters in Washington, then took a job with Rockwell International in St. Louis. While in St. Louis, he made a "short-term career change" by joining Brown Group Inc., the parent company of Brown Shoe Co., as an electronic data processing auditor.

He earned a master's degree in data processing in 1979 from Washington University, and gained some valuable management experience while at Brown. But he soon discovered that auditing was not for him. "I decided I really enjoyed being directly involved in software development more than I did criticizing other people's attempts," Grayson says.

He did enjoy some aspects of the job, however. He got to try his hand at hacking one day, when he was assigned to run a security test of Brown's computer system. The executives were shocked at how

easily Grayson was able to breach security. "It took me about half of an afternoon to get a printout of all the payroll records," he says. "They were very surprised."

Future direction

There are few surprises about Grayson's plans for the future.

After a dozen years at the helm of his software company, Grayson today spends a lot of time thinking about his firm's direction. The challenges boil down to two things: competition and technology.

The two are interrelated, Grayson says. The computer business has taken on many of the aspects of a traditional consumer commodity market, and computers are mass-marketed, much like TV sets or CD players. The price of software and hardware keeps going down, forcing companies to keep their costs low.

Driving the intense competition is the rapid pace of technology, Grayson says. "Technology has advanced so rapidly that just staying up with it is very difficult, and it's difficult to decide where to go next."

But one emerging technology—the Internet—is a sure winner, says Grayson. The advent of the Internet is "a watershed event" that will transform his industry as radically as desktop publishing changed software products in the 1980s. "It (the Internet) is going to lead to another explosion for demand in graphics programs and documents, only these will be electronic documents instead of paper documents."

Toward that end, Grayson is positioning his company to be a leader in providing graphics packages for the World Wide Web, which Grayson expects to continue its explosive growth.

Indeed, with the Internet gaining prominence in the world of information technology, the climate for the industry today is much the same as it was some 15 years ago, when Grayson decided to risk it all on a dream. It paid off then, and Grayson is betting that it will pay off again. ■

Chili cook-off: a HOT time at Comdex

In 1989 Micrografx organized its first chili cook-off to raise money for charity while raising visibility for the company. Today, the Micrografx Chili for Children Cook-Off is the hottest fund-raising event in the information technology business.

The annual party is sponsored by the Chili for Children Foundation Inc., a non-profit organization created by Micrografx founder Paul Grayson. The Texas-style party, held in Las Vegas each year during Comdex, the computer industry's biggest trade show, nets about \$500,000 a year for the National Center for Missing and Exploited Children, based in Washington.

The \$50-a-person event features some 50 different chili dishes, prepared by the finest cooks in the computer business. The fun includes a battle of the bands (last year's event featured some hot licks from Paul Allen, co-founder of Microsoft, and his band The Threads; Dave Stewart of Eurythmics fame sat in with the band for last fall's contest), a big-name group (in 1995 it was the Temptations, in keeping with the theme "Mo' Chili, Motown"), and the always-popular armadillo races, which feature some of the biggest names in the computer business. "Bill Gates has never raced one, but some of his direct reports have," says Grayson.

The money raised through the cook-off goes to support the use of technology to help solve the problems associated with finding missing children. Recently, the proceeds have been used to support "photographic age progression" technology, which uses image-editing software to create composite pictures of children as they would look today. This process has led to the recovery of some 60 children who might not have been found otherwise, Grayson says.

Proceeds also have been used to create electronic forums for the discussion of missing-children issues and on-line clearinghouses in all 50 states.



**Geek is chic
and at its
peak,
so to speak**

■ Andrew Careaga

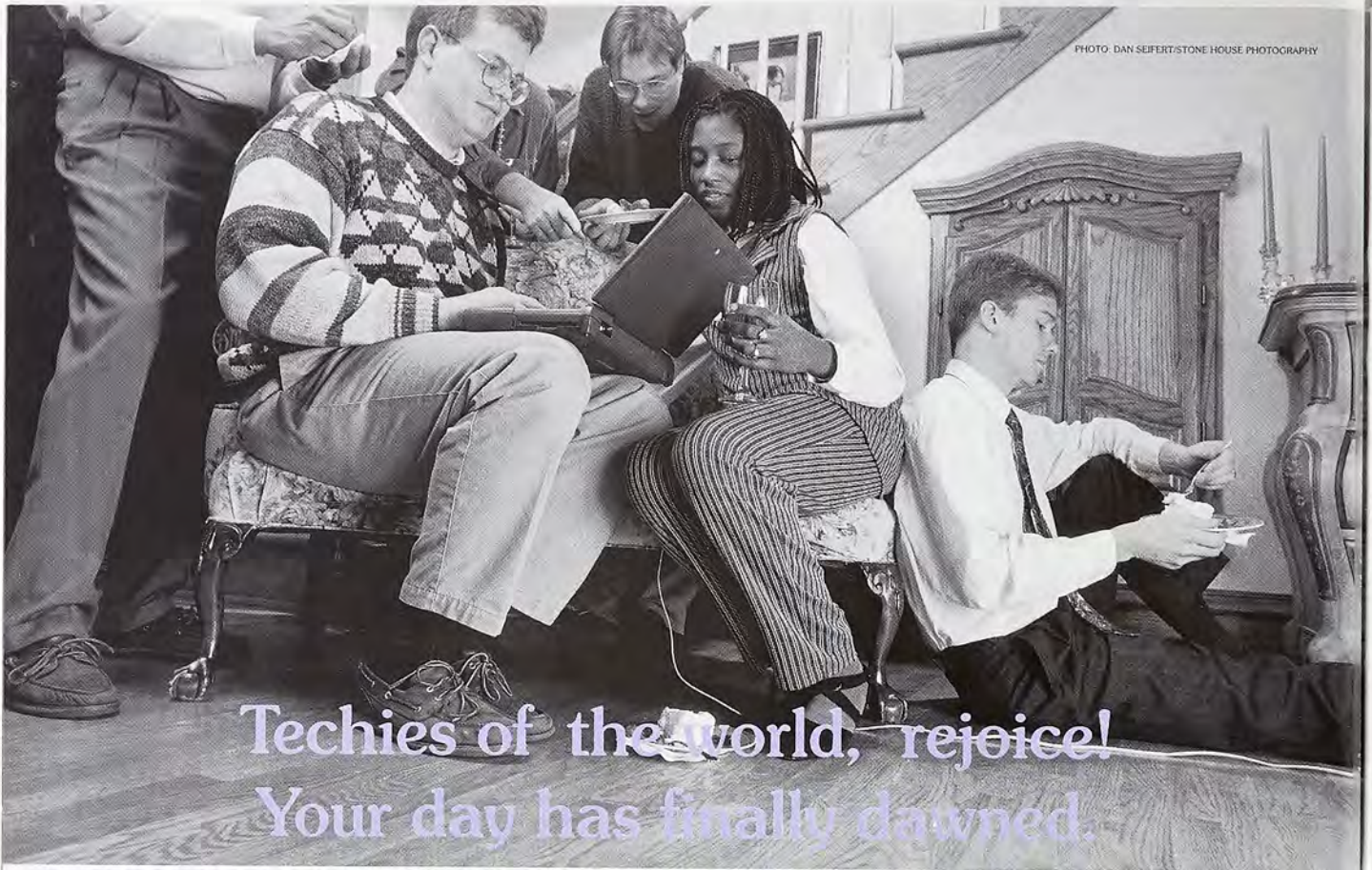
Internet mania puts



C
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engineers in vogue

PHOTO: DAN SEPERT/STONE HOUSE PHOTOGRAPHY



Techies of the world, rejoice! Your day has finally dawned.

For years, the technically able of this world have been maligned by the media. They have been caricatured as cubicle-dwelling unsociables more interested in computer interfaces than human interaction.

But today, techies are cool.

Let's face it: When was the last time you picked up a newspaper or news magazine and *didn't* read about the Internet or Bill Gates? The media laud techies and things technical. High tech drives Wall Street, and a lowly engineer and his insolent dog now rule the funny pages.

Call it geek chic, if you will.

"I always joked that geeks and nerds would be the next 'in' thing," says **Andrew Sears**, EE'95, now a graduate student at the Massachusetts Institute of Technology. "It's time to invest in pocket protectors before the mad rush hits."

The signs of techie eminence are everywhere:

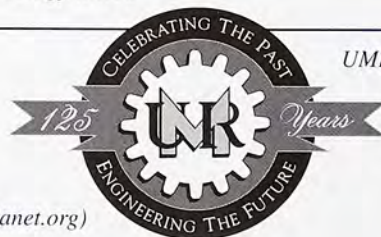
- The world's richest man is no typical captain of industry. It's software maven Bill Gates, the president and founder of Microsoft Corp.

- When Netscape, a software package for the Internet's World Wide Web, went public on the stock exchange last summer, its stock doubled before the end of the first day, making 24-year-old Marc Andreessen, the creator of Netscape, a millionaire overnight—and proving that even Wall Street investors know that technology is hot.

- The comics page, always a barometer of societal leanings, is no longer the domain of "The Far Side," the hippest strip of the '80s, or "Calvin and Hobbes," whose creator, Bill Watterson, retired on New Year's Eve. It has been commandeered by an unassuming technocrat named Dilbert. "Dilbert" is now distributed in more than 800 newspapers worldwide, and the comic strip's World Wide Web site, "The Dilbert Zone" (<http://www.unitedmedia.com/comics/dilbert/>), is a hot spot on the internet, visited by hundreds of thousands of Web surfers daily. "Nearly



RollaNet (<http://www.rollanet.org>)



UMR home page (<http://www.umn.edu>)



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USA Today
Spring, 1996

everyone loves 'The Dilbert Zone,'" says **Mitch Levings**, ChE '78, a lead engineer in technical program development at Houston Lighting and Power.

•The Internet—that conglomeration of computers joined by fiber-optic cable to exchange information—is paving the way for what many are calling the "information superhighway." People plugged in to the Internet like never before in 1995, and the pace of net activity shows no signs of slowing.

A highway or a market?

People like Gates say the highway metaphor is misleading because it implies distance, and the Internet transcends all boundaries of place. Instead, Gates says in his book "The Road Ahead," the Internet will become "the ultimate market," where people will buy and sell, invest, haggle, argue, meet new people, hang out, and conduct all manner of human activity.

Gates is helping to shape that market. His most recent venture, with NBC, merges television news with an on-line computer service. The result will allow computer users to watch the news on their PCs. Other companies, meanwhile, are taking the reverse approach, turning channel surfers into Web surfers by making the World Wide Web accessible via television.

"The Internet is a watershed event that is transforming the entire industry," says software entrepreneur **J. Paul Grayson**, CSci '74. The Internet opens up a wide frontier of opportunities for Grayson's company, Micrografx Inc., which pioneered graphics and business-presentation software in the 1980s.

"Just as desktop publishing generated demand for new graphic images for publications and other documents in the '80s, so is the World Wide Web generating demand for electronic documents and images," says Grayson.

While some companies may be running scared at the prospect of the Internet explosion, Grayson welcomes the new challenges. "My attitude is, 'Let's make the best of it,'" Grayson says. (See the story on Grayson on page 6.)

Millions are on line

Some 24 million people in the United States and Canada are plugged into the Internet, according to a November 1995 report by Nielson Media Research and CommerceNet. In the forefront of this plunge into cyberspace are colleges and universities like UMR, which provides one networked computer for every eight students. Students and faculty can also plug into the Internet from their home computers via modem by dialing in to UMR's Internet connection. The campus is also getting elementary and secondary school teachers on line through the campus' South Central Regional Professional Development Center, which trains math and science teachers on the basics of Internet.

Meanwhile, UMR staff members—including **Meg Brady**, CSci '83, '89, manager of user services, and **Richard Altheide**, CSci '84, a senior systems programmer—are lending their expertise to the community by developing a local

All of this on-line activity is dramatically changing the way people conduct business, engage socially or communicate within traditional organizational structures.

"freenet" called RollaNet (<http://www.rollanet.org>). RollaNet, now over a year old, gives area computer users access to the Internet from their home computers.

Living the virtual life

All of this on-line activity is dramatically changing the way people conduct business, engage socially or communicate within traditional organizational structures.

MIT student Sears often begins his day catching the news through the on-line version of USA Today (<http://www.usatoday.com>). He also uses the World Wide Web to conduct research, and spends time "reading other electronic newspapers and magazines, and keeping up-to-date on technology. However, I've found that I can spend hours on the web wasting time if I don't watch it."

That's one of the pitfalls of Web-surfing, says Sears, who helped create cyberspace's Internet Headquarters for Student Governments (<http://www.umar.edu/~stuco/ihsg.html>) while he was at UMR. (Sears later created a Web site devoted to the Republican primary (<http://www.umar.edu/~sears/primary/main.html>)—a site recently featured in The New York Times. "Since I started it several months ago, it's received over 100,000 hits," Sears says.)

People with a bit of know-how and time management, however, find the Internet a vast resource of information. **Lt. Ronald B. Shankland**, CE '92, who is stationed at Wright-Patterson Air Force Base in Ohio, uses it frequently to stay abreast of NASA projects (<http://www.ksc.nasa.gov>). But his daughter may have gotten the best value from Shankland's Internet access. When she was preparing a report about cats for her third-grade class last year, she plugged into the Internet with a request about how to say "cat" or "kitten" in different languages. "The number of responses was amazing," says Shankland. His daughter ended up with more than 160 different names for felines—from the Afrikaan "kat" to the Yoruban "ologbo."

The Internet is becoming a more popular shopping resource. **Greg Boice**, CSci '92, recently saved about \$2,000 by purchasing a new car through an on-line service.

Net business

As a senior programmer for Pulse Technologies Inc., Boice uses his Internet connections extensively. His company is based in Virginia, but Boice is in St. Louis, and he's frequently on the road providing

(Continued on the next page)



USA Today (<http://www.usatoday.com>)

Spring, 1996



Alpha Chi Sigma
(<http://www.dfw.net/~ccarroll/axe.html>)



Ramtron (<http://www.csn.net/ramtron/>)

Does the word geek mean anything to you?

Alumni have mixed feelings about the term "geek" as it is applied to people who are enamored with technology.

"I think that 'geek' is much less of an insult than it used to be," says **Mitch Levings**, ChE'78. "I mean, how much of an insult is it to be classified in the same category as Bill Gates?"

"I am referred to as a geek by my peers on a daily basis," says Air Force Lt. **Ronald B. Shankland**, CE'92. "I generally take it as a compliment from my colleagues because they recognize my abilities with the computer and the Internet."

Others, however, aren't so happy with the term.

"I thought the term went out with the slide rule," says **Bill Ogroski**, EE'77.

Lori (Dubin) Bush, CSci'87, who works for an Internet services firm, finds the word "humorous, and of course derogatory and overused." Terms like "techie," she says, are "more complimentary."

"I don't think engineers get too offended by these titles, but it sure would be helpful if the engineering community could develop some images that are more positive of the professional than the pocket-protector, slide rule-carrying geek," says **David Bondurant**, EE'71. "In reality, most engineers are key figures in running highly technical global businesses and have a broad range of interest, not just technical."

But according to **Greg Boice**, CSci'92, his interest in things technical is exactly what makes him "geeky."

"I'm proficient with computers, but that's not why I'm a geek," says Boice. "I'm a geek because in social situations I find myself talking about technical issues."

He points to a conversation at a friend's Thanksgiving party as an example. "We talked—argued—about some trivial point from a calculus lecture way back when, and how the new digital satellite systems work," he says.

"Rather than sit around talking about who's having a kid, the stock market or last week's episode of 'Friends,' we talk about technical stuff as well as who's having a kid, the stock market and last week's episode of 'Friends.'" ■

consulting services. Boice uses a laptop and his America Online and CompuServe e-mail accounts to keep in touch with customers and co-workers.

"I can't say that I couldn't do my job without it, but there are certainly times when access to this information (available on line) has made my job much easier," Boice says. "For example, if I need a patch for a program, I can jump onto the 'net and usually download the fix right then and there. Consider the alternative: being put on hold for hours on end, hoping to find the one tech support person who knows how to help me."

David Bondurant, EE'71, also uses the Internet for business purposes. As director of marketing for enhanced memory systems at Ramtron, a Colorado Springs, Colo., manufacturer of products for the semiconductor industry, Bondurant uses e-mail increasingly to communicate with customers and sales people throughout Europe, Japan, Israel, Russia, India and South Africa, as well as in the United States.

"The Internet is becoming a common means of business communications, along with the telephone and fax machine," says Bondurant, who is also in charge of Ramtron's web page (<http://www.csn.net/ramtron/>).

As a product manager for network management at Cisco Systems Inc.'s InterWorks Business Unit, which provides an array of Internet services, **Lori (Dubin) Bush**, CSci'87, also spends much of her day on line. "I use the Web mostly for business," says Bush, who works out of Cisco's offices in Research Triangle Park, N.C. "I sometimes look at it for fun, though." Among her favorite leisure spots on the Net are The Dilbert Zone and Women's Wire (<http://www.women.com>), a resource for women's issues and news.

On-line design

Thanks to the ubiquitous Internet, engineers hundreds of miles apart can be members of the same virtual design team. Their reliance on the computer as a com-

munications medium changes the way they work.

"You have to move beyond traditional perspectives and look at things in a new way," says **Catherine Riordan**, a professor of psychology and director of management systems at UMR. Riordan, an expert in organizational psychology, says computer-based communication in a business "can have a very liberating effect" on people—especially those who aren't in the traditional positions of power in corporate hierarchies. E-mail gives these people more of a voice in decision-making, Riordan says.

Companies are recognizing the value of e-mail's anonymity and are letting employees use the network to engage in "computer brainstorming." This technique is more effective than traditional, small-group brainstorming because employees are more comfortable sharing ideas via e-mail, Riordan says.

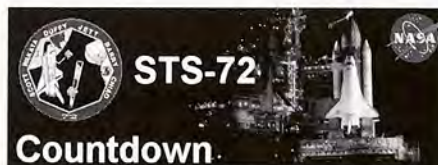
Riordan herself knows the value of e-mail for big projects. She recently co-wrote a textbook—all on line—with two other authors, one in San Diego and one in Virginia. "We never met when we were doing the active part of the writing," she says. "We developed an outline and passed it along to each other electronically, then we divided the work up." The result was "Impression Management in Organizations," published last summer by Routledge. In addition to communicating electronically with each other, Riordan and her co-authors exchanged text and notes electronically with their London-based publisher.

Flame wars

There are drawbacks to techno-communication, however. While e-mail is ideal for brainstorming, some people find the medium too liberating, Riordan says. Because of the anonymity of electronic communication, "some people feel pretty free to act in anti-social or unethical ways," she says. This often results in "flaming"—sending harsh or obscene electronic messages to individuals or groups. Universities like UMR need to encourage high ethical stan-

www.micrografx.com

NASA's space shuttle page
(<http://www.ksc.nasa.gov/shuttle/countdown/liftoff.html>)



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dards among their students to ensure that they use the new technologies responsibly, Riordan says.

Once the brainstorming part of a project is over, it's difficult to move people toward consensus via the new medium. Riordan and **Colin Benjamin**, an associate professor of engineering management at UMR, are using "group decision support software" in studies on virtual consensus-building. **Leslie Monplaisir**, a Ph.D. candidate in engineering management, is also conducting research in this emerging area.

"I think eventually we'll become more skilled at using computers to influence people, but we still rely on a lot of non-verbal communication methods" to build consensus, Riordan says. Those methods are missing in computer-mediated work environments, she adds.



Joe Council and Rolla area teachers get on line at the Regional Professional Development Center on campus.

While many engineers use the Web for work, it comes in handy for recreational use as well. People like Levings and Boice use the Web to stay in touch with professional and social organizations.

While Riordan agrees that "the potential is fabulous" for organizational improvements through computers, she cautions that "there are some things you just shouldn't do" with the new communications technology.

"You can't deliver a performance appraisal over e-mail, for example," she says.

Voice e-mail over a cup of Java

But you can "talk" to somebody via e-mail. Using "freeware" called Speak Freely, which delivers voice messages

over the Internet, Sears has been using cyberspace like a telephone.

Another advance that promises to broaden the Internet's use is a new computer language called Java.

Java, which is the creation of Sun Microsystems, allows computer users to create World Wide Web sites that include animation, moving text and interactive games. In the future, Web-surfers could use Java to digitally test-drive a new car from a dealer's home page. Or companies could use the language to create animated logos. "It could revolutionize the Web just like the Web revolutionized the Internet," says Sears.

Not just work

While many engineers use the Web for work, it comes in handy for recreational use as well. People like Levings and Boice use the Web to stay in touch with professional and social organizations. (Levings, who cybersurfs a couple of hours every week from his home in Lake Jackson, Texas, visits the home page for his professional fraternity, Alpha Chi Sigma [<http://www.dfw.net/~ccarroll/axe.html>]. Boice hits

UMR's Sigma Tau Gamma site at <http://www.umn.edu/~sigtau>, visits the Web site for KMNR [<http://www.umn.edu/~kmnr>] and takes the long, strange trip to "Dead Express" [<http://www.nowhere.net/~dead123/>], a page for Grateful Dead aficionados.)

Some people, like Cisco's Bush and **Dana S. Nau**, AMth'74, a computer science professor at the University of Maryland, use the Internet to check on the weather. In North Carolina, Bush travels to <http://meawx1.nrrc.ncsu.edu/index.html>—the North Carolina State University Meteorology Page—for local weather information. Nau consults gopher://wx.atmos.uiuc.edu/, the University of Illinois' weather page, "whenever I am getting ready to take a trip out of town."

For some audio fun on the Web, Nau suggests Star Trek fans browse to <http://www.ama.caltech.edu/users/mrm/kirk.html>, home of the James T. Kirk Sing-Along Page. "You won't believe your ears," he says.

Net entertainment is fine for some folks. But after a long day in front of a computer, some engineers like to look elsewhere for amusement.

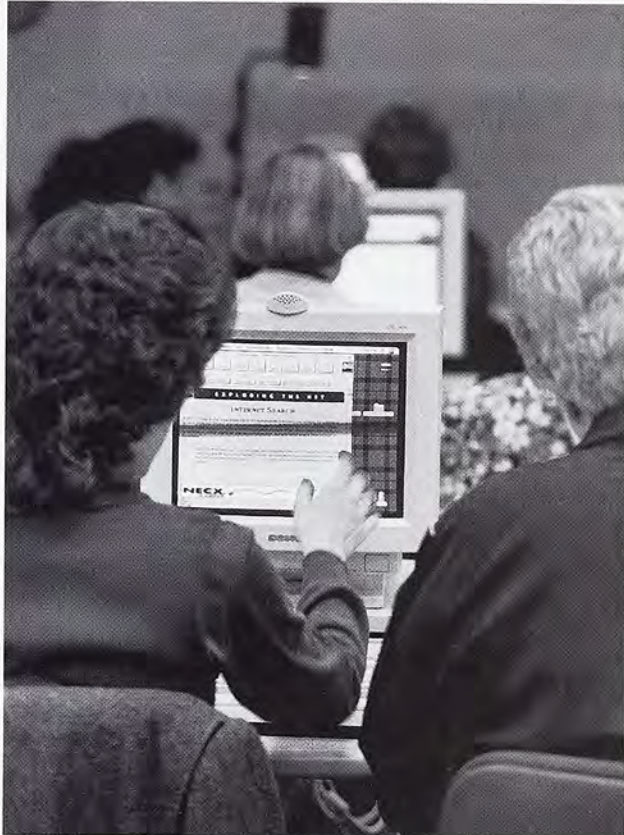
(Continued on the next page)

Internet Headquarters for Student Governments
(<http://www.umn.edu/~stucio/ihsgh.html>)



James T. Kirk Sing-Along Page
<http://www.ama.caltech.edu/users/mrm/kirk.html>





Teachers surf the web at UMR's Regional Professional Development Center.

"I find that I prefer other activities—tennis, automobiles, home theater—during my spare time, so I can't say that I am a big Web user for entertainment," says Bondurant. His two sons, ages 12 and 15, "are the big Web-surfers in our family," he says.

Not long ago, however, the Web came in handy while the Bondurants were considering a vacation in Canada. Web sites for Alberta, Vancouver and Banff Na-

tional Park all listed events, area attractions and lodging information. "From this information, I was able to determine that the time I proposed to visit Banff was a major festival that normally sells out all hotels in the area," Bondurant says. "As a result, I ended up choosing Vancouver for our vacation.

"This is my favorite use of the Web: finding information about cities and products of interest."

Bondurant also visits the Web sites of movie studios to preview movies in Quicktime format—a video format accessible via the Web.

Like Shankland, **Bill Ogroski, EE'77**, a senior engineer at IBM, likes to keep tabs on NASA. His

Internet connection helps.

"I was at work at the time a space shuttle was scheduled to launch, and I didn't have access to TV to see what was happening," Ogroski says. "The WWW came to the rescue. By stopping by at NASA's space shuttle page (<http://www.ksc.nasa.gov/shuttle/countdown/liftoff.html>), I was able to see the progress of the countdown, as well as live video snaps of the liftoff." ■

Advanced netiquette: a mini-FAQ

OK, so you know how to use a smiley, and you've avoided the flame wars. Are you ready for the next step? Net veterans never waste time typing a full phrase or sentence when an acronym will do. Some favorites:

- **BRB: Be right back.**
- **BTW: By the way.**
- **F2F: Face to face. When you actually meet those people you've been corresponding with.**
- **FAQ: Frequently asked questions, or a compilation of answers to these.**

Many Usenet newsgroups have these files, which are posted once a month or so for beginners.

- **IMHO: In my humble opinion.**
- **IMNSHO: In my not-so-humble opinion.**
- **ROTFL: Rolled on the floor laughing (a way of responding to a funny comment).**
- **TTYL: Talk to you later.**

Netiquette 101: manners of speaking

Until Miss Manners comes out with her own Web site, users of the Internet—particularly "newbies"—can be at a loss when it comes to courteous communications. But with the boom of e-communication has come the idea of "netiquette"—or good manners for Internet users.

Netiquette is designed to facilitate civil communication via e-mail, Usenet newsgroups or other electronic forums.

One of the most common breaches of netiquette is the **flame**. A flame is on-line yelling and/or ranting at another user. The anonymity of the Internet seems to bring out the rudeness in some people. Flaming can lead to **flame wars**, in which other members of the Internet community exchange nasty messages back and forth.

The straight-text nature of on-line communication can make humor or sarcasm difficult to detect. To avoid unintentional flame wars, you could use **emoticons**—symbols that help a person portray "mood" in the very flat medium of computers. There are literally hundreds of emoticons, from the obvious to the obscure. The most common is the **smiley**: :) This particular example expresses "happiness" or, in the proper context, "sarcasm."

Don't see it? Tilt your head 90 degrees to the left. An abbreviated smiley—:— is also common.

Other emoticons and their meanings:

- :-) Wink
- :(Frown
- :-O Surprise
- 8-) Smiley wearing glasses
- 7-) Smiley with hair
- :*D Smiley clowning around
- =!:-) Abraham Lincoln smiley
- @@#@@:-) Marge Simpson smiley

When communicating on line, remember one simple rule: Be courteous. "Think about the person who's receiving the message," says Catherine Riordan, professor of psychology and director of the management systems program at UMR. "Also think about other potential receivers," she adds, noting that e-mail messages are easily forwarded. "You have to be extra conscious of their perspective to minimize the potential for miscommunication."

Scott Adams

and the geek mystique

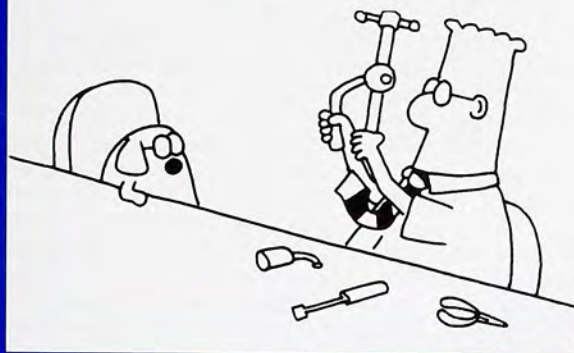


PHOTO AND DILBERT CARTOONS REPRINTED BY PERMISSION OF UNITED MEDIA

In his former life as an ISDN engineer at Pacific Bell, Scott Adams moonlighted as a cartoonist. His creation, Dilbert, a poster boy for engineers everywhere, is now the most popular comic strip in the free world—thanks in large part to the Internet. In 1993, Adams became the first cartoonist to print his e-mail address in his newspaper comic strip, and last spring United Media launched a Web page for the strip, the Dilbert Zone (<http://www.unitedmedia.com/comics/dilbert>), which attracts more than 800,000 visitors a day.

Recently Adams talked with the MSM-UMR Alumnus about e-mail, engineers, Oprah, Star Trek and, of course, Dilbert.

The Scott Adams Interview

Alumnus: Why is Dilbert so popular today?

Scott Adams: It's because I'm so damn funny.

Alumnus: Well, you are pretty damn funny!

Adams: That's like when you go for a job interview and they ask, "Tell me about your weaknesses." It's the one question you don't want to get.

But what makes people like it? A fairly broad range of people like it, for different reasons. Which is why that is a hard question to answer. I know, for example, when the 10-year-olds write and say it is their favorite cartoon, they are pretty much liking the fact that there is an insolent little dog in it, and authority is being questioned and tweaked as much as possible. The cubicle-dwelling set and the technology folks I think are mostly relating to the frustration and horror of cubicle office life, and they are kind of living vicariously through me as I skewer it. So there is a bit of enjoying the cruelty of it all, some revenge.

Alumnus: Is that one of the reasons you got started with Dilbert—to lash out about the existence of the cubicle-dwelling engineer?

Adams: No, I did it to make money. It was purely an economic decision.

Alumnus: That was the whole motivation from the very beginning.

Adams: Oh, yeah—and a better life. I figured that sitting at home as I am with my feet up on my comfy chair, doing an interview with you, is a lot better than actual work.

Alumnus: Right. Is Dilbert your alter ego?

Adams: Yes, sometimes. There are certainly aspects of his personality that map to me pretty well. I have the same love of technology for the sake of technology, and I do have a houseful of electronics and an insolent pet of my own. Only my pet is a cat.

Alumnus: Is Dogbert also your alter ego, then?

Adams: He's kind of that program that runs in my head, the voice track that I can't actually say because I would get slapped if I did. He is what I'm thinking but am afraid to say.

Alumnus: Why did you publish your e-mail address in your comic strip?

Adams: There were a couple reasons. One was just a marketing thing. I thought that if people wrote in that they liked the strip, then I could show that to the editors who weren't running it. The demographics of my readers show they are not the kind of people who write in to cartoon polls, so I was getting hammered in cartoon polls and the editors, having no other kind of information to go on, were assuming that no-

body liked it, even if they liked it themselves. They thought it was just them. ... But the biggest benefit is that people started sending in their ideas and suggestions about what the script should be like.

Alumnus: What did they say?

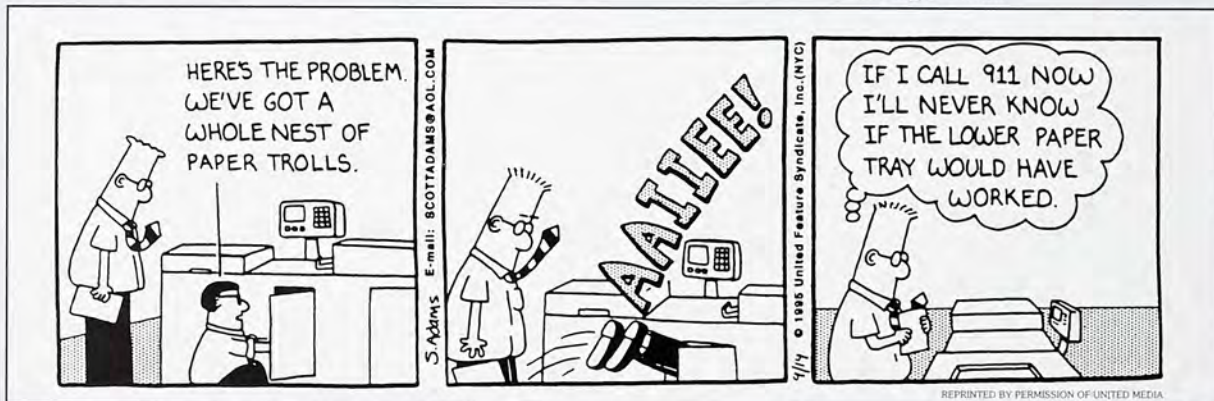
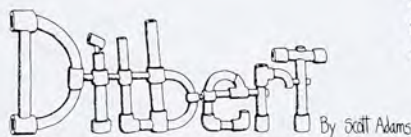
Adams: In particular, they suggested that it should be more focused on business and technology. ... People didn't like so much the far out stuff, but they were loving the cubicle-related stuff. They were cutting them out, faxing them, putting them in presentations. So when I changed the emphasis, that's when the strip really took off.

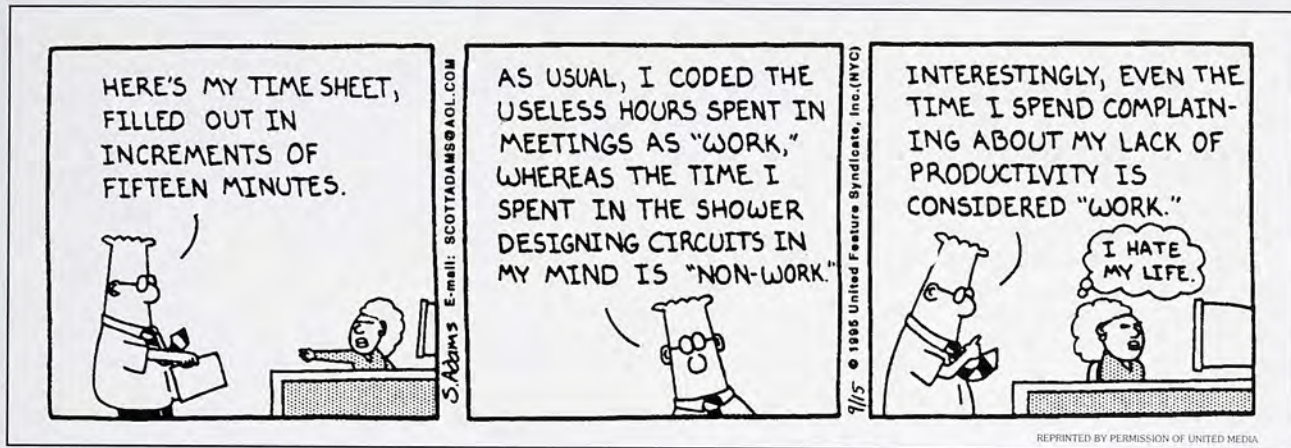
Alumnus: So you think the Internet has helped make Dilbert more popular?

Adams: Oh, immensely. The World Wide Web, electronic mail and the electronic mailing lists (through which fans receive a newsletter by e-mail) are probably the reason that it is successful. I would say that the last big cartoon to launch was Calvin and Hobbes 10 years ago. I'm not sure about this, but I think that I am probably the only cartoon that has reached 800 newspapers since then. I also would not have done that without the electronic edge.

Alumnus: In what other ways has e-mail affected you since you have published your address?

Adams: Well, it has sucked up all my free time, for one thing. I spend most of my free time reading (e-mail notes), and then I respond to as many as I can in my time. It takes about four hours a day just to pore through e-mail.





Alumnus: How many messages do you receive in a typical day?

Adams: At least 200, minimum.

Alumnus: I am assuming that you get a lot of ideas from e-mail.

Adams: Yes. In fact almost all of my ideas are from e-mail now. And I use it to look for trends and I try to find out what things are really bugging people.

Alumnus: When you were at Pacific Bell, was it a kind of breeding ground for ideas?

Adams: I really haven't used my day-to-day Pacific Bell experience the last couple of years I was there anyway. Most of my ideas came from the Internet already. ... But I used all my work experience as the filter that I put other people's suggestions through. There aren't many suggestions that are things I haven't experienced myself in some form. Occasionally, there are, but it all gets funneled through my own window.

Alumnus: Are most of the people you hear from engineers or techies or people who are into technology? Or are they from a broader audience?

Adams: Well, they have to be into technology inasmuch as they have e-mail. That is kind of the first filter. I would say that about a third of the people that I hear from are at universities, and most of them are in technology fields, but not all. Most of the rest are with high-tech companies, or at least big companies that have e-mail. And then there is a smattering of work-at-homes, consultants and stuff.

Alumnus: Why are engineers the subject of so much of your humor in Dilbert?

Adams: Well, mostly because I write about what I know. I spent most of my career surrounded by technical people, and I found them amusingly interesting. That's really all you need—something that is interesting, something you know.

Alumnus: Why do you find engineers amusingly interesting?

Adams: It's very hard to find any technical person who doesn't have some really interesting and varied tastes, and you will find that most engineers are really concert pianists, expert bridge players, private pilots, or into jumping horses—they are doing some other thing. They tend to be far more intellectually active than the average marketing professional.

Alumnus: I wonder why that is. Do you have any theories?

Adams: Yeah. I don't know why people are engineers, you know—what it is at birth that forces their brain to be like that. But once they are born the thing that distinguishes them is that they are intensely curious about things and how the world is put together and making it all work. That is really what makes music work and what makes a lot of other things what they are. If you are a sales guy or a marketing professional, then you're probably most stimulated by contact with other people, no matter how meaningless that is. Your average engineer is not willing to talk about the weather more than once a day—as in, "Is it raining?" and then you look out the window and have all the data you need. Whereas your sales guy can talk about the weather for hours and have a good time.

Alumnus: So how do the engineers among your readers react to your comic strips?

Adams: They are of course my most enthusiastic group and they are tremendously happy. I think they like the attention. It is kind of the Oprah effect. You always wonder why people go on a daytime talk show and say, "Yep, I slept with my sister," and you know they are going to be arrested as soon as they leave the building, but it's easy to find people clamoring to do it because a little bit of attention is validation; it's worth a lot. And so, I can just make horrible fun of engineers and almost never does any engineer ever say, "You have made us look bad." They just like the attention. It's not true of other professions, by the way. Technical writers, for example. I made fun of technical writers and I just got absolutely lambasted. ... The ones who contacted me were just totally incensed that I would put a technical writer in bad light. You just don't get that with engineers. It never happens.

Alumnus: Tell me a little bit about how you see engineers in society. Do you think they are becoming more popular, or at least less maligned, than in the past?

Adams: I can point to a few things that probably have something to do with that. The biggest thing is Star Trek. Because, if you watch any Star Trek show, you will notice that often the solution is an engineering solution. Like, you know, re-channel the photon through the Jeffries tubes—or whatever it is. If you don't need to know what it is, it doesn't really matter. But you are fully aware that the universe has been saved yet again by a clever engineering solution. And you know, over time, that starts to seep into the consciousness—when you see that the people who are

driving the biggest cars and have the most money, the people who are on the cover of Time magazine, are either politicians or technology gurus. And the importance of people that know technology has kind of finally reached the point where it cannot be ignored. There definitely is a geek chic. And there is clearly a percentage of the female population who have formed a clear preference for people in this field. People who are looking for their own Dilbert.

Alumnus: Was Scotty your favorite Star Trek character?

Adams: I was partial to "Star Trek: The Next Generation." And the interesting thing is that even (starship commander Jean-Luc) Picard often would have to use an engineering solution—so it wasn't confined to the engineers. That I think made a big difference as well.

Alumnus: Who were your influences among cartoonists?

Adams: Oh, probably Charles Schultz (creator of "Peanuts") when I was a kid. And after that I would say MAD Magazine.

Alumnus: Did you read MAD a lot when you were a kid?

Adams: Oh, yeah. That was the dirty pleasure.

Alumnus: Well, now that Dilbert is the most popular comic strip in the world, how are you going to maintain your cutting edge?



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Adams: You mean, how am I going to keep it funny? Well, there is a big assumption in there, which is that I will keep it funny. I would like to think that that is true. When I left Pacific Bell, people were watching quite closely to see if within a few weeks I would lose my edge and get soft. Most of my mail has said that I have become more vicious than ever and I think that that's true, because I have nothing to lose at this point. But there certainly was a whole level of cartoons that even I was afraid to do (while at Pacific Bell) because of the repercussions. But now the gloves are off, and if you watch the strip in the beginning of January you will see a bearded boss character, so you be the judge as to whether or not I am getting soft.

Alumnus: What else does the future hold for you?

Adams: Well, I'm kind of riding this crest right now, and the biggest impact of all this is the licensing (of "Dilbert" T-shirts, screen savers and other products). The licensing stuff is going wild. So we are doing all kinds of stuff, like stuffed animals, shirts, notepads, more books.

Alumnus: You have quite a few people sending you pictures of their sock puppets to the Web page (<http://www.unitedmedia.com/comics/dilbert/puppets>).

Adams: That is more of the Oprah effect. "I will give you two seconds to be seen by lots of people and all you have to do is look foolish. Will you do it?" "Sure! Where do I send it?" I had no idea that that would be as popular as it was. I had to write a little introduction for the Web, and I was thinking, How about doing me with a sock puppet? That would be funny. And they just started pouring in. We haven't been able to keep up with it.

Alumnus: It is amazing what people will do for a little bit of attention.

Adams: The other thing, to answer your earlier question: One of the things that makes the strip a little different than other strips is that it is interactive in a sense. I consciously aim to make people do something with it. Whether it is cut it out, or talk about it, or get mad, or write me a letter, or send me a suggestion, or look in the Web to see the ones you missed, or buy a book or an animal or fax it to a friend. So whatever it is—change the names, use them in a new presentation, I'm always aiming to answer that question, What is it about that strip that makes somebody do something with it? And I think that kind of makes it special, because I think we have passed the time where it's likely there would be another comic strip that is so damn good just while you're looking at it that you don't want to do anything with it, that that is enough to make it popular. Those days may be over. It just takes more to stimulate us now.

Alumnus: So you make a conscious effort to make Dilbert more interactive than the average comic?

Adams: Yeah. The e-mail was really the first foray into that, but I also do surveys. In fact, on Jan. 1, I think, you will see the result of the vote on Tina the Brittle Tech Writer. You will see the hell that that caused.

Alumnus: Is there going to be another "Dilbert Gripe Index" poll?

Adams: I changed it a little to answer this question from a list of eight choices. The question is, "If you could hit your boss in the back of the head with any one of these objects, with no risk of being caught, which would you choose?" And the list ranges from harmless things from Nerf balls and bean burritos to heavier things like framed certificates of accomplishment or your last performance review, still in the file cabinet where it is stored. The most brutal one is the Ford Pinto with a full tank of gas. And so we tabulated the votes and that will be announced. ■

(The 1995 Dilbert Index of Workplace sentiment will be posted on The Dilbert Zone web page later this year.)

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survey says...

- UMR grads in demand
- well received by industry

UMR graduates are well prepared for the work force, according to a recent survey of industrial employers of UMR alumni.

The survey, conducted by UMR last summer, "indicates that we're providing a high level of service to some of our main customers in industry," says UMR Chancellor John T. Park. "The survey is good news, but it also shows us we've got some work to do in some areas."

A good overall program

The survey of personnel officers at these companies revealed that 96 percent of them are satisfied with UMR's overall degree program. In addition, two-thirds of them are satisfied with graduates' written communication skills, while nearly three out of four employers (73 percent) are satisfied with their oral communication skills.

This is good news, Park says, because campuses like UMR, which are so focused on engineering and science, are sometimes criticized for producing graduates who are strong in technical areas but lack good communication skills.

Even though UMR got high marks in the areas of communication and leadership training, the survey showed that employers think UMR should place even more emphasis on these areas, as well as global business issues. Seventy-three percent of the employers indicate that they would like more topics from business schools—such as marketing, finance and accounting—incorporated into the engineering curricula.

All in all, employers were well satisfied with UMR's preparation of graduates. Ninety-one percent of those surveyed say they were satisfied with the departmental training of UMR graduates, and 80 per-

cent say the UMR graduates they hire are capable of moving into leadership positions. Seventy-eight percent say they are satisfied with UMR graduates' interpersonal skills.

Not surprisingly, UMR graduates fared well on the technical side of things. Ninety-one percent of those surveyed are satisfied with the UMR graduates' problem-solving abilities, and 86 percent are satisfied with their computer skills.

Other areas of emphasis

Only 22 percent of the companies surveyed feel that more emphasis should be placed on flexibility to allow students to tailor their own degrees. Conversely, 92 percent feel that more emphasis should be placed on the development of motivation for lifelong learning, and 93 percent feel that more emphasis should be placed on co-op or internship work experience.

Seventy-one percent of those surveyed think UMR's graduate programs should be more practical, while 32 percent say more emphasis should be placed on research-oriented graduate programs.

Graduates well-prepared

The bottom line of the survey: Most employers say UMR graduates are well-prepared for the work force, and the employers rank UMR at the top of the class in terms of schools they recruit from.

Ninety-one percent of the companies say UMR grads are successful in their entry-level positions, and 90 percent say the grads succeed beyond their entry-level jobs.

And how do these corporations rank UMR against other universities from which they recruit? Eighty-seven percent of them rank UMR as a top choice. ■

Geology on the web

UMR geological engineering students are surfing the Internet to do their homework.

For nearly two years now, David J. Barr, a UMR professor of geological and petroleum engineering, has been teaching his students how to use the World Wide Web for their classroom assignments. "With all the information available to us on the system," Barr says, "we can gather the data faster and obtain insight on how to best analyze that data for the solution of contemporary environmental problems."

Barr and his students use the World Wide Web to find resources in two geological engineering courses: Remote Sensing, which involves the analysis of aircraft and satellite imagery, and Geographic Information Systems, in which students use various maps to characterize sites through terrain modeling.

Other faculty in the department are using the Internet for the same purpose, Barr says.

"Professors in our department are aware of the benefits of the Internet," he says. "Some of my assignments have been to have the students do their own searching on geological engineering topics to see what they can find out on their own."

If a student needs to find technically accurate data, or find something geographical in a certain state, Barr says, "Whatever the information, if students can get the information at their desk, they are ahead of the game."

Barr hopes this approach to education will give UMR students an edge. "I want to make sure that my students know what is on the Internet," he says. "That technology will give them the timely information they have to have to be successful in their professional careers." ■

Creating a virtual classroom for electrical engineers

Electrical engineering students at UMR, the University of Arkansas and Kansas State will all be in the same classroom next fall. But it will be a virtual classroom, consisting of fiber-optic lines and satellite signals, and one of the first of its kind for electrical engineering students.

Scott Sudhoff and Mariesa Crow, assistant professors of electrical engineering at UMR, are leading the effort to overhaul the way two power engineering courses are taught at the three campuses. The three-year project, funded through a \$400,000 grant from the National Science Foundation, will result in a curriculum that relies heavily on electronic communications—including electronic mail, interactive video and a "hyper textbook" on the World Wide Web. This approach is intended to help EE students on the three campuses understand the issues confronting the utilities industry as it moves toward deregulation.

"One single school can't have an expert in every area, but we certainly want to be able to give our students a broader base of expertise," says Crow. "By combining the expertise of the faculty from these three campuses, we're able to strengthen all three power engineering programs."

The electric power industry is faced with several challenges as it faces deregulation. An aging infrastructure and more demand for power will require utilities companies to squeeze more power out of their existing systems, Crow and Sudhoff say. Also, deregulation will allow new companies to transmit electricity over the power lines of established companies, resulting in the need to ensure the quality of power and the stability of the power systems providing that power.

Electrical engineering programs throughout the nation must change their curriculum to prepare students for these challenges, Sudhoff says.

"Because of deregulation, utilities are going to be operating much closer to their limits, and five years from now, the in-

dustry is going to need electrical engineers who understand the economic and technical issues that will affect this new deregulated climate," he says. "One of our goals with this project is to prepare the students from the three campuses for these

PHOTO: DAN SEIFERT/STONE HOUSE PHOTOGRAPHY



EE researchers Mariesa Crow and Scott Sudhoff are creating a classroom without walls.

dustry is going to need electrical engineers who understand the economic and technical issues that will affect this new deregulated climate," he says. "One of our goals with this project is to prepare the students from the three campuses for these

challenges, while also developing some new approaches to engineering education."

Those new approaches include more emphasis on teamwork, economics and electronic communication methods.

Sudhoff and Crow's approach is part of a national trend in which campuses are placing greater emphasis on student learning and electronic technology in the classroom. The American Council on Education's 1995 "campus trends" survey shows that almost all institutions are redesigning courses for greater effectiveness and taking advantage of new technology.

Working with Crow and Sudhoff are Kraig J. Olejniczak of the University of Arkansas, an expert in the area of power quality, and Anil Pahwa and Shelli Starrett

of Kansas State University. Pahwa's area of expertise is power distribution, and Starrett teaches courses on power system stability and control.

The five professors also will work with an advisory council made up of people in the utilities industry. This group will evaluate the program and serve as guest lecturers for some of the courses.

The three-year project, funded through a \$400,000 grant from the National Science Foundation, will result in a curriculum that relies heavily on electronic communications—including electronic mail, interactive video and a "hyper textbook" on the World Wide

The first course—Flexible Control of Distribution Systems—begins in the fall. It will be taught by Olejniczak at Arkansas and Pahwa at Kansas State. In January 1997, the second course—Flexible Control of Transmission Systems—will be taught by Sudhoff and Crow in Rolla and Starrett at Kansas State. The courses will be beamed via satellite to the various campuses.

In addition to the live video lectures, students in each course will work in cross-campus teams

to design power systems. Because the students will be from various campuses, they will need to communicate via electronic mail and use other Internet resources, such as the World Wide Web, to conduct research.

At the same time, the faculty will develop a "hyper textbook" on the World Wide Web. Unlike a normal textbook, this work will be constantly updated and connected to other electronic resources, such as on-line research journals or other sources of new research in power systems.

"Much of the information our students are going to need is available in the technical literature, but it tends to be very dry," says Crow. "What we're trying to do is make it more palatable for the average engineer." ■

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AROUND CAMPUS



Don Gunther delivers UMR's Winter Commencement address

Focus was the message **Don J. Gunther**, CE'60, an executive with Bechtel Group Inc., delivered during his winter commencement address on Dec. 16.

Gunther, who is president of Bechtel Europe, Africa and Middle East, also received an honorary doctorate in engineering during UMR's commencement ceremonies.

He gave UMR graduates several pointers about success in life and career.

About life, he said, "Focus on winning, whatever that means to you. Make losing difficult." And about a career, Gunther said,

"Focus on your customer either externally or within your company. Everyone has a customer or they don't have a job.

"Be a team player and make sure you are adding value to your team. Don't be satisfied with NOW, be in constant dissatisfaction," Gunther told the graduates. "Be a leader in continual improvement and don't be concerned about being in first place, be concerned about being best at improving."

Bechtel Group Inc., based in London, is the private holding company for six engineering and construction subsidiaries.



Curators' Professorship conferred on Switzer

Also during commencement, **Jay A. Switzer**, a UMR professor of chemistry, was named Curators' Professor of chemistry.

The Curators' Professorship is awarded to outstanding scholars with established reputations in their fields of expertise. Switzer, a senior investigator in UMR's Graduate Center for Materials Research, is known for his work on nanoscale electrodeposited superlattices and defect-chemistry superlattices. These atomic-scale ceramic materials conduct electricity nearly as well as metals and could be used as "smart" switches for fiber-optic communications.

Switzer joined the UMR faculty in 1990. He received a

bachelor of science degree in chemistry from the University of Cincinnati and a master of arts degree and Ph.D. in inorganic chemistry from Wayne State University in Detroit, Mich.



Above: Chancellor **John T. Park** congratulates **Jay Switzer**, UMR's newest Curators' Professor.

For more information about any of these news items, please contact UMR News Services
573-341-4328

New vice chancellor an expert in TQM

UMR's expertise in quality management got a big boost recently when **Mohammad H. (Mo) Qayoumi** joined the senior management team.

Qayoumi, who became UMR's vice chancellor of administrative services on Dec. 1, is an expert in total quality management. He is the former associate vice president for administration at San Jose State University in California.

Qayoumi fills the position vacated by **Neil Smith** when he became vice chancellor for university advancement in December 1994. Smith had been vice chancellor for administrative services since 1983.

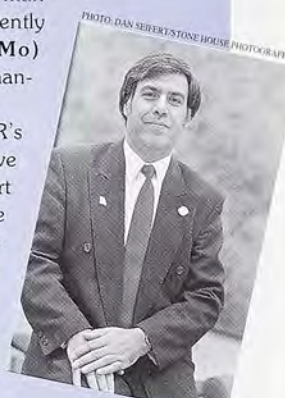
Qayoumi holds a bachelor's degree in electrical engineering from American University of Beirut, Lebanon. He holds four other degrees—master's degrees in nuclear engineering and computer engineering, an MBA, and a Ph.D. in electrical engineering—from the University of Cincinnati, and he has a certificate in total quality management from San Jose State University.

"We're very pleased to have Mo Qayoumi as part of our leadership team," UMR Chancellor **John T. Park** says. "Mo's engineering and administrative background will be a valuable asset to this campus as we progress with our current and future construction and renovation projects. His background in total quality management also fits well with our campus's quality initiatives."

History professor wins governor's award

Lawrence O. Christensen, a Distinguished Teaching Professor of history, was among some 50 instructors from throughout Missouri to receive the 1995 Governor's Award for Excellence in Teaching. Gov. Mel Carnahan presented the award during the 1995 Governor's Conference on Higher Education at St. Louis Community College at Forest Park.

The awards go to instructors known for their effective teaching and high standards of excellence. Christensen, a member of the UMR faculty since 1969, is the author of dozens of articles and two co-authored books on Missouri's history. He also co-wrote "UM-Rolla: A History of MSM-UMR," with Jack Ridley, also a Distinguished Teaching Professor of history.





Nader challenges students



PHOTOS: DAN SEIBERT/STONE HOUSE PHOTOGRAPHY



Left/above: Ralph Nader answers questions during a press conference. Nader signing books following his speech.

Ralph Nader, America's most prominent consumer advocate, visited campus last fall to challenge students to make a difference during their time at UMR.

"Don't miss the opportunity to leave this university a better place when you graduate than it was when you entered it," Nader said during his speech on Nov. 6 in the Gale Bullman Multi-Purpose Building.

Nader's visit to campus was sponsored by the Center for Economic Education, the Harry W.L. Porth Distinguished Lecture Series, and the Leaders for the 21st Century Lecture Series. He spoke earlier that evening at a banquet sponsored by the Center for Economic Education.

Hard times for Gulf Coast fishermen

Forrest Gump may have made a fortune in the shrimp business, but most Gulf Coast shrimp fishermen see their dreams of the good life drifting away due to increased regulations. That's the conclusion of **Catherine Riordan**, a professor of psychology and director of management systems at UMR.

For more than a decade, Riordan, working with University of South Alabama researchers Stephen Thomas and David Johnson, has examined how fishing regulations affect Gulf Coast fishermen.

Gulf Coast fishermen are hearty, rugged individuals who have weathered storms, fluctuations in fish population and an influx of Vietnamese fishermen in the 1980s. "But it's the regulations that are overwhelming them," Riordan says. "Many of the commercial shrimp fishermen feel their government is keeping them from making a living.

"Shrimp fishermen feel that the regulations are not justified, based on the number or habits of the fish the regulations are designed to protect," Riordan says. "They think the regulations are being put forward on the conservative side by white-collar workers touting a print-out, rather than by someone who has spent much time on the waters of the Gulf."

The regulations, proposed regulations and ambiguity of it all have fishermen feeling hopeless, she says. "They have serious forms of depression that are twice and three times the national rates. Fishermen also seek help in much smaller numbers than males with comparable mental health problems."

Riordan and her colleagues addressed the mental health needs of fishermen in a presentation they made to the American Sociological Association last summer in Washington.

PHOTO: DAN SEIBERT/STONE HOUSE PHOTOGRAPHY



“Many of the commercial shrimp fishermen feel their government is keeping them from making a living.”

—Catherine Riordan, professor of psychology and director of management systems.

Program designed to attract more Ph.D.'s

UMR's School of Mines and Metallurgy hopes to see more Ph.D. students in materials engineering through an effort sponsored by the U.S. Department of Education.

The program sponsors materials engineering fellowships through the education department's Graduate Assistance in Areas of National Need Program. The effort is designed to encourage some of the best undergraduate students from the United States to pursue Ph.D.'s. The fellowship also gives the students management and professional experience as well as hands-on research in some of the hottest areas offered today.

Everything from information technology to new energy research depends on the development of advanced materials, says **Lee W. Saperstein**, dean of UMR's School of Mines and Metallurgy.

"The technological revolution of the last few decades in almost every way of life is a direct result of advances in materials engineering," says Saperstein. And the future for materials engineers is equally bright, he says, as research in the areas of fuel cells, flat-panel computer displays, information technology, "smart" structures, mobile and remote telecommunications, and superconductivity continues to be fueled by developments in the materials field.

Environmental lab moves into Bureau of Mines building

PHOTO: DAN SEBERTSTONE/HOUSE PHOTOGRAPHY



The move comes at a time when the Bureau of Mines' Rolla Research Center faces elimination. The research center's work force has decreased substantially in recent years as a result of budget-cutting moves in Congress.

For years, the U.S. Bureau of Mines and UMR have been partners in a variety of areas. UMR's mining engineering and metallurgical engineering faculty have worked closely with the bureau on numerous research projects. Now, with the imminent closure of the bureau's Rolla Research Center due to federal budget cuts, the research center building adjacent to campus is being turned over to UMR.

UMR's Environmental Trace Substances Laboratory (ETSL) has nearly completed its move into the 50-year-old brick landmark, and with the move come 15 scientists and a research, instructional and analytical services budget of nearly \$1 million.

The relocation is a cooperative effort of the U.S. Bureau of Mines and UMR. The ETSL, formerly under the direction of the University of Missouri System and located at Sinclair Farm in Columbia, Mo., has been under UMR's direction since July 1, 1992.

The move comes at a time when the Bureau of Mines' Rolla Research Center faces elimination. The research center's work force has decreased substantially in recent years as a result of budget-cutting moves in Congress.

Some bureau researchers' jobs may be saved through the new arrangement, however. "Two of the 15 ETSL staff directly working with the UMR trace substances lab are former bureau staff," says **ETSL Director Melvin L. Rueppel**, Chem'66. "In addition, there may be five to 10 current bureau people who will carry on mining and metallurgical programs by mutual contract or agreement.

"We negotiated a memorandum of agreement with the bureau that provides for on-site cooperation and sharing of facilities, research programs and staff," says Rueppel.

The bureau's entire Rolla complex—its main landmark building, three buildings adjacent to the main building and four oth-

ers on Nagogami Road, and much of the equipment—is slated to transfer to UMR in September 1996.

"The only cost to the university will be required maintenance and operational funding that go with the building," Rueppel says.

The ETSL currently tests about 4,000 samples, such as soil, water and fish, for contaminants. Environmental chemistry is the major area of emphasis for the laboratory and CEST.

Another UMR research laboratory also plans to move into the building. "Dr. William James, director of UMR's Center for Environmental Science and Technology (CEST), will be making this building the main headquarters for CEST," Rueppel says. CEST, established in 1992, promotes research in the areas of waste reduction, pollution prevention and other environmental issues.



PHOTO: DAN SEBERTSTONE/HOUSE PHOTOGRAPHY



UMR named School of the Year, thanks to residence hall programs

The UMR Residence Hall Association takes the total quality management approach to heart.

RHA gives students a say in how they want their residence halls run. Now that customer-satisfaction approach has gained some regional recognition. Thanks to RHA and its programs, UMR was named School of the Year by the Midwest Association of College and University Residence Halls.

The award, presented in October during MACURH's annual conference in Grand Forks, N.D., honors the student-leaders from RHA for their efforts to give students a say in their living conditions.

"Winning the school of the year is a significant award for UMR," says James H. Murphy, director of UMR's residential life department. The award, he adds, shows "that our residential life program demonstrates a level of excellence in our efforts to give students a residential environment that complements their college learning experience."

The students' leadership skills and advocacy for residence hall improvements have been critical to RHA's success. The association recently recommended changes to give students a broader choice of living environments—including opportunities to choose from rooms that have access to the campus computer network and cable television, smoking or non-smoking environments, and three- and four-room suites. In addition, RHA students select their own resident assistants for the campus residence halls—an approach not followed by many colleges and universities.

The approach is part of the campus' "learning community" concept, which promotes student involvement in all aspects of campus life—right down to the menus at residence hall cafeterias.

"The fact that we are winning these awards tells me that we are serving and representing the residents well," says Natalie Dixon of St. Charles, Mo., an aerospace engineering student

who is active in RHA. "We are doing things for them that other schools don't do for their residents, and we are doing these things on a regular basis."

One of the biggest projects the residence hall students undertake each year is a two-week training session for residence hall staff and student leaders. This project involves students from RHA, the National Residence Hall Honorary and the campus' other two residence hall groups, the Thomas Jefferson Hall Asso-

ciation and Quadrangle Hall Association. Following this effort, the NRHH students run a leadership forum for about 100 students.

MACURH is a regional association of residence hall student leaders from about 50 universities in Iowa, Kansas, Minnesota, Missouri, Nebraska and North and South Dakota. It is affiliated with the National Association of College and University Residence Halls.

Also during the conference...

UMR received further recognition during the MACURH conference:

- **Brenda Wiesler** of Yankton, S.D., a junior in aerospace engineering, was a nominee for the Student of the Year award.
- **Amy Grazier**, assistant resident director in UMR's residential life department, was a nominee for the Advisor of the Year award.
- **Wiesler and Kevin Solofra** of Oak Forest, Ill., a senior in ceramic engineering, have been asked to coordinate the training sessions during the National Association of College and University Residence Halls conference to be held next summer in Norman, Okla.
- UMR also received recognition for the best school display and school spirit among large schools.

New recreation center getting a workout

The new Recreation and Intramural Center is now open, giving students more room to play and keep fit.

The \$4.1 million addition to the Gale Bullman Multi-Purpose Building provides additional racquetball and squash courts, aerobics and martial arts rooms, and an indoor track. Already, the students have been giving the new rec center a workout, says Mark Mullin, director of athletics at UMR.

Funding for the project has come from student fees and private contributions, including a

Buy-A-Brick campaign. That fund-raising project has raised more than \$65,000 toward its \$100,000 goal. Contributors may see their bricks at the new 10th Street entrance to the Bullman Building.

Anyone interested in taking part in the Buy-A-Brick campaign should contact Marylou Shomaker, Engl '90, UMR's Phon-a-Thon coordinator, at (573) 341-6386. For information about naming opportunities, contact Kittie Robertson at (573) 341-4002.

PHOTO: DAN SEBERT/STONE HOUSE PHOTOGRAPHY



Students drive the lane in one of the new basketball courts in the recreation center.

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New address/area code

The University of Missouri-Rolla campus has a new address and zip code for all correspondence. Please make note of the new address.

**University of Missouri-Rolla
1870 Miner Circle
Rolla, MO 65409**

The area code for the University of Missouri-Rolla has changed from **314 to 573.**

A letter from the president



Dear fellow alumni,

Members are the lifeblood of associations everywhere. And associations exist to address their members' top challenges - in our case, such things as keeping the value of your degree high and the reputation of your alma mater strong, helping today's students, and keeping in touch with old friends. Who knows these issues better than you? That is why volunteering your knowledge and experience to the association is so important and gratifying. Here are some ways you can get involved:

- Serve on a committee or task force. There you can join with others to direct the association's efforts, choose award recipients, or plan reunions and other events.
- Speak to a class or present an educational short course at Homecoming on a topic in which you have expertise.
- Serve on the board of directors of the MSM-UMR Alumni Association to direct the policies and long-term direction of the association.
- Volunteer to be a Public Resource Ambassador (if you live in Missouri) to help public officials understand the need for support of UMR.
- Work with the admissions office as an Admissions Ambassador and help recruit students.
- Be a Class Coordinator and help organize your next reunion.
- Get involved in your local alumni section, if you have one, or work with the alumni office to start one.

By volunteering for your alumni association, you increase your exposure, broaden your mind, and contribute to the overall advancement of MSM-UMR. Most importantly, you make the association yours.

To volunteer for one of the activities above, or to find out more about how you can help your alumni association, contact Don Brackhahn in the campus alumni office by phoning him at (573)341-4145, by e-mail at alumni@umr.edu, by fax at (573)341-6091, or in writing at the MSM-UMR Alumni Association, Castleman Hall, 1870 Miner Circle, Rolla, MO 65409-0650.

Sincerely,

Gerald L. Stevenson '59
President

1995 Annual Fund Report

The MSM-UMR Alumni Association's 1995 Annual Fund closed with a record \$753,400 in gifts from alumni and friends. These funds will go to support the association's scholarship/loan/assistantship program, as well as helping to fund production of the *MSM-UMR Alumnus* magazine. Other programs funded by the Annual Fund are the Golden Alumni Reunion; Homecoming; sec-

tion invitations; awards for outstanding alumni, faculty and staff; the Alumni Directory and the alumni locator service; and support for the athletic and music/art programs as well as the library.

In recent years, Alumni Association scholarship recipients have been asked to remember their "moral obligation" to give back to the Alumni Association after graduation, to help keep the schol-

arship program going, and they have been very dedicated in doing just that. For example, one young graduate who received scholarships from the association all four years is making a gift every month, and another made a gift six months after graduation in the amount of 25 percent of the funds he had received during his years at UMR. Many of these recent graduates have stated that they appreciated

the scholarships they received and they planned to be loyal Annual Fund donors as a result.

Thank you to those of you who contributed to this fund. We realize that many of you are also contributors to your academic department phonathon or to some other area of interest at UMR, and we appreciate your remembering the MSM-UMR Alumni Association and its programs, too.



MSM-UMR Alumni Association mission and goals for 1995-1996

MISSION

The Association will proactively strive to create an environment — embodying communication with and participation by MSM-UMR Alumni Association and friends — to foster strong loyalty to UMR and growth of the association. The association will increase its financial strength as well as provide aid and support to deserving students and appropriate projects.

GOALS

- Increase involvement of young alumni in the association.
- Improve section programming.
- Increase financial resources of the association and the university.
- Improve communication with alumni.
- Increase support to the university and its students.

The officers and other members of the association's board of directors provide leadership and actual 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.

Your MSM-UMR Alumni Association

It truly is YOUR alumni association, made up of you and your fellow alumni, governed by a board of directors composed of alumni, and designed to serve both current and "future" alumni. The MSM-UMR Alumni Association is a not-for-profit corporation, separate from the University of Missouri-Rolla. According to the bylaws of the association, the objectives and purposes of the association are as follows:

- The furtherance of education at the University of Missouri-Rolla.
- To advance the standards of the University of Missouri-Rolla, technical science and the engineering profession in general.
- To accomplish this, the MSM-UMR Alumni Association shall solicit contributions from alumni, industry, and friends for scholarships, student aid, and for other activities in the promotion of the university.
- Cooperate with other such agencies to promote study and research for the health and welfare of the general public.

In order to facilitate these objectives and purposes, the association shall:

- Bring together alumni of the Missouri School of Mines and Metallurgy and the University of Missouri-Rolla interested in the advancement and development of the campus and higher education.
- Provide support for UMR and its programs in matters of finance, public affairs, placement, and in the identification, recruitment and retention of new students.
- Continually and regularly communicate the affairs of the university, the association and its members,
 - by recognizing alumni achievement
 - by encouraging involvement in University activities and programs and
 - by publication of the *MSM-UMR Alumnus* magazine.

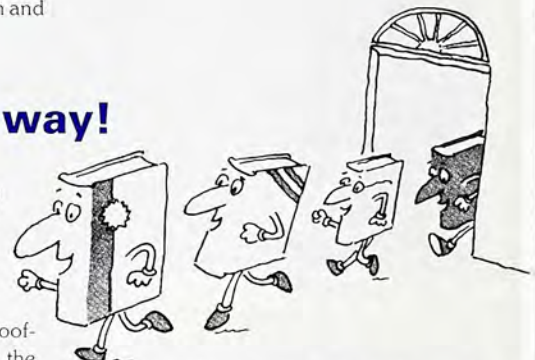
They're on their way!

Our 1995 MSM-UMR Alumni Directory project is nearing completion and the directories will be shipped soon!

This comprehensive new volume is a compilation of the most current data available on more than 38,000 MSM-UMR alumni. Now that the editing, proof-reading and printing are almost finished, the distribution of this impressive edition will begin.

The directories are scheduled to be released in late April. All alumni who reserved a copy of the directory by making a gift of \$50 or more to the MSM-UMR Alumni Association from Aug. 31, 1994, through Dec. 31, 1995, should receive their copies two to three weeks after the release. If you have a question about whether or not you are on the list to get a copy, please e-mail us at alumni@umr.edu, call us at (573)341-4145, fax us at (573)341-6091, or write us at the MSM-UMR Alumni Association, Castleman Hall, 1870 Miner Circle, Rolla, MO 65409-0650.

It's not too late to get a directory if you haven't already made your gift—just send



your gift of \$50 or more to the MSM-UMR Alumni Association and mark it "Directory." We'll send you a copy as soon as we get them in our office!

Our new directory is an excellent way of reliving your school days and getting reacquainted with former MSM-UMR classmates. The front pages also provide historical information about the alumni association and the university, recognition of the many volunteers who help the association and the university, and even a list of current faculty so you can check on your favorite professors.

Many thanks to those of you who made a gift to the Alumni Association in connection with the directory—we know you'll enjoy your book!

And the survey says...

Alumni share views on the campus, the magazine, and their educational experience

■ Dick Hatfield

We asked, and you told us. An overwhelming majority of alumni who

UMR," Brackhahn says. "And 97 percent of alumni association donors felt the same way."

"A large percentage of

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Put your name on this plaque.

Make your Century Club gift today!

PREMIUMS

Year 1

- Plaque with plate designating first year member

Future

- Membership plate for that year

Lithographs

- 1995—Old Metallurgy Building
- 1996—Harris Hall
- 1997—UMR Stonehenge
- 1998—Rolla Building
- 1999—Chancellor's Residence
- 2000—Parker Hall
- 2001—Norwood Hall
- 2002—Castleman Hall
- 2003—McNutt Hall
- 2004—Fulton Hall

- Complimentary season pass for athletic events on campus
- Special parking privileges on request

- Lithograph is framed
- Two free tickets to Silver and Gold Homecoming Party (on request)



Your MSM-UMR Alumni Association

It truly is YOUR alumni association, made up of you and your fellow alumni, governed by a board of directors composed of alumni, and designed to serve both current and "future" alumni. The MSM-UMR Alumni Association is a not-for-profit corporation, separate from the University of Missouri-Rolla. According to the bylaws of the association, the objectives and

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MSM-UMR Alumni Association mission and goals for

The Association to combine participation, strengthen the association, increase as possible projects

- Increase alumni
- Improve
- Increase association
- Improve
- Increase and improve

The Association provides participation and funds to be active in what you choose

MSM-UMR Alumni Association
 Castleman Hall
 1870 Miner Circle
 Rolla, Missouri 65409-0650

NAME _____
 ADDRESS _____
 CITY/STATE/ZIP _____

Your stamp helps even more—thank you!

The MSM-UMR Alumni Association supports:

- ✓ Scholarships
- ✓ Named Scholarship Funds
- ✓ Educational Assistants
- ✓ Student Loan Fund
- ✓ MSM-UMR Alumnus
- ✓ Homecoming
- ✓ Class Reunions
- ✓ Area Meetings
- ✓ Alumni Awards
- ✓ Faculty Awards
- ✓ Staff Awards
- ✓ Athletic Program
- ✓ Music Program
- ✓ Library
- ✓ Newsletters
- ✓ Alumni Records
- ✓ Alumni Directory
- ✓ Special Projects

MSM-UMR Alumni Association
 Castleman Hall
 1870 Miner Circle
 Rolla, Missouri 65409-0650



Make your 1996 Alumni Association Annual Fund contribution today!



And the survey says...

Alumni share views on the campus, the magazine, and their educational experience

■ Dick Hatfield

We asked, and you told us.

An overwhelming majority of alumni who filled out our survey say they chose the right school for their education.

According to a recent survey conducted by the MSM-UMR Alumni Association, MSM-UMR graduates are proud to have been a part of the campus experience. And they enjoy reading about campus activities in the MSM-UMR Alumnus Magazine.

"The survey results tell us that alumni are glad to be UMR graduates and that the alumni association represents them well," says **Gerald L. Stevenson**, ChE '59, '63, of Pasadena, Calif., president of the MSM-UMR Alumni Association. "They also feel the alumni magazine is well written and has improved in recent issues."

Donald G. Brackhahn, executive vice president of the alumni association, and other university advancement staff sifted through thousands of responses to compile the survey results. The survey, which was sent to all alumni, was targeted to gauge alumni attitudes toward the campus, the alumni association and the MSM-UMR Alumnus magazine. The survey also identified interests of alumni in specific programs within the alumni association. "We wanted to find out what our graduates thought about the campus and the alumni association," Brackhahn says.

Two separate groups of alumni received the survey—alumni association donors and non-donors. The non-donor surveys were mailed in August 1994, and donor surveys were mailed in April 1995.

A total of 32,125 surveys went to non-donors, and about 5 percent (roughly 1,600 alumni) responded. Of the 3,702 surveys sent to alumni association donors, about 44 percent—again, about 1,600 people—responded.

Both surveys showed that most respondents feel their time at Rolla was well worth it.

"The non-donor survey showed that 89 percent of alumni who responded felt that the benefits they received from UMR were adequate to justify their investment in attending

UMR," Brackhahn says. "And 97 percent of alumni association donors felt the same way."

The survey also showed that three-fourths of the non-donor respondents said if they had to do it all over again they would still attend UMR. Eighty-five percent of the donors said the same thing.

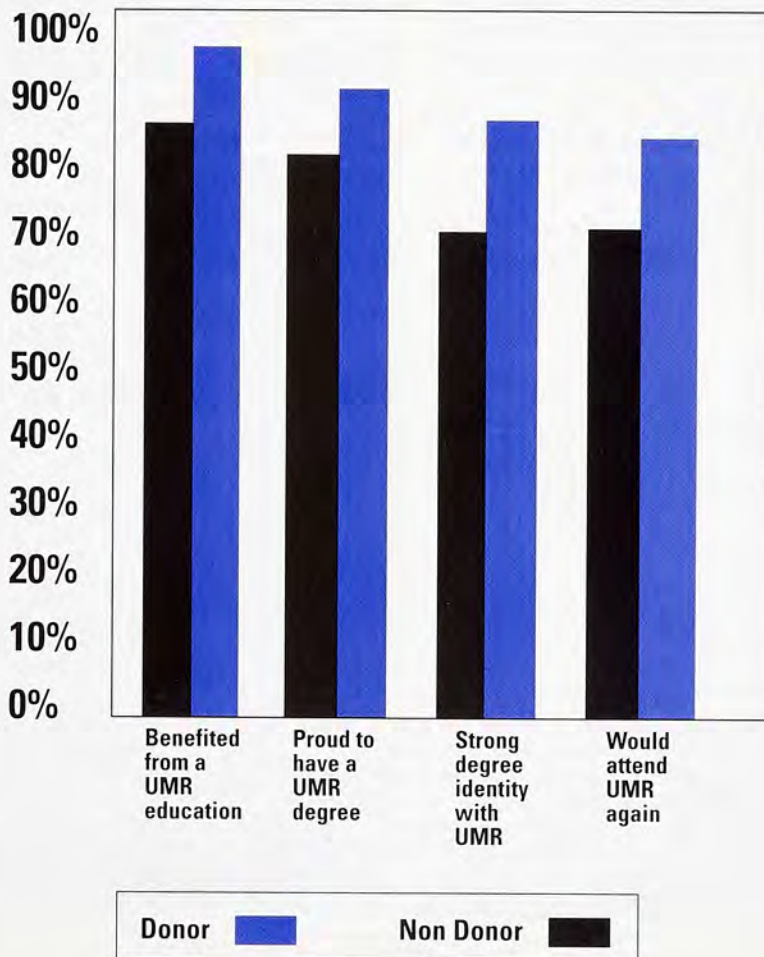
About 83 percent of the non-donors said they were proud to have a degree from UMR, while 94 percent of the donors felt that way.

"There is a very positive attitude that alumni have about their experiences at UMR," he says. "A large percentage of alumni feel a high

"A large percentage of alumni feel a high degree of identity with the campus, and most feel they have received great benefits from the education they received from UMR."

—Don Brackhahn, executive vice president of the MSM-UMR Alumni Association

(Continued on the next page)



Association Annual Fund contribution today!

Rolla, Missouri 65409-0650





And the survey says—

(continued from page 29)

degree of identity with the campus, and most feel they have received great benefits from the education they received from UMR.”

Sometimes a survey is the best way to find out whether an organization or company is moving in the right direction. According to Brackhahn, the same holds true for a university.

“If you are interested in meeting alumni needs, you conduct a survey and you use that information to grow closer to meeting those needs,” he says.

The survey also showed what campus events alumni think are most important. Results indicate that alumni are most interested in such events as graduation class reunions and reunions of their academic majors. “We found that alumni want to have more alumni events where they live,” Brackhahn says.

Alumni also shared their feelings on what they like to read most in the MSM-UMR *Alumnus* magazine. The alumni notes, or personals, were highest on the list, followed by stories about innovations in education at UMR, topical articles about fellow alumni, students and faculty, alumni profiles, and news about new construction on campus.

No single age group dominated the survey. “About 50 percent of non-donors who responded to the survey were alumni who graduated in the past 15 years,” showing that young alumni were just as responsive to the survey as older alumni, Brackhahn says.

Results of the survey will help UMR and the alumni association strengthen ties with alumni.

“We plan to generate changes to further give alumni what they want,” Brackhahn says. But if this survey was any indication, he adds, “we must be doing something right or we wouldn’t have such strong support from our alumni.”

Order your Bricks NOW!

During MSM-UMR’s 125th anniversary year, celebrate our distinguished history by inscribing your name and class year on a commemorative brick. A personalized brick also makes a terrific gift for a birthday, graduation, special holiday, or an anniversary. So put your name on stone and celebrate the 125 years MSM-UMR has educated leaders in engineering and science. Funds received will support the new Student Recreation and Intramural Center so our students can play smart and stay fit while preparing for the future.

For only \$125 your name, or the name you designate, will be engraved on a red paving brick and placed on the terrace just outside the main entrance to the facility. Or you may prefer to engrave your name on our gold, executive brick for \$500. The executive bricks will be specially placed among the red to spell out MSM-UMR on the terrace. Your gift is fully tax deductible.

Order your brick(s) today by completing the form below or call (573) 341-6386.

Bricks for Fitness Order Form

Name(s) _____

Address _____

City _____ State _____ ZIP _____

Enclosed is my gift of \$_____ for a red, personalized brick(s) @\$125 each.
800160 (92)

Enclosed is my gift of \$_____ for a gold, personalized brick(s) @\$500 each.
800160 (92)

Enclosed is \$5.00 plus \$0.77 postage for a brick certificate suitable for framing.
(R-4-25095)

Check here if you work for a matching gift company & enclose your company’s matching gift form.

If paying by check, please make it payable to UMR. Thank you!

For your convenience, you may make gifts with your Mastercard, Visa or Discover Card.

Please charge to: Mastercard _____ Visa _____ Discover _____

Account No. _____ Expiration Date: _____

Signature of Cardholder: _____

Gifts are tax deductible.

Please fill in the blocks below with the letters EXACTLY as you would like to see your brick(s) engraved. LEAVE A SPACE BETWEEN NAMES AND BEFORE AND AFTER “&”. MAXIMUM OF 32 CHARACTERS AND THREE LINES PER BRICK.

Mail to: Bricks for Fitness, Castleman Hall,
1870 Miner Circle, Rolla MO 65409-0650.



Would you like to be a part of an exciting new program?

Student Council, in cooperation with the Alumni Association, desires to start a program that will help both students, alumni and businesses. A mentoring program is greatly needed by the students at MSM-UMR. The idea of this program centers on your participation and on getting the students involved. The program would greatly assist freshman students who are undecided on what engineering field they wish to enter. Also, the program would give students a chance to see

practical application of the knowledge they are acquiring and the opportunity to make contact with MSM-UMR graduates in business. The program will require you to allow a student to see what you do in a typical day. This will not require an ongoing commitment from you. Would you be interested in participating in this exciting new program? If so please email stuco@umr.edu, fax us at (573) 341-6972 with the following information, or clip and send this to:

Student Council
University of Missouri-Rolla
202 University Center West
1870 Miner Circle
Rolla, MO 65409

NAME: _____ YEAR OF GRADUATION _____

MAJOR: _____

E-MAIL: _____

WORLD WIDE WEB ADDRESS (IF APPLICABLE) : _____

New grads get jobs

UMR's Career Opportunities Center has released the 1994-95 Annual Report of Full-time Job Status, and the news is good. UMR's graduates are getting jobs and are commanding good salaries, above the national average in many cases.

Of the 755 graduates included in the report, more than 625 had either accepted a job, been accepted to graduate school, had other plans such as teaching/military service/further undergraduate education, or had not yet reported their status.

UMR graduates' average salaries were higher than the national average in the following fields: management systems, mathematics, physics, history, English, aerospace engineering, engineering management, ceramic engineering, and mining engineering. The highest starting salary reported was \$44,400 (for a chemical engineer), with the overall UMR average salary being \$33,401.

Looking for a job?

The UMR Career Opportunities Center can help! To find out how, please e-mail Marcia Ridley at mr Ridley@umr.edu. Or you can call her at (573) 341-4229 or write her at 1870 Miner Circle, Rolla, MO 65409-0240.

Alumni Salary Survey

Several alumni have requested that we conduct a salary survey, so they can see how they measure up to their peers. Won't you take a moment to send us the following information? We'll tally it up and print the results in a future issue, so you can see where you stand!

Current salary: _____

Your major at MSM-UMR: _____

Highest degree received (BA, BS, MS, PhD, etc.): _____

Number of years since receipt of highest degree: _____

Clip and mail this form to: MSM-UMR Salary Survey, Castleman Hall, 1870 Miner Circle, Rolla, MO 65409-0650; fax to (573)341-6091; or e-mail information to alumni@umr.edu

Belt buckles again available

Many of you have asked us where you can get the "Joe Miner" belt buckles that used to be advertised in the *MSM-UMR Alumnus*. The UMR student chapter of the Society of Mining Engineers is once again offering these brass belt buckles for sale, for only \$10 each. For more information or to obtain a buckle, get in touch with Barbara Robertson at (573)341-4753, write to her at 226 McNutt Hall, 1870 Miner Circle, Rolla, MO 65409-0810, or e-mail her at barb@umr.edu.

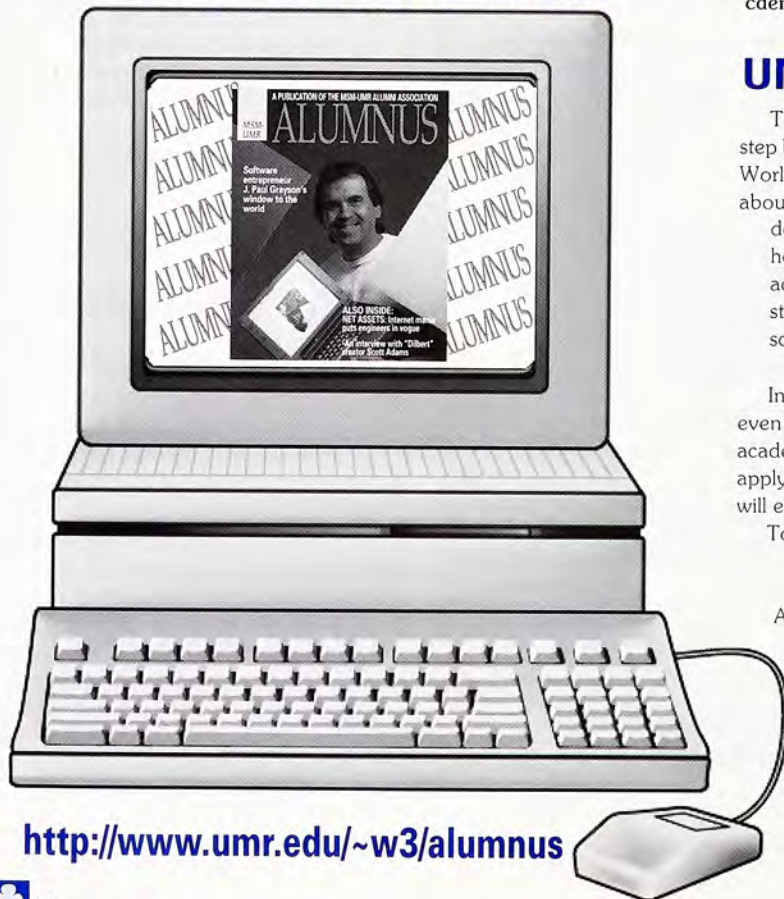


If you would like to get on line with other alumni, send us your e-mail address!

E-MAIL ADDRESSES

- Richard Dickerson, CE'74, '75, richd0@aol.com
Walter P. Glaesser, ME'85, wglaser@ix.netcom.com
Greg Gurnow, EE'89, Internet: G_Gurnow@AEP.e-mail.com
AOL: GGurnow@AOL.com
James L. Kreilich, ME, MSCSci'72, JLK@Cray.com
Catherine Morse, Csci'92, MorseCL@bu.com
Bill Ogroski, EE'77, billo@aztec.asu.edu
Roger S. Protzman, GeoE'93, Roger.Protzman@AABSMTP.ABB.COM
Susan Schumacher, MetE'87, SchumaS@mdmp015.allied.com
J. B. Shelden, PetE'81, J.Barry Shelden, 102055, 3227@compuserve.com

MSM-UMR Alumnus is now on the web!



<http://www.UMR.edu/~w3/alumnus>

World Wide Web

Applying to UMR?

If you know a prospective student who is planning to fill out an application for admission to UMR, it can now be done through the UMR home page at <http://www.UMR.edu/>.

UMR's 'piece of the Web'

Go to <http://www.UMR.edu/> to find the UMR home page on the World Wide Web, which serves as a "table of contents" to other UMR-related home pages and information about UMR, including the MSM-UMR Alumni Association home page at <http://www.UMR.edu/alumni/>. Thanks to the volunteer efforts of Richard Altheide, CSci'84, you'll find information about the association and its history, and more. This is still a "work in progress," so if you don't find what you're looking for there, let us know and we'll try to put it on.

Just for Fun

If you'd like to check out other colleges and universities around the world, to see what they've got on the World Wide Web, go to <http://www.mit.edu:8001/people/cdemello/univ.html>.

UMR goes on line

The University of Missouri-Rolla has taken an important step by placing information about our school on the Internet's World Wide Web. A prospective student can discover more about the following areas of UMR through the UMR web site:

- degree programs
- how to plan a campus visit
- academic departments
- student activities
- scholarship information and application

In addition to this information, a prospective student can even apply for admission via the Web. For the 1995-96 academic year, the \$20 application fee is waived if students apply for admission via the Web. A form is also on the Web that will electronically add students to our mailing list.

To view the Admissions Office home page, the URL is: <http://www.UMR.edu/~enrol>

Admissions e-mail address on the Internet is: egghead@UMR.edu

If you have any questions or comments about the home page, feel free to call Jennifer Bayless '89, coordinator of alumni/admissions, at 1-800-522-0938 or e-mail her at jennieb@shuttle.cc.UMR.edu.

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RELATIVELY SPEAKING

Three generations of Koopmanns

The Koopmanns are believed to be the first family to graduate three consecutive generations of MSM-UMR alumni, and each generation graduated exactly 30 years apart—in 1935, 1965 and 1995.

The record-holders are the late August "A.P." Koopmann, ME'35, August's son, Bruce Koopmann, AMth'65, MS NucE'69, and Bruce's daughter, Rayna Koopmann, ME'95, both of Manteca, Calif.

But the family tradition doesn't stop there. So far, 10 Koopmanns and Hensons (including those who married into the family) have graduated from MSM-UMR.

"My grandfather (August Koopmann) never believed I was coming to UMR," Rayna says. (Few, if any, women came to MSM in A.P.'s days. Even Bruce remembers just six female students in his class.)

Playing, sailing, tennis and golf. He plans to remain in the Kansas City area enjoying the "fruits" of his career. • **Judson A. Hughes Jr.**, ME, retired Sept. 1 from Westinghouse Electric Corp. after 41 years in marketing and sales of electric utility generation and nuclear equipment. He writes, "My wife and I will continue to live in Wayne, Pa., adjacent to the Valley Forge National Park." • **Herbert E. Lincoln III**, CE, plans to retire to the East Coast (Beaufort, S.C.) in spring 1996. He will concentrate on boating, boat building, bicycling, touring, hiking and camping. • **Robert B. Puyear**, ChE, was elected vice president of Nace International, the corrosion control society, for 1996-1997.

1955

David J. Davis, CE, writes "I am retired and living on Grand Lake in Oklahoma, where I hope to do a lot of fishing." • **Richard L. Jones**, MetE, writes, "I am enjoying retirement for four years after 35 years as a metallurgical engineer at General Dynamics-FW. My wife of five years, Janis, is still working as an administrative assistant in a doctor's family practice office. We enjoyed a three-week va-

liked the small-school atmosphere."

A trip home

Esther Jane met Bruce when her brother, Chester Henson Jr., CE'67, brought him to the Henson home in Poplar Bluff, Mo., during a school break.

"I dated him from the time I was 14 until I was 22 and married him," Esther Jane says.

The Hensons have a long relationship not just with UMR, but also with Acacia fraternity. When food was in short supply at Acacia, the Hensons would butcher cattle from their ranch for the fraternity. "My parents were also chaperones of Acacia," Esther Jane says.

The Henson family was so popular that Chester Henson Sr. (Rayna's maternal grandfather) was named an honorary member of Acacia fraternity. He also received an honorary degree from UMR in 1969—"not bad for someone with an eighth grade education year by civil engineering students at Florida International University."

1957

Charles A. Frey, CE, retired from the Texas Department of Transportation in March 1993. The former supervisor research engineer in the NASA area now teaches high school math on a part-time basis. He also does some traveling. • **William S. Soper**, EE, writes, "Retired on July 1, 1995, after 35 years with GD/EB Division. Plan to enjoy my place on the water here in Florida and do a little boating and fishing."

1958

Edward D. Duderstadt, CerE, MSCerE'59, writes, "We plan to spend the rest of our retirement here in New Mexico. Marilou and I recently moved to Las Cruces from Ohio, and are building a new home. Our new neighbor will be another alum, **Jack Dorsch**, EE'61, and his wife, who is a native of Rolla." • **Jack L. Jost**, ME, is vice president at Tropicana/Dole Beverage Group, a division of Seagrams Co. He received his master of engineering administra-

Is it a reunion year for you? It is if you are a member of the classes of 1936, 1941, 1946, 1951, 1956, 1961, 1966, 1971, 1976, 1981, 1986, or 1991. Your classes will have reunions at Homecoming this year, Oct. 4-5. Plan now to attend and join the fun!

Some of your fellow alumni are already making plans for activities that weekend - they are your class coordinators. The class coordinators are very important volunteers. They communicate with the alumni association, keeping us up-to-date on addresses and other alumni information. They organize special reunion events at Homecoming and at other times of the year serve as contact for their classmates. They sign their names to the letters inviting their classmates back for Homecoming, encouraging all to attend their reunion.

The alumni association plans special events at Homecoming for the reunions, most notably the Silver & Gold Reunion Cocktail Buffet on Friday night, and the Fieldhouse Feed Reunion Luncheon on Saturday. Both occasions offer special areas for classes to gather as well as opportunities for those from other classes to find their friends in the reunion year classes. Some class coordinators also choose to plan other activities for their classmates, such as receptions and parties in private homes or other locations. The alumni office encourages class coordinators to organize these special events, and will advise class coordinators on making the plans. Class members can be advised of special reunion plans through mailings from the alumni office.

The alumni listed on this page have already committed to serving as class coordinators for Homecoming 1996, and others will join them soon.

A complete list of class coordinators for all classes appears in the Alumni Directory. Jim Van Buren '63 is the chairman of the association's Reunions Committee, and as such is the person in charge of recruiting class coordinators. He is still in the process of lining up this year's reunion coordinators.

If you'd like to join these alumni in serving as a class coordinator, please contact Jim Van Buren at (314)770-4342 at work or (314)821-9382 at home, or call Don Brackhahn or Lindsay Bagnall at the alumni office at (573) 341-4145.



The Class of 1951 met in St. Louis for a reunion. Front row: Tony '51 and Ellie Anderhub; Bob '50 and Delores Morrison; Gerald '51 and Gloria Bender. Back row: Bob '51 and Mary Smith; Bill '51 and Mavis Monroe. Not pictured: Jim Ellison '51. They say they're looking forward to the 45th reunion in Rolla in 1996.

Fifties

1950

Gerald L. Hammond, ME, writes, "I'm fully retired now. Kathleen and I are enjoying it with some travel. Still restoring Mustangs. Enjoying the computer community." • **Franklin W. Wyatt**, ChE, writes, "Retired from Union Carbide in 1989. Staying active with Union Carbide Retiree Club."

The four-year project restored the bridge to its original 1849 condition. In the 1960s this bridge graced the month of April in a Trans World Airline calendar.

1952

Kenneth L. DeLap, CE, writes, "Tell Patrick D. Smith my Sig Ep number was 100." • **Gregory V. Menke**, CE, retired in 1993 after 25 years with International Harvester Co. (Navistar) and 15 years with National Steel. • **Ernest J. Reeves**, ChE, writes, "My first visit to the campus in 43 years was last September. The

ALUMNI NOTES

Thirties

1932

Frank J. Zvanut, CerE, PhDChem '37, writes, "My wife (Kay) had a dance studio in Rolla from 1934 to 1937. At '94 Homecoming she met four wives of alums who had taken dance lessons from her (during that time). They were present for '95 Homecoming."

1933

Vernon L. Asher, CE, writes, "On my 85th birthday (Oct. 31, 1995), I have been retired from Southwestern Bell for 20 years. We enjoy traveling (especially cruises) and I am starting my 50th year as a member of the Chancel Choir at Kirkwood United Methodist Church. I was in the old MSM Glee Club while at MSM-UMR."

1934

John H. McKinley, CE, writes, "Same year-round sunshine, same 'crummy' golf, traveling and enjoy-

ing." • **Thomas J. Stewart Jr., ChE, PddChE '69**, writes, "Just returned from a trip to Scotland with two brothers and a sister. We had a family reunion."

1936

George O. Nations, CE, writes, "At age 81 the golf ball doesn't go as far as it once did but with the year-round golfing climate, being a spectator has its advantages. Motorized golf carts are a big improvement since undergrad days on the MSM golf course. Best wishes to all our contemporaries and those from earlier and later times." (We were notified of George's death in early 1996.)

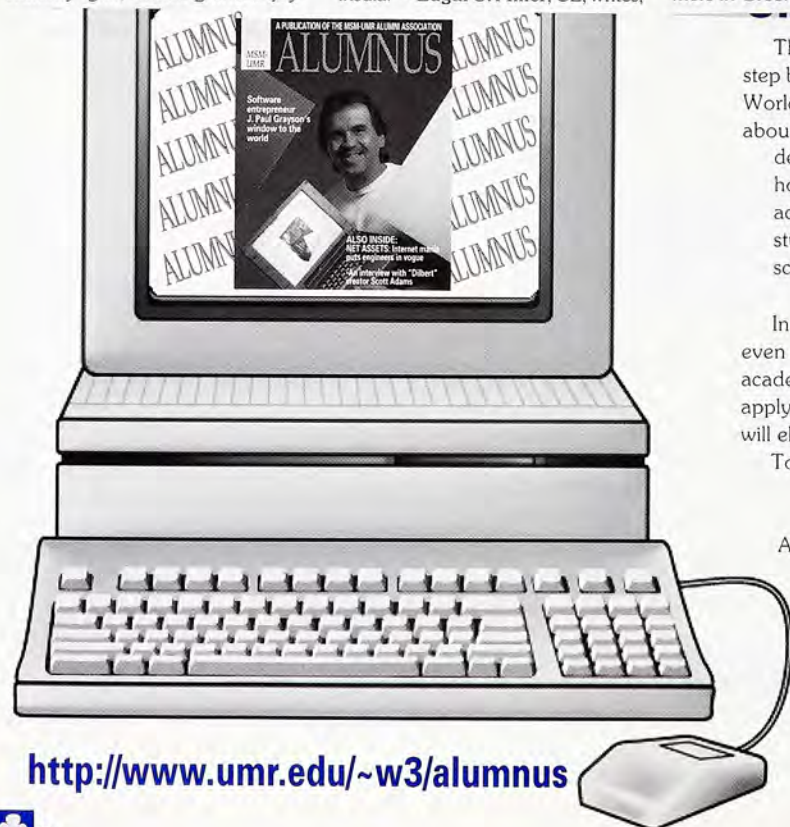
1939

Jack W. Moore, ChE, writes, "I've been retired 12 3/4 years and enjoy it. Greetings to all '39ers."

1940

John D. McClendon, ChE, writes, "I've just turned 77 and been retired 14 years. I'm still reasonably healthy and have good enough eyesight and hearing to enjoy life in Poulsbo, Wash. (Little Norway), on the Olympic Peninsula." • **Edgar S. Miller, CE**, writes,

Forties



<http://www.UMR.edu/~w3/alumnus>

Class of 1945 50-year reunion



"We will miss the reunion this year as Peg and I plan to take a 25-day cruise in early November from Athens, Greece, to Singapore via the Suez Canal." • **George L. Mitsch, MetE**, writes, "Still kicking!" • **James F. Rushing, CE '40**, writes, "Spent four days in Rolla during October 1995. Wife, Evelyn, had a minor heart attack while we were on the road. Three cheers for your fantastic hospital!"

1941

James J. Springer, EE, writes, "June and I celebrated (sedately) our 55th wedding anniversary on Sept. 20, 1995. We have now enjoyed 12 summers in Green Valley, Ariz."

1942

Thomas A. Jones, MinE, writes, "Evelyn and I were not able to attend homecoming this year, but we are celebrating 51 (long) years of marriage this month." • **Albert T. Sindel Jr., MinE**, writes, "Still retired. Lil and I are still in great health."

1943

Charles S. McCormick, ME, writes, "Still active, along with mostly other retirees, in church-sponsored charity focused on making minor repairs in the home."

1946

Robert H. Smith, ChE, writes, "Enjoying retirement!"

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Admissions e-mail address on the Internet is:
egghead@UMR.edu

If you have any questions or comments about the home page, feel free to call Jennifer Bayless '89, coordinator of alumni/admissions, at 1-800-522-0938 or e-mail her at jennieb@shuttle.cc.UMR.edu.

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1950

Gerald L. Ha "I'm fully retire I are enjoying it restoring Mus computer com W. Wyatt, ChE Union Carbide tive with Uni Club."

1948

John V. Glaves, ChE, writes, "What does a chemical engineer do after retirement? This one took a course in alcohol and drug abuse. I now work in the psych wards of Houston-area hospitals." • **Donald J. Mathews**, ME, moved to Rolla last September after living in Jonesboro, Ark., for 17 years. • **Lawrence F. O'Neill**, CE, retired in 1986 with wife Becky. They live at Terre du Lac, Bonne Terre, Mo. • **Wilbert F. Stoecker**, ME, PDDME '79, writes that his book, "Volume II of Industrial Refrigeration," has just been published.

1949

Joseph E. Greig, ME, writes, "Enjoying retirement in San Diego, Calif., area. Wife, Rita, had bypass surgery in October 1995. Plan to make Homecoming '96." • **Henry P. Schweder**, ChE, writes, "Nothing special—enjoying retirement with Irene, my wife."

1951

Donald J. Dowling Jr., ChE, writes, "Enjoying retirement in the Valley of the Sun—Sun City West, Ariz. The golf is great. Plan to make the 45th class reunion in '96." • **Charles R. Ferry**, EE, writes, "My wife died of lung cancer in October 1994. My daughter died at age 43 in August 1995." • **David E. Glenn**, ME, writes, "Not much new to report." He's keeping busy with charitable work, and at the University of Pittsburgh, college of general studies. • **Eugene F. Kolb**, ME, writes, "Retiring after 40 years with the company. Wife and I both are in good health, looking forward to leisure time." • **Marion J. Norton**, CE, retired from Thiokol Corp. in February 1992. • **William R. Oldham**, CE, writes, "Retired from U.S. government. Enjoying new career as massage therapist and holistic health practitioner." • **Elmer D. Packheiser**, ME, received a certificate recognizing his efforts to restore a 205-foot-long covered bridge.

Class of 1951 reunion in St. Louis



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campus ambassador was an absolute necessity for touring!"

1953

John H. Bender, CerE, is still in the refractory industry, working for Refraction Service Corp., which supplies major steel companies in Northern India.

1954

Jerry R. Custead, ME, MSME '54, retired on Aug. 31, 1995, after a "wonderful and rewarding" 41-year career with Kansas City Power and Light Co. Now he plans to do a lot of flying, sailing, tennis and golf. He plans to remain in the Kansas City area enjoying the "fruits" of his career. • **Judson A. Hughes Jr.**, ME, retired Sept. 1 from Westinghouse Electric Corp. after 41 years in marketing and sales of electric utility generation and nuclear equipment. He writes, "My wife and I will continue to live in Wayne, Pa., adjacent to the Valley Forge National Park." • **Herbert E. Lincoln III**, CE, plans to retire to the East Coast (Beaufort, S.C.) in spring 1996. He will concentrate on boating, boat building, bicycling, touring, hiking and camping. • **Robert B. Puyear**, ChE, was elected vice president of Nace International, the corrosion control society, for 1996-1997.

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campus ambassador was an absolute necessity for touring!"

1956

Richard A. Hughes, CE, retired for a second time on Nov. 1, 1995. His new address is 1013 Kimberly Court, Marion, IL 62959. "Will advise of phone number later." • **Harlan L. Kebel**, MinE, retired "again" in January 1996 and moved to New Bern, N.C. • **LeRoy E. Thompson**, CE, MSCE '65, was named the outstanding professor for the 1994-95 academic year by civil engineering students at Florida International University.

1957

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1958

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POLICY FOR PUBLICATION OF ALUMNI NOTES IN THE MSM-UMR ALUMNUS

- 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.
- The MSM-UMR Alumnus will announce deaths if information is submitted by an immediate family member, or from a newspaper obituary.
- Obituary information on alumni spouses will be printed only if the alumnus/na specifically requests that we print it.
- We will print addresses if specifically requested to do so by the alumnus submitting the note.
- We reserve the right to edit alumni notes to meet space requirements.
- We will use submitted photos only as space permits.

ALUMNI NOTES

tion at Washington University in 1969. He was employed with Shell Oil Co. from 1958-1964 and with Monsanto Co. from 1965-1986. He joined Tropicana/Dole in 1988. • **Eugene R. Russell Sr.**, CE, a civil engineering professor at Kansas State University, recently presented a paper at an international safety conference in Prague, Czech Republic. He received an FHWA Eischower faculty fellowship award to take two courses in accident reconstruction at Northwestern Traffic Institute and received a Burns and McDonnell faculty award for excellence in research and teaching. He writes, "We recently had our 17th grandchild born and thoughts of retirement are beginning to dance in my head." • **Paul W. Taylor**, ME, writes, "Enjoying retirement in the Adirondacks with occasional consulting engagement."

1959

Lucien M. Bolon Jr., CE, and wife, Sammy, are the grandparents of Brett James, "Peanut," born July 21, 1995. Parents are **Greg Bolon**, CE'85, and Sherrie of Macon, Mo. Granddad says he is a "keeper." Since Lu's retirement, he's ready to babysit on call. • **Jon Langstaff**, MinE, is vice president of human resources at

Hecla Mining Co. • **Edward L. Niedringhaus**, CE, MSCE'70, writes, "My nephew, Brian Billingsley, is in the freshman class." • **Ronald E. Volker**, CE, MSCE'60, writes, "Retired from McDonnell Douglas this year. Wife, Pat, and I are enjoying travel. Present address is 54 Jamaica Drive, St. Peters, MO 63376."

Sixties

1960

William A. Anderson, CE, a retired colonel for the U.S. Army, was honored recently by Casper College as an "exemplary alumnus." Casper College is celebrating its 50th anniversary, and held a banquet to honor 50 former students. Anderson received his associate degree from Casper College prior to attending



William Anderson

MSM-UMR. Before retiring, Anderson owned an engineer consulting firm in El Paso. He is a member of the Casper College Alumni Board. • **Anthony Del Prete Jr.**, GGph, MSGGph'63, writes, "Our family went on a great Caribbean cruise in July. We visited five islands. In August we spent two weeks in Utah. Gloria and I went rafting on the Colorado River." • **Michael R. Vancil**, CerE, writes, "Seems like I tried to do it all! Started with Triangle fraternity life, helping with their intramural successes. I became a married man and began a family. Charlene and Michael were born in Rolla. Randy missed Rolla by two months and was born in Springfield, Ill. Housing arrangements changed as our family grew. First we lived across from the golf course and my dog Tim used to swipe golf balls at mid-fairway on hole number nine. Later we moved across from the Chancellor's Residence so had only a few steps to view the annual bonfire. Lastly, we lived in Military Court—that was 48 steps downhill from Bear Tracks Bar! No free time or money in those years. I had five part-time jobs and did all the grocery shopping on a motorcycle because we couldn't afford a car. I remember being late to class often...and was always sleepy or cold or both. Those were the years!" • **Neal T. Wagenheim**, MetE, writes, "Retired

Former EE prof is SMMA Hall of Famer



Earl F. Richards, MSE'61, PhDEE'71, a UMR professor emeritus of electrical engineering, received the 1995 SMMA Hall of Fame Award from SMMA—The Association for Electric Motors, Their Control and Application. The SMMA, based in Sherborn, Mass., is a manufacturing trade association with about 180 member companies.

The SMMA Hall of Fame honors those "who have significantly influenced the electric motor and motion industry through their creative endeavors in technology, business, research or education."

Richards has been teaching rotating machinery classes to undergraduate and graduate engineering students at UMR since 1958. Although he retired from full-time teaching in 1992, he still teaches a course in electric machines.

In addition, he has lectured at many technical conferences, taught short courses and served as a consultant to the private sector and government agencies. A member of SMMA for several years, Richards helped develop the organization's Motor College, a series of motor design courses started in 1994.

Through his involvement in SMMA, Richards has encouraged many UMR engineering students to apply to the SMMA Philip H. Trickey Student Grant program. The program provides the recipient with a cash award and the opportunity to present a paper at the SMMA spring meeting.

Richards joined the UMR faculty after working with the Ford Motor Research Center in Detroit. He received his bachelor of science degree in electrical engineering from Wayne State University in Detroit.

He and his wife, Marjorie, were honored by SMMA at a reception and dinner last October.

from Westinghouse Sept. 1, 1995. Linda and I are planning to relocate to the Southeast."

1961

S. Mitchell Bowers, ME, writes, "I've been working part-time at Mike Dayton Service & Repair and volunteering in neighborhood activities, and doing some church work. I am trying to enjoy semi-retirement." • **Farouk El-Baz**, GGph, PhDGGph'64, a director at Boston University, was one of the researchers at the Million Man March held in October in Washington. El-Baz and his colleagues at Boston University's Center for Remote Sensing used digital analysis of U.S. Park Police photos to estimate attendance of 870,000. • **Charles R. (Ron) Featherston**, PetE, is a partner with J&W Engineering Inc., an international petroleum engineering consulting organization. • **Robert E. Henderson**, ME, writes, "I retired from the Air Force (civil service) in January 1995 and am now a consultant with the Universal Technology Corp. of Dayton, Ohio." • **Bill Henning**, MetE, was promoted to vice president of technology at Miller and Co. in Chicago in 1994. He received the AFS-CMI Director's Award in 1993. He writes, "Still proud of that 10 Handicap!" • **Morris T. Worley**, MinE, is the chief operating officer for the Rayrock group of com-

panies: Rayrock Yellow Resources Inc., Mineral Rayrock Inc. and Rayrock Mines Inc. He is responsible for operations in the United States, including Nevada and New Mexico, and Latin America, including Chile and Costa Rica.

1962

Bhalchandra T. Dave, ChE, MSChE'64, resides in Southington, Conn. He welcomes visits or phone calls from classmates. His son is also a chemical engineer and works as production engineer in the Baton Rouge area. • **Henry P. Duvall**, Math, writes that his 21-year-old daughter Kim spent 10 weeks in Europe from July to September 1995, studying at the University of Salamanca, Spain, for four weeks. She is a senior and member of Delta Theta sorority at the University of Washington-Seattle. His daughter Kristin, 14, is a freshman at Holyname Academy in Seattle. • **Donald W. Haas**, ChE, writes, "Completed 31 years at Eastman Chemical Co. this year. Will be going on expatriate assignment to Malaysia in 1996. My 21-year-old daughter is a junior in chemical engineering at Tennessee Tech. University."

1963

Arvinkumar M. Shah, ME, was recently promoted to group leader in

New Job? New Spouse? New Kid?

We would love to hear what's new with you! Send your *Alumni Notes* news to:

Electronic Mail

ALUMNI@UMR.EDU

(This is an Internet address)

FAX to:

MSM-UMR Alumni Association
(573) 341-6091

Or, write us

MSM-UMR Alumni Association
1870 Miner Circle
University of Missouri-Rolla
Rolla, MO 65409-0650



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charge of the structural analysis group at the Technology Center of Case Corp.

1965

D. Franklin Giger Jr., ME, writes, "Since graduating from Rolla in 1965, I still make it to St. Pat's annually with **Dave Marcee, EE'72, Robert Klein, CE'72, Robert Grady, EE'68, Tom Manning, CE'70**, and our families. I appreciate the de-emphasis of the role of liquor at St. Pat's." • **Roney L. Haden, CE**, has moved from hands-on engineer to personnel manager for the Highway and Transportation Department's Jefferson City-based District 5. • **Jerry J. Moser, ME, MSEMgt'78**, writes, "Betty and I have a new granddaughter, Michaela Lynn Cash, born Jan. 22, 1995. Her parents are **Deana, CE'93**, and **Chris Cash, CE'93**. Both are employed in Springfield, Mo., Deana with the Department of Environment and Chris with Larken Industries. Our older son, **Jerry, CE'89**, and his wife, Jennifer, and 5-year-old son, Jacob, reside in Farmington, Mo., where Jerry is employed by G.W.S. Industries. Michael, our 16-year-old, is a junior at Sulphur High (La.). I am starting my 31st year with PPG Industries. We are a UMR family!" • **Barton A. Regelbrugge, ME**, writes, "Doing business at General Pump & Machinery, Sales Organization. My two offices are in Peoria, Ill., and Atlanta. Phones: (309) 693-7444, (404) 469-9332."

1966

Allen G. Behring, ME, MSME'68, PhDME'72, writes, "Recently formed a small consulting engineering firm to provide project management design, quality assurance and operations and maintenance service to clients in the power, process, transportation and manufacturing industries." • **Glen N. Foss, GGph**, writes "Received my master's in geology from Texas A&M University in 1994. Have now retired from the TAMU Ocean Drilling Program and am teaching geology and oceanography part-time at community colleges in San Diego County. The address is 2830 Calle de Malibu, Escondido, CA 92029." • **Robert Kulhan, EE**, was recently promoted to manager at Coffeen Power Station of Central Illinois Public Service Co. His daughter, Michelle, is a graduate of Southern Illinois University, Edwardsville. Son Robert is a recent graduate of the University of Illinois-Chicago, and daughter Tracy is a student at Belmont University, Nash-

ville, Tenn. • **Gary M. Turner, CE, MSCE'72**, a lieutenant colonel in the U.S. Army reserves, 416th Engineer Command, completed the air war college correspondence course in October 1995.

1967

Gary L. Kelso, ChE, writes, "Missouri School of Mines (MSM), the university can take the School of Mines out of its name, but can't take the old Miners away from MSM! Hope the ChE department continues to turn out some of the best ChEs in the world." • **Charles H. McGrady, CE**, writes, "I still reside in Bowie, Md." • **Clifford C. McMullen, CE**, writes, "Retired from Wilbur Smith Associates in December 1994. Am working again. Seem to be a failure at retirement as this was my second try." • **Gary F. Sievert, ME'67**, was pro-

moted in February 1995 to manager of support services. This includes research, engineering, purchasing, manufacturing, safety, quality and marketing groups.

1968

James L. Kreilich, ME, MSCSci'72, is manager of the design automation and service departments at Cray Research Inc. He would like to hear from the '72 master's degree graduates. • **Henry A. Till, NucE, PhDNucE'73**, writes, "I would just like to thank MSM-UMR for the fine education you gave me."

1969

Jan R. Lojek, NucO, writes, "I continue at B&W Nuclear Technologies as fuel project manager for ANO-1 and Davis-Besse. Since we are now French-owned, our name changed

to Fromatome Cogema Fuel at the first of the year." • **Philip G. Rasch, ChE**, writes, "I am the safety director of Vanaloc Inc. in Vancouver, Wash. My son, Erik, is a senior at Texas A&M-Corpus Christi majoring in environmental engineering. My youngest daughter, Stefani, is a freshman at Texas A&M-College Station majoring in animal science. She is also on the Lady Aggies softball team. I also have two grandsons by my daughter, Amanda. She and her husband will be making the move to Washington with us in January, and his family is from that area." • **Robert W. Schmidt, EE**, is the manager at Union Electric in the Wentzville, Mo., district. Robert has served as underground district manager since 1988 and as manager of the Geraldine district since 1991. He joined Union Electric in 1969 as an assistant engineer in engineering and construction and has served in various UE engineering and management positions in the St. Louis metropolitan area.



Robert Schmidt

Alumni demonstrate the art of civil engineering

There is an art to engineering, as six UMR alumni recently demonstrated. The six graduates, all civil engineers with the U.S. Army Corps of Engineers' St. Louis District, were among the recipients of the 1995 Federal Design Achievement Awards from the National Endowment for the Arts. The awards, presented every four years since 1983, honor "exemplary federal superior design achievement" in various fields.

Receiving the awards with **Col. Thomas C. Suermann**, commander of the St. Louis District, were **Claude N. Strauser, CE'69; Phillip S. Eydmann, CE'69, '74; Robert D. Davinroy, CE'80, '94; David R. Busse, CE'81, '83; Stephen L. Redington, CE'71; and Donald M. Coleman, CE'80.**

The team's winning project, "Environmental River Engineering Project on the Mississippi River," deals with obtaining a safe, dependable and environmentally sensitive navigation channel on the Mississippi River. The project was developed to encourage biological diversity of the Middle Mississippi River through re-engineering the design of the navigation structures already in use on the river.

The competition involved about 400 entries from 75 government agencies and departments.



Receiving the National Endowment for the Arts awards are (from left) **Claude N. Strauser, CE'69; Phillip S. Eydmann, CE'69, '74; Robert D. Davinroy, CE'80, '94; Col. Thomas C. Suermann, St. Louis district commander; David R. Busse, CE'81, '83; Stephen L. Redington, CE'71; and Donald M. Coleman, CE'80.**

Seventies

1970

Bruce W. Baumann, EMgt, MSEMgt'72, is a field support services manager for Allan A. Myers, Worcester, Pa. He manages a 400-plus fleet of construction, transportation and fueling equipment. • **David D. Beardsley, CE**, writes, "One of my most enjoyable jobs in recent years was being Sverdrup Corp.'s resident inspector for the structural rehabilitation of the lower (railroad) level of Eads Bridge in St. Louis for the Metro Link light rail system. I climbed over just about every square inch of the steel!" • **Max M. Ethridge, CE**, moved to Rolla to become the chief of the U.S. Geological Survey's Mid-continent Mapping Center. • **Art Liang, EE**, writes, "After a year-and-a-half as the managing director of AISI (the American Iron and Steel Institute), it's time for me to move on. Once again, I will be directing Fox World Inc." • **Larry W. Mays, CE, MSCE'71**, continues as chair and professor of the department of civil and environmental engineering at Arizona State University. He is completing a "Handbook of Water Resources" to be published

ALUMNI NOTES

by McGraw Hill, and is also author of a new book, "Optional Control of Hydrosystems," to be published by Marcel-Dekker Inc. He's very active in research and has lectured on his research in Israel, Portugal, Korea, and Greece. • **Larry J. Oliver**, CE, MSCE '76, MSEMgt '83, writes, "Still working as an environmental engineer for Sverdrup Corp. Have been working in Portland, Ore., since September 1994 on the city's \$700 million combined sewer overflow program. Work has been interesting, and Carole, the kids—Jeffrey, 15, Steven, 12, and Kari, 7—and I are enjoying the beautiful and adventurous Pacific Northwest." • **James R. Pierce**, ME, and wife Barbara have relocated to Pittsburgh, Pa., where Jim is a project engineer in the steel process group at ICF Kaiser Engineers Inc. He and Barbara live at 132 Fox Meadow Drive, Wexford, PA 15090. • **Charles Pokross**, CerE, says he would like to hear from fellow alumni and former St. Pat's Board members who remember UMR in the late '60s. Some alumni might remember him as "Tuna." Charles is a senior engineer at Brush Wellman in Ohio. His address is 8028 Ivywood Lane, Sylvania, OH 43560 • **Thomas F. Wolff**, CE, reports that his first textbook, "Spreadsheet Applications in Geotechnical Engineering," was recently published by PWS-Kent Publishers. • **Warren C. Woods**, CE, MSCE '72, served as president of the Kansas Society of Land Surveyors from 1991-1993 and president of the Kansas County Highway Association in 1994.

1971

Mary C. Alexander, CSci, writes, "I'm looking forward to the new directory. There are some old friends I'd love to get in touch with to tell them, 'Hi.' Our daughter Amanda is now 14 and loves computers, but she wants to be a marine biologist and 'Save the Whales.' Hi to everyone who went to UMR in the late '60s and early '70s!" • **Richard E. Carver**, ME, was promoted to manufacturing engineer manager in July 1995. He is responsible for process engineering, tooling and maintenance activities. • **Frank J. Doering**, Che, MSEMgt '73, writes, "Returned to Monsanto headquarters after nine years at company outposts. Enjoying involvement in Monsanto mining op-

erations in scenic Idaho. Getting back to the university with oldest daughter, Angie, graduating from UMSL, and Shelly trying to select a college. Julie's athletics and Barb's social activities are keeping us busy." • **Madan (Jim) G. Jahagirdar**, MetE, and his family visited India in summer 1995. • **Michael G. Kelly**, Chem, and wife Linda, have two sons, ages 16 and 14. • **Harold "Hal" D. Morgan**, EMgt, and Joan have lived in Vicksburg, Miss., for the last 20 years. He recently returned from Central Asia, where he worked on building a new U.S. Embassy in Ashgabat, Turkmenistan. He would like to hear from 1971 military classmates. • **Charles E. Powell**, CE, assistant chief engineer at Archer Engineers, Springfield, Mo., and a resident of Ozark, Mo., served as a volunteer structural specialist for the Lincoln, Neb., Search and Rescue Team of the Federal Emergency Management Agency. He assisted in the aftermath of Hurricane Opal, which hit the Gulf Coast of Mississippi, Alabama and Florida. He is also a volunteer member of the Missouri SAVE coalition for emergency response in Missouri. • **Michael S. Sandella**, CE, writes, "As part of Amoco engineering and construction consolidation, Judy and I are moving to 2507 Briarglen Drive, Pearland, TX 77581." • **Allen W. Seabaugh**, ME, moved to 6814 Autumn Lake Trail, Hixson, TN 37343.

1972

Billy W. Bourne, Econ, writes, "After 17 years with Honeywell, I joined Engineered Thermal Systems in May. We are an authorized agent for York International and are located at 2616 Metro Blvd. Maryland Heights, Mo. The advantages of a smaller firm are demanding but much more rewarding." • **Teriel E. Burke**, CE, writes, "I changed jobs in May 1995 to chief engineer at Rapps Engineering and Applied Science in Springfield, Ill. I'm enjoying my new career. My daughter, Sadie, is a third-year CE student at UMR. Son, Rob, is a senior at Chatham Glenwood. Wife, Deb, is doing fine also." • **William J. Ernst Jr.**, CE, writes, "Still city engineer/public works director of Fulton. Managing maintenance activities in five divisions and various utility and public works construction projects through the engineering division." • **Dominic J. Grana**, CE, MSCE '75, writes, "I have recently joined the St. Louis office of Dames & Moore as principal engineer—air

Panamanian minister returns to campus



Nitzia R. de Villarreal, PetE'79, the minister of commerce and industries for Panama, recently visited her alma mater while she was in the United States discussing trade relations with Missouri Gov. Mel Carnahan. She is pictured on the UMR campus with UMR Chancellor John T. Park and Leonard Koederitz, ChE'68, MS PetE'69, PhD PetE'70, Distinguished Teaching Professor of geological and petroleum engineering.

services Midwest. Rosemary works for St. Louis Community College. Dominic is studying education at UMSL. Emily is studying physical therapy at Maryville University and David is a junior in high school." • **Don Rice**, GGph, writes, "After 11 years of international exploration (including 2 years in London), I'm again looking for natural gas in the United States. With brother Ken, GeoE '78, in Houston, brother David, GeoE '74, and his wife Lynn, Chem '74, in Dallas, and father, Paul, EE '49, in Cape Girardeau, the clan is more centralized than it has been for a long time." • **Steven D. Rush**, CE, served as the 1995 president of the OMC Chamber of Commerce. His firm, Site Development Engineering Inc. has grown to 13 employees. Steve and his wife, Marlene, live in St. Louis. Their son, Scott, is a junior at UMR. Jennifer, their daughter, is a senior at Mehlville High School.

1973

A.W. Cagle Jr, ChE, was retained as the Kansas City Housing Court judge by the voters of Kansas City, Mo. • **David P. Capelle**, CE, writes, "My oldest son Chris is currently attending UMR as a computer science/electrical engineer major." • **Robert J. Miline**, CE, is no longer employed by John Brown Inc. He is owner and president of Qualex Engineering of Mt. Vernon, Ind., with 60 engineers. "Wish us luck!" • **Thomas W. Richter**, CE, writes, "I recently 'flew away' from my position as director of planning and engineering at Lambert St.

Louis International Airport and joined David Mason & Associates Inc. (DMA) as director of marketing. I spent 20 great years at Lambert and I look forward to 20 great years here at Mason." • **Willis J. Wilson**, CE, transferred to Burns and McDonnell's St. Louis office as manager of the environmental and sanitary engineering department.

1974

Richard M. Baker, CE, MSEMgt '90, has two sons attending UMR. Jessie is a senior in geophysics and Jack is a junior in civil engineering. • **Gary L. Blankenship**, AE, MSAE '75, writes, "I have formed my own consulting business—Aviation Noise Technology Inc. Great to be on my own. Best to all in AE department." • **Danny L. Latal**, was promoted to site manager of the Dow Corning Center site in Midland, Mich. • **Paul E. Miller**, MinE, writes, "After 21 years of various prospecting and development adventures in the Western Hemisphere. I have parked my burro in Fort Myers, Fla." • **R.P. Sauerwein**, CE, writes, "Just married Ms. Kathleen Brown on June 10, 1995. Will retire from the Navy in May '96 and continue my career in civil/environment engineering."

1975

James W. Abbott, EMgt, MSEMgt '76, writes, "I was divorced in May 1995, a sad event, but my daughter Carrie, age 5, is living with me and we are forging a new life together. I'm planning to retire from

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1977

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get to live in g
still married to

the Army in September 1996." • **David A. Colvin**, CE, was promoted to president of The Clayton Engineering Co. on April 3, 1995. • **Dawne E. Sarchet**, Psyc, writes, "Served two Presbyterian churches as full-time pastor for eight years (1987-1994). Currently, I am working on my doctoral dissertation on Bible and the Ancient Near East at Hebrew Union College. I was ordained in 1980."

1976

J. David Lomax, ND, writes, "Susie is still teaching chemistry and physics at Highland High School, trying to direct as many students as possible to UMR. John Mark, age 9, and Merritt, age 4, are ornery little Miners-to-be. Even though my degree is in another field, I am assuming more and more engineering functions at Walter Louis Chemicals in Quincy, Ill." • **Jennifer W. Posda**, CE, writes, "I have changed jobs this past June to SEPR as a sales manager/product manager for surface treatment area." • **John A. Schelin**, MetE, writes, "In May 1995, I departed Kansas City, Mo., for South Bend, Ind.—a home of a different type of Irish tradition. I am now in quality assurance for Wells Aluminum Corp. in North Liberty, Ind. My new address is 1412 N. Chicago St., South Bend, IN 46628. My telephone number is (219) 234-0647. Maybe the South Bend alumni should show the Irish how to celebrate St. Pat's." • **Gregory G. Williams**, ME, writes, "As we make our new home in Austin, Texas, I find myself working in the exciting field of wireless communications in one of the greatest places to live in—Texas. Life's good."

1977

Steven R. Bollinger, ME, writes, "When I graduated in '77 I expected to take the P.E. test long before now. But then I also expected to change employers by now. I'm studying for the test now, but still at Federal Mogul (Carter)." • **Jill B. Hanus**, ME, writes, "Husband, Vern, and I are still with John Deere. Our 10-year-old son and 8-year-old twin daughters keep us busy going to soccer and baseball games and swim meets." • **D. Larry Van Houten**, CE, writes, "I am a project manager for McCarthy, a St. Louis-based contractor/C.M. Having moved numerous times with McCarthy managing the construction of health care facilities we finally get to live in good old Missouri. I'm still married to wife #1 and we have

16- and 13-year-old girls." • **Torie A. Vandeven**, GGph, Prof GGph '93, writes, "The Kuwaitis sold Santa Fe Minerals, my former employer, to Amoco and others this summer. I accepted a position with Amoco in Denver."

1978

Bruce Bergman, Phys, MSEE '80, writes, "Yes, we finally made it to Colorado! Kathy, the girls and I moved to Fort Collins a year ago with IBM. I'm currently working with IBM ISSC in Boulder leading a team responsible for LAN workstation implementation for IBM sites from Colorado to the Pacific Coast." • **Glen R. Davidson**, CE, was elected to the board of directors at Allgaier, Martin & Associates Inc., and promoted to vice president in February 1995. He writes, "I have three daughters, ages 16, 14, and 6, and one step-son, age 12. My wife, Carole, and I live in Webb City, Mo." • **Michael E. Schaefer**, CE, received a medal in 1994 from the Society of American Military Engineers. • **Roger Zimmermann**, EE, writes, "In July I left McDonnell Douglas to join United Defense-LP in Minneapolis, a division of FMC. It was a good move!" He lives with his wife, Karen, and children, Alisha and Mark, at 3016 121st Lane NW, Coon Rapids, MN 55433.

1979

Robert "Bob" W. Arnold, EE, is the director of marketing and business analysis for Sprint's long distance division. Bob and his wife, Tamara, live in Atlanta. • **Walter R. Bilgram**, CE, writes, "I recently began as technical director for Pohlman Inc. of Chesterfield, manufacturers of air bag bodies and precision machined components. **Ramona**, ME'80, and I just celebrated our 15th anniversary." • **Carl W. Knuckles III**, CE, became the commanding officer for the Naval Mobile Construction Battalion Fifteen on Sept. 16, 1995. He is employed at the City of Springfield (Mo.) Public Works Department as an associate civil engineer. • **Steven M. Lockington**, CE, MSCE'81, was promoted to senior engineer at Boyle Engineering Corp. • **Anne McIntyre**, ChE, writes, "Transferred with Procter & Gamble to Caracas, Venezuela, in January 1996 with my husband, Tim, who also works for Procter & Gamble, and two-year-old daughter, Brandea." • **Mary Watson**, EMgt, writes, "My husband, Jeffrey, and I moved to Indy (India-

FUTURE MINERS

Wayne J. Galler, ChE'71, and Jan, a boy, Ian Andrew, Aug. 11, 1995.

Stephen C. Johnson, CE'79, a girl, Sarah Elizabeth, April 24, 1995.

Johanna Yuhas, EE'79, and **Dennis Kinchen**, ME'78, BSME'79, a girl, Kate Julianne Kinchen Yuhas, Sept. 17, 1995.

Mark S. Smith, CE'80, and Kim, a boy, Jackson Raile, Feb. 23, 1995.

Stephanie M. Tanka, Geol'81, and Christopher, a boy, Bradley, May 21, 1995.

Mark D. Dieckmann, PetE'82, MSPetE'88 and Sherry, a boy, Jedidiah, April 20, 1995.

Robert S. Baumgartner, ME'83, Karen, and sister, Megan, a boy, Stephen Robert, Aug. 29, 1995.

Allen Friedrich, CE'84, MSEMgt'89, and Cindy, a boy, Joshua, Sept. 26, 1995.

Steven D. Kimes, CE'84, and **Debbie**, Emgt'84, a boy, Bradley Steven, May 22, 1995.

Terry C. Leeds, CE'84, Dana, and older sisters, Danae and Mariah, a girl, Taren Machel, Aug. 24, 1995.

Brent J. Peterlein, CE'84, and Val, a girl, Aug. 24, 1995.

William C. Wagner, ME'84, **Cynthia**, CE'86, and big sister, Richelle, a boy, Thomas William, Sept. 16, 1995.

Greg M. Bolon, CE'85, and Sherrie, a boy, Brett, July 21, 1995.

Marc W. Eshelman, CE'85, MSCE'91, Jill, and two brothers, Nicholas, 4, and Matthew, 3, a girl, Amanda Nichole.

Kristine L. Coon, ChE'86, and **Derek Coon**, Phys'86, a girl, Taelor, April 10, 1995.

Christopher M. Keran, ChE'86, and Chansie, a boy, Nicklaus Martin, Feb. 18, 1995.

David W. Snodgrass, ChE'86, and **Debbie**, a girl, Brittney Nicole, Nov. 20, 1994.

Michele L. Youmans, ME'86, John, and sister, Stephanie, a boy, Michael, June 29, 1995.

Denis A. Backer, ChE'87, and Catherine, a boy, Paul Michael, Oct. 16, 1995.

Kim A. Mengel, CE'87, and David, a boy, Brandon, Sept. 30, 1994.

Susan Schumacher-James, MetE'87, and Jerry, a boy, Owain Rhys, July 8, 1995.

Yu Iriyama, ChE'89, and wife, Yasuyo, their first child, a girl, Yui, June 25, 1995.

Steven M. Mertz, NucO'89, and Shelly, a girl, Christina Michelle, Jan. 8, 1995.

David W. Loida, Emgt'90, and Mary, a girl, Margaret (Maggie) Lee, Oct. 21, 1995.

Alex H. Vincent, GGph, '90 and Diane, a boy, Connor James, Sept. 25, 1995.

Lawrence R. Youst, ME'90, and April, a girl, Alexis Raye, July 16, 1995.

Timothy P. McConnell, CE'91, and Julie, a boy, Tyler Paul, Feb. 8, 1995.

Joseph G. Jones, CE'92, Valerie, and older brother Nicholas, a boy, Nathaniel Gerard, Sept. 13, 1995.

George (Jay) Doster, Phys'93, MSPPhys'95, and Sabrina Doster, Engl.'93, a girl, Katherine Leticia Doster, Oct. 17, 1995.

ALUMNI NOTES

napolis) in 1993. We have two smart and beautiful children, George, 7, and Jackie, 3. I keep busy taking care of my children and my customers. I've also become an avid Pacer fan!"

- **Leslie D. Witt**, PetE, MSPetE'88, writes, "I finally broke out of apartment blues and into a house at 3320 Lake Trail Drive, Metairie, LA 70003."

Eighties

1980

James A. "Buck" Durham, CE, writes, "Would like to hear from former classmates. Is anyone doing home inspections part-time or full-time? How about failure damage assessments? I need help in Nashville, Tenn." • **Ann M. Hagni**, Geol, MSGMgt'85, PhDDGGph'95, has been appointed by Gov. Mel Carnahan to Missouri's first State Board of Geologist Registration. The board will prepare and administer examinations for geologist registration, issue certifications of registration and renewals, and provide consumer information regarding the regulation of geologists.



Charles Jarrett

• **Charles R. Jarrett**, ME, was named manager of manufacturing technology at the Timken Co.'s Columbus Railroad Bearing Plant in Columbus, Ohio. He started with the company in 1980 as an associate engineer. The Timken Co. is an international manufacturer of highly engineered bearings and alloy steels. The company employs 16,000 people worldwide and recorded 1994 sales of more than \$1.9 billion.

- **Leslie Granger**, ME, writes, "We moved to a new house last December and are enjoying the extra space."
- **Thomas M. O'Connor**, ChE, has directed the proceeds from a \$4 million endowment to support a research and teaching program at Texas A&M University. The gift honors his wife, a chemical engineer who died in a 1989 explosion at a Houston chemical complex.
- **Michael S. Schmidt**, ChE, MSChE'85, writes, "Last time you heard from me, I mentioned how much I was enjoying my new job as a consulting engineer.

Things are hopping. Chris, the kids and I have since moved from Kansas City so I could assume management of our St. Louis office. We're hiring. I'd love to hear from alumni with ME, ChE, or EE degrees." He works at Clark, Richardson & Bishop, 650 Craig Road, St. Louis, MO 63141.

1981

Terrance M. Bodine, CE, has been living in St. Louis since 1990 with wife, Dottie, and three children, Andy, 6, Alex, 2, and Arielle, 6 months.

- **Michael L. Clark**, CE, writes, "The firm I am with, the Nelson Corp., recently merged with the national consulting firm Post, Buckley Schuh & Jernigan, headquartered in Miami. I am now manager of civil engineering services for the Dallas office."
- **Michael J. Flannigan**, ChE, writes, "I recently accepted a job with PHIBRO at their Houston refinery. I hope to link up with the Houston section of the alumni association."
- **Jeffrey J. Heppermann**, Geol, writes,

"Janice and I moved to Lafayette, La., in time for Mardi Gras. Nice change of pace after 11.5 years of Houston. I'm in development geophysics, working up 3-D surveys in the Gulf of Mexico." • **Doli K. Jones**, CSci, writes "I'm heading up my own consulting firm and have two wonderful girls. My husband is with Occidental Petroleum Co. and we live in Edmond, Okla. Come by and see us!" • **Mark R. Jourdan**, CE, MSCE'83, graduated with a doctor of engineering from Texas A&M University in August 1995.

- **W. Jeff Meier**, ChE, writes, "Patty, Michael and I have moved to Sugar Land, Texas, from Ponca City, Okla. Patty is in her final year of law school at U of H. I recently transferred to DuPont as an engineering consultant."
- **J. Barry Shelden**, PetE, writes, "Kathy and I are settling in to 'Ex-Pat' life in Jakarta, Indonesia. It is quite an adventure. We have run into several UMR Alumni in Jakarta!"
- **Mary E. (Lawler) Skouby**, CE, married Curtis

Skouby, CE'85, on Sept. 9, 1995, in St. Louis. They honeymooned in St. Thomas and survived the infamous Hurricane Marilyn.

- **John L. Woracek**, ME, writes, "Still working the 1800 program for RAH-66 Comanche." The first flight was scheduled for late November 1995. He plans to move to Redstone Arsenal in Huntsville, Ala., in 1997.

1982

David B. Akers, CE, and **Becky**, MetE'84, are glad to be back in the United States after their year in Hong Kong. Dave has returned to his position as senior civil engineer with Burns & McDonnell and Becky is a process quality engineer with National Steel in Granite City, Mo.

- **Vicki S. Johnson**, AE, writes, "I've joined the ranks of academe! It's an exciting new experience. I'm the director of the student success programs and associate professor of aerospace engineering at Embry-Riddle Aeronautical University in Daytona Beach, Fla. It is a dynamic, growing university. And gone are the 'good old days' of attempting to weed out students. We still lose too many, but we're really trying to help them."

- **Gloria Krieger**, CSci, writes, "I will be married in November to Mike Ford. We are both enjoying work at MCI and looking forward to the upcoming ski season."
- **Edward X. Ruebling**, ME, writes, "I am working for Veco Engineering on Alaska Pipeline Projects. I came to Alaska in 1992 on vacation and decided to stay. It's like living in a big national park."
- **Mary E. Simmons**, ChE, writes, "My husband, Jeff Simmons, and I continue to work for Shell Oil in

Explosion nets promotion

Christopher A. Layton, CE'90, has had an explosive career.

Few can claim what Layton can: He was promoted to project engineer on a \$15 million dollar bridge replacement project because of an explosion.

Layton helped bring down a lift span and truss bridge over the Red River at Alexandria, La. The demolition required an engineering plan and coordination with local officials all the way through the federal government. Layton worked with the U.S. Coast Guard and Explosives Units of the Louisiana State Police to ensure safety and smooth river traffic flow. A similar plan will be used to remove the Cape Girardeau, Mo., bridge crossing to Illinois.

Layton, who is with the Marine Bridge Division of Traylor Brothers Inc. of Evansville, Ind., will serve as the project engineer during construction of the new bridge.

Layton credits his "solid family background, Catholic education and experience at the University of Missouri-Rolla for giving me the faith and skills to go out and tackle these kinds of projects," he says.

Layton and his wife Kristy, both of Perryville, Mo., are "enjoying our 2-year assignment in 'Cajun Country,' where we are becoming adapted to regularly eating crawfish and sucking the heads. We are also keeping a close eye on the Mississippi River Bridge crossing here in Southeast Missouri in hopes of being able to build a bridge right here at home, just as civil engineers do."

3-2-1 Boom!

This photo was taken a split second after the explosion, which dropped the 600-ton lift span bridge into the Red River at Alexandria,

La. Prior to the explosion, demolition crews removed more than 500 tons of non-structural steel and assembled rigging to expedite the bridge's removal from the navigable waterway. The steel was removed in less than 10 working hours and 48 hours shy of the 72-hour time limit.



Houston. We have two children. Kristen is 3 and Eric is 1."

1983

Jay B. Immele, ME, and **Dawna (Brown),** Psyc, with daughters Elizabeth, 7, and Samantha, 4, have moved again to 174 Hilltop Road, Cadiz, KY. Jay is still with General Electric-IPGS, working as a lead startup engineer in Hagit, Israel. Their phone number is 502-522-9214 and Fax number is (502)-522-9210. • **Roger T. Kopp, MSChE '83,** writes, "Working for 3M in Springfield, Mo., as a manufacturing engineer. Mary, Jenny, Daniel and I enjoy living in Springfield." • **Michael T. Moylett, GGPH, MSGGph '85,** is "still exploring for oil and gas in the Permian and Williston Basins. All is going well," he writes. • **David R. Smith, ME,** writes, "doing great living in Indiana with Marsha and Sam, 9, Brian, 8, and Kim, 7. I am working at Nucor Steel, and Marsha works as an eighth-grade mathematics teacher." • **Paul L. Wojciechowski, CE,** writes, "I'm almost done with my 12th year at Missouri Highway & Transportation Department. Time flies when you're having fun."

1984

Douglas L. Kuchem, AE, writes, "After eight years on the X-30 program, which was canceled in January 1995, I am now working on advanced aircraft of much slower speeds. My area of expertise is still air-breathing propulsion." • **Eric H. Lidholm, GeoE, MSCE '90,** has become a senior project engineer for Trinity Engineering Testing Corp. (TETCO). • **Paul D. Long, ChE,** writes, "Laura, our three sons and I still live in Boise, Idaho. I work as an engineering section manager at Micron Technology." • **Patricia M. (McLaughlin) O'Brien, EMgt,** writes, "I was married to Thomas F. O'Brien on June 3, 1995. New address: 409 Monaco Dr., St. Louis, MO 63122." • **Brent J. Peterlein, CE,** writes that he is still working for Winchester Ammunition. • **John P. Scheibel, ME,** is a senior engineer at McDonnell Douglas. He is involved in armament installation design. • **David C. Skouby, ChE,** writes, "I got my P.E. license in New Jersey this year. After 4 years of undergraduate studies, 5 years of graduate study and 5 years in industry, I can finally officially call myself an engineer."

1985

Greg M. Bolon, CE, writes, "I have changed jobs with the Missouri High-

way & Transportation Department as the district materials engineer." • **Christopher J. Bruhn, AE,** writes, "We have moved to 1823 Carriage House Cir. #3604, Arlington, TX 76011. I'm teaching Physics I & II in a local high school. I'm working on a new class for next year called pre-engineering, which will include an aerospace unit!" • **Matt Conlon, ME,** and **Brad Stogsdill, EE '86,** rode in the St. Louis MS150 bike tour, which raised more than \$250,000 for the Multiple Sclerosis Society. "Brad used his engineering skill to repair his bike during the tour," Conlon writes. • **Walter P. Glaesser, ME,** writes, "Maureen, Colleen, 3, Brendan (born July 28, 1995), and I recently moved to Chandler, Ariz., where I'm employed as a space systems engineer for TASC, a subcontractor to Motorola, developing the IRIDIUM satellite constellation, which will provide worldwide 24-hour cellular telecommunications to authorized subscribers. I recently separated from the Air Force after 9 years in space/satellite operations." • **Jan C. Jungewaelter, ME,** writes, "I will be at Johnson Space Center in Houston working on the Space Station Mir project as a liaison engineer between the Russians and NASA." • **Patrick J. Mahon, ME,** was promoted to manager, division quality for Bussmann Division, Cooper Industries. He and Kathleen live in Ballwin, Mo., with their two sons. • **Edmund T. Moody, CE,** writes, "I am now a field bridge inspector with the Missouri Highway & Transportation Department, P.O. Box 270, Jefferson City, MO 65102." • **Nancy J. Nethington, GGph,** writes, "After 10 years with Mobil, Dennis' position was eliminated in September 1995 as part of a 50 percent reduction in information technology staff. This opportunity will allow us to move our family back to Missouri (our goal for many years)." Nancy is now substitute teaching in the Lewisville School District "while Dennis plays 'Mr. Mom.'" • **Robert K. Randolph, CE,** writes, "Monica, David, 4, Brittany, 2, and I are doing fine in Atlanta. Our new phone number is (707) 516-2838." • **Christopher Schaefer, ChE,** writes, "I've returned to our Freeport, Texas, site after having spent the past year at our Plaquemine, La., site (near Baton Rouge). Find myself really missing the Cajun food. Work goes on. Sometimes interesting, sometimes maddening." • **Scott D. Stephens, CE,** is assigned to the construction management staff for Black & Veatch in Orlando, Fla.



Holiday almost thwarts wedding plans

It wasn't cold feet, but rather closed doors that almost kept **Thomas Threlkeld, MAE '95,** of Loudon, Tenn., and **Jessica Glancy,** a junior metallurgical engineering major, of Vernon, Texas, from getting married Saturday, Nov. 11.

On Friday, the day before they were to get married, Threlkeld and Glancy went to the government center in Clayton, Mo., to get their marriage license. Much to their surprise, they (along with two other couples) discovered it was closed for Veterans Day.

Sympathetic security guards phoned Recorder of Deeds Daniel T. O'Leary at his home. O'Leary in turn called Mary Fajfar, marriage license supervisor. Together, they opened their offices and got the marriage licenses.

Threlkeld and Glancy were married at Larimore House in Spanish Lake, Mo.

• **Curtis D. Wiseman, CE,** writes, "I was married Aug. 26, 1995, to **Susan Pericich, CSci '87, MSCSci '93.** We are currently building our home in South St. Louis County." • **Anne M. Werner, CE,** writes, "Getting out of the Navy. Going back to graduate school to get my PhD in engineering (I hope)." • **Randall A. Wood, ME, MSME '87,** is the director of engineering for Able Body Corp. Madison is 1 and Ryan is 3.

1986

Pamela A. (Savala) Altice, CE, and **Rich Altice, CE,** are living in Oklahoma City and expecting their first child in June. • **Tracy A. Baysinger, ChE,** writes, "Enjoying life in Hutchinson, Minn., with my husband and 2-year-old daughter." • **Kristine L. Coon, ChE,** and **Derek Coon, Phys,** both work for Nikon. She is a technology engineer for Nikon Precision, and he is a systems designer for Nikon Precision Research Center. • **Roger A. Edmison Jr., CE,** writes, "Finally passed my PE exam. Will pass the P.L.S. exam in October, I hope. I'll be a registered professional engineer and land surveyor. I bet (Richard) Elgin, CE '74, MSCE '76, would have never believed it. Just bought a house—am thankful for my education." • **Michael E. Herleth, CE,** writes, "My wife Mandy and I recently purchased a home at 2703 Poppy Way in Columbia, Mo. We had our first child, Mason, on May 7, 1995." • **Phillip G. Kaufmann, CE,** is one of only four engineer officers to ever wear the black beret. "Now, two of

the four engineers ever assigned to the U.S. Army's 75th Ranger Regiment have graduated from Rolla!" They are Kauffmann and **Stephen Bridgman, MinE '81.** "Rangers—not for the weak or faint of heart," Kauffmann writes. • **Andrew Knudsen, NucO,** writes, "My wife Vicki and I have a 15-month-old son, Maxwell." • **Matthew P. Licklider, ME,** and **Robin Ruiz, EE '95,** were married in September 1995. They live in St. Louis. • **Wendy Liu, MeE, MSEMgt '89,** has worked as a production engineer at Formosa Plastics Corp. in Texas for the past six years. • **David W. Snodgrass, ChE,** writes, "I'm still working for Dow Corning, and Debbie, Britney and I live in the historic portion of Madison, Ind." • **Michael C. Spencer, ChE,** writes, "I'm not working at HarCros anymore. I'm working at Sverdrup Corp." • **Brad Stogsdill, EE,** and **Matt Conlon, ME '86,** rode in the St. Louis MS150 bike tour, which raised more than \$250,000 for the Multiple Sclerosis Society. Stogsdill used his engineering skill to repair his bike during the tour. • **Forrest T. Thomas, CE,** and **Mary E. (Marshall), CE '87,** were expecting their second child in March 1996.

1987

Martin J. Armstrong, ChE, works as a process engineer with Chevron Research and Technology Co. • **Clinton T. Ballinger, NucO,** writes, "Things are just dandy with me. I am an adjunct professor at RPI



ALUMNI NOTES

and teach Nuke Reactor Analysis. I still use my notes from D. Ray's class!"

• **Christopher V. Calandro**, CE, writes, "I passed my P.E. exam in April 1995 and became a Missouri P.E. this year. My wife and I have four kids and she is currently home-schooling our oldest, who is 6 years old and in first grade. Home-schooling is working out great—thus far." • **Joseph A. Farrow**, ME, married Conni A. Koehler on July 29, 1995. They reside in Metairie, La. • **Joseph B. Maynard**, ChE, writes, "We've moved and grown!" He is a process engineer—the only engineer—at Ameron, a Little Rock, Ark., company that makes industrial coatings. Their second child, Sara Nichole, was born in May. • **Gregory A. Mitchell**, ME, writes, "still teaching in K.C. Was diagnosed with colon cancer in January 1995. Had surgery and now undergoing chemo." • **Mary E. (Marshall) Thomas**, CE, and husband **Forrest**, CE '86, were expecting their second child in March 1996.

1988

Richard T. Bradley, CE, writes, "On Sept. 2, 1995, I married Alison M. Riddle. Alison received her bachelor's degree in nursing from SIUE in 1994. We were married in Crystal Lake, Ill. (a Chicago suburb)." • **Timothy W. Crosnoe**, EE, writes, "I am currently a captain in the United States Air Force. In 1993 I passed the P.E. and gained my professional registration. In May of 1994 I was assigned to the Air Force Institute of Technology (AFIT) to attend graduate school. In December I will be graduating with a master's in engineering and environmental management. I will then be stationed, again, here at Wright-Patterson AFB, but I will be assigned to Headquarters, Air Force Material Command, as an environmental project engineer. Since we will be staying for at least another three years, my wife, Kristin, and I bought a house and will be moving in after Christmas." • **William A. Heineken**, NucE, writes, "Employed at LMES, the section head for the safety analysis section, facility safety department, Y-12 Plant. In charge of a group of 25 safety analysis engineers. I am married, and we have one daughter born on Nov. 11, 1994." • **Timothy S. Hudwalker**, CE, works for BSI Constructors as a

Field work: Environmental engineer's sideline is cheering for the Rams

When time permits, environmental engineer **Courtney C. Sandford**, CE '94, likes to spend time on the sidelines.

In her full-time job, Sandford, of Chesterfield, Mo., is a civil engineer with Black & Veatch Waste Science Inc. in St. Louis. As a hobby, she is an NFL cheerleader for the St. Louis Rams.

"Cheerleading is strictly a hobby for me," Sandford says. And her hobby only comes when her engineering job permits.

Sandford joined Black & Veatch in 1995 after receiving her master of science degree from UMR. She received a bachelor of science degree in biology from the University of Missouri-Columbia in 1992.

"I actually started with an internship at Black & Veatch during the summer of 1994," she says. "Then I started full-time in January 1995."

Sandford is part of a team of engineers that works on hazardous waste issues in the company's environmental division. Most of the work involves CERCLA/RCRA regulatory support, intrusive investigations and sampling, hydrogeological evaluations, remedial design/remedial action, environmental site assessments, industrial waste pretreatment and Clean Air Act Title V services.

project engineer in St. Louis. • **Alexander W. Kott III**, ME, writes, "My wife, Amy, and I are back to the Peoria, Ill., area with our daughter, Allison. I'm testing Caterpillar engines and enjoying working on our new home." • **Lloyd A. Meffert**, ME, writes, "Still working for General Motors in Wentzville, Mo. My wife, Deanna, and I have two children, Allison and Andrew, and our home with 10.5 acres is flourishing. Visiting Rolla soon to see my brick on campus!" • **Dennis E. Melton**, CE, writes, "Was promoted to senior engineer with K N Energy this past spring. Wife Linda and boys, Jonathan, 4, and Matthew, 3, are doing well. We are enjoying our home and life in the mountains of Colorado." • **Craig S. Prevaillet**, ChE, moved back to Texas. "Still with Shell," he writes. • **Mark R. Reynolds**, EE, is an electrical engineer on the institutional team of the Cedar Rapids' office of Shive-Hattery Engineers and Architects. • **Daniel A. Schaubroeck**, ME, married Ann Henderson on Sept. 16, 1995. They

Sandford missed the Rams' November debut in the team's new Trans World Dome in St. Louis. She was in western Iowa working on a phase II site investigation. Field work involved advancing 20 geoprobe borings and installing three monitoring wells designed to monitor for zinc chloride that might be present in the ground water.

Despite the rigors of her full-time engineering job, Sandford still finds some time for her hobby of cheering the Rams to victory. It gives her an outlet for dancing—something she's done since she was a young girl.

"NFL cheerleaders actually dance rather than cheer," she says. "And I have been dancing since I was six years old."

Sandford was a cheerleader for the former St. Louis football Cardinals in 1987 and 1988, while she attended Parkway North High School in Creve Coeur, Mo. She also has cheered for the St. Louis Steamers soccer team and the St. Louis Vipers roller hockey team.

Sandford says UMR had much to do with motivating her to become a team-oriented player in the engineering field. "I was involved in a number of leadership positions at UMR, which has helped me to excel professionally," she says. She was president of Chi Epsilon, the

live at 171 Whispering Pines Lane, Russellville, AZ 72801.

1989

Stephen Atkinson, CE, married Michele Rottjakob on April 22, 1995. He is employed with the Missouri Highway and Transportation Department as a civil engineer. They reside in Jefferson City. • **William T. Chipley**, CE, a civil engineer at Fru-Con Construction, is the project engineer on two projects at Anheuser-Busch. He has been on two award-winning Fru-Con projects. • **Tracey (Clavenna) Chriske**, AE, writes, "In September I started as an associate in the general corporate department at the law firm Taft, Stettinius & Hollister, in Cincinnati. I much prefer the law over engineering." • **Tim R. Garvey**, CE, is a demolition engineer for Brandenburg in Chicago. His wife, Jennifer, was expecting their second child in November. Their first child, Cara, is four years old. • **Kelly D. Hewlett**, ChE, writes, "Mark and I transferred to Dallas with each of our companies.



Courtney C. Sandford, CE '94

national civil engineering honor society, corresponding secretary for the American Society of Civil Engineers and an active member of the Society of Women Engineers. She is now a member of the professional sections of ASCE and SWE, and has also joined the Engineers' Club of St. Louis.

Though her career and hobby take up much of her time, Sandford still finds the time to work toward a better future. "I'm currently working on passing my EIT (Engineer-in-Training) exam, which will allow me to become a professional engineer in Missouri."

And the cheerleading? "It's just a fun thing for me to do in this stage of my life," she says.

■ Dick Hatfield

We bought a new home in Plano, Texas, in October, and live there with our sons, Nathan and Dylan." • **Yu Iriyama**, Chem, writes, "I was promoted to associate professor at Yamanashi University-Japan in April. We also had our first baby (a girl), Yui, in June." • **John "JK" M. Pope**, Phys, writes, "I finished my Ph.D. in physical chemistry at the University of Wyoming under Dan Buttry on Sept. 28, 1995. I work at the Tokyo University of Agriculture and Technology as an associate professor and researcher working on lightweight organic batteries under Noboru Oyama. I have a wife, Jamie Johnson, and a new baby, Isabella Marie, 6 months old. Our address is 3-3-31-22 Nukui-kita-machi, Koganei, Tokyo 184, Japan. We plan to stay in Japan for two more years." • **Scott A. Rakers**, CE, is now a professional engineer. • **Gregory M. Witte**, ChE, writes, "Renee and I recently had our second child, Justin Gregory, who turned one on Sept. 17, 1995. His big sister, Ashley Marie, 4, is enjoying

watching h
being a pro
Co."

1990

Ronald W. turned from aboard the Theodore F. recently parti strikes in su operations eled more t the six-mor ed going to Suez Canal Gulf. • **Da** project eng neering. "I Chi Brethre C. Scheer. PE exam giv in Indiana Thornton, F ing my third looking forw Eppenberge tual propert liability defen CE, married 24, 1995. "V South Tulsaly," he writ GGph, was hydrogeolog environment sulting firm Lawrence R

THE

In Ireland, Left to right Betty Eyber

watching him grow. I am enjoying being a process engineer for Shell Oil Co."

Nineties

1990

Ronald W. Hackley, ME, has returned from a six-month deployment aboard the aircraft carrier USS Theodore Roosevelt, which most recently participated in the NATO air strikes in support of United Nations operations in Bosnia. Hackley traveled more than 50,000 miles during the six-month voyage, which included going to the Mediterranean Sea, Suez Canal, Red Sea and Persian Gulf. • **David W. Loida, EMgt**, is a project engineer for Fru-Con Engineering. "IN HOC to all my Sigma Chi Brethren," he writes. • **Claudia C. Scheer, CE**, writes, "I passed the PE exam given in April! Now licensed in Indiana." • **Christopher A. Thornton, Phys**, writes, "I am enjoying my third year of law school and looking forward to joining Husch & Eppenberger, specializing in intellectual property matters and products liability defense." • **Paul M. Tobben, CE**, married Jane Busboom on June 24, 1995. "We've bought a house in South Tulsa and are settling in nicely," he writes. • **Alex H. Vincent, GGph**, was promoted to senior hydrogeologist at GeoTrans Inc., an environmental and groundwater consulting firm in Steerling, Va. • **Lawrence R. Youst, ME**, writes, "We

had a baby girl, Alexis Raye, on July 16, 1995. I graduated from the University of Texas School of Law in May 1993, and currently work for Warren & Peree, an intellectual property law firm in Dallas."

1991

Paul T. Lenox, ME, was promoted to a captain in the U.S. Marines while serving at the Marine Corps Recruiting Station Eastern New England in Portsmouth, N.H. • **Mark Sautman, NucE**, writes, "I am now the Defense Nuclear Facilities Safety Board's site representative at the Department of Energy's Rocky Flats Environmental Technology Site located in Golden, Colo."

1992

Graham B. Emore, EE, works in the management development program at Army Aviation and Troop Command (ATCOM). • **James P. Fechter, ChE**, is the environmental engineer on the corporate staff at Titan Wheel International Inc. in Quincy, Ill. • **Catherine L. (Jabusch) Morse, CSci**, writes, "We bought our first house!" • **Melanie S. Roberti, GGph**, writes, "Steve and I are still living in Newberry, Fla. Steve works for CH2M Hill as a water resource engineer and I stay home with our 2-year-old daughter, Maria." • **Ronald B. Shankland, CE**, writes, "Just got word that we'll probably be moving to Germany in January or February. I'll keep you posted."

1993

Daniel W. De Armond, CE, writes, "Relocated to St. Louis from Houston, Texas, in January 1995, to work for Booker Associates in the infrastructure group." • **Richard J. Falkenrath, CE**, graduated from Purdue University with a master's degree in civil engineering in May 1995. He works in the structural engineering department at Burns and McDonnell in St. Louis. • **Heather R. Governick, GeoE**, is a geological engineer at Wellington Environmental Consulting and Construction Inc. in St. Louis. • **Steven D. Hoernig, CE**, was promoted to district maintenance engineer on June 1, 1995. • **Wayne A. Hopkins, GGph**, works for Brown and Coldwell. • **John Lochirco, EMgt**, and **Missy McMurray, EMgt '95**, were married on June 9, 1995. Missy is a project engineer at Sporlan Valve Co., and John is employed at Lochirco Fruit and Produce Co. The couple resides in Washington, Mo. • **Roger S. Protzman, GeoE**, writes, "My son, Benjamin, celebrated his first birthday on Sept. 8, 1995." • **Deborah L. Rackers, CE**, writes, "Our daughter, Shaylynn Ann, was born Sept. 8, 1994. When she was two months old we moved to Decatur, Ill. (My husband, Mitch Rackers, ME '93, got a better job here), and I have been a full-time mother ever since and love it." • **Velletta M. (Grote) Scott, GeoE**, and **Travis Scott, GeoE '92**, are in Houston looking for a house

that is "out of town—a long way! We finished our master's degrees in civil and missed UMR a lot in the process," she writes. • **David M. Smith, CE**, was married on June 3, 1995, to **Lisa Mooney, ME '94**. He is a PhD student at the University of Memphis. • **Marc G. Thomas, CE**, and **Kelley Jozwiak, CE '91**, were married Aug. 12, 1995, and live in Kirkwood, Mo. • **Stephanie Trickey, GeoE**, and **Cary Hirner, GeoE '94**, were married on Aug. 26, 1995. She is an environmental engineer at Wyandotte County Department of Air Quality. He is an environmental engineer at Black and Veatch. • **Mark A. Zurbuchen, CerE**, received his master's degree in materials engineering from Rensselaer Polytechnic Institute in August 1995. He is pursuing a Ph.D. in ceramic science at Pennsylvania State University.

1994

Sean P. Antle, CE, was named continuous improvement program coordinator in Morrison Knudsen's St. Louis office in July 1995. • **Krista L. (Moulin) Burnett, CE**, writes, "I got married June 24, 1995, to Paul (P.J.) Burnett. We bought a 160-acre farm just outside Coffey, Mo." • **Kevin D. Grant, CSci**, married the former Christy Draves in August. They live in Omaha, Neb., where he is a programmer for U.S. Strategic Air Command at Offutt Air Force Base. • **Aaron J. Hankins, AE**, writes, "I'm

THE TRAVELING MINERS—IN IRELAND!



In Ireland, a few of the Traveling Miners pose outside the Connemara Marble Factory. Left to right: Illa Bell, Peggy Fox, Merle Ranney, Louise Edscorn, "Doc" Ranney and Betty Eyberg.



Below: at County Galway, Ireland, September 1995. Left to right: Kenneth Crandall '57, Lester (Woody) Holcomb '51, and John Skain '73, '85.



ALUMNI NOTES

a flight test engineer at McDonnell Douglas Aerospace, working on the Swiss F/A-18 program. As an FTE, I'll be assigned to their first C-model F/A-18, and participate in flutter, loads, weapons separation, software and Swiss follow-on tests at remote sites with Swiss engineers and pilots. Exciting!" • **Shannon D. Johnson**, ME, was married to Kristina Fern Gross on Oct. 21, 1995. He is a product development engineer in the Ford College Graduate Program at Ford Motor Co. in Dearborn, Mich. • **Nookaiah V. Kolluru**, CSci, married Sangeetha Dara on April 14, 1995, in Madras, India. Sangeetha

plans to earn an MBA in the United States. • **David J. McEuen**, CE, and wife Deborah were expecting a baby boy in December. • **Michael E. Podolak**, ChE, writes, "Doing well in the Windy City. Staying out of trouble. Really like my new 1995 Ford Thunderbird LX V-8. If anyone I know is in the area, give me a call." • **Dale Redhage**, ME, is employed with Washington Engineering as a building systems designer.

1995

Mark B. Joersz, CE, married Jill Marie Bittick on Sept. 2, 1995, at Salem Luthern Church in St. Louis. • **Wayne A. Weber**, GeoE, is an associate staff engineer at SCS Engineer's Springfield office.

ALUMNI ASSOCIATION VOLUNTEER GEORGE AXMACHER DIES

After retiring in 1988, following a career in sales with Sample Brothers Inc. of St. Louis, George Axmacher, MinE'42, took on a new full-time career: working as a volunteer for the MSM-UMR Alumni Association. For six years, "Ax" worked between 32 and 40 hours a week in the alumni office, helping to organize class reunions, greet visitors, give tours of campus, stuff and label envelopes, run errands and perform other tasks as needed.

When Mr. Axmacher died on Feb. 21, 1996, at age 76, MSM-UMR lost one of its most ardent supporters.

"We could not have done our jobs without George's help," says Don Brackhahn, executive vice president of the Alumni Association. "He always said he was the lucky one because we allowed him to work here, but the truth is that we were the fortunate ones to have him as our volunteer."

Mr. Axmacher's volunteer activities with the Alumni Association earned him the 1995 Volunteer Spirit Award, presented by Buick at a special ceremony on campus.



While at MSM, Mr. Axmacher was a member of Theta Kappa Phi (now Phi Kappa Theta) and a member of the St. Pat's Board and the Interfraternity Council. After graduation, he served in the Navy during World War II.

He is survived by his wife, Norma Axmacher, of Rolla; a daughter, Patricia Axmacher Rice, and her husband, David Rice, of St. Louis; a son, Stephen Axmacher, of St. Louis; grandchildren William and Sara Axmacher; and a sister, Janet L. Axmacher, of Annandale, Va.

Memorial contributions may be made to the George W. Axmacher Scholarship Fund with the MSM-UMR Alumni Association.

Correction: in the Fall 1995 issue, we accidentally repeated information in the memorial information for Robert Simmons and Seymour Beers. The correct information is that Robert Simmons and his wife Jane lived in Wittman, Md., at the time of his death, and Seymour Beers lived in Rock Hill, S.C., with his wife Sophia. We apologize for the error.

Memorials

1923



John H. Riddle, CE, operated Riddle Quarries Inc. He was the former president of the Kansas Limestone Association and the National Aglime Institute.

He served in the Kansas House of Representatives from 1932-1934. He later served a term as a member of the Kansas Supreme Court Nominating Commission. He was a resident of Lee's Summit, Mo. †Oct. 5, 1995.

1926



Bennet R. Thompson, EE, retired with Gulf Oil Corp. At MSM he was a member of the Mercier Club, track and Senior Council. †Oct. 18, 1995.

1930



Myron F. Thomas, MetE, retired from Republic Steel Corp. Myron was a member of Kappa Alpha, Theta Tau, MSM Players and Senior Council. †April 6,

1995.

1936



Frank L. Hillmeyer, ME, retired as vice president from Black Angus Meat Packaging Co. Frank and his wife, Billie, lived in St. Louis. †Aug. 29, 1995.

1938

John "Jack" R. Long, ME, was a Registered Professional Engineer and worked at Meramac Mining Co. until his retirement in 1977. He was a licensed HAM radio operator and charter member of the DOERS Amateur Radio Club of Ste. Genevieve, and was chosen as the group's Man of the Year for 1994-1995. He was on the board of directors of Channel 7 Public Access Television. He worked as a volunteer in maintenance at St. Mary's Seminary in Perryville for 15 years. While attending MSM-UMR he was a mem-

ber of the band, the Athletic Association, Officers Club and Radio Club. He also was athletic manager, Alpha Psi Omega director, vice president of Blue Key and an ROTC cadet. †Oct. 10, 1995.

1941

Merritt M. Francis, ChE, was a member of Alpha Chi Sigma, S.A.M.E., a student assistant for the chemistry department and an ROTC cadet. †1993.

1942



Herbert P. Brueschke, ChE, retired from Aluminum Co. of America in Pittsburgh. His wife Betty preceded him in death. He attended his 50th anniversary reunion in Rolla in 1992. †Oct. 7, 1995.



Irwin L. Cherrick, EE, was a member of the Radio Club at MSM. He was formerly employed with NASA and retired with Bechtel Power Corp. He and his wife,

Bette, lived in Maryland. †Nov. 26, 1992.

1946

Richard Farrell, ND, †1990.

1948



Robert D. Davies, MinE, retired from Eagle Mine Products Inc. as plant manager. †June 19, 1995.

Melvin A. Hagan, CerE, retired in 1987 with California Tech-Propul Lab as a principal investigator. He lived in Granite City, Ill., with his wife, Delores. †Dec. 30, 1994.

1949



Louis B. Ingold, CE, served four years in the Army during World War II in the United States, North Africa and Europe. He was a member of the American Legion and a lifelong member of First Christian Church. At MSM, he was a member of ASCE and on the honor roll. He lived in Columbia with his wife, Helen. †Oct. 10, 1995.

† = date of death



Robert W. Wilks, MetE, was formerly a manager at Teague Brick Co. At MSM, he was a member of ROTC and honor roll. He lived in Louisiana for the last 10 years. †May 1995.

1950



John J. Kovach, EE, retired after 30 years as a district engineer with Westinghouse Electric Co. in St. Louis. He was a member of the Engineers Club at MSM. †July 13, 1995



Eldon C. Lindimore, CE, was a professor of civil engineering at Metropolitan State College. He was a member of ASCE and Tau Beta Pi and on the honor roll. He and his wife, Thelma, lived in Denver for the last 20 years. †March 26, 1995.



Neil C. Martin, ME, was a member of Phi Kappa Phi, honor roll, ASME and was a student assistant in the mechanical engineering department. He won the book plate award. He lived in Alabama with his wife, Eileen. †Jan. 20, 1992.

Philip B. Newlin, CE, was a registered surveyor and professional engineer. He organized and conducted the Arizona Land Surveyor's Conference for 25 years. He was named Engineer of the Year by the Southern Chapter of ASPE in the 1990s. He was a member of Tau Beta Pi and Theta Tau, a fellow in ASCE and a supporter of the UA Student Chapter ASCE. He also was a member of the American Society of Professional Engineers and a member and past board member of the American Congress of Surveying Mapping and Photogrammetry. He is survived by his wife, Audrey, of Tuscon, Ariz. †Oct. 20, 1995.



Leslie B. "Robby" Robison, CE, was active in student affairs at MSM, serving as president of his junior class. He served as an adviser to his fraternity, Sigma Pi, after graduating. He worked at the Mid-Continent Mapping Center, National Mapping Division, U.S. Geological Survey. He

was affiliated with the National Society of Professional Engineers, Missouri Society of Professional Engineers, American Congress on Surveying and Mapping and American Society of Civil Engineers. He served 14 years as a district chief in Rolla before retiring after 32 years in surveying in July 1980. †April 16, 1995.

1952

Forrest C. Mosley, CE, was a member of ASCE, Engineers Club and the golf squad. He retired from the Missouri Highway and Transportation Department after 30 years. He was a resident of Jefferson City, Mo., for 40 years. †March 22, 1995.

1953

James L. Knearem, ME, was employed by Hercules Powder Co. from 1955 through 1982. He retired in 1993 as executive vice president from Grindsted Products Inc. in Kansas City. He served in the U.S. Army from 1953 to 1955. He was a member of the United Church of Christ and treasurer of the Rotary Club of Eagle River. He was a deacon at the Webb Horton Presbyterian Church in Middleton, N.Y., and a member of the Optimist Club of Stanley, Kan. At MSM, he was president of Kappa Alpha fraternity. He received an honorary degree from UMR in 1974. He is survived by his wife, Mary. †Oct. 10, 1995.

1957

Ralph L. Herring, ME, retired from McDonnell Douglas after 30 years. At MSM Ralph was a member of Gamma Delta, ASME, Beta Sigma Psi, SAE, Phi Kappa Phi and on the honor roll. He also won the Book Plate Award. He lived in Florissant with his wife, Nola. †Sept. 22, 1994.



Louie G. Jones, MetE, was employed by many foundries. He was vice president and general manager of the McNally-Pittsburgh foundry division, Pittsburgh, Kan. In addition, he helped build and was general manager for the Gardner-Denver foundry in Pryor, Okla. He retired from Electron Corp. of Blackwell, Okla. He was a member of AFS. †Aug. 19, 1995.

Frank M. Wilson, EE, was a senior engineer at McDonnell Douglas when



he retired in 1987. He previously worked in St. Louis as an electrical engineer for Emerson Electric. He was a registered professional engineer in Missouri and lived in St. Charles, Mo., with his wife. †Oct. 8, 1994.

1959

William S. Wood, CE, retired from the City of Phoenix as an architect, engineer and supervisor. At MSM he was a member of Canterbury, ASCE, honor roll and Chi Epsilon. He retired in Arizona with his wife, Muriel. †May 10, 1991.

1960

Edward J. Jankowski, CE, was a lifelong resident of Illinois. He is survived by his wife. †Aug. 3, 1995.

1962

Clarence A. Horst, CE, was a lifelong resident of the St. Louis area. He was employed for many years with Alberici Construction Co. †Aug. 1995.

1963

Raymond H. Popp, EE, retired as a senior engineer from Westinghouse Electric Corp. †1995.

1965

Robert N. DeLozier, CSci, retired after 20 years with Phillips Petroleum Co. He and his wife, Barbara, lived in Texas. †Nov. 10, 1993.

1966

William F. Bland, ME, joined the United States Air Force after graduation and then was employed with McDonnell Douglas as an engineer. He lived in the Bridgeton, Mo., area with his wife, Jean. †June 28, 1995

1967

David A. Nelson, ME, was formerly employed as an engineer at Magnetek in St. Louis. He is survived by his wife, Janet, of St. Louis. †Sept. 8, 1995.

1968

Robert L. Delaney Jr., EE, was a member of MRHA Radio, Newman Club, MSM Radio Club and Phi Kappa Theta at UMR. He retired as an electrical engineer with Control Data Corp. after 25 years. He lived in Minnesota with his wife, Janice. †June 5, 1994.

1970

Lance V. Wade, EE, was a member of the 49ers, GDI, IEEE, Raiders, Esperanto and the Russian Club. He was a resident of Wisconsin. †1994.

1972

Louis L. Werner was formerly employed with Reilly Tar & Chemical Corp. He and his wife, Barbara, lived in Texas. †July 1992.

1985

David A. Simpkins, ChE, was valedictorian of his class. He was a member of Tau Beta Pi and AIChE. He was employed with Lhyondell-Citgo Refining. He and his wife, Maureen, lived in Houston. †Aug. 30, 1995.

Friends:

Robert A. Cooley was a chemical explosives and defense metals expert with the Navy and founded and worked with several aerospace companies. †Oct. 26, 1995.



J. Stuart Johnson, earned his Ph.D. in electrical engineering from Iowa State University. He was a former dean of engineering at MSM-UMR and Wayne State University; an assistant dean at the University of Florida, and head of electrical engineering at Purdue University. He was included in "Who's Who in America" and "American Men of Science" and was a member of Sigma Psi Gamma and Triangle. He is survived by his wife, Lucille. †Dec. 9, 1995.

Kay Rucker, wife of Ray Rucker '54, and daughter of Mr. & Mrs. Gale Bullman. †Oct. 30, 1995.



Ark-La-Tex Section

Section president
Walt Mulyca '65
307 Clarice St.
Delhi, LA 71232-2003
(318) 878-9013

The fall meeting of the Ark-La-Tex Section was held in Longview, Texas, on Oct. 21, 1995. Kenny Cochran '83 and his wife, Beth, hosted the event in their home. The activities began with the usual "attitude adjustment hour" from 4 to 6 p.m. After that, a potluck dinner was served. Jerry Poland '82 deep-fried a turkey for the group. The food was outstanding. If you have never eaten a deep-fried turkey, you need to try it. It is fabulous. There were 19 alumni and spouses present.

After dinner, a short business meeting was held. President John Moscarì '51 and his wife Loretta attended this year's Homecoming events in Rolla. John reported they had a great time and this year's events were better than ever.

New officers for the coming year were elected. They are: Walt Mulyca '65, president; Gene Rand '62, vice president; and Jerry Poland '82, secretary/treasurer.

Our scholarship ambassador, Beth Cochran (Kenny '83), reported that college nights were scheduled for Nov. 14 in Longview, Texas, and Nov. 17 in Bossier City, La. She and Kenny and any others interested planned to attend. A motion was passed to reimburse the scholarship ambassador for out-of-pocket expenses while conducting a search for section scholarship candidates.

Treasurer Gene Rand reported a balance of \$232.45 in the treasury.

President Moscarì led a discussion about the benefits of section scholarships to UMR. The

scholarship provides approximately \$20,000 of benefits to a student over a four-year period. This is an outstanding value.

The next section meeting was scheduled for Jan. 20, 1996, in the Shreveport, La., area. Dinner will be at the Barksdale Air Force Base Officers Club. (Submitted by Gene Rand)

Those attending were Phil '48 and Ardella Browning; Kenny '83 and Beth Cochran; Basil '39 and Clydelle Compton; Judy '74 and Rande '73 Grotefendt; John '39 and Eilyeen Livingston; John '51 and Loretta Moscarì; Walt '65 and Anne Mulyca; Jerry Poland '82; Gene '62 and Judy Rand; Frank '32 and Katherine Zvanut.

Central Ozarks Section

Section president
Dennis McGee
HCR 82, Box 445, Bixby, MO 65439
(573) 626-4422

The Central Ozarks Section, along with the Missouri Society of Professional Engineers, held the annual shrimp feed on Saturday, Sept. 23, at Lions Club Park. Proceeds from the shrimp feed went to support the Rolla chapter MSPE scholarship fund.

Those attending were Jerry '59, Shirley and Jennie '89 Bayless; Rick and Sharon '72 Stephenson; Mildred Gevecker; Elwyn and Debbie Wax; Bob '51 and Dottie Wolf; Burns and Kay Hegler; Peggy Tex; Al '61, '62 and Sherrell Bolon; Tom '67 and Susan Petry; Armin Tucker '40; Charlie and Jane Dare; Dixie '67 and Charlie Finley; Hank '56 and Pat Sauer; Cal '49 and Jackie Ochs; Don and Nancy Brackhahn; Dick Elgin '74, '76 and Lucy Sutcliffe; Bob and Janie Mitchell; Don and Carol Bennett; Bill '67 and Jamie Anderson; Sharyn and John '47 Powell; Ken and Kittie Robertson; Erma and Ken '35 Asher; Delbert Day '58 and Ted Day; Barbara '61 and Gary '60 Patterson; Ed Car-

ney '79; H.E. '66 and Joyce Fiebelman; Larry George '90; Steve '85 and Tracy Hargis; Don Myers '61; Claude Strauser '69; Ken '72, '76 and Beverly Oster; John '71, '79 and Amy Buckwalter; Bob Ybarra and Camille Consolvo; Don '52 and Mabel Spencer; Lindsay '76 and Kent '76 Bagnall; Leon '64 and Helen Kreisler; Chuck '49 and Agnes Remington; Dan '90 and Loretta Paulson; Merrill Stevens '83; Merle '61 and Judy Southern; Max '70 and Martha Ethridge; Paul '62 and Mary Stigall; Susan Murray; Annemarie Daniel; Paul Jobe '95; Lee and Priscilla Saperstein; Glenn Brand '39; Ruth Faucett; Robert '37 and Sybil Lange; Russ '66 and Paula Lindenlaub; Suzanne Olson '94; John and Dorcas Park; J. Kent '50 and Winona Roberts; Mabel and Myrna Rueff; Dennis Sourlas; Larry Thomas; Nick Tsoulfanidis; Don and Pat Warner; Kim Colter '73 and Elaine Menke '73; Perry Allison '59.

Dallas-Fort Worth Section

Section presidents
Stephen & Stephanie Puljak
418 Castlewood Drive,
Garland, TX 75040
(214) 276-9921

The Dallas-Fort Worth Section celebrated its Homecoming event at Yegua Creek Brewing Co., a local microbrewery in Dallas, on Sunday, Oct. 29. The group gathered for brunch, beer and Dallas Cowboys football on a large projection TV. The group consisted of both Cowboys fans and fans of any team playing against the Cowboys—

the Atlanta Falcons in this case. The rivalry was settled, however, with a decisive Cowboys victory.

Scholarship chairman Warren Unk '91, '93 reported that the scholarship applications had been sent. He looks forward to receiving a healthy response. Warren also spoke of the section's next event, the Feb. 10 hockey game between the St. Louis Blues and the Dallas Stars. Plans are also being developed for a St. Pat's celebration—stay tuned for more details. The Dallas-Fort Worth section looks forward to growing the group by hearing from more alumni in the area. (Submitted by Stephanie Puljak)

Those attending were Steve '92 and Stephanie '92 Puljak; Glenn '83 and Mindy '84 Brand; David Witt '93, '95; Chris Gorsuch '93; Warren Unk '91, '93; Mark Jones '82; James Younger '92; Dennis Chasten '70; Lawrence '90 and April Youst; Chuck Kincy '94 and Cheryl Hammond.

Georgia Section

Section president
Dave Ziegler
1531 Huntington Drive
Marietta, GA 30066-5907
(404) 425-0971

The Georgia Section had a business meeting on Nov. 5, 1995, at the Blue Willow Inn in Social Circle, Ga., just east of Atlanta. Eighteen alumni and spouses attended, and Don and Nancy Brackhahn joined the group. The main purpose was to elect new officers. Dave Ziegler, '85-'87 will serve as president. James C. Roberts '81 is the new president



Atlanta officers: George Leck '61, past president; David Ziegler '85, president; Mindy Gardner '95, secretary/treasurer; James Roberts '81, vice president.

elect. Mindy M. Gardner '95 is the secretary-treasurer. Richard A. Kahl '63, '69 is one of the section's members-at-large and the scholarship chairman. Kim Winkeler '88 is also a member-at-large. Brackhahn gave out UMR souvenirs, as well as the Phoenix Award for 1994 for the most improved section. The Georgia Section is becoming more active! (Submitted by Mindy Gardner)

Those attending were Don and Nancy Brackhahn; Dave Ziegler '85 '87; Mindy M. Gardner '95; Richard A. '63, '69 and Chris Kahl '63, '69; Kim Winkeler '88; Mabel Niewoeaner; Connelly '53 and Rose Sanders; Jeanne Gettle '85; Gerald Schnaedelbach '50; James Bomar '61; Don '35, '59 and Ruth Dutton; Bruce R. Duncil '75; Jim '81 and Kim Roberts; George '61 and Barbara Leck.

Heartland Section

Section president
Gene W. Edwards
159 Hillmont Drive,
Paducah, KY 42003
(502) 554-2415

The Heartland Section met on Nov. 18, 1995, at the Rend Lake Resort. The meeting was hosted by Frank '54 and Leona Conci. Gene Edwards '53 and Frank Conci were the guest speakers. The pending scholarship fund being established by the chapter, hosting of athletic recruiters when in the area and the need for better attendance at the alumni meetings were discussed. (Submitted by Frank Conci)

Those attending were Carol P. "Punch" '54 and Jan Bennett; Max '54 and Jo Ann Burgett; Jim Burke '69; Frank '54 and Leona Conci; Gene Edwards '53; Don Fuller '66; Bill '54 and Clemence Stewart; Greg Strother '71; Larry '61 and Kay Strobel.

Houston Section

Section president
Nicole L. M. Talbot
4006 Lee Lane, Pearland, TX 77584
(713) 489-0391

On Friday, Aug. 4, 1995, the MSM-UMR Alumni Association held a UMR new student send-off reception in Houston. The Houston Section and the UMR Admissions Office co-hosted the event, which was held at the Houston Independent School District Wesleyan Center. Approximately 56 freshmen, prospective students, alumni and their guests attended the reception. Nicole L. Talbot '77 kept the evening well-

organized as the alumni hostess and master of ceremonies.

The evening began at 6 p.m. with registration, refreshments and time to mingle. David Allen, UMR director of admissions and student financial aid, started the evening activities with an introductory presentation. Allen talked about the UMR campus and the surrounding area, showing some beautiful pictures of mid-Missouri in the changing seasons. He discussed incentives for attending UMR, such as small class sizes and excellent computer and lab facilities. He also discussed the introductory Freshman Engineering Program (FEP), which allows

students to explore various engineering fields before choosing a major.

Ron Fannin, chair of basic engineering, continued the FEP discussion, noting the importance of academic advising and placing students in the proper level of courses. The two main goals of the FEP are (1) to get students off to a good start academically through proper advising and (2) to expose new students to engineering fields. Fannin discussed the 12 engineering degrees available at UMR and then answered some basic questions the students and parents asked concerning finan-

SPE Alumni Reception in Dallas, Oct. 25, 1995

Alumni gathered for the annual SPE reception at the Wyndham Anatole Hotel in Dallas on Tuesday, Oct. 25, 1995. This large gathering of alumni, faculty, former faculty and spouses renewed old and made new acquaintances. A number of the Dallas/Ft. Worth Section members from other academic disciplines joined the revelry along with SPE attendees. Current co-presidents of the Dallas/Ft. Worth Section, Steve '92 and Stephanie '92 Puljak, and board members, Mindy '84 and Glenn '83 Brand, and Warren Unk '91, visited with SPE members from Norway, Anchorage, Alaska, and other distant locations. According to Lenn Koederitz, the evening was punctuated by several lively discussions, many of which appeared to center around the "Flying Valentis," a noted dynamic duo. Don Brackhahn drew names for several door prizes, including a copy of the history of MSM-UMR. As a historical note, we had in attendance possibly the only former student to receive degrees from all three of the name changes we've seen at Rolla: Tommie C. Wilson received a bachelor's de-

gree from the Missouri School of Mines and Metallurgy, a master's degree from the University of Missouri at Rolla, and a Ph.D. from the University of Missouri-Rolla. Also, we have it on good authority that the UMR Alumni reception had a much better turnout than either the OU or LSU receptions. Way to go, MINERS!

Those attending were Marion (former faculty) and Carolyn Arnold; John '78 and Kim Auman; Ed '50 '51 '77 and Barbara Barsachs; Glenn '83 and Mindy '84 Brand; Don and Nancy Brackhahn; Matt Bratovich '73; James Chaney '82; Ron D. Craig '78; Cindy Crow '82; Shari Dunn-Norman, faculty; Terry E. Durham '70; John Farmer '63; Scott M. '85 and Lori Frailey; Eric Gill '86; Mike Griffin '75; Lloyd R. '86 & '91 and Teresa Heinze; Susan Holley '81; Jim Home '70; Byron '52 and Mary Ann Keil; Ron Kelley '82; John C. Killinger '73; John Knepler '67; Lenn '68 '69 '70 & Cheryl



Above: Terry Durham '70, Plano, Texas, Angie St. Gemme, Keith St. Gemme '91, Anchorage, Alaska, Shari Dunn-Norman and Eric Gill '86, Lafayette, La.

Koederitz; Bill Koederitz; Jack Lutz '59; Edward A. May '82 '95; Jim '53 and Joyce McClaine; Tom '88 and Deb Nichols; Steve '92 and Stephanie '82 Puljak; Martin Rodseth '87 '89; Robert P. '52 and Margaret Schafer; Phil Schenewerk, faculty; Tom Schmidt '69; Grant F. Smith '90; Keith '91 and Angie St. Gemme; Robert R. Steele '50; Warren Unk '91; R. Valenti '80; Nick Valenti '81; Jack Wallace '73; Robert E. Wallace '80; Thomas Webb; Scott C. Wehner '80; Tommie Wilson '64, '65, '69; Ted Wooten '82 and James Younger '92.





cial aid and scholarships.

After Dr. Fannin's discussion, Allen talked about the EXCEL UMR program, which is a supplemental program of small student groups working with upperclassmen. Subjects include calculus, chemistry and English. Through the EXCEL UMR program, students develop teamwork skills and collaborative learning skills.

Later, the UMR alumni introduced themselves and talked about their experiences at UMR and in the work force. A short break followed, during which the students socialized with alumni to ask questions and share concerns.

After the break, Allen talked about an issue foremost in the students' and parents' minds—financial aid. He estimated the total tuition and fees, including room and board, and discussed the two-year live-in rule for campus housing. Allen also discussed the variety of choices for on-campus housing, including the two residence halls and the Greek system. He continued with a slide presentation on scholarships.

The evening concluded with a drawing for door prizes. (Submitted by Diane Schwalje)

Those attending were Rex Alford '40; Mark Allen and guest; Wayne '58 and Betty Andreas; David '65 and Jeannie Bergt; William Brune '73; Forrest '38 and Madelyn Carpenter; Mark Chadoir '86; Joe Cowen '69; Curt Killinger '73, '80; Diane Schwalje '93; Nicole Talbot '77; Ronald '66 and Marilyn Umphrey. Approximately 39 students and their guests attended in addition to the above.

Houston Section takes on Astros and Cardinals

On Friday, Sept. 22, 1995, the Houston Section attended

an Astros game against the St. Louis Cardinals. The Astros lost the game, and some considered this unfortunate, but there were some of us wearing red and rooting for the Cardinals. We had great seats close to the field by the third-base line. A few foul balls flew by our heads, but none of us caught one. A total of 23 UMR alumni, family and friends attended the event, now a Houston Section tradition. Everyone had a relaxing evening at the ball park. (Submitted by Diane Schwalje)

Those attending were Bill Anst '95; Wayne '58 and Betty Andreas; Mike '78 and Kathy Bayer and family; Lorren '44 and Pearl Bridge; Bill Brune '73 and guest; George '51 and Melba Comanich; Brad Flaucus '94; Jim Hummel '94; Rich Langenstein '87 with sister and daughter; Philip Ling '92; Diane Schwalje '93; Nicole Talbot '77; Mark Fletcher and Yash Gidh '95.

Kansas City Section "Happy Hour"

Section president Joseph F. Reichert 7312 Charlotte, Kansas City, MO 64131 (816) 361-9147

A Kansas City Happy Hour was held Nov. 15, 1995. *Those attending were Janet Alfermann '93; Kristi Allen '93; Stefanie Arndt (student '98); Gary '66 and Barbara Fouts; Roger Hatfield '91; Paul R. Hodson (parent); Mark Huber '93; Mike Hurst '92; Cathy (McMillan) Irvin '95; Travis Irvin '95; Karin Jacoby '85; James C. Medlin '95; Darren Peeler '94; David Renfert '93; Julie (Dickherber) Ryan '94; Steve Starwalt '92; Jason Stratman '94; Shawn Thomas '94; Linda Williams '80; Mike Wilson '79; Richard J. Warsnak '95. Approximately 30 attended, per Joe Reichert.*

Lincolnland Section

David Tepen 400 South MacArthur Blvd. Springfield, IL 62704 (217) 546-1546

On Oct. 26, 1995, the Lincolnland Section hosted a dinner meeting at the Springfield Motorboat Club on Lake Springfield. The guest speaker was Paul R. Munger, '58, '61, professor of civil engineering at UMR. Munger spoke to the 19 alumni and guests on the subject of ethics and professionalism within the engineering discipline. Munger's primary focus was the walkway failure at the Hyatt Regency Hotel in Kansas City, Mo., and the subsequent investigation and action taken against registered engineers involved in the design and construction of the hotel. Munger gave great insight into the problems leading up to the failure and decisions made by individuals involved during the design and review process. The presentation was greatly enjoyed by all attendees and helped to promote an understanding of professional responsibility in everyday practice.

A brief business meeting was conducted by section president David Tepen. He discussed the student reception scheduled for Dec. 10, and the next chapter meeting scheduled for Nov. 30, 1995. (Submitted by Jerry Parsons)

Those attending were Paul '58, '61 and Frieda Munger; Pat Tobby '88; Rich Beming '69; Tom Feger '69; Dan Kerns '74, '79; Bob Uthoff '52; Ed '69 and Anne Midden; Jerry Hurlinger '86; Aaron Weatherholt '88; Jerry Parsons '70; Mark Riegel '84; Gary '74 and Debra Hutchison; David Tepen '90; Bill Bullen '59; Laura Neels '89 and Bill Kramer '87. The dinner was coordinated by Jerry Parsons.

Miner Music Section

Section president Randy Skaggs '89 12822 Capistrano Drive Creve Coeur, MO 63141 (314) 453-0158

The Miner Music Section congratulates the UMR Marching Band for outstanding pre-game and half-time shows at the Homecoming football game Oct. 7. We enjoyed our time in the



Above: Lincolnland met Oct. 26, 1995, at the Springfield Motorboat Club on Lake Springfield.

stands with the band and some of us even brought our horns and played with the band. The marching band is just one group of a growing music program at UMR that we, as music alums, are proud to support.

Following the football game the Miner Music Section held its annual business meeting. There were 24 people in attendance. As part of our business, we discussed the endowment fund and the section scholarship. We also approved the budget for next year and elected new officers. The officers for the next year are Randy Skaggs, president; Cyn-

Above: the Miner Music Section congratulates the UMR Marching Band for outstanding pre-game and half-time shows at the Homecoming football game Oct. 7. We enjoyed our time in the

thia Millangu Karen (Sch... tive secretar... tee member... wards, chair... Blair and Sa...

We also t... to congratula... tificate to this... arship recipi... end the eve... picnic hoste... and Kappa K... a game of... current stud... any serious i... we looked a... football team... game, we m... doors and tu... ical game of... Overall, i... able weeken... old friends a... We are plan... for the sectio... to seeing ma... the future. (S... bie Hunke)... Those at... bie Hunke, '... '89; Nicole T... Millangu; L... Fischer '76;... Illert; Sandra



Above: the Miner Music football game was a pick-up game with brave alumni and current band students. Front row, left to right: Pat Illert, Dave Illert and Gary Fischer. Second row: Randy Skaggs, Cynthia Millangue and Libby Blair. Back row: Jim Miller, Liz Miller and Emily Donaldson.

thia Millangue, vice president; and Karen (Schoor) Rogge, executive secretary. Finance committee members include Shawn Edwards, chair, and Libby (Perkins) Blair and Sandra Nelson.

We also took this opportunity to congratulate and present a certificate to this year's section scholarship recipient, Jeff Fischer. To end the evening we attended a picnic hosted by Tau Beta Sigma and Kappa Kappa Psi and played a game of touch football with current students. There weren't any serious injuries and I believe we looked as good as the Miner football team! After the football game, we moved the party indoors and turned to the less physical game of Spades.

Overall, it was a very enjoyable weekend as we visited with old friends and made new ones. We are planning more activities for the section and look forward to seeing more music alumni in the future. (Submitted by Debbie Hunke)

Those attending were Debbie Hunke, '90; Randy Skaggs, '89; Nicole Talbot '77; Cynthia Millangue; Lois Crane '79; Gary Fischer '76; Dave '84 and Pat Illert; Sandra Nelson '95; David

McCown '93; David P. Johnson '94; Jim and Elizabeth 94 Miller; Libby (Perkins) Blair '94; Tom '93 and Karen (Schoor) Rogge '94; Nancey (Drissel) Spait '72; Tom Alleman; Jeff Digrande; Jeff Fischer; Matt Benz; Amy Katschman, and Doug Stotter, director of bands at UMR.

Phoenix Section

Section president
Walter Knecht
17207 Desert Glen Drive, Sun City
West, AZ 85375
(602-546-6672)

On Nov. 12, 1995, a small group from the Phoenix Section enjoyed a visit to Theater Works, a small intimate theater in Glendale, Ariz. The 10 people attending saw Neil Simon's play, "Lost in Yonkers." Needless to say, the group had a lot of laughs during the performance, and enjoyed the chance to reminisce before and after the performance.

Those attending were Louis '57 and Marilyn Astroth; Craig '38 and Joan Ellis; Earl '44 and Ruth Ann Kane; Walt '49 and Shirley

Knecht, along with two friends of Walt and Shirley who filled in at the last minute when Charles '51 and Doris Shulz could not attend.

St. Louis Section

Section president
Ted Medler '86
527 Golden Valley Dr.
St. Louis, MO 63129
(314) 892-3306

The St. Louis Section held its third annual riverboat and casino night on Nov. 10, 1995. The event started with happy hour after work at the Tap Room Micro-Brewery where members were able to taste some of the local St. Louis specialty brews. The event progressed with a chartered bus ride to the Alton Belle Casino where a buffet dinner of prime rib, peel-and-eat shrimp, and steamed crab was provided in a private banquet room.

After feasting on a great dinner, the group headed to the casino to try their skills (and to test their luck) at the various games. Black jack, craps and video poker seemed to be the

favorites of the night with about half the group reporting success at the tables. (Success is defined as at least breaking even.) Everyone reported having a good time. The bus returned to the Tap Room, where a few die-hards finished the evening celebrating their wins or lamenting their losses. (Submitted by Ron Jagels)

Those attending were Bruce '90 and Christina '92 Baker; Dave Diestelkamp; Richard and Ed Bradley '84 and guest; Bob and Jean Faenger; Carol Duenke; Barbara Ann and Neil Fiala '56; Lisa Gallagher '81; Jim Whetsel '81; Ron Jagels '86, '91; Vicki Jensen; Phil '66 and Barbara Jozwiak; John and Judi Laschober '81, '86; John '79, '92 and Lora Lodderhose; Ted '86 and Sandra Medler; Walter '63, '90 and Susan Mueller; Kelley Thomas '91; Tony Rosso; Rich and Tracy Spitznagle '86, and Nick '56, '58 and Jean Weiss.

St. Louis Section Golf Tournament

The St. Louis Section Spring Golf Tournament was held July 9, 1995, at New Melle Lakes Golf Course. First place went to



Above: Alumni and friends prepare to tee off at the St. Louis Section Golf Tourney. Left: The winning foursome, Steve Cronin, Harry Newling, Rob Wesolich, and Bob Wesolich.





Steve Cronin '81, H. Neuling, Bob Wesolich and Rob Wesolich. Second place went to Gregg Carlson '77, Calvin Curdt '74, Doug Workman '71 and Steve Bruns '78. Closest to Pin: #4 Rob Wesolich, #7 Mike Hutchinson, #10 Tom Hoffmann '83, #13 Keith Jozwiak and #15 Randy Lang '74. Longest Drive: #9 Max Waggoner '76 and #18 Rust Reimer. (Submitted by Phil Jozwiak)

Those attending were Ron Jagels '86, '91; Ray Tauser '56; Bob Buechel '73; Brian Cassity; Jennifer Kuchinski '95; Jack Bertlesmeyer; Tom Holst; Gregg Carlson '77; John Andesicich '66; Andy Nolfo '71; Bob Reimer '65; Bob Wesolich; John Loderhose '79, '92; Paul Dillon '68; Ken Busch '72; Jim VanBuren '72; Phil Jozwiak '66; Scott Meyer '83; Tom Herrmann '50; Randy Lang; Jack Cassity; Brian Kuchinski '92; Gene Faenger '65, '71; Richard Humphreys '79; Calvin Curdt '74; Mike Swing; Bill Kennedy; Ron Reimer '89; Rob Wesolich; Robert Hoffmann '81; Ron Halbach '65; Ed Lynch; Todd VanBuren; Keith Jozwiak; Tom Schneider '75; Neil Smith; Rodney Legrand '74; Mike

Hutchinson; Milt Murry '64, '80; Mike Potter; Steve Wade; Doug Workmann; Denny Noto; Rich Mues '71; Rusty Reimer; Steve Cronin '81; Tom Hoffmann '83; Randy Dreiling; John Baker; Kim VanBuren; Kelley Jozwiak '91; De Bernard; Tom Webb; Jerry Dombeck; Eric Richards; Jim Petry; Joe Minellon; Steve Bruns '78; Ken Dubose; Tony Estopare '87; Harry Neuling; Paul Fleischut '85; Joe Krispin '54; Max Waggoner '76; Traci Van Buren; Marc Thomas '93.

ABB Power Company hosts reception

A Prospective Student Reception was held Sunday, Nov. 5, 1995, at ABB Power Co. in Jefferson City, Mo. Jerry Bayless '59 stood in for Cal Ochs '49 who was unable to serve as host alumnus at the last minute. Alumni and "future alumni" attending were the following: Anne Freeman '84, Edward Little '47, John Prater '70, Tom Petry '67, Dale Elifrits '76, Jerry Bayless '59, Jennie Bayless '89, David Birenbaum '78, Mike Taylor '72, Dave Boston '72, Dave Reinke '72, Jan Skouby '82, Lindsay Bagnall '76, and students Angie Urbanic, Catherine Vomberg, Rachel Durst and Dawn McCoy.

Prospective Student Receptions

St. Charles, Ill., admissions reception



Left: Lea Anne Howell '81, talks with a prospective student and his parents at the St. Charles, Ill., admissions reception on Nov. 19, 1995.

Springfield, Mo., admissions reception



Left: Springfield, Mo., admissions reception, left to right, Glen Halley '91, Earl Burk '70, Brownie Unsell '50, Wilbur Feagan '76, Karry Halley '91, Kevin Skibiski '75, Bill Murray '67, and Roger Kopp '83. Wilbur kindly provided the UMR headgear for all alumni in attendance!

Tulsa admissions reception



Left: Cynthia '90, and Craig '90 Bailey help students and parents make the right decision at the Tulsa admissions reception.

MSM-UMR ALUMNI ASSOCIATION LOCAL SECTIONS

Alaska
Ark-La-Tex
Central Ozarks
Chicago
Colorado
Dallas/Ft. Worth
Georgia
Heartland
Houston
Kansas City
Lincolnland
McDonnell Douglas
Miami
Miner Music
New Orleans
Northeast Ohio
Northern Alabama
Oklahoma
Pacific Northwest
Phoenix
St. Louis
San Diego
Southern California
Springfield, Mo.
Tucson
Washington D.C.
West Florida
West Texas

John W. Hentges
Walter C. Mulyca
Dennis McGee
Deirk & Maria Feiner
Hugh E. Blevins, Jr.
Stephen & Stephanie Puljak
David R. Ziegler
Gene W. Edwards
Nicole L. M. Talbot
Joseph F. Reichert
David M. Tepen
Alice Fern Gilbert
Rene J. Leonard
Randall Skaggs
Darryl Moore
Hugh C. Kind
John P. Dunbar
Ronald G. LaManque
Steve Wright
Walter Knecht
Ted Medler
Albert S. Keevil
John O. Wilms
Earl Burk
William M. Hallett
Robert J. Scanlon
John Van Nort
J. Michael Party

13501 Ebttide Circle, Anchorage, AK 99516
307 Clarice Street, Delhi, LA 71232
HCR 82, Box 445, Bixby, MO 65439
217 Green Mountain Drive, Bolingbrook, IL 60440
2155 S. Owens Ct., Denver, CO 80227
418 Castlewood Drive, Garland, TX 75040
1531 Huntington Drive, Marietta, GA 30066-5907
159 Hillmont Drive, Paducah, KY 42003
4006 Lee Lane, Pearland, TX 77584
7312 Charlotte, Kansas City, MO 64131
400 South MacArthur Blvd., Springfield, IL 62704
1150 Heritage Court, St. Charles, MO 63303
9030 Old Cutler Road, Miami, FL 33156
12822 Capistrano Drive, Creve Coeur, MO 63141
2425 Oxford Place Unit 107, Terrytown, LA 70056
1021 Morewood Parkway, Rocky River, OH 44116
622 Patterson Lane, Meridianville, AL 35759
7807 S. Florence, Tulsa, OK 74136-8711
35708 SE 49th, Fall City, WA 98024
17207 Desert Glen Drive, Sun City West, AZ 85375
527 Golden Valley Drive, St. Louis, MO 63129-2749
1442 Yost Drive, San Diego, CA 92109
17700 Avalon Boulevard #59, Carson, CA 90746-1537
4740 S. Glenn, Springfield, MO 65810
P.O. Box 64216, Tucson, AZ 85728
2408 Honeystone Way, Brookeville, MD 20833
4908 W. Country Club Drive, Sarasota, FL 34243
6209 Driftwood, Midland, TX 79707

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ATTENTION SHUTTERBUGS

We'll be glad to print photos taken at your events - just send them in! They need to be good quality, clear pictures, preferably showing some of the fun at your event. Either color or black-and-white pictures are acceptable, but please identify those people in the picture. If you'll send several, we'll pick the best for publication.



AROUND THE COUNTRY

UPCOMING MINER ALUMNI EVENTS

WHEN	EVENT	WHOM DO I CONTACT?
APRIL	17 Kansas City Section "Happy Hour," Kansas City, MO	Joseph F. Reichert '59, 816-274-2069 (B)
	27 Ark-La-Tex Section	John Moscari '51, 903-753-7786 (H)
	TBA St. Louis Section Hockey Game or Brewery Tour, St. Louis, MO	Paul Fleischut '85, 314-231-5400 (B)
MAY	9-11 Class of '46 Golden Alumni Reunion	Alumni Office, 573-341-4145 Rolla, MO
	15 Kansas City Section "Happy Hour," Kansas City, MO	Joseph F. Reichert '59, 816-274-2069 (B)
	TBA Springfield Section Golf Outing, Springfield, MO	John C. Jones '58, 417-637-5866
	TBA St. Louis Section Maifest, Augusta, MO	Kelly Jozwiak '91, 314-878-1285 (H)
JUNE	2 Central Ozarks Pig Roast, Meramec Springs, St. James, MO	Dennis McGee '69, 573-626-4422 (H)
	15 Springfield Section House Boat Outing, Springfield, MO	Earl Burk '70, 417-882-1424
	21 Kansas City Section Picnic, Kansas City, MO	Joseph F. Reichert '59, 816-274-2069 (B)
	22 St. Louis Section Golf Tournament, St. Louis, MO	Phil Jozwiak '66, 314-878-1285 (H)
	TBA Oklahoma Section Golf Outing, Tulsa, OK	Ronald G. LaManque '85, 918-488-8345 (H)
TBA St. Louis Section Picnic, St. Louis, MO	Ted Medler '86, 314-892-3306 (H)	
JULY	12-14 St. Louis Section Baseball, Chicago, IL	Ted Medler '86, 314-892-3306 (H)
AUG.	1 Springfield Section/MSPE Shrimp Feed, Springfield, MO	Earl Burk '70, 417-882-1424
	3 Kansas City Section Casino Night, Kansas City, MO	Joseph F. Reichert '59, 816-274-2069 (B)
	17 Springfield Section Picnic, Springfield, MO	Larry Wolf '79, 417-833-2200 (B)
	TBA St. Louis Section Cardinals Game, St. Louis, MO	Christina Sfredo '94, 314-724-5413 (H)

FUTURE DATES FOR HOMECOMING:

October 4-5, 1996
 October 2-3, 1998*
 October 6-7, 2000*

October 10-11, 1997*
 October 1-2, 1999*

*Tentative
 TBA= To Be Announced

We are the champions!

Miners, Lady Miners earn share of MIAA crown, trip to NCAA tournament

■ John Kean

When the Miners won the MIAA championship 20 years ago, they had a game dubbed the "Miracle on 10th Street." (See article on page 54.)

If that was a miracle, then what do you call what happened Jan. 13, 1996, in the same building?

That night, the Miners erased a 19-point deficit in the final 13 minutes of play and went on to beat Southwest Baptist 81-66 in overtime. The victory raised fans' hopes for another MIAA conference title for the Miners.

And then there was the evening of Jan. 24, when the Lady Miners found themselves down by three with just seconds to go. Beth Ragsdale, a reserve guard, tossed in a long three-pointer with two seconds left on the clock, and the Lady Miners won the game in overtime. The dreams of winning a conference championship were starting to come into focus.

The Miners and Lady Miners didn't dash those hopes. On Saturday, Feb. 24, the final game of the regular season, both teams clinched a share of the MIAA conference title. The men did it by beating Pittsburg State, 84-76, to tie Northwest Missouri State for the first-place spot. The Miners, 24-5 overall in the regular season and ranked No. 8 in the national rankings, finished 12-4 in the conference. The Lady Miners, 21-6, posted an 82-59 win over Pittsburg State, finishing the regular season with a 12-4 conference record—and in a three-way tie for first place in the MIAA. Pittsburg State and Northwest Missouri State shared the honors.

Both teams earned home-court advantages in the first round of the MIAA tournament.

The men's team went on to win the tournament with a first-round victory over Washburn (112-104, a record for most points scored in an MIAA tournament game), a 74-69 win over UM-St. Louis in the semifinals, and a 67-65 victory over Central Missouri State in the finals. The women lost the first-round game to Missouri Southern, 55-53.

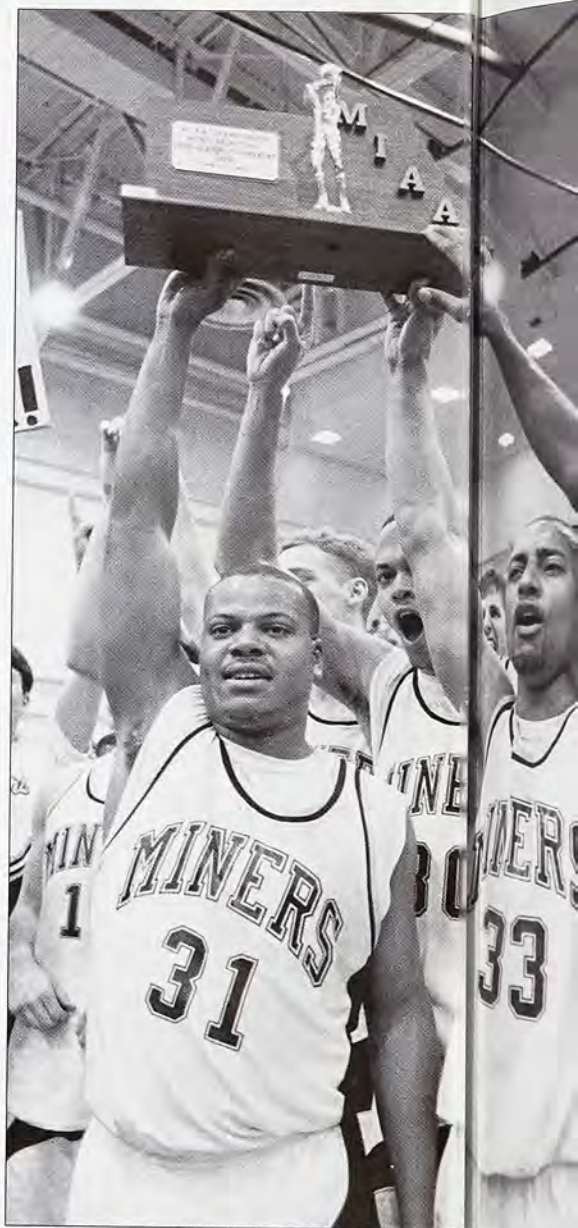
But both teams earned spots in the NCAA Division II Tournament. For the men's bracket, UMR was named the host school for the South Central Regional, held March 7-9. The men earned a first-round bye and were set to play the winner of the Central Missouri State-East Texas State game. The women traveled to Abilene, Texas, to play the University of Nebraska-Kearney in the first-round game March 7.

Best teams ever?

The teams that took the floor this season were perhaps the best ever to wear the Miner uniform.

The Miners' 9-1 non-conference record included impressive victories over Eckerd and Seattle Pacific, two teams that had been in the national rankings. The Miners beat Eckerd 76-60 in the Pepsi-Cola/Ameritech Shootout at UMR, and Seattle Pacific 81-68 in Seattle in a game they led by as many as 30 points. The Miners' league losses were to MIAA co-champion Northwest Missouri State and to two teams who tied for third place—Missouri-St. Louis and Pittsburg State. Three of the four losses were by five points or less.

A combination of returning players and key additions have made this team a title contender. Among the returners are pre-season All-America selection Jamie Brueggeman,



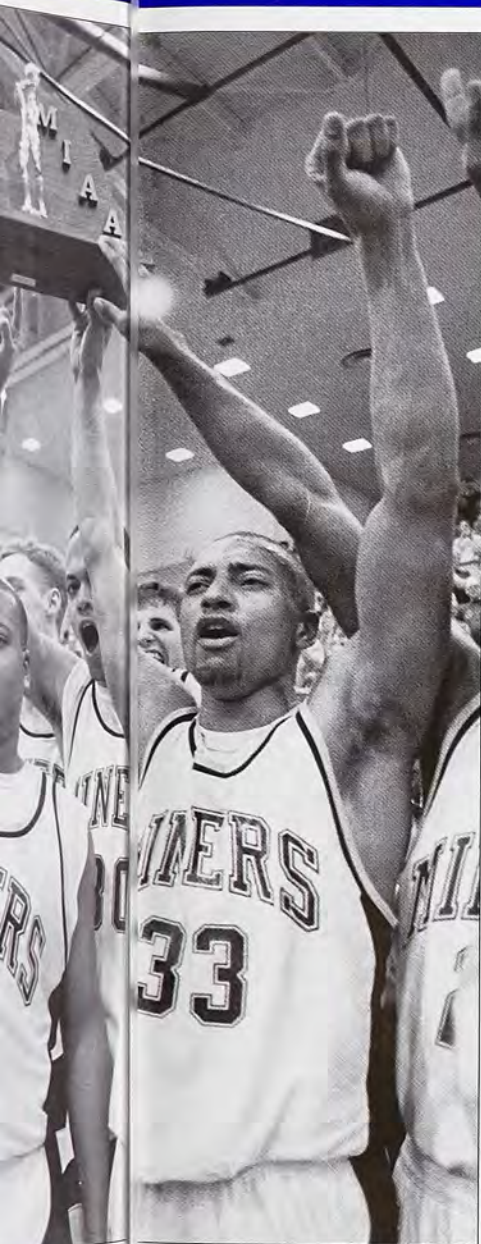
A glorious season: Terry Smith (31) and Michael McClain (33) present the MIAA Tournament trophy

who is among the team leaders in scoring, rebounding and blocked shots; Tim Holloway, a shooting guard who has led the Miners in scoring for two straight years; Jeff Kokal, an improving player along the front line who is shooting better than 60 percent from the floor; and key reserves Marc Tompkins and Scott Rush, who have been valuable players off the bench.

The newcomers of impact include University of Washington transfer Michael McClain, who is sixth in NCAA Division II in assists and a candidate for most valuable player honors in the MIAA; Terry Smith, a three-point spe-

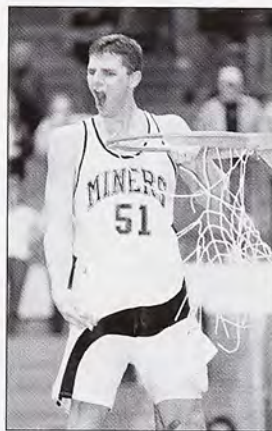
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No. 51 Jeff Kokal snips nothin' but net



Tim Holloway fends off a Central Missouri State defender



No. 20 Becky Reichard drives the lane



Lady Miners guard Ondrea Bermudez seeks help against a Missouri Southern defender

cialist who is among the league leaders in that department; and Cam Lindsey, the heir apparent to McClain at the point guard position who was the most valuable player in the Pepsi/Ameritech Shootout.

When UMR won the league title in 1976, the conference had only seven teams. Today, there are 12 teams in the MIAA and since 1991 five of them have made the NCAA Tournament field, with Washburn finishing third two years ago. The Miners have taken their place among the top teams in the nation and hope to make a big run in the post-season.

Spring, 1996

For the Lady Miners, a balanced scoring attack and strong defensive play was the key to their first-ever conference title. A nine-game winning streak at the start of the year propelled the women to 24th in the country in the WBCA/USA Today NCAA Division II national rankings (the team has been ranked as high as 23rd). It was the team's second national ranking in three years.

The team has four double-figure scorers: guards Christie Williams and Becky Reichard, forward Heather Hartman, and center Tobi Rees. This season, Williams set a new school

record for career assists with 395, while Hartman broke the mark for career blocked shots with 146.

The team's defensive play has been an important part of the story. UMR has held its opponents to 38 percent shooting from the field (best in the Mid-America Intercollegiate Athletics Association) and to just 64.4 points per game. Both figures are close to the numbers of the national leaders — and numbers that can win conference championships. ■

PHOTOS BY DAN SEIFERT/STONE HOUSE PHOTOGRAPHY

The waiting game—played on Feb. 23, 1976—may have been the longest 20 minutes for anyone involved with the Miner basketball program.

The Miner game against Southwest Missouri State was already over. The victorious Miners were in the locker room showering.

But on the floor, people were gathering around the press table at Southwest's McDonald Arena, where the courtside telephone was linked with radio station KIRX in Kirksville, which was broadcasting the game between Lincoln and Northeast Missouri State. ...

On the night of Feb. 23, 1976, the UMR basketball team was in Springfield, Mo., preparing for the 1,117th game in school history. The Miners took the court that night knowing that a win would assure at least a tie for the Missouri Intercollegiate Athletic Association championship. With a little good fortune and the right outcome in a game being played some 340 miles away, the Miners could win the title outright.

The Lincoln Blue Tigers, like UMR, had lost two conference games—and Lincoln was playing that night in Kirksville against a tough Northeast Missouri State team that had yet to lose at home that season.

Twenty years ago, MIAA conference titles were of supreme importance.

"There is so much emphasis placed on the NCAA Tournament today that it has taken away the meaning of winning the conference," says Billy Key, the head coach of that team. "Teams just don't experience the same excitement."

The Miners started the 1975-76 season in good shape, with five starters and a top reserve from the previous season returning:

- Royce Vessell, a hard-nosed, 5-11 point guard whose forte was running the offense and spearheading the defense.

- Mark Franklin, a 6-3 forward who was one of the best athletes on the team.

- Ross Klie, a 6-4 guard who, like Franklin, was a match-up nightmare. A good perimeter shooter, he was bigger than most of the players assigned to cover him.

- Ron Scroggins, a 6-6 center who was an outstanding player in the open floor. (It was not common to see a 6-6 player who could handle the ball in the mid-70s.)

- Bob Stanley, a 6-6 defensive terror who had led the team in scoring and rebounding the previous season.

- The sixth man, Terry Buzbee, a good all-around performer.

There was no true center; therefore, any of the five players could create a mismatch inside.

"I remember that we had seven players who complimented each other pretty well," recalls Klie. "The whole was better than the sum of the parts. We had four players who could play any of four positions, with the offense being set up by Royce (Vessell). On a given night, a different player would step up and carry the team."

All five starters finished the 1975-76 season as double-figure scorers, with Franklin's

14.7 points per game leading the pack. Stanley averaged 11 rebounds per game, but three others—Franklin, Klie and Scroggins—averaged between 6.4 and 6.9 boards per contest.

As regulation time ended in Kirksville, the tension around the McDonald Arena press table grew greater. The game was heading to overtime. Miner fans had to hope the Blue Tigers were worn out, as it was their second overtime game in three nights. ...

While the versatility of the Miner offense was a key to the team's success, so was its defense.

"We jelled as a team because of our unique abilities," Vessell says. "We created a lot of problems for defenses because of our offense."

The Miners led the MIAA in scoring defense, allowing just 66.3 points per game and holding their opponents to 42.8 percent from the field.

Head coach Billy Key was talking with friends at courtside, twisting his familiar post-game cigar, nervously awaiting word from Kirksville. ...

An early pivotal point in the 1975-76 season was the game against Division I team Illinois. With Stanley out with a sprained foot, the Miners rallied from a 12-point deficit in the second half to close to within two by shooting 60 percent from the field. UMR trailed 59-57 with 4:27 left, but was unable to close the gap any further as the Fighting Illini won 69-67.

"We picked up a lot of confidence from that game," Klie says. "We played well and came that close to a Division I team, therefore we knew we could be competitive."

Prior to the 1975-76 season, the Miners had finished above the .500 mark in conference play only three times—the three previous seasons—since joining the MIAA in 1935.

One of the things that kept the Miners from winning a league title in the past was their play on the road. The prior year, UMR won all six of its league games at the Gale Bullman Multi-Purpose Building, but won only two of six away from home.

The players were determined that the 1975-76 season would be different.

"We started coming together over those two or three years and improved a little each season," Vessell says. "We had confidence in one another's abilities and did start winning on the road more consistently."

"Miracle on 10th Street"

Miners' first championship season came 20 years ago

■ John Kean



Bob Stanley goes in for a layup in one of the 1975-76 Miners games.

PHOTO BY BOB HOLLAND

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Front row: Royce Vessell, Terry Buzbee, Dennis DeBacco, Ron Scroggins, Bob Stanley, and Bob Kean.

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UMR SPORTS UPDATE

Unzicker to make third appearance at nationals

Bill Unzicker apparently enjoyed his first two trips to the NCAA Division II swimming championships so much that he wasted no time getting back.

Unzicker, a junior, qualified for the national meet in the 400-yard individual medley in the Miners' second meet of the season. He made the national cut with a time of 4:06.49 in that event in a November meet at Northeast Missouri State. Unzicker was to compete for All-America honors at the national meet March 13-16 at the University of North Dakota. Last year, he finished fifth in the 400-IM and among the top 10 in two other events.

Prior to that, however, the Miners are looking to win a fourth straight Mideast Regional title. The team had a record of 5-1 in dual meets as of Jan. 9, with the only loss coming to Division I Southwest Missouri State.

Gilmore named to Academic All-America team again

Brian Gilmore, a junior linebacker for the Miner football team, was named to the Academic All-America first team for the second year in a row in December. The team, sponsored by GTE, is voted on by the College Sports Information Directors of America.

Gilmore led the Miners in tackles for the second year in a row with 137, and he was an honorable mention selection to the all-conference team. He also had eight tackles for lost yardage, an interception, two fumble recoveries and two blocked kicks. He is the third player in school history to be named to the Academic All-America team twice.

What's ahead...

- The UMR baseball and softball teams got their seasons under way in February. The Miners hope to improve on last year's 14-win season. They have several veteran players back, led by catcher Mike Williams and outfielders Nathan Wade and Dan McGinnis. All three were among the Miners' top hitters in 1995.

- The Lady Miners also are expecting big things from their returners, headed by first baseman Teri Marvich, center fielder Nicki Vray and shortstop Melanie Rohrer. The pitching staff should be boosted by the addition of junior college All-America performer Angie Bax.

- The tennis team also hopes for a great deal of success this year as it looks to continue its surge in the MIAA. Junior Methi Bengisu, one of the top players in the region and a third-place finisher at the MIAA Championships last spring, will lead the way along with doubles partner Steve Kadyk. That team also finished third at conference.

- The track season's indoor competition began in January and the outdoor season opened in March. Among the top returners for the Lady Miners are high jumper Kim Finke and distance runner Jennifer Frazer. The men's squad will be headed by distance runner Bob Etien and thrower Brian Gorman.

- The golf season resumed in March as well, with the Miners standing in eighth place in the conference after the three fall meets. UMR is the host school for the MIAA Championships to be held April 21-22 at Tan-Tar-A in Osage Beach, Mo.

The Miners proved their worth in a home game against Southwest. With 6:25 left in the game, the Miners still trailed by seven. Then came the "Miracle on 10th Street."

The Bears did not score another point.

Scroggins scored back-to-back baskets to close the gap to three, then Buzbee canned a shot from the top of the key to make it 63-62. On the Bears' next possession, Mike Johnson turned the ball over and was then called for a technical foul for protesting the

Southwest to clinch a share of the title. Then came the waiting game.

As the overtime period wound down in Kirksville, the Bulldogs were doing the Miners a favor by taking the lead over the Blue Tigers. But there was still time left. ...

About 20 minutes had passed since the Miners' victory of Southwest. Then a roar came from the scorer's table. Northeast had pulled out a 97-96 overtime win over Lincoln, making the Miners the undisputed champions of the MIAA. Key hugged the nearest person, then rushed to the locker room to tell the team. Another roar came from the locker room. It wouldn't be the last ovation of the night—the team got another one several minutes later when they came out of the locker room, and again at a McDonald's when they stopped to get something to eat.

The win at Southwest turned out to be the last for the Miners in the 1975-76 season. UMR lost its season finale to Eastern Illinois, then lost two games—including one to Lincoln in overtime—in the NCAA South Central Regional in Thibodaux, La.

But the memory of winning the league title overshadowed any of the losses at the end of the year.

"Our players all liked each other and our chemistry was good," Key says.

It all came together in the form of a conference title—something no other team had done before.

MIAA championship team 20 years ago...



PHOTO FROM 1976 ROLLAMO

Front row: Ross Klie, Royce Vessell, Phil Ostapowicz, Joe Bierschwal, Terry Buzbee, Mark Franklin. Back row: Joel Schreiner, Tom Gredell, Dennis DeBondt, Bob Stanley, Ron Scroggins, Jeff Lewis, Chris Schroeder and Head Coach Billy Key.

call. UMR's Buzbee missed the free throw, but Stanley canned a 17-footer moments later to give UMR its first lead of the game, 64-63.

The eventual 67-63 win put the Miners in first place in the conference. With back-to-back wins over Southeast Missouri State, the Miners took a 5-1 record into Lincoln, the defending league champions. In a disappointing game, the Blue Tigers won 79-60 and took first place. The Miners fell to third, behind Lincoln and Central Missouri State.

If the Miners were going to win the conference now, they had no room for error. The last five league games included three at home—including a rematch with Lincoln—and a dangerous road trip to close the schedule.

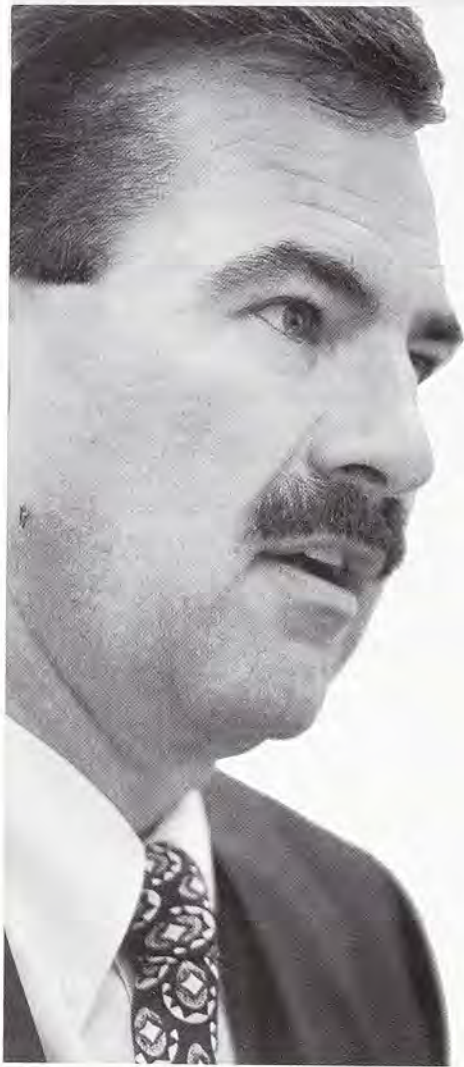
Note: The Miners won two at home, lost at Pittsburg State, beat Central Missouri State, and won at

And today...



PHOTO BY DAN SPIERT/STONE HOUSE PHOTOGRAPHY

Mark Franklin, Tom Gredell, Royce Vessell, Jeff Lewis, Jerry Kirksey, Joel Schreiner, Phil Ostapowicz, Terry Buzbee and Billy Key.



Nineteen of Horner and Shifrin's 42 engineers are UMR graduates. The company, with 72 employees, prepares studies, reports, design plans and specifications for a wide range of infrastructure projects, including highways, bridges, airports, water and wastewater facilities, and architectural projects. Most of the firm's work is in Missouri and Illinois.

PHOTOS BY DAN SEIFERT/STONE HOUSE PHOTOGRAPHY

ALUMNI PROFILE

UMR HAS A FRIEND IN HO

Well before they graduate, UMR civil engineering students learn what it takes to be engineers and managers in the real world, thanks in part to Horner and Shifrin Inc., a consulting engineering, architectural and planning firm in St. Louis.

Each fall for the past several years, Horner and Shifrin has helped sponsor two-day field trips to St. Louis and Kansas City, Mo., for civil engineering students. The trips, which alternate between the two cities, give some 100 UMR students each year the opportunity to learn about real-world engineering projects and to tour construction sites.

"We take care of providing meals and arranging the tours," says **Leonard C. Kirberg**, CE'66, of St. Louis, president of Horner and Shifrin Inc. "The students stay overnight, and a dinner is held with UMR alumni to chat with the students about real life engineering concepts. We want to show those students and faculty members actual construction sites and what civil engineers will be doing in the work force in the practical side of engineering.

"This also gives students a great opportunity to talk to engineering firms for future jobs," Kirberg says.

Some of those students have talked to Kirberg himself about their future. Nineteen of Horner and Shifrin's 42 engineers are UMR graduates. The company, with 72 employees, prepares studies, reports, design plans and specifications for a wide range of infrastructure projects, including highways, bridges, airports, water and wastewater facilities, and architectural projects. Most of the firm's work is in Missouri and Illinois.

During the fall of 1994, students and faculty members visited the construction site of the recently completed Trans World Dome stadium in St. Louis and a Metropolitan Sewer District wastewater treatment facility. They also visited consulting engineering firms, Lambert Airport

and the Metro Link light-rail system.

Horner and Shifrin's ties to UMR go beyond the field trips. The company also provides summer internships for UMR students and occasionally sends company members to UMR to present programs to students.

Both Kirberg and Horner and Shifrin take an active role in helping prepare UMR students for the future. "We contribute to the UMR Academy of Civil Engineers, which budgets about \$13,000 a year to the UMR department of civil engineering to fund student and faculty activities in the department," says Kirberg, who is president-elect of the academy. Kirberg is also compiling a survey of academy members to find out what expertise they have for departmental use. Those academy members are available to provide lectures at UMR on technical and professional issues. "The academy assists the civil department in sponsoring a UMR spring alumni event and a homecoming civil engineering reception at UMR," says Kirberg.

The academy is also leading the civil engineering department's Project 2000, which started in 1988. The goal of Project 2000 is to endow 21 new undergraduate scholarships, seven new graduate fellowships, four professorships and two chairs by the year 2000. The program also aims to gain 100 new members for UMR's Order of the Golden Shillelagh and to raise \$5 million in private funding for the renovation and expansion of the Civil Engineering Building.

Horner and Shifrin was founded in 1933 Wesley W. Horner and Hyman Shifrin. "In 1988 we had 43 employees," says Kirberg, who became president that year. "We have grown to 72 in seven years."

Kirberg credits the company's success to its total quality management approach. "We stress TQM, and we are meeting and exceeding expectations,"

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Kirberg says. "In 1988, we did a leveraged buyout of our retiring owners by forming an employee stock ownership plan. We bought 76 percent of the stock from the retiring principles, bought ourselves away from the previous owners and started our entrepreneurship in 1988."

Horner and Shifrin's business has increased 300 percent overall since 1988 under Kirberg's leadership.

Kirberg credits the success of the company to the employees. "Everybody in our company owns stock and for it to be successful we have to do quality work," Kirberg says. "Quality employees are the company. It makes for a win-win situation."

Horner and Shifrin was named one of the top 25 companies in St. Louis with a Small Business Award in 1991. "We were then in the early stages of our growth," Kirberg says. "We were on a

12 percent growth rate in 1991 and now we are on a 40 percent growth rate per year."

One of the company's largest projects has been the rehabilitation of old, large-diameter brick sewers in St. Louis. "Many of those sewer systems were constructed in the 1800s and are in danger of collapsing because of age and condition," Kirberg says.

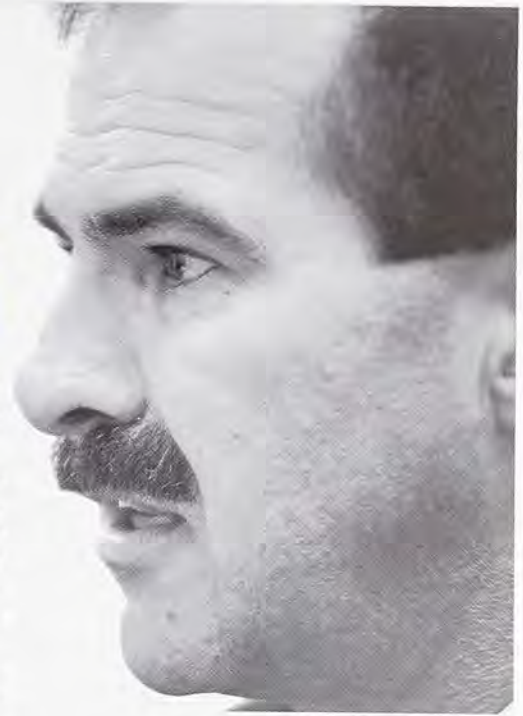
"We have also had a major role on the design team for the Metro Link light-rail system in St. Louis, which is a \$350 million project," Kirberg says.

Among many of Horner and Shifrin's awards and citations include engineering excellence awards from the Consulting Engineers Councils of Missouri and Illinois, and an honorable mention for the Sewer Rehabilitation Project for the Metropolitan St. Louis Sewer District. The company also received an Honor Award for Design of a Multiport Diffusion System for the Rock River Water Reclamation District in Rockford, Ill.

Kirberg is a member of UMR's Order of the Golden Shillelagh and is a Registered Professional Engineer in Missouri and Illinois.

Kirberg's leadership activities include having served as president of the St. Louis section of the American Society of Civil Engineers, president of the St. Louis Chapter of the Missouri Society of Professional Engineers, president of the Engineers Club of St. Louis, president of the St. Louis Section of the MSM-UMR Alumni Association, and president of the Consulting Engineers Council of Missouri.

His community activities include serving on the board of directors and president of the



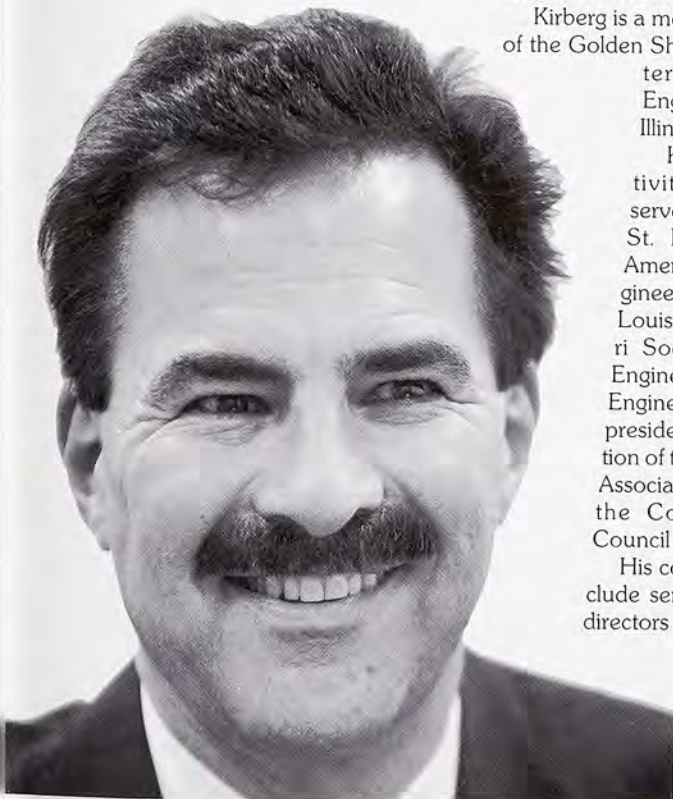
Rotary Skyway Farm Foundation Inc., a service project of the Rotary Club of St. Louis. He is also on the board of directors of both the St. Louis Ambassadors and the St. Louis County.

At UMR he was a member of Lambda Chi Alpha fraternity and was the fraternity's "Man of the Year" in 1965.

"The students stay overnight, and a dinner is held with UMR alumni to chat with the students about real life engineering concepts. We want to show those students and faculty members actual construction sites and what civil engineers will be doing in the work force in the practical side of engineering.

"This also gives students a great opportunity to talk to engineering firms for future jobs."

—Leonard Kirberg





celebrating 125 years of educating tomorrow's leaders in engineering and science



The history of MSM/UMR is the story of its students, its teachers,



its staff. As students



and then as alumni,



you contribute



to the life and texture of this campus. The next

issue of the *MSM-UMR Alumnus* commemorates



the contributions of all who have made this university great during



its 125-year history.