LOUISIANA CIVIL ENGINEER

Journal of the Louisiana Section

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Claiborne Elevated Storage Tank -Foundation Formwork and Steel Placement

Feature:

Hammering Out Post-Katrina Issues for New Orleans Drinking Water System

News:

2019 Spring Conference in Shreveport a Success

Louisiana Tech University wins Concrete Canoe Competition





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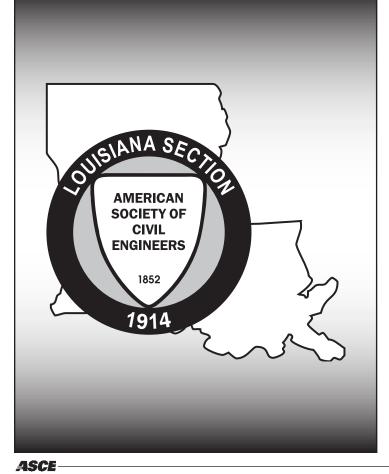
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The Louisiana Section of the American Society of Civil Engineers was founded in 1914 and has since been in continuous operation. The Section consists of the entire state of Louisiana and is divided into four branches that directly serve over 2000 members. They are the Acadiana Branch centered in Lafayette, the Baton Rouge Branch, the New Orleans Branch, and the Shreveport Branch.

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PUBLISHER:

Baton Rouge Printing, Inc., Port Allen, LA

Louisiana Civil Engineer quarterly journal is an official publication of the Louisiana Section of the American Society of Civil Engineers with an average circulation of approximately 2100. The Section neither guarantees the accuracy of the information provided nor necessarily concurs with opinions expressed. It does not claim the copyrights for the contents in this publication. Please submit letters and articles for consideration to be published by email to <u>nedrasuedavis@gmail.com</u> or mail to the Publications Committee c/o Nedra S. Davis • 622 Steele Blvd. • Baton Rouge, LA 70806-5742.





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President's Message By Rudolph Simoneaux, III, PE

As we approach summer, I'd like to take this opportunity to look back on some exciting events that took place this past Spring. In March, Louisiana Tech hosted the 2019 ASCE Deep South Student Competition in Ruston. I would like to commend the Louisiana Tech ASCE Students and their faculty for doing an exceptional job hosting this year's event. Even better news – the Louisiana Tech Team placed first in the overall Concrete Canoe and Mead Paper Competitions! The Concrete Canoe Team will be participating in the National Competition in Melbourne, FL in June. The Steel Bridge Competition is now sponsored by AISC, but was held during the ASCE Deep South Competition in Ruston. The LSU Steel Bridge Team placed first and will be participating in the National Competition in Carbondale, IL in June. Participating in these student events while balancing school work takes a tremendous amount of hard work and commitment. The Louisiana Tech and LSU victories show just how dedicated these students are to their schools and our organization. On behalf of the entire ASCE Louisiana Section membership, I'd like to congratulate both teams on their regional victories. Good luck at the National Competitions in June!

In April, the Shreveport Branch hosted this year's annual Spring conference. A full report of the conference is included later on in the journal. I'd like to take this opportunity to thank the members of the Shreveport Branch for all of their hard work in putting on this conference. The conference was well-attended and the program was very diverse and balanced. The evening social at one of the local breweries was also very nice! Our annual General Membership Meeting was held during the conference, which included the nomination and election of the Louisiana Section Board of Directors for the 2019-2020 term, which will begin on October 1, 2019. I will be comfortably filling the role of Past-President and passing on the responsibilities of President to Mr. Beau Tate. The remaining 2019-2020 Board Members are as follows: ASCE and its partner organizations routinely monitor the filed legislation the at beginning of each legislative session. It is not usual to see bills that attempt to change the engineering licensure laws and regulations. This legislative session was no different. House Bill 354 was filed in April and attempts to alter



Rudolph Simoneaux, III, PE

a Civil Engineers' involvement in the design of buildings. Present law provides that no person shall practice architecture in Louisiana unless he or she has secured a certificate of registration and license in architecture. However, present law also provides several exemptions, one of which exempts licensed Civil Engineers if the engineer does not use the designation of "architect". House Bill 354 proposed to remove that exemption and require the involvement of a licensed architect on any project that has previously been designed by Civil Engineers. This exemption has been in place since 1946 at no detriment to the public. Civil Engineers routinely design buildings that are components of industrial and municipal projects without the participation or approval of a licensed architect. Small material storage buildings, housing for pump stations, and process equipment buildings are three common examples of such structures. Thanks to the dozens of ASCE members that reached out legislators to oppose this bill, and the collaboration of ASCE, LES, and ACEC, this bill was voluntarily deferred by the author at this time. A special thanks to our Government Relations Committee Chair, Kirk Lowery, for leading the charge in the opposition of this legislation. We will continue to track this bill for the remainder of this session and during future sessions.

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"The Louisiana Section recently purchased over 800 Dream Big DVD kits. We will be distributing one kit to every public school in the State. More information will be provided in the coming months."



Hammering Out Post-Katrina Issues for New Orleans Drinking Water System

By Jeff Decoteau, PE, PMP, Stanley Consultants, Inc.

In addition to the devastation and heartbreak that Hurricane Katrina brought to the Gulf Coast in 2005, lingering consequences hamper the quality of life and health in New Orleans today. Some of these consequences are related to the City's water supply which has suffered several "boil water" advisories since 2012, to protect citizens from potentially tainted drinking water.

The Sewerage and Water Board of New Orleans (SWBNO) advisories are cautionary and no events have resulted in harm. There are a myriad of environmental, maintenance, and operational causes for the water distribution pressure drops. Several short-term events (less than 24 hours) reduced pressures to less than 20 psi (boil order threshold). There were a gamut of reasons for the pressure drop events; power fluctuations at the on-site power plant; interruptions of the commercial power supply; thunderstorms that knock out power; a major water main break in New Orleans East; commercial power surges; a mechanical failure of the on-site boilers; a fire at the power plant, a water main rupture in Uptown and other impactful water main breaks. The consequences of these events are a hassle for citizens, a frustration for SWBNO maintenance and operations staff, and a political issue for city officials.

After Hurricane Katrina, the Federal Emergency Management Agency (FEMA) launched a program to repair point leaks and fullline ruptures to the existing water distribution system. These system integrity improvements still limit the effectiveness of the restoration work due to "water hammer" effects when power outages cause water distribution delivery pumps to shut down resulting in a rapid water pressure drop in the system.

Imagine a shift in water pressure resulting in powerful 5-foot waves slamming back and forth within the pipes, causing damage to pumps, angled pipe connections, valves, and other system parts. Because of these conditions, the Water Hammer Hazard Mitigation Program (WHHMP) was initiated at the SWBNO in conjunction with FEMA. The Program's basic goals are:

- 1. Develop a hydraulic model of three main pumping stations and the associated distribution system for understanding the problem,
- 2. Determine the most cost-effective solution for eliminating water hammer effects, and
- 3. Execute a design and construction program for bringing the project to completion.

Sewerage & Water Board of New Orleans

The Sewerage and Water Board was created in 1899 to prevent disease and improve health conditions related to open sewer ditches in the city of New Orleans. The Carrollton Water Treatment Plant (WTP) was built between 1905-1909 to provide safe drinking water under controlled conditions. In its infancy, the SWBNO also managed the City's sewerage collection and stormwater drainage control.





Jeff Decoteau, PE, PMP

Not only was the original WTP an engineering marvel for its time, the distinctive Mediterranean architecture of the original 10 buildings resembled a university campus rather than an industrial plant. This placed today's facility on the historical landmark list for the Carrollton Historic District. Although it lost much of that campus feel as the plant was enlarged and modernized through the years, the architecture of this historic landmark area continues to play a role in shaping plant improvements in the future. Copper and red roofs, white stucco building facades, and large arched windows seen today link the modern building to its past.

In 1973 the Louisiana Engineering Society awarded the innovative tri-service SWBNO as one of the 10 most outstanding engineering achievements in the state of Louisiana. Today, the WTP provides over 170million gallons per day of drinking/fire protection water which serves the majority of New Orleans on the East Bank of the Mississippi River. The Algiers Plant supplies 53,000 people on the West Bank with 11 million gallons of drinking/fire protection water per day.

Post-Katrina Damage

Even an award-winning water system will deteriorate with age when combined with the catastrophic forces of a hurricane. Katrina brought uprooted trees, saturated soils, and an influx of contaminated floodwaters which resulted in a complete loss of system pressure. Nearly a half-million residents were without water, sewage collection, and stormwater pump protection. The Post-Katrina impact for non-revenue water (leakage) was a loss of nearly 90 million gallons of treated water per day.

Federal money poured in to make repairs, and tens of thousands of point and line repairs were made, restoring operating pressure to nearly pre-storm levels. However, the improvements led to water hammer conditions that attacked the old parts of the system causing further leaks.

FEMA Proposed Solution

FEMA recommended the replacement of four 40 million gallon per day (MGD) pumps at the Claiborne station, two 45-MGD pumps at the Panola station, and two steam-driven pumps in the steam pump room. The new pumps, though of similar capacity, would bring

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better capabilities, such as variable frequency drives, slow opening and closing discharge valves with battery backup for each pump; inverter-duty motors with anti-rotation devices, and a vacuum priming system for each pump. Programmable logic controllers were proposed to minimize sudden pressure changes.

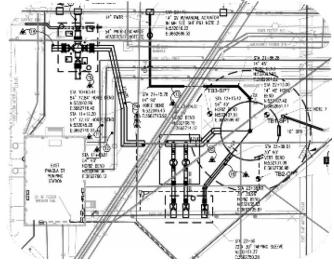
A key factor for successful water operations at the WTP is reliable power. Instead of a dedicated power source, 60-Hertz power is supplied by the local utility, while antiquated 25-Hertz power is generated on-site. A breakdown in any part of the power supply chain from either the public utility or the onsite plant would jeopardize pump service and result in a potential "boil order" advisory.

Surge Mitigation Analysis and Recommendations

The SWNBO authorized the Stanley Consultants, Inc. team to initiate the WHHMP planning and design efforts. The WHHMP included improvements at the WTP to reduce the risk of transient pressures in the repaired water distribution system. The team confirmed the FEMA pump upgrade recommendations would mitigate highpressure surges but did not provide adequate protection for controlling low pressure fluctuations.

After reviewing various options, the resulting recommendation by Stanley Consultants, Inc. included installing two, 2-million-gallon elevated composite concrete and steel storage tanks that would provide both high and low-pressure surge mitigation and keep the system pressurized for 40 minutes at 75 psi. This 40-minute design criteria allows enough start-up time for ramping backup pumps into operation to regain system pressure.

In conjunction with the elevated storage tanks, it was recommended to upgrade the Claiborne and Panola on-site pump stations to create a more robust, sustainable, and redundant system. The improvements include new pumping equipment, variable frequency drives, electrical upgrades, discharge check valves, isolation valves, electric drives, and miscellaneous piping appurtenances. To minimize pump-start times and reliable pump availability, each pumping station is designed with a central priming system that will keep each pump primed continuously. The WHHMP has a total estimated construction cost of over \$100 million.





The WTP is a 100-year old site where all utility lines are required to be buried, creating a logistical problem for creating a clear footprint for the placement of two 2-million-gallon elevated storage tanks. A virtual rats nest of underground utilities was the main challenge: electrical duct banks, communications and data lines, water mains and branches, return lines, storm water drainage pipes, sanitary sewers, force mains, building piles and support systems.

In addition to typical engineering constraints, the elevated storage tanks needed to meet requirements maintaining the community's historical identity. The stakeholders included members from the SWBNO, FEMA, Governor's Office of Homeland Security and Emergency Preparedness, Louisiana State Historic Preservation Office, Carrollton and Riverbend Neighborhood Associations, and the Preservation Resource Center of New Orleans. As such, it was important to maintain the New Orleans heritage by including a roofed tank structure resembling the architecture of the French Quarter. Therefore, architectural gusset trusses were used in conjunction with the red roof to give the illusion of a roofed cistern.



Figure 2 - Rendering from Landmark Tank Structures

After final design was completed by the Stanley Consultants, Inc. team, the project was bid and awarded to B & K Construction Co. LLC of Mandeville, La., for \$33.6 million. The contactor in partnership with Landmark Tank Structures completed the concrete tank pedestal bases using 14 vertical lifts and building a final tower dome tank bottom. The steel tank was fabricated onsite and lifted onto the base adorned with the classic SWBNO logo. The Claiborne tank is operational and scheduled for final completion in July 2019. The Panola tank is currently under construction with a scheduled completion date of July 2019.

The B & K foundation design for the tanks included a flexible design matrix of 12 different pile layout scenarios for accommodating the resulting pile load tests for both the Claiborne and Panola tanks.

This design planning and innovation allowed for a quick foundation determination for each tank for maintaining the critical path schedule for construction. Ultimately, 128 piles in a 4-row configuration were used for the Claiborne storage tank and the Panola tank required 146 piles in a 5-row alignment.

The new Claiborne and Panola Elevated Storage Tanks and the Claiborne and Panola Pump Station upgrades will provide reliable safe water for years to come. The SWBNO officials, engineers, operational and maintenance staff continue to seek ways to improve functionality, reliability and sustainability of the system to the citizens of New Orleans.

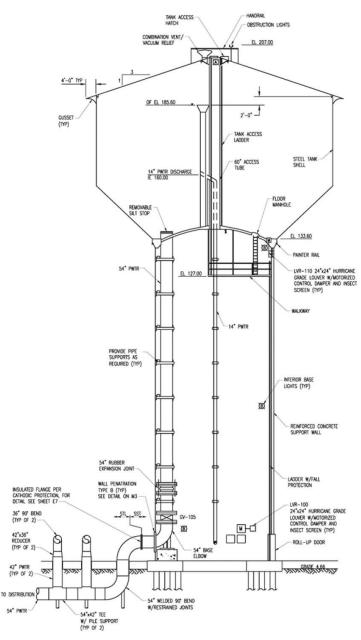


Figure 3 - Design Drawing by Stanley Consultants, Inc.

Water Hammer Program Ongoing Projects

The potable water system in New Orleans managed by the SWBNO is an amazing and complex modern marvel that faces enormous challenges in the future because of water demands, local subsiding soils, and exposure to the coastal ravages of hurricanes and sea level rise. The WHHMP represents a leap forward into modernizing the city's water system and significantly reducing the adverse risks associated with boil order advisories.



Figure 4 - Claiborne Pump



Figure 5 – Claiborne Water Tower Foundation



Figure 6- Claiborne Water Tower Pedestal Slip Forms



Figure 7- Steel Tank Onsite Fabrication



Figure 8- Installed Steel Tank for Panola Water Tower



Figure 9- Operational Claiborne Water Tower

About the author

Jeff Decoteau, PE, PMP is the Vice-President of the Water Market Operations at Stanley Consultants, Inc. He is a Senior Project Manager and Principal Environmental Engineer in the Baton Rouge office. Decoteau earned a B.S. in Civil Engineering from Louisiana State University in 1989. His background includes project planning and management, technical analysis and design, and the operation of company resources for Water Resources, Potable Water and Wastewater planning, design, and construction management divisions.

About the team

The Water Hammer Hazard Mitigation Program team is led by SWBNO Project Manager Chris Bergeron, PE, Chief of Engineering Ron Spooner, PE, and Deputy General Superintendent, Bruce Adams, PE

The Stanley Consultants, Inc. members were Jeff Decoteau, PE PMP Senior Project Manager, Larry Leischner, PE Senior Civil Task Lead, Fred Rouse, PE Senior Mechanical Task Lead, Nate Veen, PE Electrical Task Lead, Scott Warren, PE Instrumentation and Control, and Gwen Stithem, Resident Project Representative.

The Stanley Consultants team included specialty consultants for Hydraulic Modelling and Analysis by Owen & White, Inc.; Geotechnical services by Intertek-PSI, Survey and Inspection services by GOTECH, Inc., Preliminary Cost Estimates by Resilere Engineering and Consulting, LLC, Hydraulics by Flow Science, Transportation Design by Civil Design and Construction, Inc. and Structural Design and Permitting services by Trigon Associates, LLC.

ASCE Region 5 By Peter M. Moore, PE, ENV SP, F. ASCE







Committee Restructures, Big-Picture Planning Highlight Productive Board Meeting

It was another successful Spring Week for ASCE in the Washington, DC, area. The annual Legislative Fly-In featured members from all 50 states (plus DC and Puerto Rico) bringing our message of infrastructure investment to Congress. The 20th annual OPAL Gala honored the best people and projects in our profession.

The Board meeting was a productive session, as we continue to reshape ASCE and everything we do in alignment with our new strategic plan.

Highlights from the Board meeting:

- The Board of Direction approved a reorganization of the Committee on Advancing the Profession. The new structure creates a new diversity and inclusion advisory council called MOSAIC (Members Of Society Advancing Inclusion Council) that will report directly to the Board, among several other important improvements (read the full ASCE News story online).
- The Task Committee on Revenue Generation gave a progress report on its four key areas: 1. building engagement with government engineers; 2. market intelligence and benchmarking data; 3. leadership training; 4. online streaming. Each area has had its successes and challenges during the past year. Various relevant ASCE committees will continue to work with ASCE staff to monitor each area and maximize future opportunities.

Peter M. Moore, PE, ENV SP, F. ASCE

- Student voting rights continues to be an important issue worth consideration. President-Elect K.N. Gunalan, PhD, PE, DGE, F-ASCE, updated the Board on his work in this area, and we approved his continued leadership for research into possible student voting rights recommendations.
- The next Board meeting is scheduled for July 12 and 13 at ASCE Headquarters in Reston, VA.

To share your views or provide ideas on how ASCE can better serve its members and the profession, please email Peter at pmoore@ chenmoore.com.

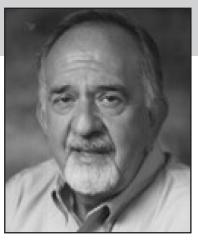
* Remember, the R5BoG is made up of seven Governors who are willing and able to help:

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Shelly Watson (MS):	sbwatson@ara.com

Passing of Albert John Bergamini, PE

We learned with great sadness the death of fellow engineer, Mr. Albert John Bergamini. Mr. Bergamini passed away May 3rd. Mr. Bergamini was the founder and CEO of NTB, an all-discipline Engineering Company, headquartered in Shreveport, LA. He was a licensed Civil Engineer and was active in many Engineering organizations including ASCE. He earned many awards and citations for design and excellence.

He was a friend and colleague to many of us and he will be missed.



Albert John Bergamini, PE

Deep South 2019 By Kirk Lowery, PE

On March 29th and 30th, Louisiana Tech University hosted the Deep South Conference that had teams from Louisiana, Mississippi, Southern Arkansas and Southern Tennessee competing in multiple judged competitions. This included the Sustainability Competition, the Surveying Competition, the Daniel Mead Professional Ethics Competition and the Concrete Canoe Competition. The Sustainability Competition was based on the building of a dog house judged for aesthetics, speed of construction, lightness or weight, cost, the written submittal and oral presentation. The Surveying Competition was judged for level loop, a parapet wall top elevation, boundary side length accuracy, boundary side bearing accuracy, and the field book. The Daniel Mead Competition was judged on the submitted paper and presentation. The Concrete Canoe Competition was judged on the design paper, oral presentation, final product and the results of the men's, women's and coed canoe races.

The Deep Conference could not be completed without the assistance of volunteer university professors and volunteer ASCE members as coaches and judges. Thank you volunteers and congratulations to Louisiana Tech University for not only winning the Concrete

Canoe Competition, see their presentation pictured below, but for the outstanding, wellorganized conference. Good luck on June 6th through 8th in Melbourne, FL at the National Concrete Canoe Competition.











Pictured above clockwise are students with their concrete canoes from Louisiana Tech University, LSU, McNeese State University and UNO. The top three universities in each of the competitions are provided in the following table:

Competition	First Place	Second Place	Third Place
Sustainability	University of Arkansas at Little Rock	University of Louisiana at Lafayette	Arkansas State University
Surveying	Arkansas State University	Christian Brothers University	Louisiana Tech University
Daniel Mead	Louisiana Tech University (tie) University of Louisiana at Lafayette (tie)		University of Arkansas at Little Rock
Concrete Canoe	Louisiana Tech University	Mississippi State University	University of Tennessee at Martin
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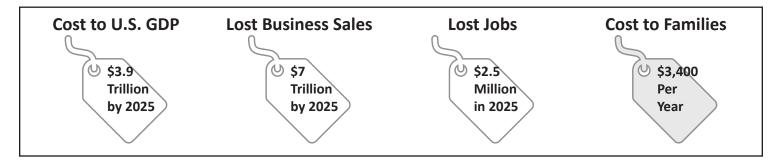
ASCE | GOVERNMENT RELATIONS

ASCE Government Relations Legislative Fly-In 2019 By Butch Ford, PE

On Wednesday, March 13, 2019, 310 ASCE members from 50 states, and Puerto Rico arrived on Capitol Hill to advocate for infrastructure and the civil engineering community. The Louisiana Section Team brought their message and the #ASCE2DC #InfrastructureNow hashtags about infrastructure needs to the 116th Congress that affect the United States and the State of Louisiana. Nedra Hains, Molly Bourgoyne, Ken Perrett, and Butch Ford engaged with the staff of Senator Kennedy, Senator Cassidy, Representative Scalise, Representative Graves, Representative Higgins, Representative Johnson, Representative Richmond, and Representative Abraham. In addition, we were able to meet with Senator Cassidy, Representative Graves, Johnson, and Higgins in person. Armed with issues briefings from the ASCE Government

Relations team, and insight from keynote speakers, Fly-In attendees spent Wednesday afternoon advocating for a 25-cent per gallon motor fuels tax increase to help fix the Highway Trust Fund, fully appropriating key infrastructure programs in FY2020, and urged Members of Congress to follow ASCE's Principles for Investment as they draft a bipartisan infrastructure bill.

It seems to be a replay of last year, as with any plan to better address infrastructure issues, the main question still is how to fund the various infrastructure programs. ASCE's 2017 Infrastructure Report Card http://www.infrastructurereportcard.org/, rates the overall condition of the nation's infrastructure a "D+," with an investment gap of \$2 trillion. An economic study released last year found that the U.S. is on track to invest only half of what is needed in infrastructure over the next decade.



ASCE has no cure-all to make our infrastructure whole; however, during the meetings with our representatives the National Report Card was referenced. Some of the key talking points that were discussed follow:

- A long-term solution to pay for our surface transportation network must be identified to provide stability and modernize our nation's roads, bridges, and transit system for the 21st century.
 - Fix the HTF by raising the motor fuels user fee by 5 cents per gallon for the next five years. Increasing the user foo from the current 1993 rate of 18.4 cents would provide the revenue needed to modernize our surface transportation infrastructure and address the current funding deficit.
 - Fully fund critical transportation infrastructure programs including the Better Utilizing Investments to Leverage Development grants, Airport Improvement Program, and Transit Capital Investment grants.
- Eliminate the cap on Passenger Facility Charge to modernize the nation's airports.
- Put trust in the Harbor Maintenance Trust Fund by fully appropriating the Harbor Maintenance Tax collections each year.

- Fully fund critical water resources infrastructure programs, including:
 - o Clean Water State Revolving Fund
 - o Drinking Water State Revolving Fund
 - o Water Infrastructure Finance & Innovation Act
 - National Dam Safety Program & High Hazard Potential Dam Rehabilitation Program
 National Levee Safety Program
- Reauthorize and fully fund the Land & Water Conservation Fund.
- Address the \$12 Billion National Park Service deferred maintenance backlog.

Failing to close the infrastructure investment gap means higher costs for businesses to manufacture and distribute goods and provide services. In turn, these higher costs get passed along to workers and families.

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ASCE Government Relations, Continued



L-R: Ken Perret, Representative Mike Johnson, Nedra Hains, Molly Bourgoyne, and Butch Ford – All meet with the about Infrastructure issues during the Fly-In

During Tuesday's programs members received advocacy tips and tools from notable guests. During Tuesday's programs members heard from Brad Fitch, CEO of the Congressional Management Foundation and Senator Tom Carper (D-DE), while Neil Pedersen, Executive Director of the Transportation Research Board shared details from their latest study "Renewing the National Commitment to the Interstate Highway System." Molly Bourgoyne, from the Baton Rouge Branch, was able to attend the Younger Member Session as well. The Younger Member Session oriented participants to the Fly-In process and built skills for congressional visits and introduced ASCE's Government Relations program and public policy advocacy resources.

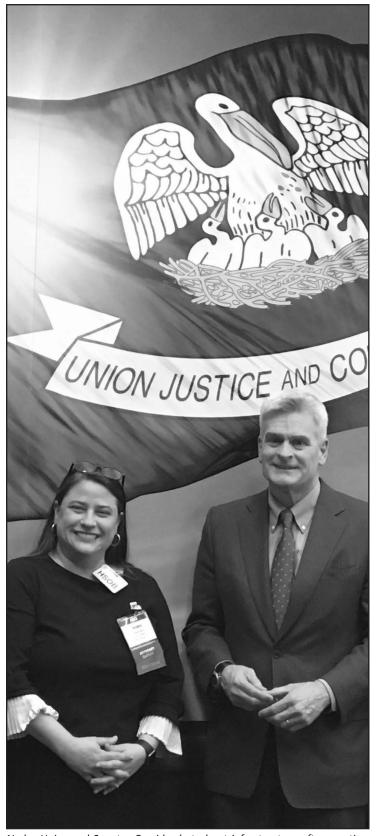
During Wednesday's advocacy session, Representatives Earl Blumenauer (D-OR) and Rodney Davis (R-IL) provided insights on what legislators hope to hear from constituents and the current status of a federal infrastructure package before heading out to make visits to Members of Congress.

Ultimately, our ASCE delegation reminded the 116th Congressional members that we at ASCE are here as professional licensed engineers to help them find the answers and solutions, all they have to do is reach out. If you would like to help or join the Louisiana Government Relations Committee, please contact the editor, our president or the government relations chairman, Kirk Lowery. We need volunteers and could use assistance from engineers all over the state.



Molly Bourgoyne and Nedra Hains advocating for infrastructure on the Hill for Fly-In

ASCE Government Relations, Continued



Nedra Hains and Senator Cassidy chat about infrastructure after meeting with the Louisiana Delegation for the Fly-In



Molly Bourgoyne, Representative Garret Graves, and Nedra Hains meeting for Fly-In



Nedra Hains, Molly Bourgoyne, and Representative Higgins grab a quick selfie while the Rep. was running to go vote

ASCE-T&DI Louisiana Chapter News

By Michael Paul, PE - Newsletter Editor



& DEVELOPMENT INSTITUTE LOUISIANA CHAPTER

Louisiana State Science and Engineering Fair

In continuation of our efforts to promote interest in transportation, planning and engineering, the T&DI Louisiana Chapter contributed to the 2019 Louisiana Science and Engineering Fair held on March 19th and 20th at the Royal Cotillion Ballroom at the LSU Student Union. The State is divided into 12 Regions and each region holds a Science Fair early in the year. The top winners from each Region can participate at the State level. The Judges for the transportation-related exhibits consisted of and T&DI Executive Committee members Sean Daly, Joffrey Easley, PE, Dan Aucutt, PE, Bill Temple, PE and Michael Paul, PE. The special awards winners for the Junior and Senior Divisions are shown below:



During the second part of the seminar, Bradley Holleman presented multiple case studies where mobile and terrestrial LiDAR scanning was utilized. The case studies showcased various application, advantages and accuracies of LiDAR scanning for surveying, measurement and modeling of highway structures. Bradley Holleman, PLS, EI is Land Surveying Division Manager at SJB Group.



From left: Michael Paul, Ken LaBry, Dan Aucutt, Bradley Holleman and Ryan Fuselier



Junior Division (Grades 6-8): 1st Place: Jake Noda (left) "How does the front and rear wing gradient of a Formula One car affect lap times"

2nd Place: Terra Bardarson (right) "The effect of dynamic speed limit signs on driver behavior"



Senior Division (Grades 9-12): 1st Place: Prachi Rojiwadia (left) and Noah Karavatakis (center) "Collision avoidance through use of sensors and programming utilizing an Arduino platform"

2nd Place: Alexis Haley (right) "Easy Bump"

Survey Advancement in Transportation

In February the T&DIL ouisiana Chapterhosted the Survey Advancementsin Transportation Seminar, with SJB Group as Co-Sponsor, at the Patrick F. Taylor Hall at LSU in Baton Rouge. This presentation was divided into 3 parts; each of which focused on different aspects of measurement and surveying. Initially, Ken LeBray discussed underwater inspection of bridge substructures by use of acoustic imaging. Multiple case studies were presented where acoustic scanning was used to detect areas of deterioration and scour. The acoustic scanning results were compared to those from commercial diver inspections for accuracy and to determine the best uses for underwater acoustic imaging. Ken LeBry is Chief Acoustic Scientist with C.H. Fenstermaker and has over 20 years of experience in the area of underwater acoustics remote sensing.

During the third part of the seminar, Ryan Fuselier discussed drone mapping which included the evolution of consumer and DIY drones as well as the differences between photogrammetry and LiDAR. Several case studies were also presented where accuracies and client deliverables were discussed. Ryan Fuselier, PE, PLS is Owner and President of R.J. Fuselier & Associates. This seminar was coordinated by T&DI Executive Committee Members Dan Aucutt, PE and Michael Paul, PE.

Looking Ahead

The intent of T&DI is to promote transportation and development as a career path, and to provide training and networking opportunities for all professionals involved in transportation projects. If you are interested in co-sponsoring a seminar at your branch, the T&DI Louisiana Chapter has prepared a Seminar Coordinator's Check List to assist you in your preparation. Contact Sean Daly at std@ iteris.com for a copy of the checklist. Our seminars are two hours in length and are typically presented from 5:30-7:30 pm in either the New Orleans or Baton Rouge area. We have also presented out-reach seminars with the ASCE Acadiana Branch and Shreveport Branch. We are open to co-hosting seminars in additional Louisiana cities if requested. In keeping with the intent of the Institute to provide training and networking opportunities for all professionals involved in transportation projects, the Chapter is planning the following future seminars:

- **Mitigation Banking**
- Green Infrastructure: Integrating Infrastructure Needs
 - New Orleans Armstrong Airport
- **Bridge Approach Slabs** .

Branch News

ACADIANA BRANCH By Will Cenac, PE, Branch President

I would like to start off by thanking again our ASCE Acadiana Branch members for attending our events so far in the 2018-2019 term. The officers of the branch have been working hard to grow and develop the branch so that it becomes a great resource for our members.

I would like to thank our branch secretary, Mr. Algy Semien, EI, for hosting our March luncheon on March 21, 2019 at ABACUS in Lafayette, LA. There was a presentation by Mr. Philip Averill on NCHRP and MASH crash testing standards for guardrails, barricades, and other highway safety hardware.

We switched up our typical luncheon in April because we will be cohosted a joint crawfish boil with the Louisiana Engineering Society (LES) and Institute of Electrical and Electronics Engineers (IEEE). This boil has been made possible by the hard work of Ms. Jessica Caldarera, PE, our branch Treasurer. Thank you Jessica! The boil was well attended by members of all organizations.



While at the boil, we handed a scholarship to Nick Scalfano, a civil engineering junior at UL. Congratulations Nick! We will be having more scholarship opportunities to UL and McNeese students in the Fall of 2019.

We would also like to recognize Ivy Thibodeaux, a UL civil engineering student, for being awarded the Baker Student Fellowship with American Concrete Institute. Congratulations Ivy!

We have a luncheon scheduled at ABACUS in Lafayette on May 23, 2019. So please mark you calendars, and we hope to see you for the last of our luncheons for the year.

We are also in the planning stages of holding an ASCE Acadiana Branch Golf Tournament fundraiser in the Lafayette area this summer, so keep an eye out for more information. Please reach out to the branch at <u>asceacadiana@outlook.com</u> to make sure you have the most up to date email address on file.

We are also in need of help! We would like to add two officer positions for the branch, should volunteers come forward. We are in need of a Webmaster who will assist in updating content on the branch website, as well as a Newsletter Editor who will be responsible for collecting content and editing our monthly newsletter. If you have any interest in the above positions or would like to be involved as another officer position next year, please do not hesitate to reach out to any of the current branch officers. Thank you for your interest in the Acadiana Branch!

BATON ROUGE BRANCH By Sarah Ollenburger, PE, Branch President



Engineering Day for Kids: Volunteers Left to Right: Greg Sepeda (Sigma Consulting Group), Sarah Ollenburger (ASCE Baton Rouge Branch President), Sydney Sziber (LSU ASCE President), Rob Spruell (LSU ASCE Event Coordinator), and Stephen Williams (LSU ASCE Member). Not pictured – Tyler Branch (Forte and Tablada)

Engineers Week

In February, our Branch focused on Engineers Week which is February 17-23. During this week, we awarded two scholarships: our annual Baton Rouge Branch Scholarship and the Melissa Young Doucet, PE Memorial Scholarship.

ASCE Baton Rouge Branch Scholarship: Ms. Sydney Sziber, ASCE LSU Chapter President

Sziber has been the president of the LSU ASCE Chapter for two years, a steel bridge team member for two years, and a concrete canoe team member for one year. She assisted in hosting two ASCE Bayou Regional Career Fairs which included students from LSU, SU, ULL, LA Tech, and McNeese.

Melissa Young Doucet, PE Memorial Scholarship: Ms. Orisamola Richardson, ASCE SU Chapter Vice President

Richardson is the Vice President of the Southern University Chapter and has been actively involved in planning the extra-curricular activities including Boo at the Zoo and fundraising events such as "Civil Delights" which involves the chapter selling food on campus to raise funds for the organization.

Continued on next page.

Baton Rouge Branch, Continued

Congratulations to both of our scholarship recipients! You were both well deserving candidates!

Evening Under the Stars to Celebrate the Engineering Profession

Also during E-Week in February, ASCE, WTS, and LES hosted the "Evening Under the Stars to Celebrate the Engineering Profession". The evening event included live music and mingling with Engineers at the Capital Park Welcome Center.

March Luncheon

The March Luncheon was a discussion on Ethics hosted by Louisiana Professional Engineering Land Surveying and The speakers Board. included William Hyatt and Chris Aaron. Mr. Hyatt and Mr. Aaron are both Board Investigators for LAPELS. Thank you Hyatt and Mr. Aaron!



again for your time Mr. ASCE Baton Rouge Branch Scholarship: Hyatt and Mr. Aaron! Sydney Sziber, ASCE LSU Chapter President

2019 Engineering Day at LASM

The Baton Rouge Branch along with the LSU ASCE Chapter volunteered for the 2019 Engineering Day at the Louisiana Arts and Science Museum on March 23. Our volunteers led the Stream Table activity, the Building and Bridge activity, and the Hurricane House activity. The event hosted over 860 participants which made for a busy and exciting day. Thank you again to all of our volunteers!



Melissa Young Doucet, PE Memorial Scholarship: Orisamola Richardson, ASCE SU Chapter Vice President

NEW ORLEANS BRANCH

By Robert J. Delaune, Jr., PE, Branch President

The New Orleans Branch January luncheon was held on January 15th at Dominique's Wine Boutique and Bistro in downtown Houma. This was the first ever branch luncheon held in Houma in an effort to better serve our members and fellow professionals in the Bayou Region. The luncheon



was well attended by 30 professionals in the Houma area. Dacoda Bartels discussed the use of cutting edge drone technologies that can enhance engineering projects such as structural inspections of towers, bridges, and offshore platforms, surveying, and construction monitoring. Below is a picture of one of the drones used for inspections that was on display at the presentation.

The ASCE New Orleans Branch February luncheon was held on February 12th at Lula Restaurant and Distillery on St. Charles Avenue in New Orleans. Our speaker was Ehab Meselhe, PhD, PE who is a Professor in the Department of River-Coastal Science and Engineering at Tulane University with more than 25 years of experience in computer modeling of coastal areas and river systems with extensive experience working with academic institutions, government agencies, and the private sector. Meselhe discussed the topic of storm water and hydraulic modeling with the attendees at the luncheon. The New Orleans Branch March luncheon featured a topic on the 2019 Mississippi River Flood Impact and Response. The luncheon was held on March 12th at Lula Restaurant and Distillery on St. Charles Avenue in New Orleans. Our speaker was Jean S.



Vossen, PE, Chief, Engineering Division of the New Orleans District U.S. Army Corps of Engineers. Vossen was selected as Chief of Engineering Division in April 2016 after working 20 years as a civil engineer for the New Orleans District. As Chief, she is responsible for leading an engineering staff of over 200 employees. The presentation focused on the flood fight that the Corps of Engineers is currently leading due to the high Mississippi River levels which has caused the Corps to open the Bonnet Carre Spillway flood control structure two years in a row for the first time ever. Below is a picture from Vossen's presentation which shows the extent of the Mississippi River and its tributaries which includes over 2,200 miles of levees and floodwalls.

The ASCE New Orleans Branch volunteered for Engineer's Day at the University of New Orleans on February 20th. Our Outreach Chair, Stephanie Bayne, coordinated for us to provide multiple showings *Continued on next page.*

New Orleans Branch, Continued

of Dream Big the movie as we have in years past. We also sponsored and staffed a booth at the event to teach prospective Engineering students about Civil Engineering. We featured drones and a wave action demonstration that was a hit with the students. Thanks to all our New Orleans Branch members that volunteered and staffed the booth for Engineer's Day. Below are some pictures from the event.

The ASCE New Orleans Branch Younger Members have formed a kickball team which includes Younger Members and University of New Orleans Civil Engineering students. Games are played in City Park in New Orleans in the evenings with start times ranging from



6:30PM to 8:30PM giving our Younger Members the perfect excuse to tell their boss "I can't work late tonight, I have a very important ASCE professional development and networking event to attend." Thanks to all our Younger Members and Student Members that are participating. This is a great opportunity for the Younger Members and Students to network and build the foundation of the future of the New Orleans Branch.



SHREVEPORT BRANCH By Marcus Taylor, PE, Branch President

2019 ASCE Louisiana Section Spring Conference



The Shreveport Branch hosted the 2019 ASCE Louisiana Section Spring Conference on Thursday, April 25th and Friday 26th at the Shreveport Civic Center. The conference was a great success, and the Section Board and Shreveport Branch would like to say thanks to all the attendees, speakers, sponsors, exhibitors, students, faculty members, and all those who donated their time to make this conference possible.

The conference consisted of 11 PDH sessions in two tracks, and a variety of topics including in Coastal Engineering, Wastewater, Water Resources, Wind Engineering, The Lower Mississippi River Physical Model, Pipe Rehabilitation, Planning, Infrastructure, Construction, Geotechnical Engineering, and Ethics.

Opening day was on Thursday, which started with breakfast and registration. Thursday's technical sessions included presentations on pipe rehabilitation using UV in CIPP; New Water Design Standards Review; The Engineers Role in Building Strong Towns; Sanitary Survey Reports; LiDAR Data Extraction; Overview of Large Diameter Pipe Rehabilitation using Geopolymers; Lightweight Concrete for Transportation Infrastructure System; Role of the Geotechnical Engineer during Construction; Updated History of Red River Flood; Building Momentum and Markets for Impactful Green Stormwater Infrastructure Implementation; Environmental Regulatory Compliance; and, a presentation of the Lower Mississippi River Physical Model by Louisiana Section President Rudy Simoneaux III, PE – Chief of Engineering CPRA. At lunch LAPELS Board member and professor at Louisiana Tech, Jeff Pike, PE, gave a lively ethics presentation. The Thursday session concluded with a presentation on the Engineering of Beer by Ben Pattillo, PE. A fun evening social followed that was hosted by Pattillo at the Flying Heart Brewery, which he owns and operates.



Prof. Jeff Pike, PE presenting Engineering Ethics during Thursday's lunch

Continued on next page.

Shreveport Branch, Continued



Ali Mustapha, PE, ASCE Regional Governor presents the Updated History of the Red River Flood

Friday's technical sessions included presentations on the Port of Caddo-Bossier; Construction Phase of I-49/I-220 Interchange; An Update on Shreveport's Historic A-Truss Bridge over Cross Bayou; Underground Retention/Detention; Navigating the Waves of Change: Adapting and Exploring Policy Options Along Louisiana's Coast; Wind Engineering; Geopier; and, Issuing & Rescinding Boil Advisories. Friday also featured the 2019 General Membership Meeting, which was conducted by ASCE Louisiana Section President Rudy Simoneaux III. Distinguished and Outstanding Civil Engineering Student Awards to seniors and juniors were also presented, please see below. The Branch and the Section would like to thank Jerry Klier, PE for all the work he does as the Student Activities & Awards Committee Chair putting these nominations together and recognizing the achievements of the future of our profession.

Distinguished Civil Engineering Senior Student Award Recipients:

John Ange (McNeese State University)

Joyner Deamer (Southern University)

Bailee Hurm (University of New Orleans)

Matthew Thomas (Louisiana State University)

Mary Grace Sherlock (University of Louisiana Lafayette)

Allie Thurman (Louisiana Tech University)

Outstanding Civil Engineering Junior Student Award Recipients:
Sarah Lyons (McNeese State University)
Orisamola Richardson (Southern University)
Alexander Vu (University of New Orleans)
Miriam Tariq (Louisiana State University)
Laura Manual (University of Louisiana Lafayette)
Anna Kayta Opel (Louisiana Tech University)



L-R: Jerry Klier, John Ange, Rudy Simoneaux III



L-R: Jerry Klier, Allie Thurman, Rudy Simoneaux III



L-R: Jerry Klier, Anna Kayta Opel, Rudy Simoneaux III

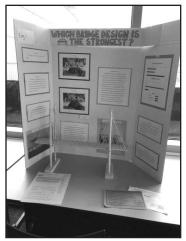
ASCE-SEI New Orleans Chapter News

By Om Dixit, PE, FASCE, F-SEI

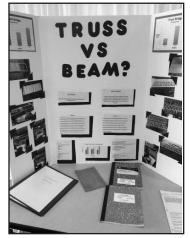


The ASCE SEI New Orleans Chapter has been very busy hosting and planning seminars and workshops and volunteer efforts. After hosting seminars in November 2018, SEI NO hosted the following seminars during the past quarter:

ASCE SEI New Orleans Chapter presented next seminar on January 17 by inviting **Tarek Alkhrdaji, PhD, PE**, (Vice President, Structural Technologies, Columbia, Maryland). The title for this seminar was *Techniques and Design Considerations for Strengthening of Existing Concrete Structures*. Dr. Alkhrdaji explained that strengthening projects may utilize traditional materials such as conventional cement-based and steel materials as well as advanced composite materials (FRP's). The techniques used to design



New Orleans Reginal Science Fair award-winning project <u>"Which</u> <u>Bridge Design is the Strongest"</u> (Junior Division) by **Aislynn Adams**, of John Q. Adams Middle School



New Orleans Reginal Science Fair award-winning project "<u>Truss Vs.</u> <u>Beam"</u> (Junior Division) by the Team of **Stephen Treadaway** and **Steve Volpi,** from Holy Cross School

and install these materials upgrade for applications are not common to the engineering and general construction industry which can make strengthening projects even more challenging and more complex than new design/ construction projects. There were a few case histories also presented to make the special situations. The seminar was attended by 53 members.

There was seminar planned for March 27on *Simplified Building Design by ACI 314* by Jose M Izquierdo-Encarnacion from Puerto Rico. This seminar has been postponed for later as the speaker could not make the planned date.

The annual David Hunter Lecture (DHL) for 2019 "Great Builders" will be presented by Raymond "Paul" Giroux (Kiewit Infrastructure West Co., Vancouver, WA) on June 6 2019 at University of New Orleans. 2019 DHL was originally scheduled to be on April 30, 2019 but it was moved to the new date due to schedule conflict with speaker. Giroux will shed new light on how the Great Projects were built. His unique insight, gained from nearly 40 years of construction engineering experience combined with meticulous research, stunning animations, and storytelling bring the Great Projects; the Brooklyn Bridge, The Hoover Dam, the Golden Gate Bridge, and the Panama Canal, to life. Veteran builder and award-winning civil engineering historian Paul Giroux shares his unique perspective and motivates his audience his audience with timeless lessons of the builders of the great projects. SEI NO DHL is cosponsored with Linfield Junius Hunter and Department of Civil and Environmental Engineering at University of New Orleans.

ASCE SEI New Orleans Chapter made donation to the **LES Regional MathCounts** competition held at University of New Orleans in February 2019 and provided a few volunteers for managing the competition.

The ASCE SEI New Orleans Chapter sponsored awards at **Greater New Orleans Science and Engineering Fair (GNOSEF)** held in February 2019. SEI NO Chapter provides judges to pick the best projects related to structural engineering. In recent years the number of projects related to structural engineering have grown due to these awards. The award winners were:

Junior Division

The First Place (\$100) award was given to **Aislynn Adams**, of John Q. Adams Middle School for her project <u>"Which Bridge Design is the Strongest"</u>. The Second Place (\$75) award was given to a Team of **Stephen Treadaway** and **Steve Volpi**, from Holy Cross School - \$75.00 (each) for their project "<u>Truss Vs. Beam"</u>.

Senior Division

The First Place (\$100) award was given to **Chase Perkins** from Patrick F. Taylor Science & Technology Academy for his project <u>"Using Plastic Aggregates In Concrete"</u>. The Second Place (\$75) award was given to **Jamie Wingerter** from John Curtis Christian for her project "Which Geodesic Dome is the Strongest?"

The awards of \$50 were also given to the Teachers of the winning project's school for encouraging their students to do a Structural Engineering project. These teachers were **Amanda Godshaw** (Patrick F. Taylor Science & Technology Academy); **Cathy Boucvalt** (John Curtis Christian); **Charlene Cavatoio** (John Q. Adams Middle School), and **Tara Lavender** (Holy Cross School). The teachers of the winning projects are also awarded to encourage more students to structural engineering projects in future Science Fairs.

Other seminars being planned by SEI NO are <u>Structural Forensics</u>, <u>ACI 318-19</u> <u>Code New Changes</u>, <u>Design and Construction of Concrete Drilled Shafts</u> and <u>Structural Vibration Analysis</u>.

The committee is looking for good topics and speakers for future presentations. Members with expertise in the field of structural engineering are welcome to join the Executive Committee. For any suggestion and information on joining the Executive Committee, contact Chairman Kabir Mohammed, PE at <u>asceseinola@gmail.com</u>. For adding your name to our mailing list, please visit ASCE New Orleans Branch website at <u>www.asceneworleans.org</u> and add name to the email list. Members will be directed to registration page for preregistration to the event. Members could also follow the activities and news of SEI-NO on Facebook @SEINOCHAPTER.

The committee is looking for good topics and speakers for future presentations. Members with expertise in the field of structural engineering would be welcome to join the Executive Committee. For any suggestion and information on joining the Executive Committee, contact Chairman Kabir Mohammed, PE.

Student Chapter News

LOUISIANA STATE UNIVERSITY

By Sydney Sziber, LSU Student Chapter President



Recently, Louisiana State University's American Society of Civil Engineers Student Chapter traveled to Ruston, LA to compete in the Concrete Canoe and Surveying competitions at the 2019 Deep South Conference. The concrete canoe team's theme for 2019 was a swamp theme featuring the Rougarou. The concrete canoe was nicknamed the *Rougarou Raft*. The concrete canoe presentation team, Miriam Tariq and Matthew Thomas, came second place overall for their presentation. Overall at the Deep South Conference, the concrete canoe team placed 4th, missing 3rd place by about 4 points. The surveying team came and conquered, but did not place this year. This

UNIVERSITY OF NEW ORLEANS By Bailee Hurm, Student Chapter President

ASCE at UNO has had an exciting semester thus far and is continuing the excitement as the school year comes to an end. We held our second general meeting of the year on Thursday February 21St where we had guest speakers John Robbins and the Johnson Brothers Management Team give an excellent presentation on Project Management. This was an informative presentation that gave our student members substantial insight into the Project Management field and all of its different components. National Engineers' Day was a success at UNO where students in Louisiana were able to come to UNO to learn about the several different applications of engineering we have here on campus as well as in the surrounding New Orleans area. ASCE-UNO participated in this event in which we held a paper bridge competition for the students and was able to tell the students about the benefits of being a Civil Engineer and being in ASCE. year was the first time LSU ASCE Student Chapter has sent a surveying team to compete at the conference in the past few years.

The LSU Student Chapter is hosting their Bayou Regional Career Fair on April 3rd and 4th. Twenty-seven companies have signed up to attend this event. The Student Chapter also recently volunteered at the Louisiana Arts and Science Museum for Engineer's Day. Saturday, April 6th, the student chapter will be volunteering at the Companion Animal Alliance animal shelter.

On Tuesday March 26th we held our third general meeting where our guest speaker Gary Bowers from Masonry Solutions, Inc. gave a presentation on "New methods to repair historic masonry." Bowers gave a compelling presentation that intrigued a lot of our student members. We were also able to give out PDH's for this presentation. Shortly after this meeting we left for the 2019 Deep South Regional Conference which was held on Friday and Saturday, March 29th and 30th. We prepared for this event all year and especially for the last two months, so we were extremely excited to get to Ruston where the conference would be hosted at Louisiana Tech University. Overall, there were 24 students who got to experience the events and competitions held at the Deep South Conference. Our student chapter is grateful to have had the opportunity to compete with the other schools in our region and to celebrate all of the hard work put in over the last school year.

Continued on next page.

University of New Orleans, Continued



UNO's Concrete Canoe: The Sauce Boss



UNO's Concrete Canoe Team

Concluding the school year at UNO, ASCE hosted a joint Spring Social with the ACI Student Chapter and the Younger Members of ASCE on Thursday April 11th. During this social, we had a panel of Younger Members that discussed and answered questions our student members had about transitioning from school to the professional world. This panel was held during the first hour of the social, and we

hope it provided our student members with some useful insight into the professional work setting as well as the benefits of maintaining membership of ASCE once graduated. This was a wonderful way to end the year as we celebrate all of our hard work and network with local professionals.

LOUISIANA TECH UNIVERSITY

By Quenton McKenzie Buckhalter featured in LA Tech Talk Newsletter

Louisiana Tech's American Society of Civil Engineers (ASCE) hosted two conferences on Louisiana Tech's campus on March 28-30. This was the first year that the engineering competitions were facilitated as separate conferences and Louisiana Tech's first-time hosting in almost 13 years.

The ASCE Deep South Regional Conference consisted of four categories, one of them being the concrete canoe competition. It involved a presentation and a race of canoes that were designed and constructed by students. The Mead paper presentation is a competition that judged student-written papers on the topic of engineering ethics. Louisiana Tech placed first in both of these categories.

The concrete canoe team was led by captains, Arthur Baldwin and Seth Garner, and the winning Mead paper was written by Dillon Benoit. The remaining categories within ASCE were the surveying and the sustainable doghouse competitions. Tech's surveying team of Dillon Benoit, Dayne Ghormley and Alec Reddoch took home third place, while captain Lannie Skelly placed fourth in the sustainable doghouse competition, with the help of her fellow teammates

The second conference featured the steel bridge competition that was sponsored by the American Institute of Steel Construction. Jake Kraft and Johnny Romig acted as the captains that had a hand in snagging third place for Louisiana Tech in the construction of the steel bridge.

Senior lecturer of civil engineering and construction engineering technology, Jeffrey Pike, was very pleased with how the students

represented the Louisiana Tech at the Deep South conference. "The students in each of those (competitions) did a fantastic job," Pike said.

Katya Opel, third- year member and vice president of ASCE, was also proud of the amazing work that each of her fellow members put in to host and place in both of the conferences.

"We had to reserve all venues, provide four meals to about 400 people, fundraise \$45,000, procure the testing equipment for competitions and find over 20 judges available to come on their own time for the weekend," Opel said. "After months of planning, coordinating and preparing, watching every university enjoy their time in Ruston was the most memorable aspect."

Louisiana Tech's ASCE faculty adviser and associate professor of civil engineering and construction engineering technology, Norman Pumphrey, could not think of a better way to go into retirement after 29 years of working at Tech. Pumphrey was actually a member of ASCE at Tech in the 1970s. This is an organization that has been around and diligently working for many years.

"One of the things that I really enjoy most out of all the things that I've done is working with student," said Pumphrey. Some are going on to graduate and others will be back to lead in coming years so I'm sad in many ways. The primary way is that I won't get to work with this group of students again. I'm going to miss the very capable abilities that they have shown. I'm looking forward to retiring but I am going to miss the students. It was nice to be involved again here in my last year. It's a good way to go out on a very high note."



Louisiana Tech Concrete Canoe team members and former members are (pictured from left) Noah Perkins, current ASCE member; Seth Garner, lead canoe captain; Josh Ridley, racing captain; Reed Edwards, construction/racing team; Miller Boyd, ASCE officer; Arthur Baldwin, lead canoe captain; Gabe Clottey, construction team; Allie Thurman, ASCE President; Katya Opel, ASCE VP and canoe aesthetics captain; Tracey Stephens, alumni; Lannie Skelly, racing team; and Sydney

UNIVERSITY OF LOUISIANA AT LAFAYETTE

By Mary Grace Sherlock, Student Chapter President

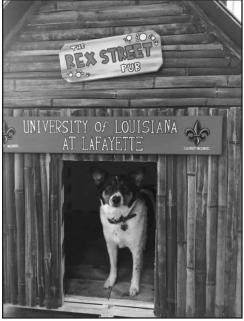
The University of Louisiana at Lafayette (ULL) Student Chapter of the American Society of Civil Engineers (ASCE) have accomplished a lot this semester. Thanks to the wonderful participation from our officers as well as members, we have been able to accomplish a lot in the past year.

On March 16th, we conducted a fundraiser at Olde Tyme Grocery in Lafayette for the Deep South Competition hosted at Louisiana Tech. There were structural and environmental engineering activities for children, and we sold UL Civil Engineering t-shirts and merchandise. By receiving 10% of sales, donations and merchandise, we raised \$1,532.00!!! This was a huge success and we're so thankful for the Lafayette Community and professionals in the area!

LSU hosted their Bayou Regional Civil Engineering/Environmental Career Fair on April 4th. The evening prior to the event, engineering professionals and students networked with one another over refreshments at Walk-Ons. We were well represented at the job fair with promising opportunities for students seeking internships and employment.

Sports Update: This semester, LES held a few sports tournaments where all of the campus engineering departments come together and fight for the title. On February 16th, the civil engineering team placed 3rd overall for basketball, On March 9th, we placed 1st overall for soccer; and March 23rd, we placed 3rd overall for softball. Though we did not come out on top this semester, there is always room for improvement for the next year.

Our busiest part of the year has passed and was super successful thanks to the faculty, staff, and student volunteers at UL. Within the last week of March, the College of Engineering put on their Annual Engineering and Technology Week and UL ASCE travelled to Ruston, Louisiana for the Annual Deep South Competition. Engineering and



Pictured above: Civil Engineering Student's dog, Slade, pictured in the Sustainable Dog House constructed by the UL ASCE Students

Week Technology is a way for the engineering students recognized to be for their hardthroughout work the week. In the middle of the week, UL hosts an EXPO day for students in the area to come and tour what UL Engineering is all about. Then, at the end of the week, 47 members of UL ASCE attended the Deep South Competition. arrived We on Thursday evening and participated the following morning in the Sustainability



ASCE President, left (Mary Grace Sherlock) and Vice President, right (Alice Kerl) enjoyed their last Deep South Competition at the ASCE Awards Banquet

Dog House assembly and Steel Bridge assembly. That afternoon, Laura Manuel presented on her Mead Paper followed by our Concrete Canoe Presentation. On Saturday, the Concrete Canoe Races and Sustainability Dog Presentation took place. Saturday evening was the ASCE Awards Banquet. Laura Manuel tied for first place in the Mead Paper and our Sustainability Dog House placed 2nd overall (GEAUX CAJUNS!). We're so proud of our accomplishments at the Deep South Competition. We look forward to next year's competition in Jackson, Mississippi.

We're looking forward to the final two UL ASCE events for the year. With one final general meeting at the end of April, we'll elect new officers for the 2019-2020 school year. To wrap things up, we hosted our Annual ASCE/Chi Epsilon Banquet on May 10th.

For additional information regarding the aforementioned events, please contact us at ullafayetteasce@gmail.com. And if you want to see what else is going on within the chapter, visit https://ulcivil. weebly.com. Geauxxx Cajuns!!



UL ASCE Sustainability Dog House Assembly Team with an assemble time of 3 minutes and 28 seconds

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— CALENDAR OF EVENTS —			
	2019		
Baton Rouge Branch Past President's Lunche http://branches.asce.org/baton-rouge	2on Thursday,	June 20, 2019	
ASCE New Orleans Branch Luncheon Special Guest: Norma Jean Mattei, Ph.D. To Location TBD	Thursday, pic: Professional Ethics	June 11, 2019	
ASCE New Orleans Branch Awards Luncheon			
For more events visit the	e ASCE Events Calendar: <u>http://wwv</u>	v.lasce.org/calendar.html	
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