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Common Ground

Civil, Architectural and Environmental
Engineering Newsletters

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Common Ground Newsletter Fall 2015

Missouri University of Science and Technology

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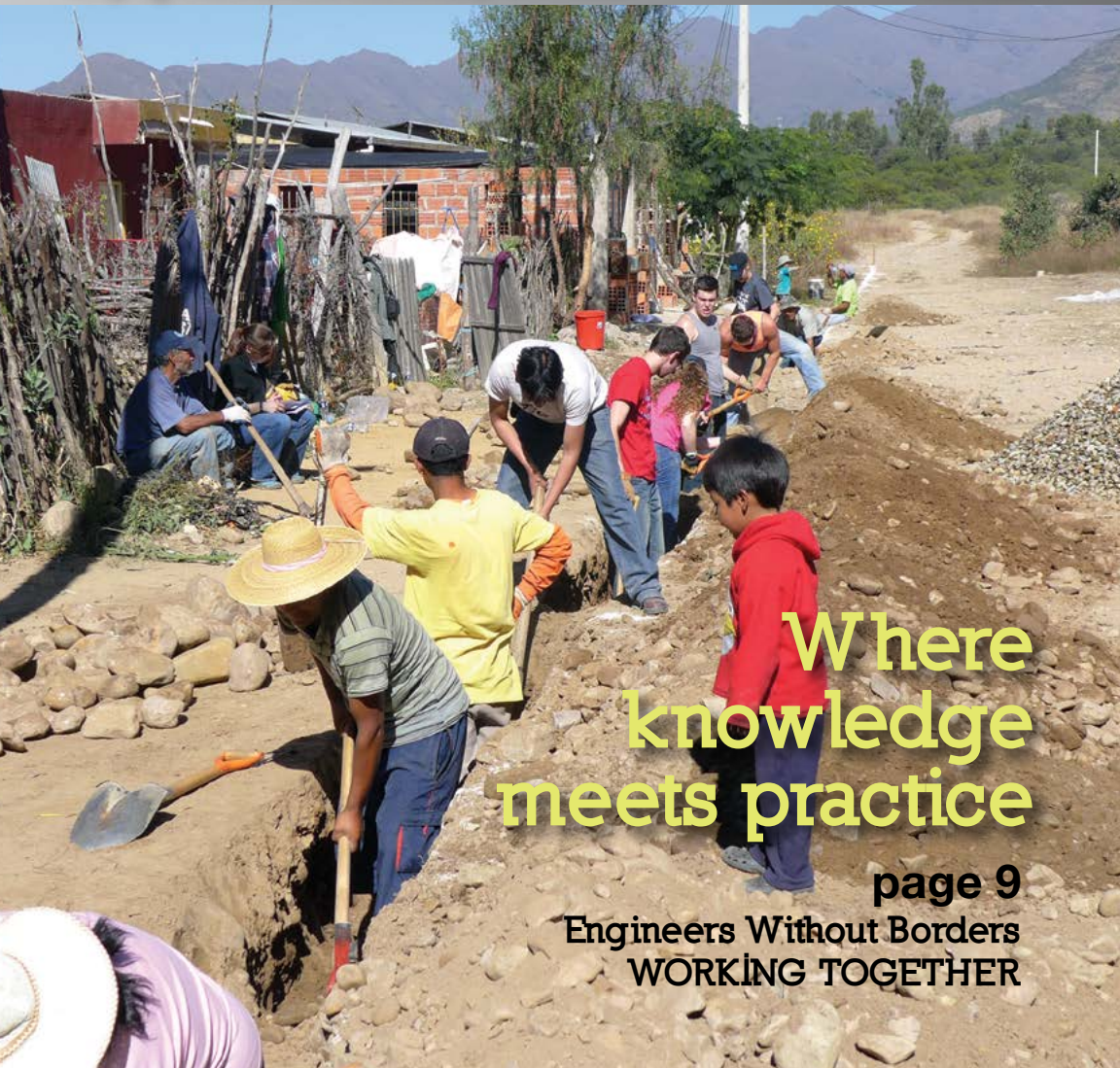
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common ground

Civil, Architectural and Environmental Engineering

Helping students and alumni stay connected

Fall 2015



**Where
knowledge
meets practice**

page 9

**Engineers Without Borders
WORKING TOGETHER**



Going beyond the standard course options.

Because life at Missouri S&T
DOES involve more than
wearing green, studying
or making the grade.

It involves making the most
of tools and resources
AND
exploring organizations
and design teams to
GAIN experience.

Read on to see what we've been doing
this past year in the Civil, Architectural and
Environmental Engineering Department.

Pursuing leadership and
research opportunities
because we're inquisitive.

Chris Moore

“

I am very grateful to have been accepted into the Greenberg Scholars Program. A master's degree was not in my original education plan, but this program has shown me the benefits and rewards of pursuing graduate-level research.”

Major: Architectural and Civil Engineering
Hometown: Springfield, Ill.

GREENBERG SCHOLAR





“

Being Project Manager has allowed me to develop skills that can be difficult to learn in a classroom — time management, teamwork, conflict resolution and public speaking. It's not easy, but it's definitely worth it.”

Major: Environmental Engineering
Hometown: St. Louis, Mo.

SOLAR HOUSE TEAM
PROJECT MANAGER

Mary Puleo

Working hard because
we're ambitious.

“

I joined Engineers Without Borders for the opportunity to address humanitarian issues, travel the world and learn more about the design process. Last year, my team surveyed a path for a potable water pipeline along the side of a mountain. This year, we're going to help the community members install it.”

Major: Civil Engineering
Hometown: Charleston, Mo.

EWB MEMBER



Joe Collum

Solving real-world problems
because we're inventive.

Competing and traveling with design teams.

Networking with students from competing schools and industry professionals alike can lead to personal and professional relationships that advance **rewarding careers.**

Turn the page and learn what the four S&T design teams that draw their members from our department accomplished in 2014-2015.



Mixing the Joe Miner mascot with a character from every techie's favorite movie – *Star Wars* – inspired the 2015 concrete canoe's name: Joebi-Wan Canoebe.

The team's product display featured a deep-space backdrop across which TIE fighters bearing each of the concrete components seemed magically suspended in mid-air.

A well-constructed canoe and lots of practice carried the Miners to first in men's and women's sprints, third in product and sixth overall.

Next year the Mid-Continent ASCE Conference returns to Rolla for the first time in 17 years. That means the two teams will compete in AND host the event.



concrete canoe






Working with Central and South America to design and build infrastructure engineering solutions

engineers without borders



Los Eucaliptos, Bolivia

The team and local community constructed a water storage tank and distribution system, floodwater drainage canals, and a gabion spur system in the river bed to prevent erosion. They are now in the process of building a well.

Tacachia, Bolivia

Students surveyed and made observations regarding water source options, continued educating the community, and monitored the water distribution system and erosion control project. They are now designing and installing a water pipeline to connect the existing distribution system.

Nahualate, Guatemala

The team inspected the elevated tank and verified continued construction of the distribution system. They determined ideal water meter locations, evaluated the flux of individuals on the system, and took inventory of the parts for distribution.

Santiago, Honduras

Students evaluated current water capacity and water storage quantities. They used survey, leak study and water usage data collected in May to add an additional water storage tank.

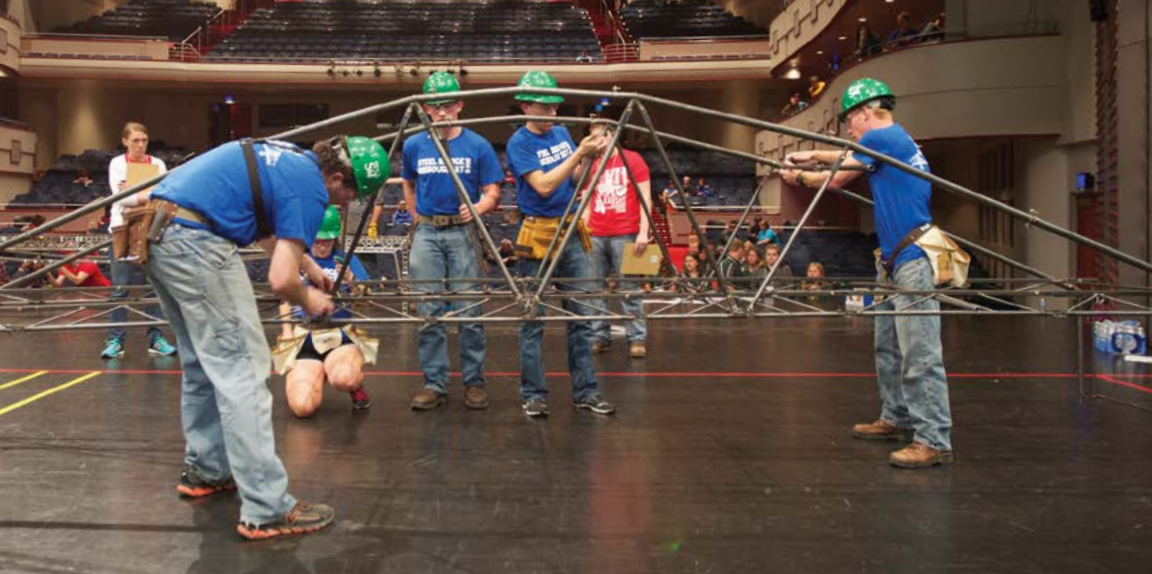


solar house



The 2015 Nest Home was built using local, recycled materials and designed to serve a family “from a full nest to an empty nest.” The core structure consists of three repurposed shipping containers that form a deconstructed triangular space similar to a bird’s nest.

Although this open-floor concept is designed to work for a couple and small children in two bedrooms, it also allows the residents to add or remove shipping containers as their lifestyles change.



The team designed an over-truss bridge with steel beams that arched over the top of the deck. It weighed approximately 160 pounds and was comprised of fewer than 50 pieces.

The bridge was scored on its weight and rigidity, construction speed and the number of team members building the bridge.

Only five students were needed to assemble the bridge. The team recorded one of their fastest assembly times, but the bridge fell 2 percent short of passing the load test.



steel bridge



The background of the entire image is a photograph of the Joe Miner mascot. The mascot is a large, anthropomorphic figure with a yellow cowboy hat, a brown beard, and a wide, toothy grin. He is wearing a red shirt with a yellow vest. On the left chest of the vest, there is a patch that reads "Joe Miner". He is holding a large, curved white object, possibly a pipe or a tool, in his right hand. The background is slightly blurred, showing other people and a sign that partially reads "MISS".

Connecting with alumni.

MINERS FOR LIFE!

Share your personal and
professional accomplishments.

Submit a class note at:
www.mineralumni.com

●1940s

Robert E. “Bob” Held, CE’48, “I love retirement in Florida. Celebrating marriage to my wonderful wife for 70 years this year.”

William Shaw, CE’49, a World War II veteran, was awarded the French Legion of Honor, the highest award that France bestows, for his service in helping to liberate France from Nazi control.



Joseph Senne, MS CE’51

●1950s

Kenneth L. DeLap, CE’52: “My first wife passed away and I was alone for about two years. The Lord proved he was a wonderful God and gave me a wonderful new wife on Dec. 23, 2013. Her name is Melinda DeLap.”

Erkman Erkman, MS CE’59, worked at ATAS Refinery in Mersin, Turkey, until his retirement in 1996. He lives in Mersin with his wife. They have one son.

John F. Kirse Jr., CE’58, “Enjoying the summer and archery practice. Anxiously waiting for hunting season.”

World War II veteran **Joseph Senne**, (pictured above), MS CE’51, former chair of civil engineering at Missouri S&T, flew to Washington, D.C., in October to visit the national war memorials as part of the San Diego Honor Flight. Senne, who joined the Navy in 1942 as a petty officer first class, was on Okinawa when Japan surrendered. His work as a surveyor helped clear Port Seeadler, an important staging area for WWII operations in the South Pacific.

(continued on the next page)



Class of 1965 Golden Alumni pictured from left to right: **Dave Hoffman, Ed Tharp, Roger H. Smith, Ken Robb, Bob Otto and Steve Smith.**

Edward O. Wakefield, CE'59: "Retirement continues to be great. Still blessed with good health so we can travel and enjoy our summers in northern Wisconsin; the fishing is great."

Lee M. Wehmeier, CE'51, "Celebrating our 60th anniversary this year with five children and 10 grandchildren, two of whom are attending Missouri S&T."

Hasan Cevat Yah, MS CE'51, worked for International Engineering and Foster Wheeler and in 1957 moved to Adana, Turkey, where he resides with his wife of 64 years.

● 1960s

Richard T. Berning, CE'69, was appointed to the board of directors of the American Public Works Association, where he will serve as Region V director.

Dan Chilton, CE'65, and his wife, Suzanne, wrote *Blue & Gray Cross Current*, a historical novel set in the Civil War. The book is based on official records and true events and characters in Chilton's family. Profits go to the Shannon County (Mo.) Museum.



Charles W. Foster, CE'69, MS CE'70: "I still work in the Department of Defense for the U.S. Army, but I'm looking to retire in the next couple of years. My education was a great investment."

Don J. Gunther, CE'60, was named chairman of the board for Pernix Group Inc., a global construction and power infrastructure company.

Floyd H. Hahn, CE'62, celebrated 50 years of marriage with his wife, Nancy.

Robert W. Hogue, CE'66, served in the 14th Combat Engineer Battalion in Vietnam. He earned a master's degree in engineering management from Tulsa University and spent 11 years as the city engineer for Decatur, Ill. In 2000, he retired as village manager for Glen Carbon, Ill. He and his wife, Catherine, recently celebrated their 50th wedding anniversary.

Ugur Ozoguz, MS CE'60, is the founder and principal shareholder of PADA Construction Ltd. Co. He is also a board member of the Turkish Acoustics Society.

● 1970s

David Beardsley, CE'70: "I've been retired from Sverdrup and Parcel/Jacobs Engineering for 2 1/2 years now. Eileen and I will celebrate our 40th anniversary this fall with a trip to Ireland."

Dale L. Houdeshell, CE'72, was appointed director of public works for the city of Clayton, Mo., in February.

● 1980s

James Gillam, CE'84, MS CE'92, was appointed director of public works in Crestwood, Mo.

Joel Mahnken, CE'83, joined the Leavenworth (Kan.) Water Department as general manager.

(continued on page 16)



● **Bob Berry**, CE'72, visited the Dead Sea in Jordan in April 2014.



● **Kevin Skibiski**, CE'75, MS CE'76, and **Rebecca Rost**, Hist'05, helped architectural engineering professor **Stuart Baur** and his 15 students document and present a report on the early 19th century Piney River Heritage Farm.

The farm, part of the Mark Twain National Forest, is located outside Licking, Mo., and has 10 buildings on site, including a house, three barns and a washhouse. After the students made their measurements, Skibiski, associate vice president and office manager of Horner & Shifrin engineering firm, submitted a final report.

Rost, preservation planner and grants manager in Missouri's historic preservation office, worked on Section 106 compliance, which requires consideration of historic preservation in projects with federal involvement. In Skibiski's estimation, experience is the best teacher. "I could have done it myself, but I wanted them to do the work," he says of the students' documentation. "What I'm trying to do is help teach the students how to do a structural evaluation."

Kirk Randolph, CE'85, was appointed executive vice president of Oldcastle Materials Inc. He will lead the acquisition and integration of new businesses.

● 1990s



Gabe Garrett, CE'99, MS CE'02, joined the St. Louis office of HOK as a senior structural project engineer.

Igor Vasquez, MS EMgt'02, and **Danielle Kleinbans**, MS CE'99, PhD CE'02, had a boy, Alejandro, on March 5, 2014.



● 2000s

Lee Dust, MetE'03, CE'07, and **Angie (Schmitz) Dust**, ChE'03, had a girl, Alexa Scarlett, on Feb. 7, 2013. She joins sister Kaylee, 3.



Ryan Elam, CE'07, was promoted to project manager in the development services segment of BHC RHODES, based in Overland Park, Kan.



Kyle Griffin, CE'09, joined Civil Site Design Group as a civil engineering intern.

Jeremiah King, CE'06, and **Maria (Conte) King**, CE'05, MS CE'10, had a boy, Frederick James, on Dec. 27, 2013. He joins brother Jeremiah David Jr.



Jeff Willey, CE'01, MS EMgt'07, and **Courtney (Greene) Willey**, ArchE'08, MS CE'10, had a boy, Theodore Stephen, on Aug. 20, 2014.



● 2010s



Kyle Butts, CE'13, was named project engineer for Micro-Surfacing Contractors LLC in St. Louis.

Nicholas Eshelman, CE'13, joined St. Louis based Tarlton Corp. as a project engineer.

Josh Gaghen, MS CE'10, was named director of federal programs for McCarthy Building Companies Inc.

Clint Wobbe, ArchE'14, joined ARCO Construction Co. as a project manager.



Meg Riley, CE'14, joined ARCO Construction Co. as a project manager.

Share your news!

Submit a class note at:
www.mineralumni.com



● **Daniel Edwards**, ArchE'11, and his wife, Dr. Ebony (Burnside) Edwards, have a vision of restoring an old workhouse castle located at 2001 Vine St. in Kansas City, Mo. Their story was featured in the May 20 issue of *The Kansas City Star*. The couple is working with **Vewiser Dixon**, ME'73, the founder of the Kansas City Business Center for



Entrepreneurial Development, which owns the property, to eventually turn the 1897 building into a community center, community garden, Internet café, and event or concert space. The pair held their June 8 wedding at the location. Volunteers from their nonprofit organization, 2orMore, helped them clean up the property, which has been vacant since the 1970s.

Daniel is executive director of 2orMore, which creates opportunities for young adults to reach their full potential and then solve social issues. The Edwardses got their first grant for \$12,500 and have an online crowdfunding campaign. You can see a video about the project at 2orMore.org.

1930s

William “Neal” Buck, CE’38, worked for the U.S. Geological Survey as a field engineer and a map editor. In the 1950s, he joined the California Department of Water Resources, where he worked on dams, reservoirs and hatcheries. After retiring in 1979, he enjoyed photography and his involvement in the local garden club. (March 29, 2014)

War II, he was a gunner on night bombing missions in Europe. In retirement, he became a carver of wooden birds. (March 30, 2014)

Edward C. Schultz, CE’49, (Oct. 3, 2014)

Donald H. Timmer, CE’49, MS CE’50
(May 22, 2014)

Carl J. Weis, CE’43, (Oct. 10, 2014)

1940s

James E. Barkley, CE’49, (March 1, 2014)

Harold G. Butzer, CE’47, served in World War II and was a member of Theta Kappa Phi, Theta Tau and Blue Key. Butzer served on the Miner Alumni Association board of directors, was a public resource ambassador, received the Alumni Service Award, and was a member of the Academy of Civil Engineers and OGS. (Sept. 6, 2014)

Maurice H. Ellis, CE’48, (Jan. 9, 2014)

Paul Kram, CE’48, (Nov. 21, 2013)

Albert G. McGuire Jr., CE’48, served in the U.S. Army Corps of Engineers in France during the Battle of the Bulge, then worked for the Wyoming Highway Department and Phillips Petroleum. An ordained American Baptist minister, he held a master of divinity degree. (Aug. 24, 2014)

Richard C. Raining, CE’48, (Jan. 30, 2013)

Walter L. Sappington, CE’49, had a long career as a research engineer for the U.S. Geological Survey, working in the topographical division. During World

1950s

William M. Baldwin, CE’51, MS CE’57
(June 23, 2014)

Frank L. Carroll, CE’55, MS EMgt’75
(Aug. 4, 2014)

Gilbert L. Crowell, CE’51, (Oct. 5, 2013)

Daniel R. Dickinson, CE’50
(Dec. 14, 2013)

Wallace Ferguson, CE’52
(June 12, 2014)

Eldon W. Head, CE’58, (July 29, 2013)

Lewis Martin Heying, CE’52, served in the U.S. Army Air Corps during World War II. He attended college after the war and then worked as an engineer with the U.S. Army Corps of Engineers. Later, he worked for the U.S. Department of Housing and Urban Development. (Dec. 25, 2014)

Clark F. Houghton, CE’51, was a member of Theta Xi fraternity and served in the U.S. Army during World War II. He worked for Shell Oil before buying Mid-Missouri Oil Co. in 1961, which he ran until his retirement in 1996. He served as president of the National

Oil Jobbers and Missouri Oil Jobbers.
(Jan. 18, 2013)

Newton H. Kaplan, CE'51
(March 19, 2014)

Louis P. Lesniak, CE'51, (Aug. 20, 2013)

Michael G. Mahoney, CE'56
(Nov. 03, 2013)

Eugene O. "Gene" Mantovani, CE'58, spent his career working for the Illinois Department of Transportation in Carbondale. He retired as chief of the bureau of materials in 1991.
(March 1, 2014)

Marion John Norton, CE'51
(Dec. 24, 2013)

C. Raymond Nowacki, CE'58, served in the U.S. Army during World War II and taught at MSM as a student. He earned a Ph.D. in civil engineering from the University of Illinois and taught

at Southern Illinois University in Carbondale for 30 years.
(April 28, 2014)

Robert I. Patten, CE'50, (Dec. 2, 2013)

John "Burt" Randolph Jr., CE'55, was a member of the choir and orchestra while a student. The former vice president of engineering for Fasteel, he retired from Fasteel Foundation Anchoring Systems in 2001. He was past president of the St. Louis chapter of Missouri Society of Professional Engineers. (March 4, 2014)

J. Kent Roberts, MS CE'50, professor emeritus of civil engineering at S&T, died Nov. 7, 2014. He attended the University of Oklahoma before serving the U.S. Army in France, Germany and Austria during World War II. Prof. Roberts joined the Missouri S&T faculty as an instructor in 1947 and was promoted to full professor. He served as assistant dean of the School of Engineering for

(continued on the next page)

Dr. Paul Munger



Dr. Paul R. Munger, CE'58, MS CE'61, professor emeritus of civil engineering, died on April 19, 2014. He joined the Missouri S&T faculty in 1958 and served as director of the Institute of River Studies, retiring in 2000. He earned a Ph.D. from the University of Arkansas in 1972 and was a member of the Academy of Civil Engineers for both S&T and Arkansas. Munger held many leadership roles, including 17 years on the Missouri Board for Architects, Professional Engineers and Land Surveyors, with 14 years as its chair. During his tenure, he helped investigate the 1981 collapse of the Hyatt Regency skywalks in Kansas City, Mo., one of the deadliest structural failures in U.S. history.

He led the licensing disciplinary actions following the tragedy. His work to change registration procedures following the collapse earned Munger the Outstanding Service Award from the Missouri Society of Professional Engineers and the Distinguished Service Award from the National Council of Examiners for Engineering and Surveying, where he later served as president. He was a National Society of Professional Engineers Fellow, an American Society of Civil Engineers Fellow and an MSPE Hall of Fame inductee. To make a memorial contribution, contact Sue Wallace at 573-466-3202.



In memoriam continued...

15 years, retiring in 1985. He was a Fellow in the American Society of Civil Engineers and was an active member of the National Society of Professional Engineers, the Missouri Society of Professional Engineers and the Missouri S&T Academy of Civil Engineers. In 1966, Gov. Warren E. Hearnes appointed Prof. Roberts to the Missouri State Board of Architects, Professional Engineers and Land Surveyors. He served eight years.

Eugene Robson, CE'58, (Feb. 11, 2013)

Carl R. Schumacher, CE'59
(Oct. 22, 2013)

David I. Steele, CE'53, (June 20, 2013)

Carl J. Thye Jr., CE'57, (Aug. 7, 2014)

Donald E. Werner, CE'59
(March 29, 2014)

1960s

Kenneth H. "Ken" Bell, CE'66, MS CE'67
(July 4, 2013)

Marvin L. Byington, CE'65, MS CE'67
(Aug. 24, 2013)

Charles M. Craig, CE'60, was a member of Chi Epsilon, the Independents and Student Council. He was a project manager for Talbert, Cox & Associates Inc. until 1993, when he became self-employed.
(March 8, 2014)

Vincent P. Crane, CE'66, MS CE'68
(July 7, 2014)

Willard Diel, CE'66, (Jan. 14, 2013)

Adil M. Godiwalla, MS CE'66, was born in Mumbai, India, and retired from the city of Houston after more than 30 years of service. He most recently was a consultant for Gunda Corp.
(Dec. 16, 2013)

William O. "Bill" Haag Jr., CE'65, was a member of Lambda Chi Alpha, Theta Tau, Army ROTC and the *Missouri Miner* newspaper staff. He was former director of engineering for Russell & Axon and spent the last 14 years as a project manager for PBQD Inc. He enjoyed taking his grandchildren on tractor rides.
(April 17, 2014)

Roney L. Haden, CE'65, (Oct. 1, 2013)

Bruce Hanson, CE'63, (April 14, 2014)

James A. Heidman, CE'65, MS CE'66, died March 20, 2014. Mr. Heidman was a retired lieutenant colonel in the U.S. Army and a former staff engineer with the U.S. Environmental Protection Agency. After moving to Mountain Home, Ark., he volunteered for the Humane Society of North Central Arkansas.

Fredrick D. Lehman II, CE'64
(Jan. 16, 2014)

Manuel J. Melchor, CE'63, retired in 2007 as the president of Gunther-Nash. He was a member of GDI and was active in the Newman Center. (June 25, 2014)

Richard P. Meyer, CE'65, was a member of Beta Sigma Psi fraternity and worked for Koehler Engineering & Surveying in Cape Girardeau, Mo. (Nov. 16, 2013)

Thomas "Mike" Taylor, CE'62
(Dec. 8, 2013)

Roger F. Verslues, CE'66, was a member of Phi Kappa Theta fraternity and worked on the *Missouri Miner* and the *Rollamo*. He worked for McDonnell Douglas before starting his own business, which he operated for more than 40 years. (Jan. 6, 2014)

1970s

Philip E. Broyles, CE'70, (March 29, 2014)

John J. Dickman, CE'77, (Sept. 29, 2014)

Michael P. Duff, CE'70, (June 22, 2014)

Steven F. Linhardt, CE'75, MS CE'87
(Nov. 14, 2013)

Michael W. Luck, CE'73, (Oct. 21, 2014)

Hugh J. McCluskey Jr., CE'70
(Sept. 3, 2014)

Lyle W. Merritt, CE'71, (Dec. 11, 2013)

Earl D. Ray, CE'70, (Oct. 2, 2014)

Cecil R. Taylor, CE'70, was a member of Delta Sigma Phi fraternity, played halfback

on the Miner football team and was in the Army ROTC. He served in Vietnam and finished his military career as a lieutenant colonel. He volunteered with several organizations and coordinated fundraising for homeless children. (Nov. 8, 2013)

Gerald J. Wessel, CE'75, (Oct. 30, 2013)

Dennis A. Woodruff, CE'75, MS CE'76
(Oct. 6, 2014)

Theodore W. "Ted" Yates, MS CE'72
(May 24, 2014)

1980s

Wilfred F. "Will" Bereswill, CE'80
(March 24, 2013)

1990s

David Houston Lane, CE'96
(June 20, 2014)

Dr. Charles E. Dare



Dr. Charles E. Dare, professor emeritus of civil engineering at Missouri S&T, died Oct. 27, 2014. He earned bachelor's degrees in general science and mechanical engineering and master's and Ph.D. degrees in industrial and management engineering from the University of Iowa. In 1977, Dr. Dare joined Missouri S&T, where he taught traffic and transportation courses, advised students, sponsored the Institute of Transportation Engineers, established the department's Undergraduate Student Advising Center and led the Transportation Technical Assistance Office. A member of the American Society of Civil Engineers, Chi Epsilon, the Institute of Transportation Engineers and the Transportation Engineering Association of Metropolitan St. Louis, he retired in 1997 as a full professor. To contribute to the Charles E. and Jane A. Dare Endowed Scholarship, contact Sue Wallace at 573-466-3202 or wallacesue@mst.edu.

VISION 2020

Working on our
strategic plan because
we're committed.

VISION 2020 *Changing the World*

Action items:

- Secure monies and hire a full-time Professor of the Practice.
- Enhance facilities with funds raised for the Advanced Construction and Materials Lab (ACML).
- Develop new funding opportunities for graduate students.

For more information about supporting these actions, contact **Sue Wallace**, at 573-466-3202 or email her at wallacesue@mst.edu.

Civil, Architectural and Environmental Engineering

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Please consider making
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your call or letter from
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Your participation will be counted among those who are strengthening
this department's reputation for educating quality graduates.

Last year's donations provided a variety of experiences and tools for our students, including supporting student conference attendance where students networked and previewed workplaces, scholarships and other financial assistance, software license purchases to allow students to use the latest software tools and technologies in labs and for homework, and lab equipment purchases, which enabled students to use modern, safer equipment in their lab courses.

**Calling begins Sept. 27 and continues
throughout the fall semester.**