

# Arkansas Professional

# ENGINEER

Official Magazine of the American Council of Engineering Companies of Arkansas & the Arkansas Society of Professional Engineers

## Mr. Presidents

Lane Crider of McGoodwin, Williams and Yates, left, takes over as ASPE's president, while Garver's Bert Parker will lead ACEC/A in 2013-14.

Also inside: A history of the ACEC/A  
by Bill Graham.

PRSR STD  
U.S. POSTAGE  
PAID  
LITTLE ROCK, AR  
PERMIT #2437

ACEC/A ASPE  
Union Plaza Building  
124 West Capitol, Suite 712  
Little Rock, AR 72201

# Great start to a new year for engineers

We're only a couple of months into 2013-14, but it's obvious we're going to have a great year. Our associations are as strong as our leadership, and I know that Garver's Bert Parker, president of ACEC/A, and ASPE's president, Lane Crider of McGoodwin, Williams and Yates, will do a great job.

Our next big upcoming event is the ACEC/A Agency Forum Dec. 13 at Garver. Plans are still being made, but as in past years, this one-day event will give engineers a chance to hear from leaders of the Highway Department, Department of Environmental Quality, and other key agencies related to infrastructure. While it's important that engineers hear from these policy makers, it's equally important that they hear from us. Please come join the conversation on Dec. 13.

This year's Emerging Leaders program has already had its first session, Leadership and Team Building. Emerging Leaders brings together young engineers and other design professionals to practice right-brain communication, creative and leadership skills that aren't always taught in college or training classes. This first session featured a ropes course and was a lot of fun for everyone involved. Future seminars will focus on public speaking, conflict resolution, and topics related to business and government. These four-hour sessions are a big commitment, but



**Angie W. Cooper**  
Executive Director

both the participants and their employers will benefit from the investment.

Speaking of emerging leaders, I was privileged to attend the first meeting of the ASPE's University of Arkansas Student Chapter Sept. 9. The meeting attracted a good crowd despite other engineering-related student groups scheduling events that same night. The young people heard a presentation about how licensure will improve their employment opportunities. The students came because they are interested in their profession and enthusiastic about their futures, and it didn't hurt that there was free pizza and sodas – even RC Colas.

This year's UA Student Chapter president, Johnathan Blanchard, is a perfect example of what is great about the engineering profession. A native of Lamar,

Missouri, he decided to pursue engineering after traveling on church mission trips with engineers. As he told us, "A lot of times we had a civil engineer, and they always seemed like real fun guys, and I liked their personality; I liked hanging out with them. And I was interested in the work. That's really what turned me on to civil engineering."

Johnathan decided after those church trips with engineers to use a civil engineering degree either to help poor countries develop their infrastructure or help communities rebuild after a disaster. Never underestimate the power of a good example.

Johnathan said that student chapters are the key to involving young people in ASPE. If students get involved early, he said, they'll remain so once they enter the profession. He's right. I suspect he'll be a leader for many years to come.

Looking ahead, the ACEC/A's Engineering Excellence Awards will be Feb. 27 at the Governor's Mansion. See the display ad on page 16 for more information. The ASPE Annual Conference will be May 22-23 in Northwest Arkansas.

Finally, our website, [arkansasengineers.com](http://arkansasengineers.com), has been vastly improved. It's more attractive and functional, and it's being updated with engineering news and events, including online copies of this magazine. Check it out.

## Same Water. **New Solutions.**

### **NEW WATER SYSTEMS**

- **Distributor & Manufacturers Representative of Engineered Wastewater Systems**
- **Operation & Maintenance of Small Wastewater Treatment Systems**
- **Large & Small Municipal Systems**
- **Pressure Sewer Collection Systems**
- **Sewer Systems for Private Industry, Camps, Churches, Retail, and Residential**
- **Serving Arkansas for 10 years**



**501.888.0500 | [www.newwatersystems.com](http://www.newwatersystems.com)**

# Arkansas Professional / ENGINEER

Official Magazine of the American Council of Engineering Companies of Arkansas & the Arkansas Society of Professional Engineers



**18** *Lane Crider, P.E., ASPE president, left, and Bert Parker, P.E., ACEC/A president, say they want to increase active membership in their organizations.*

## Departments

- 2 Executive Director's Column
- 4 ACEC/A President's Column
- 5 ASPE President's Column
- 6 In the News
- 7 Calendar
- 7 ACEC/A Associate/Affiliate Members
- 8 Advertiser Index
- 17 From the Governor
- 23 Marketplace

## News and Features

- 9** **UA Chapter engages future engineers**  
Fayetteville ASPE group has good start to a new year.
- 10** **Member Spotlight / McClelland Consulting Engineers**  
After 50 years, firm still a reflection of its founder.
- 11** **Griffin: Pipelines still safest oil route**  
State's Second District congressman says that, despite problems, pipelines preferable to other means of moving oil.
- 12** **ACEC/A - The early years**  
A history written by engineer Bill Graham traces the association through its first 25 years.
- 18** **Cover story / Lane Crider**  
ASPE's new president says involvement in the association was never optional once he joined the firm of McGoodwin, Williams and Yates. He wants to increase ASPE's active membership this year.
- 19** **New Emerging Leaders class begins**  
Group builds trust on ropes course; seven sessions remain.
- 20** **Cover story / Bert Parker**  
ACEC/A's president passes 14 projects he helped design when traveling between Little Rock and Huntsville, Ala. Now, he's focusing on building Garver – and the ACEC/A.
- 22** **Risk management is everyone's job**  
Small firms can benefit if more sets of eyes keeping watch.



**Bert Parker**  
ACEC President

## One challenge – engaging engineers

Crowds at any football stadium know what to do when the visiting team has the ball on fourth down and short: Make a lot of noise with one voice in order to distract the opposing offense.

Football fans know how powerful one voice can be. The state's engineering community? Not so much. Let's fix that.

Roughly 40 consulting engineering firms are members of ACEC-Arkansas. That includes most of the state's prominent firms but a minority of the firms statewide. Our industry has a diluted voice among legislators and regulators. On vital issues, some fans are cheering and leading the fight while the rest are in the concession line buying hot dogs. Meanwhile, other interests are making their wishes known loud and clear. Guess who policy makers pay most attention to?

We saw the results during this past legislative session. While nothing passed that was truly harmful to engineers, nothing particularly helpful passed, either. But, some special interests did get some legislation passed that was detrimental to the environment and contrary to recommended discharge permitting guidelines. As a result, the EPA has recently announced it is increasing its involvement in the review of Arkansas mineral discharge permits. A united and direct message by Arkansas environmental engineers probably could have improved this legislation or stopped its implementation altogether.

Other important legislation would have dedicated new and used car sales tax revenues to bolstering the weakened funding for highway maintenance and construction. That bill had a lot of early support but never got out of committee, in part because a coalition of groups that do speak with one voice opposed it. Colleges and universities, public schools, and others worried that it would reduce spending for their priorities and called it the "highway robbery bill." Many states have already passed similar legislation.

One of my goals this year is to ensure all engineering disciplines get the association's attention, and, in return, all disciplines realize and acknowledge the vital role ACEC serves in our industry. That's the best way to grow our membership. Sometimes we focus on transportation issues, because it is the low-hanging fruit. The funding comes almost entirely from government, so we know who to talk to and what to say. Water and wastewater systems are usually funded by user fees, but engineering firms that provide those services also benefit when engineers speak with a united voice. Tort reform, tax policy, regulations – all of these impact water and wastewater firms.

One potential source of new members is the state's mechanical and electrical engineering firms as well as consultants that serve our forest and agricultural industry. Arkansas does not have a large number of these types of companies, but the ones that are here do a lot of exciting things. The recent covered parking lot at the VA Hospital in Little Rock is constructed by a series of solar panels contributing power back into the campus. A siphon constructed on the Bull Shoals Dam provides high oxygenated water downstream to improve fish habitat during low flows. New power lines are being planned for several locations in eastern and northern Arkansas that will have significant impacts on the efficiency of the electrical grid both in and around our state. These are world class projects! MEP technology is alive and flourishing in Arkansas.

Engineering firms that are not involved in our association need to be educated about how ACEC/A protects their interests. Once they understand that ACEC/A is the watchdog of our industry, they'll be more likely to support its work.

Arkansas legislators will meet again in February for their fiscal session, when they'll make spending decisions for the next year. Some of those decisions will affect engineering, so engineers of all kinds need to be ready to cheer loud and clear. It makes a difference. Check out what ACEC has going on at [www.ArkansasEngineers.com](http://www.ArkansasEngineers.com) and [www.acec.org](http://www.acec.org).

# ACEC

**American Council of Engineering  
Companies of Arkansas  
Officers 2013-14**

### **President**

Bert Parker, P.E.  
Garver  
4701 Northshore Drive  
North Little Rock, AR 72118  
501.376.3633

### **Vice-President**

Brad Hammond, P.E.  
McGoodwin, Williams, and Yates, Inc.  
302 East Millsap Road  
Fayetteville, AR 72703  
479.443.3404

### **Secretary**

Dee Brown, P.E.  
Brown Engineers, LLC  
17200 Chenal Parkway, Suite 300, PMB 324  
Little Rock, AR 72223  
501.448.0100

### **Treasurer**

Andy Dibble, P.E.  
Mickle, Wagner, Coleman, Inc.  
3434 Country Club Ave.  
Fort Smith, AR 72903  
479.649.8484

### **State Director**

Mike Burns, P.E.  
Crafton Tull  
901 N. 47th Street, Suite 200  
Rogers, AR 72756  
479.636.4838

### **State Director**

Byron Hicks, P.E.  
McClelland Consulting Engineers  
900 West Markham St.  
Little Rock, AR 72201  
501.371.0272

### **National Director**

Dan Williams, P.E.  
Garver  
4701 Northshore Drive  
North Little Rock, AR 72118  
501.376.3633

### **Immediate Past President**

Brent Massey, P.E.  
CEI Engineering Associates, Inc.  
P.O. Box 1408  
Bentonville, AR 72712  
479.273.9472

## Arkansas Professional Engineer

### **Editor & Publisher**

Steve Brawner  
Steve Brawner Communications  
501.794.2012  
[brawnersteve@mac.com](mailto:brawnersteve@mac.com)

### **Executive Editor**

Angie Cooper  
[awcooper@arkansasengineers.org](mailto:awcooper@arkansasengineers.org)  
ACEC/A - ASPE  
900 S. Shackleford, Suite 300, Little Rock, AR 72211  
Phone: 501.978.1157  
[arkansasengineers.org](http://arkansasengineers.org)

Arkansas Professional Engineer is published quarterly by the Arkansas Society of Professional Engineers and the American Council of Engineering Companies of Arkansas. Copyright 2013 by those organizations and by Steve Brawner Communications. All rights reserved.



**Arkansas Society of  
Professional Engineers  
Officers 2013-14**

**President**

Lane Crider, P.E.  
McGoodwin, Williams, and Yates  
302 East Millsap Road  
Fayetteville, AR 72703  
479.443.3404

**President-Elect**

Rob Bullen, P.E.  
Mid-South Engineering Company  
1658 Malvern Ave.  
Hot Springs, AR 71901  
501.321.2276

**Secretary-Treasurer**

Brad Peterson, P.E., CFM, LEED AP  
Crafton Tull  
10825 Financial Center Parkway, Suite 300  
Little Rock, AR 72211  
501.748.8269

**State Director**

Alan Pugh, P.E., CFM  
City of Springdale  
201 Spring Street  
Springdale, AR 72764  
479.750.8105

**National Director**

Brian Moore, P.E.  
ESI  
1207 South Old Missouri Road  
Springdale, AR 72765-0282  
479.751.8733

**State Director, Central Chapter**

Clint Bell, P.E.  
CWB Engineers, Inc.  
104 Tulaka Blvd.  
Heber Springs, AR 72543  
501.362.3744

**State Director, Northwest Chapter**

Michael Weir, P.E.  
ESI  
1207 S. Old Missouri Road  
Springdale, AR 72765-0282  
479.751.8733

**State Director, Hot Springs Chapter**

Paul Speers, P.E.  
Entergy Arkansas  
P.O. Box 1330  
Hot Springs, AR 71902  
501.620.5744

**Past President**

J. Paul Strickland, P.E.  
Garver  
4701 Northshore Dr.  
North Little Rock, AR 72118  
501.376.3633

**Executive Director**

Angie W. Cooper  
Arkansas Society of Professional Engineers  
and American Council of Engineering  
Companies of Arkansas  
900 S. Shackelford, Suite 300  
Little Rock, AR 72211  
501.978.1157



**Lane Crider**  
ASPE President

# ASPE's future depends on future engineers

One of the most important meetings on ASPE's calendar occurred Sept. 9 at the University of Arkansas, when the UA Student Chapter met for the first time this school year.

The students are the future of the profession and of ASPE. Young engineers must be introduced to the idea of service early – as I was by my mentor, Carl Yates, P.E. As the group's president, Johnathan Blanchard, explained, "I think it starts here at the university. ... The more involved your starter chapter is, the more commitment you ask from your members, the more committed they go on being down the road."

Our parent organization, the NSPE, has started a membership drive that is coming not a moment too soon. Last year, membership dropped by four percent, and that's part of an ongoing trend affecting professional and civic organizations of all kinds. Among the primary reasons is that young people don't join at the same rate as their predecessors. Go to your local Rotary Club, and you'll see a lot of members with gray hair, or no hair.

We must ask ourselves two hard questions, starting with this: Why aren't young people getting involved?

It's not that they're selfish. In fact, they're idealistic like young people always have been. Blanchard, for example, plans to use his civil engineering degree to work in international development or disaster response. Young and future engineers work hard, and they are very efficient, but they have a life outside of work that is as important to them as their careers. They cherish their personal time and will not allow it to be wasted. They'll serve, but unlike previous generations, they won't sacrifice family time just for the sake of going to a meeting. I can't say I blame them.

The second hard question is this: What are we going to do in response? Because sitting around the table and complaining about these younger generations isn't really much of a solution.

For ASPE to thrive – in fact, for it to survive – it must create a different model that meets the needs of these young engineers and feels worthwhile to them. Every meeting and every activity must have a purpose: to advance members professionally at the same time it advances the profession. Otherwise, why are any of us getting together?

Meanwhile, ASPE must meet young people where they are, and that's online. Social media and web-based training opportunities will encourage young people to get involved. In fact, the ASPE along with ACEC/A have already taken steps to improve our online presence. Check out our website, [arkansasengineers.com](http://arkansasengineers.com). It's been revamped and updated with relevant news as well as copies of this magazine on the home page.

The most effective way to encourage young people to get involved in ASPE is for older members to be active themselves. Nothing is more contagious than enthusiasm – except maybe apathy. If we treat ASPE as merely a professional obligation, then young people rightly will see no reason to join. If this is a strong, vibrant organization that serves both engineers and engineering, then young people rightly will see it as a profitable investment.

ASPE is a great organization that needs to be modified, not overhauled. Let's not wait for young people to change and then complain about it when they don't. Let's make a few changes in how we do business to make ASPE more relevant and worthwhile for everyone. Its future depends on it.

## In the News

### Gaskill is new Garver CFO

Dathan Gaskill has been hired as Garver's chief financial officer after more than 20 years of corporate financial experience.

"I'm thrilled to add Dathan's financial skill set to our leadership team to help guide our continued growth," said President and CEO Dan Williams in a news release.

Gaskill has extensive experience in financial systems, governance, compliance, capital structure, treasury, capital markets, mergers and acquisitions, and investor relations. He has experience in international transactions and brings seasoned negotiating, analytical and business diagnostic skills to the firm, according to the release.

"I'm very pleased to join and serve a great and growing Arkansas company like Garver, with its esteemed reputation and its commendable mission," Dathan said.



Gaskill

Dathan earned his master of business administration with a concentration in finance from the University of Arkansas at Little Rock.

### Garver's growth places it on 'Hot Firm' list for third year

Garver is ranked for the third consecutive year in the Zweig Letter Hot Firm List, which recognizes the 100 fastest growing engineering, architecture, planning, and environmental consulting firms in the United States and Canada.

The list ranks firms according to their three-year growth rate in gross revenue. Half of the ranking is based on percentage growth and half on dollar growth.

Since 2010, Garver has opened offices in Conway; Houston; Birmingham, Alabama; Lexington, Kentucky; Leawood, Kansas; and Kansas City, Missouri.

Because what you do matters

110 South 7th Street  
P.O. Box 648  
Van Buren, AR 72957  
Ph: 479.474.1227  
Fax: 479.474.8531

211 Natural Resources Dr.  
Little Rock, AR 72205  
Ph: 501.374.4846  
Fax: 501.374.4886

www.hawkins-weir.com

**HW**  
HAWKINS-WEIR  
ENGINEERS, INC.



**IN THE RACE.** State Rep. Bruce Westerman, R-Hot Springs, an engineer with Mid-South Engineering, announces he is running for Congress Aug. 13 at his campaign headquarters in Hot Springs with his wife, Sharon.

### Mid-South's Westerman announces congressional bid

State Rep. Bruce Westerman, R-Hot Springs, the majority leader of the Arkansas House of Representatives and this year's ASPE Engineer of the Year, announced he is running for Congress in the Fourth District Aug. 13.

Westerman, P.E., an engineer in the project planning and development group at Hot Springs-based Mid-South Engineering Company, told reporters at his announcement that his training in engineering impacts his policy making decisions.

"Our training and our life experiences affect everything in life," he said. "What I've learned from engineering is there's a

lot of science and math involved, but at the end of the day, there's a lot of judgement involved. And I think my training as a professional in the engineering field, that's not only taught me how to look at facts and analyze them and make rational decisions on them, but also how to have good judgement and how to know what's best and what makes sense and what doesn't make sense."

Westerman said that the top issues in the campaign include repealing the Affordable Care Act, also known as Obamacare; reducing Washington regulations; and immigration. On that last issue, he said he opposed current plans being discussed and does not support "amnesty" for current undocumented immigrants living in the United States. However, he wasn't ready to endorse a solution.

"My background's in engineering, and we're trained that when you make a statement about something, you research it and make sure you understand the facts," he said.

Asked by reporters about alternative energy, he said energy sources should be economically justifiable and that the United States should be energy independent. He pointed out that Mid-South Engineering has been involved in a project that converts wood fiber into crude oil.

The Fourth District represents roughly the southern half of Arkansas. Its current representative, Tom Cotton, is running for the U.S. Senate against Sen. Mark Pryor.

Westerman's only announced opponent in the Republican primary is Tommy Moll, a Hot Springs businessman. Janis Percefull of Hot Springs is seeking the Democratic nomination.

## CEI Engineering announces hires

CEI Engineering Associates recently announced the hiring of Thomas Oppenheim, P.E., and Neal Griffin, P.E., in its Bentonville office.

Oppenheim has joined the firm as a project engineer in the Local Development Department. His focus will be to maintain and grow relationships with existing clients and forge new client relationships. He holds a civil engineering degree from the University of Arkansas and is a certified professional in erosion and sediment control. His job responsibilities include site layout and design of commercial and municipal projects, stormwater plans, construction plans, and project permitting and entitlements.

Prior to joining CEI, he was vice president of engineering and construction for Cooper Communities and, before that, director of compliance for storm water at Walmart.



Oppenheim



Griffin

Griffin has joined the Bentonville office's Local Development Department as a construction observer. He earned a degree in chemical engineering from Auburn University and an MBA from LSU.

*Briefs continued on next page*



### October 26 - November 1

ACEC Fall Conference  
Scottsdale, Ariz.  
Fairmont Scottsdale Princess

### November 19

Emerging Leaders Public Speaking  
Little Rock, Executive Offices

### November 21

ACEC/A Board Meeting  
TBA

### November 28-30

ACEC/A - ASPE Executive Offices closed  
for Thanksgiving

### December 13

Agency Forum  
Garver, Little Rock

### December 24-26

ACEC/A - ASPE Executive Offices closed  
for Christmas

### Feb. 27

Engineering Excellence Awards  
Little Rock, Governor's Mansion

### May 22-23

ASPE Annual Conference  
Northwest Arkansas

## ACEC/A ASSOCIATE/ AFFILIATE MEMBERS

ACEC Business Insurance Trust

ACEC Health Life Trust

Atoka, Inc.

BancorpSouth Insurance Services

BT Environmental, Inc.

Environmental Technical Sales, Inc.

Greyling Insurance Brokerage

Hanson Pipe & Precast

Jack Tyler Engineering of Arkansas

McGeorge Contracting

Snyder Environmental & Construction



## Miller-Newell Engineers, Inc.

Consulting Engineers  
and Surveyors

## Celebrating 50 Years of Service

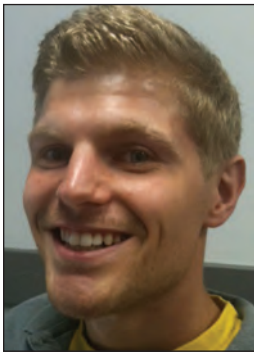
510 Third Street / P.O. Box 705 / Newport, AR 72112

Email: milnewengr@aol.com / Phone: 870.523.6531

## FTN announces employee hires

FTN Associates, Ltd. has recently added two employees to its staff.

Chris Ratliff is a new field engineer for the company. He is a graduate of the University of Arkansas at Little Rock with a B.S. in mechanical engineering technology. His previous employers include UAMS and Dassault Falcon Jet. The 27-year-old grew up in Russellville and now resides in Benton with his wife and two children.



Ratliff



Allen

Christopher Allen, E.I., is a graduate of the Missouri University of Science and Technology with a B.S. in civil engineering with a water resources concentration. He expects to receive his M.E. in civil engineering with an environmental concentration in June 2015. Allen, 25, has served in the U.S. Navy Reserves for seven years, and he also worked for the Arkansas Highway and Transportation Department. He resides in Little Rock and is engaged.

FTN Associates is a water resource and environmental consulting firm that is headquartered in Little Rock. Branch offices are in Fayetteville, Baton Rouge, and Jackson. The company has approximately 80 employees.

## University earns grant to conduct maritime research

University of Arkansas transportation researchers have been awarded a \$1.4 million grant from the U.S. Department

of Transportation to create the Maritime Transportation Research and Education Center, or MarTREC, according to a release from the university.

The grant will help the Transportation Department reach its strategic goal of economic competitiveness through efficient and sustainable waterway transportation.

MarTREC will involve a consortium of the University of Arkansas, Jackson State University, Louisiana State University and the University of New Orleans.

The grant will be matched by a total of \$750,000 from the four institutions, the Arkansas Highway and Transportation Department and private industry, said Heather Nachtmann, professor of industrial engineering, who will be the center's director.

Nachtmann said the research program will focus on maritime and multimodal logistics management, resilient and sustainable multimodal infrastructure, and livable coastal and river valley communities with effective emergency management systems. Researchers also will develop materials for transportation infrastructure, including technology to monitor the structural performance of critical facilities and structures.



Artist's rendering by Phillips Lighting

## Brown Engineers lighting Little Rock landmarks

Brown Engineers is performing the electrical design work for a project by Entergy Arkansas that will install highly efficient LED aesthetic lighting on Little Rock's Main Street Bridge, the Junction Bridge Pedestrian Walkway, and the Clinton Presidential Park Bridge.

The December project is being sponsored by Entergy Arkansas, which is celebrating its 100th anniversary by

contributing \$2 million to the project. The lights can generate multiple colors and effects and can be synchronized with firework displays, outdoor concerts and other community events. According to an Entergy press release, the lights are far more energy efficient than standard bridge lighting.

Brown is designing the power systems and fiber optic cable communications to the lights so that lighting effects can be coordinated. It is one of several project partners contributing a combined \$400,000 in supplies, services and support. Phillips Lighting is donating \$100,000 in LED lights.

## Entries sought for 2014 Engineering Excellence Awards

The 2014 ACEC/A Engineering Excellence Awards will be Feb. 27 at the Governor's Mansion. The deadline for entries is Jan. 3.

The competition highlights projects that demonstrate achievement, value and integrity.

Entries are being accepted in 10 project categories: Studies, Research, and Consulting Engineering Services; Building/Technology Systems; Structural Systems; Surveying and Mapping Technology; Environmental; Water and Wastewater; Water Resources; Transportation; Special Projects; and Energy. Entries must have been designed by Arkansas-based engineers.

For a call for entries packet, contact ACEC/A Executive Director Angie Cooper at [awcooper@arkansasengineers.com](mailto:awcooper@arkansasengineers.com).

## Advertiser Index

Environmental Tech. Sales.....	Cover
New Water Systems.....	2
Hawkins-Weir Engineers.....	6
Miller-Newell Engineers.....	7
University of Arkansas.....	9
McClelland Engineers.....	10
FTN Associates.....	11
BancorpSouth.....	13
Crafton Tull.....	15
Van Horn Construction.....	17
Garver.....	21
ICM.....	23

# UA chapter gets future engineers active



**CURRENT AND FUTURE LEADER.** Johnathan Blanchard speaks to UA students during the first chapter meeting.

It was after 6 p.m. on Sept. 9, the meeting was supposed to start in 30 minutes, and Johnathan Blanchard had a lot to take care of.

The 20-year-old civil engineering major from Lamar, Missouri, is president of the NSPE's University of Arkansas Student Chapter. Another group had unexpectedly reserved the meeting room for an earlier time slot, and while the room would be vacated on time, Johnathan and his fellow officers would have little time to set everything up. Engineers – and future engineers – like to be prepared.

While Connor Milpass of Benton, the group's treasurer, lugged soda pop from the parking lot, Blanchard paid for \$200 worth of pizza. That money came from the UA's Associated Student Government, but Blanchard said the chapter has other sources of funds when it needs it.

"There's a lot of engineering firms here in Fayetteville, and they have a lot of support for the college, and we also have the local ASPE chapter, and they love to help

out," he said as he waited for the room to clear.

Blanchard selected his major after traveling on mission trips with his youth group with the First Christian Church of Lamar. Those experiences, along with the tornado that struck nearby Joplin in 2011, led him to decide his life's work would involve helping people in need – either traveling overseas to do development work in poor countries, or helping communities rebuild after disasters. A civil engineering degree would be the best way to prepare for that.

"A lot of times we had a civil engineer, and they always seemed like real fun guys, and I liked their personality; I liked hanging out with them," he said. "And I was interested in the work. That's really what turned me on to civil engineering."

He became involved in ASPE his freshman year after seeing a flyer on campus and then served as treasurer as a sophomore. About 120-130 students attended at least one meeting last year. Attendance

fluctuates depending on when students have tests and when other groups are meeting, but last year's monthly meetings consistently drew 30-40 students and never had less than 20. With a more consistent base, Blanchard said the chapter could do more community service, more fundraising, and travel to conferences.

Officers try to make sure that each meeting presents useful information to students. During this first meeting, Brian Henderson, the UA's director of employer relations, discussed employment opportunities for engineering majors and how licensure could improve their prospects.

According to Blanchard, student groups are the key to ASPE's success because they introduce future engineers to the organization.

"I think it starts here at the university," he said before listing some of the benefits of being active. "The more involved your starter chapter is, the more commitment you ask from your members, the more committed they go on being down the road."

## *Hiring engineers?*

## *Looking for student interns?*

## *Interested in promoting your company and building relationships?*

**Contact Brian Henderson**  
**Director of Employer Relations &**  
**Student Placement**  
**(479) 575-6265**  
**bwhender@uark.edu**



UNIVERSITY OF  
**ARKANSAS**  
 COLLEGE OF  
 ENGINEERING

## ACEC/A Member Spotlight

# Fifty years hasn't changed McClelland

Firm still a reflection of founder James McClelland

If a tourist were to visit some of Arkansas' most recognizable sites, there's a good chance he'd see the work of McClelland Consulting Engineers.

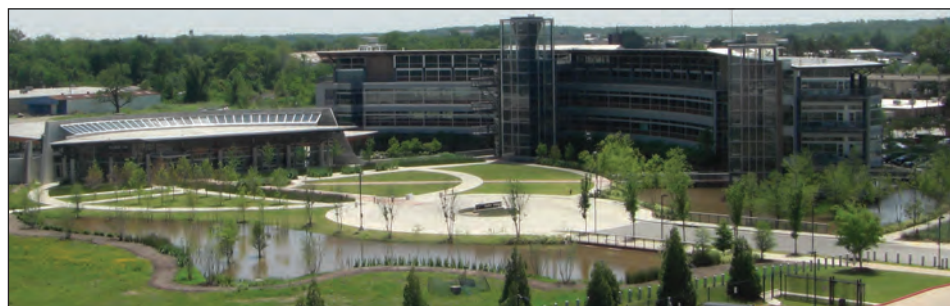
The Clinton Presidential Center, Heifer International's headquarters, Dickey-Stephens Park, and the turf at Donald W. Reynolds Razorback Stadium are just some of the projects the firm has designed during its 50 years in business.

"Those are projects that people see every day, they get to use every day," said the company's CEO, Byron Hicks. "I like all the projects, but it's exciting when the public gets to see and use the projects that we design."

McClelland Consulting Engineers is a full-service firm with 92 employees, including 41 engineers. It was voted "Best Engineering Firm" by Arkansas Business readers in 2009, 2010 and 2012.

Much of the company's work involves designing projects for municipalities. It designs water and wastewater systems, roadways, airports, sports complexes, and other facilities and serves clients in Arkansas, Missouri and Oklahoma. Its North Little Rock Roundabout at the intersection of three roads is the first major roundabout in central Arkansas. The firm does its own water, soil and materials testing in house. "Just about anything that a city needs, we help them with from an infrastructure standpoint," Hicks said.

The company was founded in 1963 in Fayetteville by James McClelland. His



**ARKANSAS LANDMARKS.** Among McClelland's many projects have been the Clinton Presidential Center, top, and Heifer International's headquarters. MCE designed Heifer International's parking lot with light-colored drive lanes to reflect the sun's rays, while the parking spaces are set on a pervious Gravel Pave system that allows the water to percolate back into the soil. Drainage is directed above ground into areas planted with wildflowers and other vegetation.

son, James Jr., started the Little Rock office, became president of the company, and still works there.

According to Hicks, the company still is very much a reflection of those two men. James Jr. began hiring new leadership, including Hicks, as the time grew

closer for him to turn over the company's day-to-day operations a number of years ago. Meanwhile, James Sr. "was the type of person that when he walked into a room, you knew it," Hicks said. "His character was just such, you knew when he walked into the room, and you listened to what he said. He was just very well-spoken, and I had a lot of respect for him. I think a lot of people did."

Even as McClelland Consulting Engineers has grown, it hasn't lost sight of its original mindset, goals and objectives, Hicks said.

"Integrity's always been a big part of the way we operate," he explained. "We want to do what's right all the time, do a good job for our clients, treat them fairly. I think those are values that (James McClelland) had, that Jim McClelland Jr., his son, had, and that we have."

When you need experience, we have 50 years of it.



Water & Wastewater



Aquatic Parks, Recreation & Trails



Civil/Site Design & Surveying



Transportation & Traffic Engineering

McClelland Consulting Engineers, Inc., is a regional civil engineering firm focused on providing exceptional client service while improving the communities where we serve, live and work.

**MCE** McCLELLAND CONSULTING ENGINEERS, INC.  
50<sup>TH</sup> ANNIVERSARY  
Integrity. Community. Excellence.



Little Rock | Fayetteville | [www.mcclelland-engrs.com](http://www.mcclelland-engrs.com)

# Griffin: Pipelines remain safest oil route

*Editor's note: This is the fifth in a series of articles by members of Arkansas' congressional delegation for Arkansas Professional Engineer.*

After the Pegasus pipeline ruptured in Mayflower earlier this year, Arkansas found itself at the center of the national conversation about energy and pipelines. Unreasonable extremists used the spill to claim we cannot continue to use oil for energy or move it through pipelines, but that view is disconnected from reality. In truth, there is no foreseeable future that does not include oil and gas energy. Our network of pipelines – thousands upon thousands of miles of it, some manufactured by Arkansans right here in Little Rock – is not going away.

Thankfully, American pipelines are indisputably the safest way to move oil. Every year, they transport more than 11 billion barrels, and last year, less than five ten-thousandths of one percent of it was lost to spills. As former Pipeline and Hazardous Materials Safety Administration (PHMSA) Administrator Brigham McCown said in his recent lecture at the Clinton School of Public Service, pipelines are 530 times safer than rail and 50,000 times safer than truck transportation. Saying no to new energy infrastructure isn't a plan for the future. It simply means more oil is moved in riskier ways. We all saw what happened when a train carrying oil in Canada derailed in July: Most of an entire town was obliterated and nearly 50 people were killed. That was tragic and devastating.

Protecting the environment for my children and the next generation of Arkansans is important to me, and that's why I continue to support improving our pipeline infrastructure and building the Keystone XL project. As mentioned in the Obama administration's environmental report, moving the oil that will flow through Keystone XL by rail, truck, or barge would significantly impact the environment by increasing noise, traffic, and air pollution. The report concluded Keystone XL would have "no significant impacts" on resources along the proposed route, likely due in part to the fact that the project will include 57 additional safety measures. Indeed, the Obama



by Rep. Tim Griffin

administration declared it would "have a degree of safety over any other."

In addition to building new projects, we have to make sure existing routes are modernized, improved and made safe. I am proud to have a strong record of supporting pipeline safety, including the Pipeline Safety Act, which President Obama signed into law in 2011. It strengthened regulations and increased penalties for operators who break the rules. As Mayflower continues to recover, I want to make sure that we take the necessary steps to protect our natural resources and environmentally sensitive areas. I was the first federal official to call for the Pegasus pipeline – which was built more than half a century ago – to be relocated away from the Lake Maumelle watershed, which provides drinking water for 400,000 Arkansans.

**"Saying no to new energy infrastructure isn't a plan for the future. It simply means more oil is moved in riskier ways."**

In my discussions with PHMSA officials, they admitted that current testing procedures are imperfect, even with the latest technology and most advanced methods. I told them that accurate and reliable testing should be a priority in addition to routine transparency before a disaster occurs. Inspection information should be accessible to everyone. After all, if public officials and Arkansans would have known prior to the spill what we know now, changes to the operation of the pipeline may have been demanded years ago. Full transparency will ensure that those who operate and inspect these pipelines can be held accountable when tests show potential vulnerabilities. I will continue to work with officials and regulators to make pipelines as failsafe as possible so that what happened in Mayflower never happens again.

Developing and transporting energy from wind, solar, hydro, nuclear, coal, oil and gas resources comes with risks, and Americans work hard to minimize them. Fueling our lives in a responsible way is the right thing to do because oil pipelines help ensure greater access to affordable energy. Harnessing these resources creates jobs, improves the quality of our lives, and propels our economy forward. American energy is something to be proud of, not resent.



"We Know H<sub>2</sub>O"

**Stormwater Management • Wetland Delineation/Mitigation**  
**Environmental Permits • Environmental Assessments**  
**Site Investigation/Remediation • Solid Waste Management**  
**Flood Insurance Studies**

(501) 225-7779 • [www.ftn-assoc.com](http://www.ftn-assoc.com) • Little Rock - Fayetteville

# ACEC/A - The early years

A history of the organization written by Bill Graham tells its story from 1957 until 1981

By **Steve Brawner**  
Editor

Where did ACEC/A come from? In the early 1980s, Bill Graham, P.E., founder of W. William Graham, Jr. Consulting Engineers, set out to create the answer. Through research and telephone conversations, he reconstructed the history of what was then the American Consulting Engineers Council of Arkansas from its founding in 1957 until 1981.

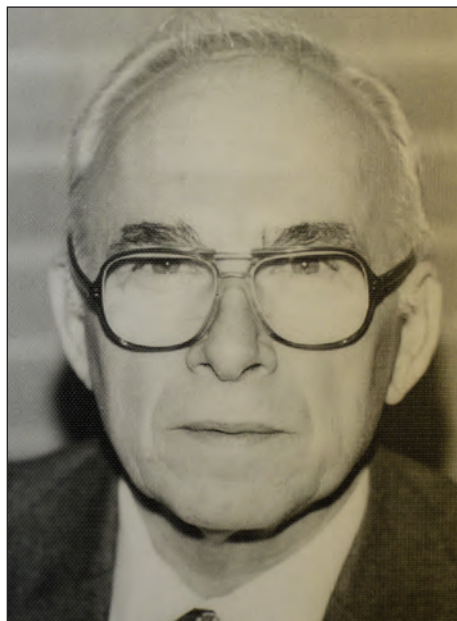
The *History of the American Consulting Engineers Council of Arkansas* is too long to publish here, but APE has summarized it in parts and quoted it in others.

According to Graham, what was probably named the Arkansas Association of Consulting Engineers formed in April 1957 at the Marion Hotel, "probably in one of the back or upstairs rooms where many meetings were held." According to Graham, the council was made up of members firm principals in independent consulting engineer companies. Firms wholly or partially owned by commercial, construction, contracting, manufacturing, sales, public utilities, holding companies and organizations could not be involved.

Bylaws were written, and nominating and membership and attendance committees were formed. New firms had to be elected by a majority of the member firms. New members were required to be involved in mechanical, sanitary, electrical or structural design, and their offices had to be located in Arkansas. The goal was to improve the practice of engineering so it could better serve the public, promote better business relationships between members and clients, maintain high professional standards, and foster harmony in the profession.

## Charter members

Known charter members were all based in central Arkansas and included Leo Landauer and Associates; Max Mehlburger Engineers; H. Allen Gibson Consulting Engineer; Edward G. Smith



**ENGINEER/HISTORIAN.** Bill Graham, P.E., founder of W. William Graham Jr. Consulting Engineers, also was one of the founding members of the Arkansas Association of Consulting Engineers, which eventually became today's ACEC/A.

Engineers; Arthur Thomas Consulting Engineers; Pettit and Pettit; and Garver and Garver, but Graham said others undoubtedly were involved. Later members included the George Ellefson Firm; Blaylock, Cook and Dietz; and Paul Zander Consulting Engineer. Once the association was established in central Arkansas, it branched out into other areas by including L.M. McGoodwin and Associates of Fayetteville and John Hawkins of Texarkana.

"Until the Arkansas Association of Consulting Engineers was formed, it is doubtful that you could have gotten more than two or three engineers to gather together and in one spot to talk about their problems in operating a business," Graham wrote. "I can remember a time when it was difficult to get various firm principals to be personally acquainted and associate with another. After years of trying to exist like this, many of the founding fathers discovered that together they could survive, particularly in the days of the federal programs and dealing with federal agencies, and that they had to combine to have a joint effort in order to survive. With this in mind, the Arkansas Association was put together. ...

"We have found that in talking to several of the older members of this organization, it was more or less a luncheon session, meeting at the Marion because this was a central location for most of the firms as they were located downtown, and it was rather like an 'eat and belch club.' They would come and discuss the weather, the football games and many other topics of current interest, taking very little heed for what the original purpose of the organization was intended."

That changed. The AACE appointed an ad hoc committee to study the fee schedule in a way that was similar to a committee of the Arkansas Society of Professional Engineers.

Then it became a more serious watchdog for maintaining professional standards. An ad hoc committee was formed to investigate R. L. Smith, a Texan who had designed a facility for the Strickland Transportation Company off 65th Street in Little Rock without registering in Arkansas and who had placed his seal on a set of plans and documents that hadn't been prepared under his supervision. When the state's Board of Registration informed Texas' board that this had happened, the AACE's attorney, Judge Bill Smith, advised members to incorporate to limit their liability. The AACE also investigated the Petit Jean Electric Coop for allegedly generating plans for power transmission lines and then having them sealed by a registered professional engineer from Missouri who had not performed the work. "Not much information is available of what the final adjudication of this matter was, but from memory I do know that we might have lost the battle but ultimately we began to win the war," Graham wrote.

The association did incorporate as the Arkansas Association of Consulting Engineers in early 1965, with George E. Ellefson, Max A. Mehlburger, Kent A. Pettit and Charles E. Dietz filing the petition. Mark Garver served as president that year. Graham writes that the membership met every two months to discuss problems related to the practice of engineering. Arnold "Beck" Tyre assumed the presidency in 1966, when there were 22

**“Until the Arkansas Association of Consulting Engineers was formed, it is doubtful that you could have gotten more than two or three engineers to gather together and in one spot to talk about their problems in operating a business.”**

**- Bill Graham, History of the American Consulting Engineers Council of Arkansas**

firms. According to Graham, there were 1,425 firms in the national Consulting Engineers Council's directory.

The year 1967 was an important year for the association. George Ellefson was president. The association's name was changed to the Consulting Engineers Council of Arkansas in 1967. To improve relations in the construction industry, a committee was formed with members from the CECA; the AGC, which was the contractors association; and the AIA, the architects association. By then, the association had grown to 24 firms.

“Along about this same time, we had a visitation from an illustrious gentlemen by the name of Eugene Waggoner,” Graham wrote. “Mr. Waggoner was a member of the firm Woodward-Clyde and Associates, which was a large soils or geotechnical firm from California. Gene discussed activities of CEC and asked what we in Arkansas were doing for the betterment of the profession. We pointed out to him that we were limited on funds and didn't have enough money to maintain any kind of lobby and had not availed ourselves of attending many of the national meetings because of a limited budget. At that time Mr. Waggoner was informed of our dues structure, which was \$10 a year. Gene in

his manly manner jumped up, pounded the table and said, ‘You cheap sons ...’ At that time several of us looked at one another with red faces and decided that we should do something about raising our dues structure, and shortly thereafter strange things began to happen. We also prepared some budgets and dedicated some money to help defray costs of the officers to attend semiannual and annual meetings and from that day forth, in my opinion, the Arkansas Association of Consulting Engineers Council began to become a man.”

Graham became president in 1968, while Max Mehlburger became president in 1969 and Larry Woolsey held that position in 1971. There were approximately 1,700 firms in the national group at that time. Gordon Grayson was elected president in 1972.

### Working for QBS

The year 1972 was an important one for engineering. That was the year that Congress passed the Brooks Act, which established qualifications based selection (QBS) as the procurement process through which engineers and architects were selected for federal design and construction projects. Under QBS, contracts

are negotiated based on demonstrated competence rather than on bid price. While the act was named for Rep. Jack Brooks, D-Texas, Graham also gave significant credit to Sen. John L. McClellan, D-Ark. “This was a long uphill battle, and we would have had it a year earlier if John McClellan could have gotten Senator (William) Proxmire in a cloak room on the last day of the session before the bill was called to a vote.”

While that was happening at the national level, the Arkansas Association of Consulting Engineers Council was working to increase the use of QBS in the state. According to Graham's history, “About this same time we on the state level had informed Governor Dale Bumpers of our concern about the methodology of selecting professionals by the various state agencies, boards and other organizations. At that time he issued a proclamation to various agencies and boards that engineers and architects would be selected on a firm basis as to their qualifications, availability, and that work would be passed to all firms that were interested in getting state work.” Several engineers became involved in national committees at about this time, Graham wrote.

*Continued on next page*

BancorpSouth Insurance Services, has a long tradition of supporting and partnering with engineering companies in Arkansas. Since 1991, we have worked with PLAN providing impactful tools such as continuing education, contract review, risk mitigation and insurance programs designed specifically for the engineering industry. We appreciate the opportunity to be a part of your organization and look forward to providing dependable services to your organization.



**BancorpSouth**  
Insurance Services, Inc.

BUSINESS | EMPLOYEE BENEFITS | SURETY | PERSONAL

Jonesboro (870)972-5281 • Little Rock (501)664-7705 • Rogers (479)271-0725 • [www.bxsi.com](http://www.bxsi.com)

BancorpSouth Insurance Services, Inc. is a wholly owned subsidiary of BancorpSouth Bank. Insurance products are • Not a deposit • Not FDIC insured • Not insured by any federal government agency • Not guaranteed by the bank • May go down in value



Alfred Williams, CWCLA



Ken Estes, CIC, AINS



James Clark



Jeremy Cox, CIC



**EARLY ACEC/A LEADERS.** Top row from left are Al Miller, co-founder of Miller-Newell, who served as president of the organization in 1980; Mark Garver, founder of Garver, who was president in 1965; and L.M. McGoodwin, whose firm, now known as McGoodwin, Williams, and Yates, was one of the first to join from outside of Little Rock. At left is Kent Pettit, whose Pettit and Pettit Engineers was a charter member.

The year 1973 also was a busy one for both the state and national associations. The Consulting Engineers Council merged with the American Institute of Consulting Engineers to form the American Consulting Engineers Council. In Arkansas, Bob Pitts was president. That year, Graham, Gene Daniel and John Hawkins rewrote the state group's constitution and bylaws. As Graham described it in his history, "A redrafting of the Arkansas constitution and bylaws by the 'unholy three' was started, and through many dozens of donuts and cups of coffee on Saturday mornings, we finally accomplished it in late 1973. The 'unholy three' met in Bill Graham's office every Saturday morning, John Hawkins having to travel from Texarkana and Gene Daniel from Fort Smith. Then through their persistence, it finally got accomplished. You've got to realize that many of the phrases and some of the reasoning behind the

constitution were derived from our own backgrounds. John Hawkins, who is a Baptist, Gene Daniel, who is a Congregationalist, and Bill Graham, who is a Presbyterian, had many a squabble about how things should be done." The membership approved the changes in January 1974.

Daniel was elected president in 1974. By then, the organization had grown to 41 firms and was operating on a budget of more than \$18,000, including national dues. "Also at the national level, a matter of the ACEC emblem evolved as a major fight at the Annual Meeting," Graham wrote. "There were many impassioned speeches made about this matter in that several people wanted to change the logo or the emblem from what we had. It finally was decided that we would add an 'A' to the already established logo that CEC had. ... (I)t got passed by an overwhelming majority of 112 to 111."

John Hawkins was elected president of ACEC of Arkansas in 1975. That year, the Legislature debated a bill that would have set up a state architectural organization for state agencies, departments, boards and commissions that would have cut out the private sector. The bill failed, but out of it evolved the State Building Services Commission. "Also about this time, a little matter of the Environmental Protection Agency Rules and Regulations appeared on the horizon," Graham wrote. "It presented many problems to the profession, particularly in the procurement

of services as far as the grantees were concerned."

By 1976, the Consulting Engineers Council of Arkansas had added a firm to reach 42 members, and some in the state organization were calling for an executive director to be hired. Aubrey Carroll was elected president. Nationally, the ACEC expanded its governmental affairs program. Promoted by several large firms, the organization began building up its staff in Washington, D.C., to protect the industry.

Over the next two years, the council moved to finally hire an executive director. In 1977, when Jim Engstrom was president, the council's budget was \$18,600, but the membership was calling to hire a full-time position and many were calling to increase the dues. Those dues were increased starting in July 1978 so that the council had a budget of \$30,000 for 1977-78. This was aided by the fact that membership had grown to 51 firms. In 1978, when Carl Brunck was president, the council formed a search committee in conjunction with the Arkansas Society of Professional Engineers. That July, Roy Nix was hired as the ACEC's first executive director, a move that Graham greeted with approval. "After Mr. Nix took over as Executive Director, for some strange reason the minutes became more detailed and there was more information available," he wrote. "If I'd had my way in 1966 when I became secretary-treasurer of this

organization, we would have had an Executive Director at that time."

Meanwhile, the council was becoming active in a scholarship program at the University of Arkansas. In 1978, members traveled to Washington to discuss the Program to Untangle Municipal Projects with members of the state's congressional delegation. This involved a dispute with the EPA, and according to Graham, the group's efforts were successful.

Tommy Bond took over as president in 1979, while Al Miller served in that position in 1980. "(A)t that time all the flack and discussion was, 'What's going to happen to the Federal programs,'" Graham wrote in his history. "FmHA's money was going to be cut, and we knew that there was going to be a certain amount of reorganization undertaken in the Environmental Protection Agency. The Department of Energy for those that were in the mechanical and electrical business was finally blooming, and they were doing great only to find out in 1980 that

those funds will be curtailed in 1981 and subsequent years."

Don Mehlburger was elected president in 1981. At about that time, the University of Arkansas' engineering school began going through an accreditation process. "We also found that lo these many years the Engineering Building had been operating that it was highly inadequate, and many of us probably like 'an ostrich in a sandstorm' didn't realize what had happened," Graham wrote. "We amassed our forces and together we approached the Board of Trustees of the University of Arkansas. We may not have won the war, but we sure made an impression and won a few battles in the ensuing process."

Graham concluded by writing, "There are many people involved in the engineering profession that have done a great deal for the Consulting Engineers of Arkansas. Some have been elected president; some have not. We have had some real good workers such as H. Allen Gibson, who through his efforts helped promote

some legislative activity. This organization would probably have never gotten off the ground if it had not been for Maury Hughes and Leo Landauer and Associates back in the middle 1950s. Many of our members are no longer with us. Some of those people that have been involved in the practice of consulting engineering, such as Neal B. Garver, Max A. Mehlburger, Kenneth LeFever, Leonard White, yes and even Terry Field, who many of you probably won't remember, have given us a great heritage. All of these people have made a marked impression on the profession. Some of them have been good and some not so good. We haven't had a Maryland scandal, we haven't had an Oklahoma scandal, and hopefully nothing like that ever happens to our profession here in Arkansas.

"This is a brief history of some of the events and some of the people that have made the Arkansas Consulting Engineers Council a real and going organization, and people, I'm glad I'm a part of it."



rogers | conway | russellville | little rock | okc | tulsa

[www.craftontull.com](http://www.craftontull.com)

**CRAFTON TULL**  
CELEBRATING  
50 YEARS

SHOWCASE  
YOUR  
CLIENTS  
AND YOUR  
FIRM!



# 2014 ENGINEERING EXCELLENCE AWARDS

by the American Council of Engineering Companies of Arkansas

“Receiving the ACEC/A  
award was such an honor,  
and my wife still talks about  
attending the event at the  
Governor’s Mansion.”

John Summers, General Manager  
Carroll-Boone Water District

## 2013 Environmental Category Winner

Keels Creek Streambank Restoration  
Carroll-Boone Water District  
McGoodwin, Williams, and Yates, Inc.

The ACEC’s annual Engineering Excellence Awards (EEA) competition recognizes engineering firms for projects that demonstrate a high degree of achievement, value, and ingenuity.

EEA entries are accepted into one of **10** project categories: Studies, Research, and Consulting Engineering Services; Building/Technology Systems; Structural Systems; Surveying and Mapping Technology; Environmental; Water and Wastewater; Water Resources; Transportation; Special Projects; and Energy. Project entries must be designed by engineers located in Arkansas.

Submission Deadline:  
**January 3, 2014**

For a call for entries packet contact:  
Executive Director Angie Cooper  
[awcooper@arkansasengineers.org](mailto:awcooper@arkansasengineers.org)

Winners will be announced during the EEA dinner at the  
Arkansas Governor’s Mansion on **February 27, 2014**.

# ACEC

AMERICAN COUNCIL OF ENGINEERING COMPANIES  
*of Arkansas*

## From the Governor

# Common Core helps students achieve

By Governor Mike Beebe  
Guest Writer

As Arkansas students in grades 9 through 12 begin a new school year, their teachers have new expectations for their academic achievements. This is a pivotal time for education in Arkansas, as the Common Core State Standards are now being implemented in our high schools.

In Arkansas, Common Core was first put into practice in kindergarten classes through second grade during the 2011-2012 school year. This past school year, these standards were phased in for students in grades 3 through 8.

Common Core Standards help teachers by clearly outlining the necessary skills and knowledge students are expected to gain by the completion of each grade level. Parents, teachers, and students will be aware of the goals set for mathematics and for English language arts and literacy. Instead of encouraging rote memorization and test-taking skills, Common Core emphasizes the critical-thinking and problem-solving skills needed for success in higher education and in today's workforce.

The standards are the latest step in Arkansas' ongoing effort to improve education, but we are far from alone in this initiative. Forty-five other states, plus the District of Columbia, have also chosen to



implement Common Core. In fact, the standards were born out of a states-led effort to ensure that the skills necessary for real-world success are taught in all of our schools. Noticing discrepancies in college readiness from state to state, the National Governors Association and the Council of Chief State School Officers worked together to create a single set of standards and common grading criteria.

Although most states are implementing the standards, it is important to remember that they are doing so voluntarily. The standards are not federally mandated, and the federal government was not involved in their development. Arkansas teachers, parents, and community and business leaders played an im-

portant role in the development of Common Core Standards. Their input and feedback helped lead to Arkansas' official adoption of the standards in July of 2010. While the standards define expectations, they in no way dictate curriculum or prescribe a particular method of instruction. The lessons, strategies and materials used in the classroom are still left up to the local school districts and their teachers and administration officials.

In Arkansas, the need for new educational standards was apparent. Although we are continuing to improve, far too many students go to college unprepared for the coursework. And Arkansas still has an unacceptably low number of college graduates per capita. To change that, we must make certain that students have the skills they need to succeed in college and careers. I believe that the Common Core Standards are a good way to do that.

With the Common Core guiding our teachers, our schools will be more effective. By providing for advances in academic rigor and content, the standards enable students to graduate from high school better prepared for college. This can help lessen the financial burden for the students themselves and for their families, and will certainly help our young people to thrive independently as they set their paths toward successful lives.



## Our Success Is Building



Lawton Water Treatment Plant, Lawton, Oklahoma

## Van Horn Construction

- Water/Wastewater
- Educational
- Healthcare
- Commercial
- Hospitality
- Cultural

For more than 40 years, Van Horn Construction, one of the most highly regarded construction companies in the central United States, has crafted a reputation of building on success. And, they have always done it the old fashioned way – one quality project at a time.



**ASPE PRESIDENT.** Lane Crider, ASPE's new president, stands at Fayetteville's West Side Wastewater Treatment Plant, where he was project engineer for a \$61 million construction effort.

## Crider's ASPE activity never optional

Society's president says service to profession expected by firm's founder

By **Steve Brawner**  
Editor

The question of whether Lane Crider, P.E., would be active in the ASPE was settled the day Carl Yates, P.E., hired him to work at McGoodwin, Williams and Yates 20 years ago.

"It was really kind of expected," Crider said. "You're going to go to these meetings, and you're going to participate."

Crider, this year's ASPE president, is emphasizing greater board involvement. He said in recent years board members, including himself, have become too passive, such as settling for teleconferences instead of meeting face to face. That reactive approach has resulted in ASPE taking a back seat to ACEC/A.

Instead, he said, both organizations should play strong roles in furthering the practice of engineering.

"There's no other organization that represents the licensure and the professional registration of an engineer," he said. "There's no other organization that understands what it takes and the years of experience and practice that it takes to become a licensed engineer. Being able to protect our profession from becoming just another commodity I think is what ASPE's primary role should be, and I think it's becoming harder and harder and harder to keep that from happening."

Crider's other goals include reviving the long defunct eastern Arkansas chapter and increasing both the total membership and the percentage of members who are actively engaged. According to Crider, a more involved, vibrant membership will make the organization more attractive to engineers who haven't joined

the association. Crider said ASPE also needs to reach out to disciplines such as mechanical engineering that place less of an emphasis on licensure.

Like many engineers, Crider knew as a young person that his future lay in construction design, but he didn't always want to be an engineer. For a while, he wanted to be an architect.

"I love tinkering with things," he said. "I love figuring out how to make things work. I love building things. So I think that comes naturally. I thought I wanted to go into architecture but soon realized I had no interest in spending a good part of four years in a design studio building little cardboard models. I didn't want to do that. I wanted to understand the basis behind how a building stood up or a road was designed or how water was treated."

A Fayetteville native, Crider has never worked for any other firm but his hometown one of McGoodwin, Williams and

Yates. After graduating from high school, he enrolled in the University of Arkansas at Fayetteville to earn his civil engineering degree. In 1989, he began working an internship at the firm, which specializes in water and wastewater treatment facilities and does almost all of its business with municipalities. That internship, which included trudging through lowlands and hacking brush with a survey crew, taught him what an engineering firm does from the ground up.

### Mentored by Carl Yates

After graduating in December 1992, he went to work at the firm full time that January. He had interviewed for a couple of other potential employers, but he saw no need to leave the one where he was working, or to stop learning from Yates. "I've said it a lot of times, and I'll continue to say it. I don't think there was a better role model in terms of how you should approach a client, and how you approach

helping them solve their problems," he said. "You know, looking at a problem and the solutions long-term rather than getting a job, finishing it as quick as we can, getting paid and moving on."

The firm, which has 10 licensed professional engineers, has installed wastewater facilities in Springdale, Rogers, Bentonville, Jonesboro and elsewhere. It also did the design work for the Beaver Water District, which serves Northwest Arkansas, and the Carroll-Boone Water District. While water and wastewater are its primary areas of focus, it also designs bridges and street projects and did the site work for the Jones Center in Springdale.

Among the firm's signature projects was the \$61 million construction of Fayetteville's West Side Wastewater Treatment Plant. Crider was the project engineer. The plant serves about two-thirds of the city's land area and was designed to treat 10 million gallons a day for about

40,000 customers. It can be expanded to treat about 50 mgd.

As part of the plant work, McGoodwin, Williams and Yates along with Environmental Consulting Operations constructed a 46-acre compensatory mitigation site, the Woolsey Wet Prairie Sanctuary. The firms discovered that the area was populated with the remnants of mounds that were part of a vast prairie that had stretched across Northwest Arkansas and into Oklahoma and Kansas. Designers have spent years clearing out invasive species so native plant species could return there. According to Environmental Consulting Operations' website, the number of plant species at the site has increased from 47 to 426 with no seeding. The project has won numerous awards.

Crider and wife Stacy have two children: Emma, 13, and Tuck, 9. In his spare time, he enjoys coaching kids sports, playing golf and outdoors activities.

## New class of Emerging Leaders has first session

Joint ASPE-ACEC/A project designed to teach creative, communications skills

The Arkansas Engineering Emerging Leaders class of 2013-14 has held its first session, a team building exercise featuring a ropes course, and has seven more sessions set to go.

Participants are: Nicholas Griffin, P.E., Mickle Wagner Coleman; Scott Geurin, EIT, Brown Engineers; Travis Tolley, P.E., Crafton Tull; Dayne Moreto, P.E., Farrell Cooper Mining; Charles Ashley, RLA, CEI Engineering; Adam Triche, P.E., McClelland Consulting Engineers; John Cantabery, P.E., Garver; Aaron Stallman, P.E., Garver; Adam White, P.E., Garver; and Ryan Castor, P.E., Burns and McDonnell.

Emerging Leaders is an eight-session program hosted jointly by ACEC/A and ASPE that focuses on right-brain thinking – the social, creative and visionary skills associated with business management and effective leadership. Prominent, accomplished presenters provide personal insights, timely information and useful tools. Those tools



**HELPING HAND.** Dayne Moreto, P.E., right, of Farrell Cooper Mining and Garver's John Cantabery, P.E., work together to climb a ropes course during the first Emerging Leaders session.

help participants advance their careers and contribute to their employer, the engineering industry, and the quality of life in Arkansas.

The Team Building session occurred Sept. 25 on the campus of Northwest Arkansas Community College. Future sessions are Business

101; Public Speaking; Government; Conflict Resolution; Contracts & Risk Reduction; and a Senior Leadership Roundtable with some of Arkansas' engineering pioneers and firm principals. Graduation for the program will be held in conjunction with the ASPE Annual Conference.



**ACEC/A PRESIDENT.** Bert Parker, P.E., Garver's chief administrative officer, stands in his office beside a painting by his wife, Robin.

## Parker has plans for building ACEC/A

Nonmember firms must understand association's watchdog role, he says

By **Steve Brawner**  
Editor

Slicing through 1,375 feet of the Boston Mountains outside of Fayetteville is the Bobby Hopper Tunnel, the only highway tunnel in Arkansas. Bert Parker, P.E., now Garver's chief administrative officer, was the project engineer.

The tunnel was the first such project managed by Garver, which speaks to the faith that the Arkansas Highway and

Transportation Department has in the firm. It was Parker's first tunnel as well. While Garver enlisted the help of experienced outside companies, ultimately the hole was dug using basic engineering principles.

"One of the things that engineers do is they break it down to the fundamentals on what they know how to do," Parker explained in an interview at his office. "So although you think about a tunnel being a little bit deceiving because it's not something you've ever done before, when you actually break it down into the stresses and strains, and you design the concrete

based on the loads, you design the portals and the retaining walls and the stuff that we had a direct impact on, it's not rocket science. It's just something that you have to have a good fundamental background of engineering to be able to do. .... It was as fun to watch actually being constructed as anything."

Thousands of motorists pass through that tunnel each day without thinking about how the concrete is supporting tons of sandstone and shale above them. Parker doesn't worry about it, either. Because the tunnel was constructed by skilled, experienced engineers, he's confi-

dent that the work will last for many years to come.

"What I've decided is, rarely does an engineer's mistake go back and catch him," he said. "It's something that he didn't look at that goes back and catches him. So, I think that you have to get comfortable with the fact that you've looked at all possible failure-type scenarios, for instance – everything that could have possibly gone wrong, and you've dealt with them."

### Building the company

Parker, 59, spends most of his time these days building the company, not highways and bridges. A couple of years ago, Garver's leadership decided that the firm needed to adopt a strategy of aggressive but structured growth, which meant it needed to get better at writing contracts, making risk assessments and other administrative matters. Instead of a finance person, it needed an engineer who understood the concept of acceptable risk.

Parker, who had a reputation in the company for reading the fine print of bank loans and contracts, was named chief administrative officer.

"The contracts we end up negotiating with them are not perfect," he said. "So somebody has to rationalize how much risk we're willing to accept, what that risk is, and is the return or the profits or the opportunities from that project worth the type of risk it has to be. So it's not just

numbers. It's more of an analysis of risk versus reward."

After 34 years of working in the transportation section, Parker is now in charge of contracts, risk management, human resources and staff education. That's a big responsibility for a firm that has 357 employees, including 80 engineers, in 17 office locations in 10 states.

He has never worked for any firm but Garver since graduating from the University of Arkansas with a master's of civil engineering degree. A native of Jonesboro, he and his future wife, Robin, attended their high school prom together as seniors. He enrolled at Arkansas State University for two years before transferring to Fayetteville and completing his education with Robin's support. "I wasn't sure I really wanted to get my master's, but I was sure I wanted to get my education out of the way," he said.

Increasing active membership in ACEC/A is one of his primary goals as president. That means reaching out past some of the ACEC/A's traditional constituencies, such as transportation-focused companies, and showing how the association benefits other disciplines such as mechanical and electrical firms. While other engineering associations, such as ASPE, are focused on advancing individual engineers, ACEC/A's purpose is to advance the engineering profession. He believes helping nonmember firms see the importance of that will inspire them to get involved.

"I think once they understand that ACEC is the watchdog of our industry and what we're focusing our energy on, they will recognize the importance of that, and those that can will contribute to that energy, that effort it takes to help manage that," he said.

Parker's employer, Garver, was one of the early members of what became the ACEC/A, and it remains active in both the state and national organizations. While Garver is among the largest Arkansas-based firms, it's a mid-sized firm compared to international companies like AECOM, which has 45,000 employees. According to Parker, those larger firms tend to be the most active nationally because they have the staff and resources to devote to those activities, but they have welcomed Garver's participation. He serves on the ACEC's Transportation Committee and chairs the Railroad & Transit Policy Subcommittee.

As head of ACEC/A, he wants to make sure that smaller firms know they also are encouraged to participate at the state level. Even firms with only a handful of engineers can be active through the association's various committees.

"Just like the national ACEC organization needs input from all size firms, not just the big firms, ACEC Arkansas needs input from all of our firms, not just Crafton Tull and Garver and those that have a large enough administrative staff that they can assign someone to represent them," he said.



## Congratulations Bert Parker

Congratulations to Bert Parker, new ACEC president. He joined the Garver Team 35 years ago. **When will you?**

Garver's growing offices are seeking dynamic engineering professionals throughout Arkansas and the region

For full job details and to apply, visit [www.GarverUSA.com/JoinUs](http://www.GarverUSA.com/JoinUs)



# Risk management is everyone's job



## Small firms benefit when extra sets of eyes watch for potential problems

*Provided by XL Insurance's Design Professional group*

In today's market, it's an understatement to say that small A/E firm owners have many competing demands on their time and attention. In addition to designing projects well, the typical small firm owner takes the lead role in marketing; client and project selection; contract management and negotiations; human resources; accounting and finance; and facilities management – not to mention keeping the lights on.

As if the technical risks of design weren't enough, each of these business functions introduces additional risk elements into the firm as well. With these operational duties competing for an owner's time, who's minding the process of risk management – and whose responsibility should it be? Should the duties of being a "risk manager" rest solely on the owner's shoulders? We don't think so.

The simple answer is that risk management should be an active component of everyone's job description because there's so much at stake and so little margin for error. A single major claim or dispute has the potential to wreak financial havoc and threaten the ongoing viability of a small business. To hedge against this negative

outcome, it's incumbent upon the small firm owner to communicate the importance of risk management to the entire staff, and to illustrate how everyone can pitch in to help proactively manage the firm's risk exposure.

Sounds logical enough, but how does a small firm owner actually do this? Here are a few suggestions.

Start by integrating other staff members into some of the firm's business activities that have historically been your exclusive domain. It's difficult for your team to fully recognize the risks involved in the business of design if you don't include them in the process.

Commit to mentoring your staff on "how you do what you do." For instance, if you're going to a marketing meeting, have a junior staff member accompany you, and take the time to explain the process you use to select clients and projects for the firm.

Take junior staff members with you to pre-bid or preconstruction meetings, and expose them to the realities of client and project team communications. Let them know you'd like them to assume some of these duties in the future.

Delegate the preparation for an upcoming contract negotiation to your next-in-command so he or she can learn those issues that are deal makers and deal breakers for the firm.

Delegate a staff member to take the lead role in the professional liability insurance process. You might assign the job of filling out the application, and then review it with him or her to point out the importance of various sections. Again, make the point that you'd like this staff member to take responsibility for more of this activity in the future.

This systematic delegation of duties not only creates a natural backup for you, but it also helps cultivate additional risk managers for the firm. Having several sets of eyes looking out for the firm's welfare can only help your firm better manage its risk.

*XL Insurance's Design Professional group offers professional liability insurance programs for engineers and architects. For more information about XL Insurance, contact the Arkansas offices of BancorpSouth at 501.664.7705 in Little Rock; at 479.271.0725 in Rogers; or at 870.972.5281 in Jonesboro.*

## Marketplace

*Editor's Note: This page contains news of interest from Arkansas Professional Engineer advertisers that are not members of ACEC/A or ASPE.*



### Van Horn building Russellville gym

Van Horn Construction has been selected as the construction manager for a new gymnasium being constructed at Russellville High School.

The gym will feature an arena-type design with seats that encircle the floor. Construction is scheduled to start in March 2014 with completion in September 2015. The project's budget is \$12 million.

Chad Weisler, Van Horn's vice president, is leading the project. Hight-Jackson Associates PA is the architectural design firm.

Van Horn Construction specializes in construction management and design build work. For more information, contact the company at 479.968.2514, or go to its website at [www.vanhornconstruction.com](http://www.vanhornconstruction.com).

### Duncan joins team at BancorpSouth; focus is engineers

BancorpSouth Insurance has announced the addition of Michelle Duncan to the Professional Services team. She will focus on engineers, architects and attorneys.

Duncan has been with BancorpSouth since 2001 and has had several key roles supporting insurance services and customer relations. In her new position, she will manage and market the renewals and new business for professional services.

Duncan will be communicating with clients regarding industry-specific topics

and working to understand the needs of their businesses.

BancorpSouth Insurance has been involved with engineers in Arkansas for more than 20 years and sponsors the Peoples Choice Award at the annual Engineering Excellence Awards banquet.



Duncan

### ICM helps cities coat sewage pump stations with epoxy

ICM Engineers has recently helped apply epoxy coatings at pump stations in Cabot and Heber Springs.

According to owner Bruce McFadden, the coating protects pump stations and manholes from the hydrogen sulfide gas that can quickly damage the concrete.

The epoxy can be applied both to new stations and rehabilitation jobs. In Cabot, ICM worked with Crist Engineers to coat a pump station built in recent years that had not yet been exposed to sewage. The epoxy was used on more than 20 new manholes in Heber Springs.

Tim Joyner, manager of Cabot WaterWorks, said this is the first time the utility has experimented with the epoxy. He is hopeful that it will help preserve the concrete from sewer gas damage.

"It completely consumes all the concrete surfaces," he said. "The hydrogen sulfide forming the sulfuric acid, it will completely eat all the concrete surface in a structural way. I've got one lift station where we're starting to see the reinforcing steel exposed. Now, it's been in service for 20 years, but it has completely deteriorated. ... We've had to replace all the pump piping once already."



**Leaders in Manhole Construction since 1970 and now Leading in Manhole Rehabilitation and Structural Repair of Water and Wastewater Facilities**

#### MANHOLE REHABILITATION

- Cementitious Products
- Epoxy Liners & Coatings
- Chimney Seals
- Chemical Grouts
- Rainwater Inflow Stoppers
- ICM Manhole Liner Forms

#### STRUCTURE REPAIR

- Water & Wastewater Plants
- Wetwells & Pump Stations
- Storm Water Systems
- Trenchless Pipe Repairs
- Concrete Dam Repairs
- Earthen Dam Stabilization

#### EPOXY COATINGS FOR NEW CONSTRUCTION

**Water & Wastewater Plant Structures**

**Contact: Bruce McFadden – (501) 912-7715**  
[www.improvedconstructionmethods.com](http://www.improvedconstructionmethods.com)

# THE CHEMFEED LEADER IS BACK!



NEW EQUIPMENT

REPLACEMENT PARTS

ON-SITE SERVICES

REPLACEMENT EQUIPMENT

## WALLACE & TIERNAN®. OVER 100 YEARS, AND STRONGER THAN EVER.

Wallace & Tiernan® products have been known for reliability and quality since 1910. Encore® chemical feed pumps, PolyBlend® dry and liquid polymer blending systems, Wallace & Tiernan® dry chemical feeders and Varea-Meter® flow meters are the standards for the markets they serve. We are working tirelessly to ensure that our responsiveness matches the historic reliability and dependability that the Wallace & Tiernan® products are known for. We are the same team that turned the business around in the late 1990s, and we are determined to earn back your trust – one order at a time. Contact us today to learn more or to purchase Wallace & Tiernan® products.

Locally Represented By:



**ENVIRONMENTAL TECHNICAL SALES, INC.**  
Chad Cooley, P.E. • [ccooley@etec-sales.com](mailto:ccooley@etec-sales.com)  
Matt Muehlbauer • [matthew@etec-sales.com](mailto:matthew@etec-sales.com)  
P: (501) 978-1025 • F: (501) 978-1026



The trademark Wallace & Tiernan® is used  
under license from Siemens Industry, Inc.