CAPSTONE ENGINEER

FALL 2011

ENGINEERING THROUGH THE STORM

THE UNIVERSITY OF ALABAMA **COLLEGE OF ENGINEERING**

CONTENTS

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Dean's message

Dear **Alumni** and **Friends**,

As Tuscaloosa and the state of Alabama recover from the devastating tornadoes in April, it is quite a comfort to recognize the stellar efforts of our alumni. Teaching engineering has been a passion of mine for more than 25 years, and to see the results of the many engineers that I not only taught but also mentored come to fruition in the days following the tornadoes is quite rewarding. I am so proud of our alumni for performing their engineering tasks to the best of their abilities as they helped restore critical infrastructure throughout the state.

As you explore this issue of the Capstone Engineer, you will get a glimpse of a few of the many stories of our alumni and how the storms impacted their professional lives. To help move Tuscaloosa forward, our College has also been quite active through service and research. And, this issue also gathers the great work of the University in helping our neighbors.

Yes, things have changed in Tuscaloosa. While there is a new "normal" here, I have never been prouder to say that I am an Alabama engineer and I teach the next generation of great engineers.

Charles L. Karr

DR. CHARLES L. KARR
DEAN

ALUMNI ENGINEERING THROUGH THE STORM

Danny Glover (blue shirt) encourages Alabama Power employees in the field.

The engineering skills of many graduates came into play immediately after the tornadoes tore through the state on April 27. Our alumni became first responders, leading efforts in search and rescue, recovery and rebuilding. From electricity and power supply to traffic safety and infrastructure, engineering alumni assumed vital roles in helping numerous communities begin the long path back to normalcy.

With a disaster of this magnitude, there are many stories to share. Everyone has a unique perspective to tell. The following stories are just a few of the many accounts from our engineering alumni impacted through their professional duties and personal experiences.

Tera Tubbs, BSCE 1997, MSCE 1998

Director, Tuscaloosa Department of Transportation

CE: Tell about the scope of your job.

Tubbs: The Tuscaloosa Department of Transportation has approximately 200 employees, and TDOT is divided into five departments (Tuscaloosa Regional Airport, Fleet Maintenance, Right-of-Way and Landscaping, Infrastructure, and Traffic Systems) with an annual operating budget of more than $6 million.

CE: Explain the magnitude of tornado-damage impact in your engineering role.

Tubbs: To reopen roadways, TDOT cleared almost 12,000 cubic yards of debris in 10 days. The traffic systems group repaired 24 signalized intersections, and 13 signalized intersections were completely rebuilt. The teams worked nonstop to open McFarland Boulevard on May 1 and 15th Street on May 3. The groups installed more than 100 new stop signs.

Due to forecasted thunderstorms, an emergency contract was issued to clean and restore nine major drainage ditches in the city. Plott Construction removed and hauled almost 6,000 cubic yards of debris in seven days.

To restore critical infrastructure, almost 20,000 feet of aerial cable and nearly 13,000 feet of underground cable were replaced in the fiber-optic system. The fiber-hub buildings at two intersections had to be reconfigured, and temporary fiber had to be installed to Fire Station 4 and the Emergency Services Department.

In addition to traffic safety and infrastructure, the city's fleet sustained major damage. The teams repaired 13 garbage trucks, two emergency services pickup trucks, 11 knuckle-boom trucks and three shuttle trucks. Many fleet vehicles are still being repaired, and we're in the process of writing the specifications for all replacement vehicles.

As the rebuilding efforts continue, TDOT is in the process of repairing and replacing more than 30 streetlights and over 1,000 street signs. The teams are repairing drainage ditches and sweeping and flushing streets in recovery zones as debris is removed. Work zones have been established for debris removal contractors and city crews restoring infrastructure.

CE: How did you begin to prioritize work? Did you have an emergency plan?

Tubbs: The city has an emergency plan that was immediately put into action. Our work was prioritized by search and rescue in the beginning and then transitioned into traffic safety.

CE: Were you at your office? Share your personal story.

Tubbs: I directed all crews to stay at TDOT. Because TDOT is located in several metal buildings, we actually go into the pits in the garage shop where we change oil in the vehicles. We watched the tornado, and it looked like it was coming straight for TDOT. I have several employees that lost everything and still continued to work. I have changed. I no longer sweat the small stuff. I cherish every moment I have with my family. I have never felt more grateful for all that God has blessed me with.

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Tuscaloosa, Ala., 15th Street and McFarland Boulevard

Left photo: Danny Glover speaks with the media. Right photo: From left to right, Charles McCrary, CEO of Alabama Power; Danny Glover; and Tom Fanning, CEO of Southern Co., are briefed in the Alabama Power Storm Center.

Danny Glover, BSCE 1980

Vice President of Power Delivery and Distribution, Alabama Power Co.

CE: Tell about the scope of your job.

Glover: I am responsible for the distribution operations for Alabama Power Co. Our work consists of designing, building, operating and maintaining the distribution facilities that serve all of our approximately 1.4 million customers. Our department has approximately 1,700 personnel consisting of engineers, technicians, crew personnel, and clerical and support staffs.

CE: Explain the magnitude of tornado-damage impact in your engineering role.

Glover: On Wednesday, April 27, we actually had two separate tornado and wind events in our service territory. The first wave came through in the morning and caused outages to approximately 270,000 of our customers. We had restored power to about 100,000 of these customers before the second and most severe tornadoes passed through. After these storms passed, we were left with 412,229 customers without power. While some of our employees had friends and family get hurt or even pass away, none of our employees themselves were hurt, thankfully. However, we did have many employees sustain damage or loss of their homes.

The physical damage to our distribution system was immense. Over the seven days that it took us to restore service to 100 percent of our customers that could take power, our field forces, and those from outside that helped us, replaced more than 7,639 poles and over 3,000 transformers. We also installed more than 4.5 million feet — 852 miles or the distance from Birmingham to Philadelphia — of wire.

CE: How did you begin to prioritize work? Did you have an emergency plan?

Glover: We have emergency plans in place for the smallest storm all the way to the largest, and our people have worked and managed all different types of restoration efforts, both on our system and in helping other utilities throughout the Southeast. We have a distributed management structure, and this allows us to gather damage intelligence quickly and prioritize the areas where we need to bring in additional assistance. We have people that are designated to interface with emergency responders and government entities, ensuring we are providing the best help for our customers in getting their power restored and providing service to key infrastructure, such as hospitals and emergency shelters. We brought in outside personnel in anticipation of the storms and immediately made requests for assistance after the morning burst of storms and tornadoes. At the peak of our restoration effort, we had about 6,000 personnel from outside Alabama Power Co., including 4,300 outside-crew personnel.

CE: Would you be able to compare this to any other natural disaster you have experienced as an engineer?

Glover: From a concentrated damage to the system standpoint, this was worse than anything I can remember from my 30 years with Alabama

Power. For instance, even though we had more than double the customers out after Hurricane Ivan (825,000), we replaced less than half the number of poles (3,365) than we replaced during the tornado recovery. Also, Hurricane Katrina affected more than 630,000 of our customers but caused us to replace 1,376 poles. In summary, the damage from the April 27 tornadoes surpassed the combined damage from the two worst natural disasters our state has seen in the last 100 years.

CE: Were you at your office? Share your personal story.

Glover: I was at home during the early morning storms and working on service restoration in our storm center at our corporate headquarters when the afternoon storms came through. The F4 tornado that did the major damage in Tuscaloosa and west Birmingham passed a few miles north of the headquarters, and we had to take shelter as it passed.

I was fortunate to not have any family members hurt, but it was difficult to watch on the television as a huge tornado rolled through my hometown knowing that family, friends and neighbors were in the path and that there would be loss of life. Afterward, other than my family, I didn't have time to check on other friends or neighbors that might have been harmed because I had to focus on what we could do to respond.

In some ways, it's easier for us at Alabama Power, because we are fortunate to provide such a vital service. We understand that the best thing we can do is to work as hard and long as we can to restore the power as quickly as possible and try to bring some hope and some sense of normalcy to our friends and customers in the communities that we serve. Also, I have a renewed sense of obligation to do what I can to help those in need and try and to make sure our team at Alabama Power is prepared to respond whenever we are needed.

Selina Lee, BSEE 1990

Distribution Manager of Eastern Division, Alabama Power Co.

CE: Tell about the scope of your job.

Lee: I supervise approximately 220 employees, and we are responsible for serving new customers, managing the day-to-day operation and maintenance of the distribution system, maintaining the reliability of the system and ensuring the safety of employees and the public.

CE: Explain the magnitude of tornado damage impact in your engineering role.

Lee: In my area (Eastern Division), there were 53,932 of our division's 220,000 customers without power following the April 27 storm. We replaced 761 poles, restrung more than 126 miles (665,312 feet) of wire and replaced 340 transformers. We utilized almost 900 outside resources that assisted Alabama

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Alabama Power workers work throughout the Southeast.

Power employees in the restoration. Power was restored to all customers with storm-related outages who could receive service within six days.

CE: How did you begin to prioritize work? Did you have an emergency plan?

Lee: I do have an emergency storm plan for each storm. However, this particular storm was much more devastating than any we experienced in our work history. The April 27 tornadoes destroyed entire feeders. In areas outside Eastern Division, substations were completely destroyed. Our transmission system had the most damage in our company's history.

After storms, we usually find broken poles with wire down and just replace them. The April tornadoes completely wiped out the system such that you could not tell where the pole and line used to be. We had to restake and rebuild the system in many places where the tornadoes touched down.

We prioritize the work based on most critical customers first, including hospitals, water pumping and sewage stations. Not only are we responsible for restoring power but also for housing and feeding everyone involved. With a storm of this magnitude, about 4,000 meals a day were furnished, hotel rooms were managed for all outside help, parking and overnight refueling for 500 large trucks were facilitated, and laundry services were available for the outside help that assisted.

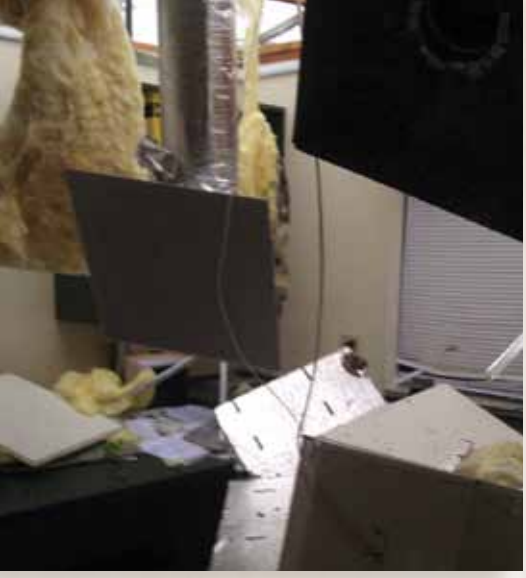
CE: Were you at your office? Share your personal story.

Lee: We knew severe weather was predicted for April 27. When the weather rolled through Wednesday morning, I thought the bad weather was just earlier than predicted and not quite as bad. My peers and I were out of town doing a leadership class for new supervisors. We all discussed the weather and then had a conference call with our corporate headquarters to learn that the National Weather Service said the morning weather was just a prelude to what was coming. Needless to say, we cancelled the class and everyone headed to their home base.

Once I was back in Anniston and in our Operations Center, we were working to restore power to the thousands that had lost power that morning and monitoring the weather as it came across the state. It was a terrible feeling to watch the tornado on the news rip through Tuscaloosa, watch the outage numbers rise and think about everyone you know in Tuscaloosa. I wanted to leave to go help, but I knew I was needed in the Operations Center. I then watched the tornadoes come through Birmingham headed to east Alabama, and I just prayed silently that they would go away. I called my counterpart in Tuscaloosa and could tell by his voice how devastating the tornadoes had been. I spent time at the office from April 27 through May 5 in the storm trouble room. I also made it a priority to visit the crews and employees working in the field with the restoration.

As first responders, our employees witnessed firsthand the tragedy our customers experienced. Our jobs require a servant's heart, and the employees of Alabama Power more than rose to the occasion. I could not be more proud to work for a great company.

Alabama Power workers restore power lines.



Bob Barnett's office in Pell City, Ala.

Bob Barnett, BSCE 1968, MSCE 1971

Principal, Barnett Jones Wilson LLC

Barnett has a slightly different firsthand account of the tornado as his office was destroyed by the April 27 morning storms. As a practicing engineer, his problem-solving skills were vital to his office's immediate survival and recovery.

Barnett: April 27 started off as most other days. I was cutting it close on getting to an early meeting in Birmingham, and I had forgotten some documents I needed, so the extra stop at the office was not going to help. With black clouds on the horizon, I was wondering if I could beat the rain. All of a sudden, the wind really picks up and tree limbs go flying across the road and gravel starts pelting my car. And just as quickly, it is over.

A couple of more blocks to downtown Pell City, I am thinking this is not good as I see insulation all over the street. Turning onto 18th Street, I see the roof of the office is gone. I am immediately concerned about my principal engineering partner, John. When I get to the office, John crawls out from under the conference table.

Our first thought was our data. We gather the server and put it in my car. Fortunately, all of our computers were under our desks, so they were somewhat protected from the rain. By about 3 p.m., everything was out of the office, and we had tarps on the building. All computers were saved, and only monitors and keyboards would have to be replaced. With help from one of our clients, we were able to locate office space so we could immediately move.

Later that afternoon, the insurance company has assigned us a claim number, and I get the first representative call. I am sure she is reading prepared statements, but she starts telling me to remove sensitive equipment and secure the property. Being a gentleman, I tried to be polite, but it was late and I was tired, so I stopped her. "I don't want to be rude, but we are engineers and we know what to do in a disaster. Everything is out of the building, and there is a temporary roof. We have a contractor hired, and we can start rebuilding tomorrow. When will your adjuster be here?" All I hear is, "Oh, uh we will get back to you."

We are told that we were hit by straight-line winds and not a tornado. When your roof is missing from 120 mph winds do you really care? How do I know it was 120 mph? One of our guys had calculated it by the end of the day. Working with a bunch of engineering geeks can be fun.

During the next few days, we do damage assessment and meet with the city about the repairs. Since our building was built in the 1970s, it does not meet current codes or zoning requirements. The city inspector informs us we will need to meet these requirements. We don't have any issues with bringing it up to code, but zoning is a killer. We have to move the building.

Our major frustration has been with working with the insurance company. The first adjuster totaled the building, but his supervisor re-evaluated and insisted upon an engineering evaluation. "Really? You do know what we do!" The engineer assigned was not a licensed engineer. So far, the insurance company has cost us about eight weeks of delays on returning to our building, and we are far from a settlement. We decided we couldn't wait any longer and proceeded with replacing the building.

We have been amazed at the people of Alabama both, in our area and in Tuscaloosa … just friends helping friends, churches helping people, volunteers looking for things to do. Alabama is a great place to live.

create your legacy.

Imagine that you built something lasting. That with your assistance, students graduated from college. And those students became leaders who helped improve the lives of people in their communities, their country and the world.

How can you make this happen? Establish a donor-advised fund at The University of Alabama. **You** recommend grants to support public charities dear to your heart. Like those active in the arts, education, health care and human services. The fund is similar to a charitable foundation, minus the administrative burdens. You receive an immediate tax deduction and investment alternatives that provide choices on how your fund can grow.

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COLLEGE RESPONDS
THROUGH ENGINEERING WORKS

Tragically, the April 27 tornadoes caused loss of life and widespread damage in several states, especially in Alabama. Immediately after the disaster, College of Engineering faculty went to work on two fronts: helping rebuild Tuscaloosa today and improving safety through engineering for tomorrow.

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Left: An apartment complex that was surveyed by the civil engineering team. Right: Drs. David Grau and Andrew Graettinger inspect a tornado-damaged apartment.

From Chain Saws to Trailers — Engineering's First Responders

College of Engineering faculty hit the ground running moments after the tornado struck. From joining chain-saw gangs to organizing supply-relief efforts, faculty and staff prove that service and commitment to community are the living mission of the Capstone.

Chain-saw crews were organized by many local church groups as the first step to help homeowners remove debris. Dr. Tim Haskew, interim head of electrical and computer engineering, and Dr. David Cordes, head of computer science, worked with the Sons of Thunder men's ministry group as part of chain-saw crews for multiple days. With recent electrical engineering and computer science graduates and current students by their sides, the volunteers helped numerous homeowners clear downed trees and begin restoring properties.

In addition to chain-saw crews, Dr. Greg Thompson, associate professor of metallurgical and materials engineering, helped organize a large group of faculty and students and utilized the College of Engineering trailer to move supplies from Holt High School's gymnasium to the Holt Baptist Church donation center. With faculty and students from engineering and the athletics department, it took nearly six hours to move all the donations — a testament to the outpouring of generosity to help those affected.

Improving Safety Through Engineering for Tomorrow

In the wake of this disaster, engineers throughout the country are analyzing building structures and codes in order to design safer and stronger buildings for the future. A research team, consisting of academic researchers, code developers and

professional engineers, received a National Science Foundation Rapid Response Grant for Exploratory Research to investigate and gather data about the damage to, and performance of, wood-frame structures in the affected areas due to strong winds.

The group received the grant because of UA's location to the proximity of the affected areas. The National Science Foundation recognized the urgency with the grant request because this type of data is perishable in that once debris removal begins, there is no way to analyze the performance of the wood structures, said Dr. John W. van de Lindt, the Garry Neil Drummond Professor of Civil, Construction and Environmental Engineering.

The research goal is to better understand the forces generated by large tornadoes and the spatial distribution of Enhanced Fujita Scale rating across the city, as well as make recommendations for design code improvements and general safety guidelines.

The research team inspected the 5.9-mile path affected by the tornado in Tuscaloosa, Ala., on May 2–5 to analyze wood-frame structures that were not damaged by trees. The team was provided clearance from FEMA's engineering division and inspected 150 structures, including single-family homes (one- and two-story) and apartment complexes. Collecting more than 3,000 photos, the team determined the EF-Scale rating in relation to damage for each of the 150 structures, with values ranging from EF0 to EF5, depending on the location within Tuscaloosa.

"Through this multi-university and industry collaboration, we can provide valuable research to help design safer homes," said van de Lindt.

The team will continue working with the National Science Foundation grant and the International Residential Code to begin the process of making changes to ensure load paths are enhanced to better protect the life safety of the occupants.

Water Quality Priorities as Rebuilding Begins

The city of Tuscaloosa is beginning the difficult task of rebuilding almost six square miles of the city, including residential and retail areas. As part of the rebuilding effort, the city has to manage how to enforce current building and water-quality codes for areas that need to be redeveloped. For example, many long-standing retail establishments were built years before the water-quality standards for runoff and storm inlets were enacted. Of course, businesses want to rebuild quickly, and the city wants to uphold landscaping ordinances.

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The College of Engineering trailer being loaded with supplies at Holt High School.

Dr. Jim Richardson (right) works with UA engineering technicians Eddie Appleby (left) and Robert Fanning (center) on the portable safe room.

Redahegn Sileshi (right), a graduate student in civil, construction and environmental engineering, works at one of the test sites in the city.

Dr. Robert Pitt, the Cudworth Professor of Civil Engineering and director of UA's Environmental Institute, is working with the city to develop erosion-control concepts and looking at landscaping options to help with bioretention areas to encourage stormwater infiltration. Pitt's summer class is specifically focused on erosion control and is working at several example locations in the city. The group is also working on a water-quality toolbox to help the small commercial sites meet the current redevelopment requirements. Pitt's fall class will focus on stormwater and will investigate small-scale and integrated controls for some of the retail and residential areas.

Safe-Room Designs

The Federal Emergency Management Agency partnered with the College in May to help design a portable safe room as an example for the Safer Alabama Summit.

Dr. Jim Richardson, associate professor of civil, construction and environmental engineering, led the team in designing the safe room and building the portable example that was displayed on a trailer during the summit. The portable safe room included cutaways of walls so contractors and builders could see the unique design needs of a safe shelter.

After the portable safe room was complete, Richardson then assisted Tuscaloosa Habitat for Humanity with specific safe-room designs that could be incorporated into all new Tuscaloosa Habitat for Humanity homes.

From chain saws to safe rooms, the College of Engineering responded to the devastation by being the best engineers — seeing problems and presenting solutions. From tragedy comes hope, and that hope is through better engineering for our safety in the storm.

UA RESPONDS

THROUGH OUR MISSION OF SERVICE

By Lauren Musselman, Mary Wymer and Cathy Butler

For Tuscaloosa citizens and the UA family, images and accounts of the devastation that occurred on April 27 have been burned into our brains. No one can forget the haunting memories of scrounging for belongings, searching for shelter or the gut-wrenching feelings in our stomachs as we waited to know if our friends and family were safe.

With paralyzing force, the tornado has become a chapter in Tuscaloosa history that will be a part of us for years to come, never to be erased or forgotten. For some, this meant an abrupt end to a college career. For others, the tornado resulted in the loss of loved ones, their homes and everything they owned. However, in times of such harrowing desolation, we must remind ourselves that within every cloud lies a silver lining.

Although it is difficult to call to mind any positive outcome of this devastating event, we must turn to the overarching sense of family and community that has guided our city through this difficult time. Just as any hardship or disaster brings out the best in those affected, we will look back on this tragedy and remember the overwhelming response and valiant efforts of relief from our community and the UA family as we all banned together and proclaimed, "We are Tuscaloosa!"

UA wasted no time in reacting to the tornado and reaching out to its family members. Directly following the tornado, the Tuscaloosa County Emergency Management Agency relocated to the University's emergency operations center in Bryant-Denny Stadium, one of the few areas still with power, phone lines and Internet. Tuscaloosa County EMA's building was one of the many destroyed facilities in the city and county.

The University of Alabama Police Department worked side by side with the Tuscaloosa Police Department, with primary responsibility in the Forest Lake and Cedar Crest areas, two of the hardest hit locations, according to UAPD Chief Tim Summerlin. Throughout the initial recovery period, UAPD served with the Tuscaloosa Police Department, Alabama State Troopers, Alabama National Guard, Alabama Forestry

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Commission, Pelham Police Department and several other law enforcement departments dispatched throughout the area. In addition to manpower, UAPD provided marked police vehicles.

The day following the storm, the University opened the Student Recreation Center as a shelter and Lakeside Dining for students and employees who had been displaced by the storm. In addition to the temporary shelter on campus, Housing and Residential Life began assisting students and staff with temporary housing needs, the 348-RIDE service was offered as a method of transportation, and counseling services were made available. Crimson Ride buses were constantly transporting work crews, first responders and volunteers, as well as ferrying supplies wherever needed.

"It's pretty safe to say this is the biggest philanthropy project the Greek system has ever organized. It's very eye-opening to see the power of the Greek system."
—Patrick Morris

After a surge of questions asking how to help UA and the Tuscaloosa community, on April 29, The University of Alabama established the UA Acts of Kindness Fund, an emergency-assistance program to help provide relief to UA students and employees. These donations are being used to provide assistance to affected students and employees in many formats, including financial assistance and scholarships.

While encouraging the continued outreach to the local community and our peers, UA President Robert E. Witt commended, "Your generosity and acts of kindness are so typical of the UA spirit, and I am proud of the way you have responded to this crisis situation. We will continue to move forward as a family."

While many citizens were volunteering with churches, schools and the local chapters of the United Way and the American Red Cross, UA's Greek system was preparing its own plan of action.

Pioneering the UA Greek Relief program was former SGA president James Fowler and Delta Kappa Epsilon fraternity. Fowler wanted to provide as many hot meals as possible, and he asked fellow fraternity and sorority houses to clean out their kitchens and refrigerators and offer that food to those displaced before the houses were abandoned for the summer.

"The first day we started it was all Greeks," said Patrick Morris, one of UA Greek Relief's directors. "But then two or three days, it became non-Greeks, adults, kids, community members, even people from across the country that joined the UA Greeks in assisting those in need. I'd say we had between 300 and 400 people total working.

"We produced over 52,000 hot meals," Morris continued. "We took the meals all over the city. We went to major shelters and distribution centers, and we also just loaded meals up into cars that handed out workers, members of the military and the victims of the tornado."

Since the tornado hit the city, UA Greek Relief has raised approximately $180,000 for those whose lives were impacted. In addition to the hot meals, UA's Greek system distributed hundreds of thousands of pounds of canned goods, clothes and hygiene supplies.

"It's pretty safe to say this is the biggest philanthropy project the Greek system has ever organized. It's very eye-opening to see the power of the Greek system," Morris said.

UA's Greeks were not the only campus groups lending a helping hand. The UA School of Law Clinical Programs, in conjunction with the Alabama State Bar's Volunteer Lawyers Program and the Tuscaloosa County Bar Association, began offering free legal services on May 5 for those affected by the tornado. The Legal Assistance Project has been providing free legal services both on-site at local area aid centers and at the law clinic programs' office at the UA School of Law. Law students and attorneys have met with more than 200 clients, providing legal advice concerning public benefits and programs, insurance claims and processes, housing rights, and other civil matters related to the storm and the displacement that resulted from it.

The University's various schools and colleges responded in many areas. From the College of Community Health Sciences and the Capstone School of Nursing converging on the emergency department at DCH Regional Medical Center to help in the first hours to the College of Human Environmental Sciences focusing on children in need by distributing toys and diapers and the students in Honors College working with the mayor's office and the Chamber of Commerce of West Alabama developing the Volunteer Registration Center to the College of Continuing Studies' environmental division distributing health and safety advice statewide, the Capstone reached out to fulfill our mission as a University of service. In addition to coordinated efforts, hundreds of individual faculty, staff and students showed up when they saw a need and began to work.

UA alumni Michael Battio, Andrew Cotton and Ryan Davis expressed in the song "5:13" our city's strength through the following line: "So tell me what's next for T-town? Regroup. Rebuild. Recoop. Rebound. Do the same thing we always do when we're down: dig deep, push forward and convert like it's three downs."

And that's exactly what we will do.

If we can learn one thing from this experience it is this: taking pride in our town and looking out for each other. We are turning one of the biggest natural disasters into an opportunity for helping each other and improving the community. Tuscaloosa rebounding.

It will take time, but Tuscaloosa will recover from this devastation and come back stronger and more resilient than ever.

After all, we are Alabama.

UA HONORS DISTINGUISHED ENGINEERING FELLOWS

The College of Engineering honored five alumni by inducting them into its class of 2011 Distinguished Engineering Fellows.

MORE ON THE WEB AT ENG.UA.EDU

Left to right: Daniel K. Glover, C. Stephen Cornelius, Linda G. Blevins, H. Dean McClure and Thomas M. Marr Sr.

Linda G. Blevins, PhD — BSME 1989

Dr. Linda Blevins has devoted more than 22 years to advancing scientific research through various roles as researcher, technical adviser and program director, but more importantly, she has served as a mentor to young women entering technical fields. Through her dedicated efforts and leadership, she was chosen to contribute a chapter to the book "Giving Much/Gaining More: Mentoring for Success," and she was recognized as part of Purdue University's Women in Engineering Program, which received a Presidential Award for Excellence in Engineering Mentoring Programs from President William Clinton. Upon graduating from The University of Alabama in 1989 with a bachelor's degree in mechanical engineering, Blevins continued her education by receiving her master's degree at Virginia Polytechnic Institute and State University in 1992 and then her doctorate from Purdue University in 1996. After serving in positions at the National Institute of Standards and Technology and the Sandia National Laboratories, she joined the U.S. Department of Energy in 2006. The following year, she was named senior technical adviser in the Office of the Deputy Director for Science Programs for the U.S. Department of Energy. In her current role, she provides advice on many aspects of science program management. She also manages the Office of Science Early Career Research Program and represents the U.S. Department of Energy on the Research Business Models subcommittee of the Committee on Science of the National Science and Technology Council.

C. Stephen Cornelius — BSME 1986

For the past 25 years, C. Stephen Cornelius has contributed his knowledge and commitment to the country through his work for the U.S. Army Aviation and Missile Research, Development and Engineering Center. As the director for missile development, he manages the U.S. Army's missile technology programs that help protect our country's armed forces. After receiving his bachelor's degree in mechanical engineering, Cornelius began his engineering career in the systems and warheads division of the Structures Directorate for the U.S. Army Missile Command. In 1999, he received a master's degree in mechanical engineering from The University of Alabama in Huntsville and then earned a master's degree in business administration from the Massachusetts Institute of Technology in 2002. In 2003, Cornelius was named chief of the systems and warheads division of the Aviation and Missile Research, Development and Engineering Center, which he led for the next two years. In 2005, he was named the director of the Propulsion and Structures Directorate, which he oversaw through 2007 when he was appointed as the deputy program executive officer of Missiles and Space. In 2008, Cornelius was named the director for Systems, Weapons Development and Integration Directorate. Currently, Cornelius serves as the director for missile development and manages the missile technology programs, including efforts in exploratory development, concept demonstration and advanced development.

Daniel K. Glover — BSCE 1980

Daniel K. Glover has dedicated 34 years of engineering expertise to Alabama Power Co. throughout his various leadership positions, including vice president of power delivery and distribution, services manager of power delivery, and operations manager. Before graduating with a degree in civil engineering, Glover began his career with Alabama Power as a student engineer. After receiving his degree, he continued with the company as a junior and then senior engineer. In 1990, Glover was named a supervising distribution engineer and two years later became the supervisor of distribution operations. He continued advancing his career through operations, contract services and distribution management areas. In 1999, he was selected to be the first contract services manager. In this role, Glover oversaw the vegetation management program, leading the organization to realize more than $4 million in annual savings. In 2008, Glover became manager of power delivery services, where he was responsible for capital and O&M budgets, distribution planning, distribution engineering systems, metering services, contract services, and the Storm Center. Currently, Glover serves as the vice president of power delivery and distribution. His responsibilities include leading more than 1,700 distribution employees in the design, construction and maintenance of over 80,000 miles of distribution facilities and the Smart Grid development and deployment.

Thomas M. Marr Sr. — BSCE 1954, JD 1957

Thomas M. Marr Sr. earned both his bachelor's degree in civil engineering and his juris doctor at the Capstone. In 1961, he founded the law firm of Marr & Friedlander. Marr has had a distinguished legal career, including election to the Alabama State Legislature, appointment as an assistant attorney general, selection by the Legislature to work on the committee to redraft the Alabama Constitution, and service as a registered lobbyist. Marr has also incorporated engineering into many of his business ventures. He has been involved in land development; home construction; pre-constructed, octo-structure home components; and condominium development. In 1989, he founded DRC Inc., which provides emergency services during natural disasters. After Hurricane Hugo struck Charleston, S.C., DRC provided debris cleanup and spent the next three years working in that area. DRC, which consists of 14 companies, is authorized to do business in most of the United States and has worked emergencies in areas outside the U.S., including the Caribbean, Guam, Haiti, Honduras, Iraq, Kosovo, Kuwait and Somalia. In 1991, Marr formed a company that went into Kuwait to provide assistance to various companies from all over the world that were extinguishing oil-well fires and removing bombs and other ordinances to re-establish the destroyed parts of that country.

H. Dean McClure — BSCE 1985

For the past 25 years, H. Dean McClure has made numerous contributions to the civil engineering field through his work with TTL Inc., a diverse environmental and geotechnical consulting and testing firm. McClure graduated in 1985 with a bachelor's degree in civil engineering. After graduation, he began his career with TTL, eventually becoming president and chief executive officer. He is responsible for 200 employees in six offices across Alabama, Georgia and Tennessee. Beginning in 1985, McClure has spent virtually his entire career at TTL. During his tenure with the company, he has been involved in numerous projects, including the UA Bryant Denny Stadium west addition, UA's Bruno Business Library, the DCH emergency room addition and site preparation for the Mercedes-Benz U.S. International plant. In addition, McClure is a strong proponent for education and has led TTL's commitment to involvement in community service through education. His company is a longtime adopt-a-school partner, and he and the leadership team have spearheaded the TTL Accelerated Reader Program, which provides reading initiatives at schools that have low reading scores. In 2008, TTL honored McClure for his support of education by endowing the H. Dean McClure scholarship at UA, which provides scholarships to deserving young men and women in civil engineering.

McGaha Awarded Outstanding Alumni Volunteer Award

Nancy Holmes (left), CES manager, with J. Ray McGaha (center) and his wife, Patricia (right).

The College of Engineering awarded J. Ray McGaha with the 2011 Outstanding Alumni Volunteer Award.

Throughout his career, McGaha has demonstrated his love and loyalty to UA by serving on the Capstone Engineering Society board and recruiting prospective students.

During his tenure as a member of the Capstone Engineering Society board, McGaha helped the College better understand the viewpoint of major engineering industries and how the College can better prepare students to enter the workforce. In addition, McGaha helped identify and nominate new CES board members.

McGaha has been an adamant supporter of the College of Engineering through his recruiting efforts. He regularly identifies outstanding students from the Winfield, Ala., area, arranges campus tours and escorts prospective students on recruiting trips. He continues to serve as a role model and mentor for many students after they choose the Capstone and begin their engineering careers.

McGaha received his bachelor's degree in mineral engineering from the Capstone in 1966, and in 1988 he was named a UA Distinguished Engineering Fellow. He joined Continental Conveyor and Equipment Co. shortly after graduation. He served the company for 37 years in various positions, retiring as senior vice president of sales and engineering.

BIG THANKS

We appreciate our recent partners in UA's College of Engineering family for their support of our students and programs.

- **American Cast Iron Pipe Co.** for continuing support of the ACIPCO Engineering Scholarship Program
- **Boeing Corp.** for continuing support of the Boeing Corp. Scholarship and the Boeing Corp. Multicultural Engineering Scholarship
- **Brasfield & Gorrie LLC** for continuing support of the Brasfield & Gorrie Founders' Scholarship, the Brasfield & Gorrie Endowed Support Fund and the Brasfield & Gorrie Discretionary Fund
- **Dr. Robin B. and Mr. William P. Buckelew** for establishing the William P. and Robin B. Buckelew Endowed Engineering Scholarship
- **CDG Engineers & Associates** for continuing support of the CDG Engineers Civil Engineering Scholarship
- **Mr. and Mrs. Clint S. Coleman** for continuing support of the Clint S. Coleman Endowed Engineering Scholarship
- **Golden & Associates Construction LLC** for continuing support of the Golden & Associates Endowed Support Fund and the Golden & Associates Construction LLC Engineering Scholarship
- **Google Inc.** for support of the Computer Science Gift Fund
- **Hattemer, Hornsby & Bailey P.C.** for establishing the Bailey-Hattemer Endowed Engineering Scholarship
- **Mr. and Mrs. Kevin M. Hostler** for establishing the Becky and Kevin Hostler Endowed Engineering Scholarship
- **Mr. and Mrs. George M. Jones III** for continuing support of the George Merrill Jones III and Carole Jurenko Jones Endowed Scholarship
- **Tom D. Kilgore** for continuing support of the Myra Blevins Kilgore Endowed Scholarship
- **Mr. James C. Lewis** for continuing support of the James C. Lewis Endowed Scholarship
- **Mr. Guy K. Mitchell** for continuing support of the Guy K. Mitchell Jr. Endowed Scholarship
- **Mr. G. William Quinby** for continuing support of the G. William Quinby Endowed Engineering Scholarship
- **Mr. and Mrs. John S. Richardson** for establishing the John S. and Suzanne R. Richardson Engineering Scholarship
- **URS Energy & Construction Inc.** for support of the Civil, Construction, and Environmental Engineering Gift Fund
- **Von Braun Center for Science and Innovation** for continuing support of the Student Rocketry Support Fund
- **Vulcan Materials Co.** for continuing support of the Vulcan Materials Co. Endowed Support Fund
- **Ms. Ferne Wlodarski** for establishing the M. Ferne Wlodarski Support Fund

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Choose from polo shirts, coffee mugs, baseball caps and more. Profit generated from the sale of these items contributes to the Capstone Engineering Society, which provides scholarship funds to UA's College of Engineering.

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THE UNIVERSITY OF
ALABAMA
ENGINEERING

MTE PROFESSOR NAMED TMS PRESIDENT

Dr. Garry W. Warren, professor of metallurgical and materials engineering, has been named president of TMS, The Minerals, Metals and Materials Society. Warren has been an active TMS member for more than 30 years, serving as director of publications, financial planning officer, member of the executive committee and vice president. He also served for a number of years as the faculty adviser for UA's Materials Advantage Student Chapter, which received five Chapter of Excellence Awards.

MIDKIFF RECEIVES UA ENGINEERING'S HACKNEY LEADERSHIP AWARD

The College of Engineering announced Dr. K. Clark Midkiff Jr., professor and director of UA's Center for Advanced Vehicle Technology, as the 2011 T. Morris Hackney Endowed Faculty Leadership award recipient. The award honors a faculty member who exemplifies the constant guidance and leadership necessary to make UA's College of Engineering exceptional.

Midkiff began working at the Capstone in 1986 as an assistant professor of mechanical engineering. In 1991, he was promoted to associate professor, and in 2006 he achieved the rank of professor. In 2011, he was named interim head of the mechanical engineering department.

Midkiff has gained a variety of experience in automotive engineering through his studies of engine combustion using natural gas and diesel fuels. In 2002, he was named director of UA's Center for Advanced Vehicle Technology, which assists in the development of efficient, safe, secure and environmentally friendly vehicles. Under his leadership, the center has experienced tremendous growth of research grants. Midkiff has been awarded numerous externally funded research grants, and he has more than 50 reviewed publications and more than 44 conference presentations.

Improving the Capstone has also been a high priority for Midkiff through his service on numerous University committees. He has been involved with UA's Faculty Senate, currently serving as the president. Midkiff also serves on UA's Intellectual Property Committee and the Intercollegiate Athletics Committee, and he is the adviser for UA's Pi Tau Sigma National Mechanical Engineering Honorary, UA's Theta Tau Engineering Professional Fraternity and the India Association of Tuscaloosa.

This award was created as a tribute to T. Morris Hackney and was made possible by the contributions from John H. Josey and his son, Howard Josey.

PROMOTION AND TENURE

The following faculty received promotions or tenure this year:

Dr. Peter Clark, professor of chemical and biological engineering

Dr. Paul Hubner, associate professor of aerospace engineering and mechanics

Dr. Amy Lang, associate professor of aerospace engineering and mechanics

Dr. Steve Shepard Jr., professor of mechanical engineering

Dr. Jialai Wang, associate professor of civil, construction and environmental engineering

RETIREMENTS

Dr. Robert Davis

After 10 years of service, Dr. Robert Davis, professor of civil, construction and environmental engineering, retired in December. Davis began at the Capstone in 2001 as professor and head of industrial engineering and moved to the department of civil, construction and environmental engineering in 2007. Davis is the author of five books, and he has published more than 60 refereed journal articles and over 50 conference papers.

Dr. Duk-Won "Duke" Park

After 30 years of service, Dr. Duk-Won "Duke" Park, professor of civil, construction and environmental engineering, retired in May. Park began at the College in 1981 as an assistant professor and was named associate professor in 1988 and professor in 1996. He has extensive experience in the areas of geotechnical and mining engineering, and his research interests include cover soil and rock mechanics analysis, development of rock and soil testing methods, underground and surface stability, blasting engineering and ground control associated with longwall and conventional mining. Park has published or presented more than 110 refereed journal articles and conference papers. In addition, he holds four international patents in the area of mining engineer.

Dr. Joey Parker

After 25 years of service, Dr. Joey K. Parker, associate professor of mechanical engineering, retired in May from the Capstone. He began at the Capstone in 1985 as an assistant professor and was named associate professor in 1991. His research interests involve the development and application of microprocessor-based controls and instrumentation to a variety of mechanical and electro-mechanical systems, including industrial robotics, electro-mechanical actuators, noise control of variable-speed drives and performance evaluation of LED warning signals for railway-highway crossings. Parker has published or presented more than 75 refereed journal articles and conference papers. In addition, he holds two U.S. patents in the area of robotics engineering.

Lyndall Wilson

Lyndall Wilson, administrative secretary in the department of metallurgical and materials engineering for 15 years, retired in April. She had 25 years of service at the University, serving her first 10 years with the Culverhouse College of Commerce and Business Administration. She assisted faculty for many years in purchasing supplies and equipment, processing paperwork for student hires and balancing grant funds.

GOOGLE AWARDS UA COMPUTER SCIENCE GRANT

Google awarded Dr. Jeff Gray, associate professor of computer science, a $15,000 grant to fund a computer science program for high school teachers that was held on July 25–27. UA was one of a few universities to receive the grant, and it was one of only two schools in the Southeast to receive the honor.

The Computer Science for High School program, or CS4HS, an initiative sponsored by Google, aims to promote computer science education. With a grant from Google's Education Group, universities worldwide receive funding for three-day workshops for high school teachers.

During UA's workshop, about 20 high school teachers throughout Alabama and the Southeast learned how to develop Android applications and were informed about emerging computer science curricula. The workshop focused specifically on Scratch and Google's App Inventor. Scratch is a programming language geared toward young people. It allows users to easily create interactive programs, animations, games, music and art that can be shared on the Web. Google's App Inventor is a visual block language that can be used to easily create Android apps.

ENGINEERING HOSTS SECME SUMMER INSTITUTE

The College of Engineering hosted the 35th Annual Southeast Consortium for Minorities in Engineering Summer Institute on June 19–26. About 90 middle and high school math and science teachers and more than 120 students from schools throughout the nation participated in more than 50 events. SECME's Summer Institute is the only professional development institute dedicated to bringing K-12 educators, university faculty, and industry and government experts together to contribute unique perspectives on equity and inclusion initiatives with a focus on learning and doing science, technology, engineering and math.

PULITZER WINNER, AUTHOR THOMAS FRIEDMAN VISITS UA

Thomas L. Friedman, internationally renowned author, reporter and New York Times columnist, visited UA on Feb. 22. Friedman, the recipient of three Pulitzer Prizes and the author of five bestselling books, among them "From Beirut to Jerusalem," "The World Is Flat," and "Hot, Flat, and Crowded," spoke at an evening presentation open to the public after meeting with UA students for a presentation and a question-and-answer session at the Ferguson Student Center in the afternoon.

Friedman's visit was sponsored by a coalition of UA entities, including the Culverhouse College of Commerce and Business Administration, College of Arts and Sciences, College of Engineering, College of Continuing Studies, Office of Academic Affairs, Office of Research, Honors College, School of Social Work, Office of Student Affairs, Graduate School, University Libraries, College of Education and College of Communication and Information Sciences.

NSF SELECTS THREE UA STUDENTS FOR 'HIGHLY COMPETITIVE' FELLOWSHIPS

The National Science Foundation selected three University of Alabama students for its Graduate Research Fellowship Program. The awards, up to $121,500 per fellowship, according to NSF, come with annual stipends to be used in the pursuit of a research-based master's or doctoral degree.

Zachary Coppens, a senior studying mechanical engineering, and Rachel McCarty, a graduate student pursuing a doctorate in engineering, were two of the three UA students selected.

Coppens' academic research has focused on mesoscale solid rocket motors by analyzing experimental thrust profile data using chaos theory applications. Dr. John Baker, professor of mechanical engineering, was his faculty adviser and one of his research mentors.

McCarty, who earned her bachelor's degree in mechanical engineering from UA in 2007, has focused on engineering and the human body through multiple projects in her academic research. Her dissertation project involves working with the human vestibular system, testing balance and the inner ear. Dr. Keith Williams, associate professor of mechanical engineering, has been her adviser.

UA SCORES HIGH IN ACADEMICS WITH TWO HOLLINGS SCHOLARS

UA's best and brightest students are once again being nationally recognized for their top-notch research. Two UA students will receive the prestigious and highly competitive National Oceanic and Atmospheric Administration Ernest F. Hollings Undergraduate Scholarship for 2011-12. Sarah Johnson, a mechanical engineering major, is one of UA's two recipients.

The scholarship provides $8,000 per year for full-time study during the junior and senior years and $6,500 for a 10-week internship at NOAA or an NOAA-approved facility during the summer between the junior and senior years. The Hollings scholarship is given in addition to existing awards the student may already receive.

Johnson's undergraduate research is focused on testing the efficiency of alcohol-based fuels and developing methods to improve their startability and efficiency. Upon graduation, her goals include earning a master's degree and doctorate in mechanical or aerospace engineering.

ENGINEERING STUDENTS LAUNCH ROCKET FOR NASA COMPETITION

The Rocket Girls, an all-female team of engineering students, fired its first rocket in the 2011 NASA University Student Launch Initiative in Huntsville, Ala., on April 16. The Rocket Girls geared up for this competition in the fall, submitting designs to NASA, and were selected to compete against 30 teams nationwide. The team designed, built and safely launched a reusable rocket.

The team received the Education Engagement Award for inspiring the study of rocketry and other space-related topics. The team held 19 events during the school year, reaching 3,200 students in local classrooms and community groups. The team also won a team spirit award.

AEM STUDENTS COMPETE IN AIRCRAFT CONTEST

Most children play with toy airplanes during their childhoods, but these kids typically do not grow up and build their very own aircraft. However, the Crimson Hawx, a team of aerospace engineering students, has done just that. The team competed with its airplane in the AIAA Student Design/Build/Fly competition on April 15–17 in Tucson, Ariz. The team designed and built a radio-controlled aircraft that demonstrated balance and good flight handling on a specified mission. The team's success depended on aircraft performance along with a practical and affordable design. The team received a $5,000 grant from the Alabama Space Grant Consortium.

MTE STUDENTS RECEIVE AWARDS AT AFS STUDENT CASTING COMPETITION

Two teams of metallurgical and materials engineering students competed in the AFS Student Casting Competition. Team 1 won first place with their A356 Impeller and Team 2 won second place with their cast iron skillet.

PREMIER AWARDS FOR SCHOLARSHIP, LEADERSHIP ANNOUNCED AT UA

Recipients of the 2011 Premier Awards — the top individual honors for scholarship, leadership and service at the Capstone — were announced by President Robert E. Witt at an awards ceremony and dinner on Feb. 24. Darryl A. Outlaw, who is majoring in chemical engineering, received the Catherine Johnson Randall Award, which recognizes the most outstanding student scholar at UA, based on GPA, rigor of course study and extraordinary scholarly or creative endeavor.

An exceptional student who has maintained a GPA above 4.0 while taking some of the University's most rigorous courses as a chemical engineering major, Outlaw has combined the highest level of undergraduate research with public service and leadership. His scholarly research, accomplished as part of a computational chemistry research group, focuses on the development of new materials for the chemical storage of hydrogen for use in fuel cells. A previous winner of the Randall Outstanding Undergraduate Research Award and the Computer-Based Honors Program Outstanding Undergraduate Researcher Award, Outlaw is also a University Fellow and a founding member of the Black Belt Experience, a program he says "taught me invaluable life lessons outside the classroom and gave me a passion to enter a career in service to others."

Ode to the Evaporator

By Natalie Summers
Senior majoring in chemical engineering

Evaporator all shining and new
Ensuring that chemicals do not spew
Creating new experiments for students to try
Making sure it never runs dry

Balancing materials and energy galore
Elementary experiments will be no more
Promising no corrosion will exist
Fun and challenges will be in our midst

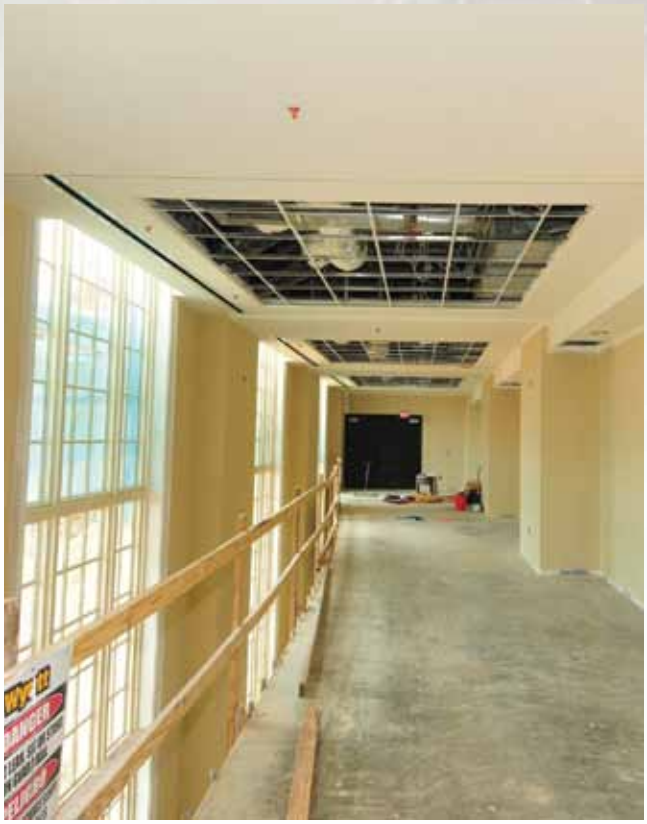
DDPs proposes manual control
Giving each student a vital role
While the price is a little stout
Students from UA will stand out

Accepting the bid will bring much success
Valuable knowledge students will possess
All different chemicals can be run
Three-nineteen guaranteed to be more fun!

CONSTRUCTION UPDATE

More photos online at
eng.ua.edu/buildings

South Engineering Research Center
Opening January 2012



CONSTRUCTION UPDATE

Science and Engineering Complex Phase IV
Opening Summer 2013

Jobs/ Promotions/ Awards

1963

William Allen Dark, BSCE '63, released his new novel, "Pinedale Incident."

1966

James V. French, BSME '66, MSESM '68, PhD '70, was appointed as vice president for launch systems for SGT Inc.

1974

David J. Minor, BS '74, BSCE '76, MSMinE '80, was appointed as executive director of operations for Far East Energy Corp. in Houston, Texas.

1975

Jane C. Ammons, PhD, BSIE '75, MSIE '78, was recently named the chair of the H. Milton Stewart School of Industrial Engineering at the Georgia Institute of Technology. She is the first woman school chair in the history of the College of Engineering at Georgia Tech. Ammons was named a UA Distinguished Engineering Fellow in 1993.

1979

Mark Zickos, BSIE '79, was named to the Trucker Buddy International board of directors. Zickos is the national transportation asset manager for Frito-Lay.

1980

Mike Wolfe

Mike Wolfe, BSChE '80, was appointed chief information officer for AMD. He is responsible for the firm's global technology infrastructure.

1981

Ronald W. Gray

Ronald W. Gray, BSME '81, was recently inducted as a UA Department of Mechanical Engineering Fellow.

1982

Pierce H. Norton

Pierce H. Norton, BSME '82, was named chief operating officer of ONEOK Inc. in Tulsa, Okla. He is responsible for the company's distribution and energy services business segments, as well as the environment, safety and health, and technical services organizations.

1983

George W. "Bill" Prigge, PhD, BSME '83, was recently appointed as the vice president for business and finance at Southern Polytechnic State University in Marietta, Ga.

1986

C. Stephen Cornelius

C. Stephen Cornelius, BSME '86, was recently inducted as a UA Department of Mechanical Engineering Fellow and a UA College of Engineering Distinguished Engineering Fellow.

Lars Ericsson, BSAE '86, was named the Redstone-Huntsville Chapter of the Association of U.S. Army's Civilian of the Year. He will now represent the Huntsville chapter in the competition for the Third Region Civilian of the Year and possibly compete in the national awards. Ericsson is the chief technologist and lead architect for the Army's unmanned aircraft systems.

1987

Jonathan Mark Darden, BSME '87, MSME '89, was recently inducted as a UA Department of Mechanical Engineering Fellow.

Tammie Williams, BSEE '87, was named to the Pell City Board of Education.

Steven James Wofford, BSME '87, was recently inducted as a UA Department of Mechanical Engineering Fellow.

1989

Michael Turner, BSME '89, MSME '92, was recently inducted as a UA Department of Mechanical Engineering Fellow.

Scott Wales, BSChE '89, was named a new litigation partner with Hogan Lovells US LLP in the firm's intellectual property practice in San Francisco, Calif.

1996

Artis Brown, BSCE '96, is featured in Exxon Mobil Corp.'s latest national television advertising campaign. Check out the video at http://www.exxonmobil.com/Corporate/news_ad_us11_oilsands.aspx.

Michael D. Davis, BSCE '96, MSCE '98, an associate engineer with Structural Design Group Inc., was named a "Top 40 Under 40" by the *Birmingham Business Journal*. The annual awards honor the best and brightest young professionals in Birmingham, Ala.

1997

Johnny Howze, BSME '97, was recently inducted as a UA Department of Mechanical Engineering Fellow.

2005

Robbie Laney, BSMtE '05, MS '07, was promoted to product manager at Fontaine Fifth Wheel. In this role, he will manage all new product launches, integrating efforts of the manufacturing, engineering and purchasing teams.

2007

David Holt

David W. Holt, BSChE '07, MSChE '09, JD '10, joined Bradley Arant Boult Cummings LLP as a first-year associate and will serve as a member of the litigation practice group.

2010

Zachariah I. Jaime, BSME '10, accepted a position as a mechanical engineer with Forsythe and Long Engineering Inc.

RAMSAY FAMILY CONTINUES LONG ENGINEERING TRADITION

Robert McLester Ramsay earned a civil engineering degree from The University of Alabama in 1949. At that time, Ramsay was a second-generation engineer, with his father having received a mining engineering degree from Leigh University and his uncle serving as a leading engineer and businessman in coal mining in Alabama. The family tradition continued with Robert's son, Erskine Ramsay II, receiving his civil engineering degree in 1973, and most recently with Erskine Ramsay III receiving dual degrees in civil and construction engineering in 2010.

IN MEMORY

John B. Bomar Jr.

Col. John Ben Bomar Jr. passed away on March 23, 2011, in San Antonio, Texas. Bomar received a bachelor's degree in chemical engineering in 1964. After his retirement from the military, he joined Biodynamic Research Corp.

Scott M. Jenkins

Scott M. Jenkins, a freshman mechanical engineering major from Mobile, Ala., died on April 7, 2011.

William D. "Bill" Jordan, PhD

Dr. William D. "Bill" Jordan, professor emeritus of mechanical engineering, died on April 3, 2011. Jordan received his bachelor's degree in mechanical engineering from UA in 1942. After he received his degree, he was ordered to active duty as a second lieutenant in the U.S. Army for which he served from 1942 to 1946. He returned to the Capstone and obtained his master's degree in civil engineering in 1949 and then earned a doctorate in theoretical and applied mechanics from the University of Illinois in 1952.

Jordan joined UA's faculty in 1946 as an instructor of engineering mechanics, and he remained on the faculty until his retirement in 1986. During that time, he rose through the ranks to the position of professor and served as a department head. He received several awards for outstanding teaching and was one of the earliest faculty members to acquire outside sponsorship for research.

Following his retirement, he was recognized as a College of Engineering Distinguished Engineering Fellow. In 1986, the William D. Jordan Endowment for Engineering Mechanics fund was established by his friends, former students and colleagues to support UA's engineering mechanics program. In 1997, a former student, Thomas Patterson, established the William D. Jordan Endowed Chair in the College in his honor.

Memorials may be made to the William D. Jordan Endowment for Engineering Mechanics. If you would like to make a donation, please mail it to Brandi Lamon, The University of Alabama College of Engineering, Box 870200, Tuscaloosa, AL 35487-0200.

Charles R. Kellermann Jr.

Charles R. Kellermann Jr. passed away on April 11, 2011, in Ann Arbor, Mich. Kellermann received a bachelor's degree in metallurgical engineering from the Capstone in 1961 and then completed his master's degree at the University of Wisconsin-Madison. He began his career in metallurgical engineering at Climax Molybdenum in Ann Arbor. He then worked at Tecumseh Products for many years before retiring in 2001. He served as a director of Lodge Manufacturing Co. for 13 years.

Gordon B. McKay, PhD

Dr. Gordon B. McKay, professor emeritus of mechanical engineering, died on Feb. 14, 2011, in Tuscaloosa, Ala. Before joining the faculty at UA, he received his bachelor's degree from the University of Maine and a master's degree and doctorate from Columbia University. He was a member of Tau Beta Pi, Sigma Xi, the American Society of Mechanical Engineers, the American Helicopter Society, the American Institute of Aeronautics and Astronautics, and the Alabama Society of Professional Engineers.

Ralph Waldo Murphy Sr.

Ralph Waldo Murphy Sr. passed away on Sept. 16, 2010. He earned a bachelor's degree in industrial engineering in 1949 and then completed his master's degree in education in 1955. He was a founding member and instructor of UA's Osher Lifelong Learning Institute.

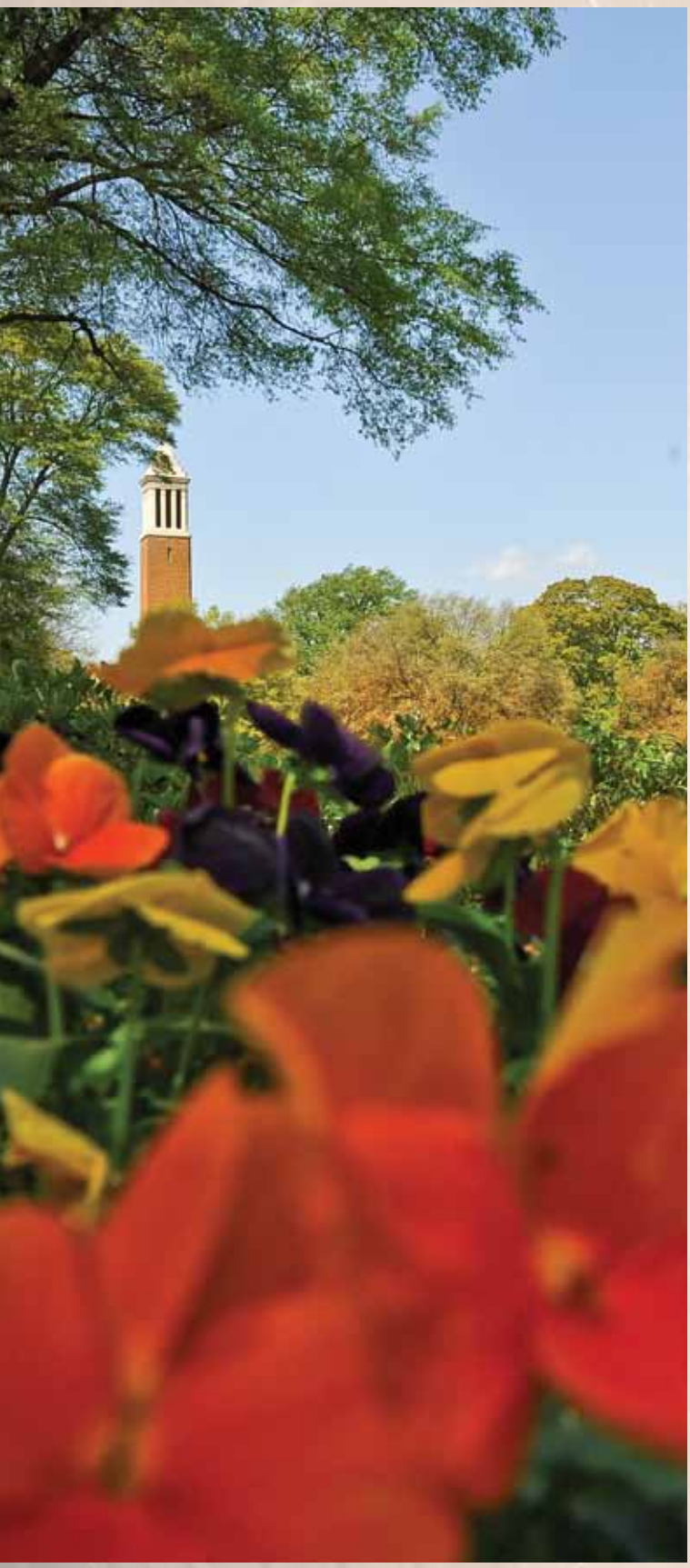
James V. Walters, PhD

Dr. James V. Walters, professor emeritus of civil and environmental engineering, died on April 24, 2011. Walters received his bachelor's and master's degrees in civil engineering from the Georgia Institute of Technology in 1955 and 1958, respectively. He began teaching at the Capstone in 1959 and left briefly while he earned his doctorate at the University of Florida in 1963. He returned to UA and taught until his retirement in 1994. While at UA, Walters was instrumental in starting the environmental engineering graduate program.

Walters was an active member of 10 professional organizations and was a registered professional engineer in 19 states. He was engaged in a consulting capacity by more than 120 different engineering firms; municipal, county and state governments; industries; and legal practitioners.

Memorials may be made to the James V. Walters Endowed Scholarship in Civil and Environmental Engineering, which was established upon his retirement in 1994 by his friends, former students and colleagues. If you would like to make a donation, please mail it to Brandi Lamon, The University of Alabama College of Engineering, Box 870200, Tuscaloosa, AL 35487-0200.

FRIENDS WE WILL MISS



William D. Antrim,
BSEE '63, died on June 7, 2011.

Jerry V. Bell,
BSMinE '65, died on Jan. 27, 2011.

William S. Brosier,
BSME '48, died on May 24, 2011.

Walter Woolf Burdin,
BSCE '53, died on May 30, 2011.

William Tarrell Cox Jr.,
BSEE '69, died on Feb. 12, 2011.

M. Daniel Dickens,
BSMtE '83, died on April 9, 2011.

Donald R. Geehring,
BSAE '39, died on Feb. 15, 2011.

Nelson R. Graves,
BSME '69, died on June 10, 2011.

Dennis W. Griffith,
BSIE '73, died on April 23, 2011.

William A. Hagen,
MSIE '68, died on March 17, 2011.

Charles H. Hammond,
BSChE '42, died on May 9, 2011.

Frank M. Hawkins Jr.,
BSEE '51, died on June 5, 2011.

Louis Randall "Bay" Hollinger,
BSME '43, died on April 19, 2011.

Harwell L. Holmes,
BSAE '62, died on May 6, 2011.

Capt. Arthur Komorowski,
BSChE '41, MSChE '46, died May 12, 2010.

Thomas W. Ozbirn,
BSIE '50, died on April 17, 2011.

Jerry M. Praytor Jr.,
BSMinE '62, died on March 27, 2011.

Thomas E. Smith,
BSIE '49, died on May 23, 2011.

Weston H. Werst,
MSIE '50, died on June 23, 2011.

James C. West,
BSAE '60, died on May 6, 2011.

Michael P. Zyne,
BSME '48, died on May 9, 2011.

CES Hosts Networking Reception

UA engineering graduating seniors attended a networking reception hosted by the Capstone Engineering Society on March 3. The CES board designed the reception to help seniors transition to the engineering profession by engaging students with alumni in their particular disciplines and holding a panel discussion.

MTE Alumni Luncheon Brings Back Memories

On March 11, the department of metallurgical and materials engineering hosted an alumni lunch. More than 60 alumni attended and toured the department facilities, including classrooms and laboratories.

Computer Science Summer Camp

UA's department of computer science hosted a three-week series of computer science camps for rising sophomores through seniors. Students learned to program a computer in several contexts, such as robotics control and smartphone programming, while studying multiple topics of computer science. The first week of camp, June 6–10, provided an introduction to programming with Java; week two, June 13–17, focused on robotics; and week three, June 20–24, focused on Android smartphone application development.

SITE Students Experience Engineering

The College hosted two weeks of SITE, or Student Introduction to Engineering, in July for high school students who have an interest in science, mathematics and engineering.

COE Does ART Presents 'Joseph and the Amazing Technicolor Dreamcoat'

Dreaming of amazing, Technicolor entertainment? The College of Engineering Does Amateur Radical Theatre staged "Joseph and the Amazing Technicolor Dreamcoat" on April 15–16.

COE Does ART, a student-led organization established in January 2007, provides engineering students with the opportunity to display their talents in a way that might not otherwise be available. The group aims at disproving the stereotype that engineers are not capable of producing creative works of art.

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+

A FANTASTIC MEAL

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COLLEGE OF ENGINEERING HOMECOMING TAILGATE PARTY

All engineering alumni and friends are invited to join us as we carry on an engineering tradition of the homecoming tailgate party. The College of Engineering Tailgate Party will be Oct. 8 from 9 a.m. to 11:30 a.m. on the Science and Engineering Quad. Join us as we cheer for the Crimson Tide against the Vanderbilt Commodores. ***Roll Tide!***

Visit eng.ua.edu/alumni/homecoming.

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