LOUISIANA CIVIL ENGINEER

Journal of the Louisiana Section

http://www.lasce.org

ACADIANA • BATON ROUGE • NEW ORLEANS • SHREVEPORT

FEATURE:

Historic Shreveport Bridge Looks for New Life

NEWS:

Louisiana Section Installation & Awards Luncheon Highlights





Rudolph Simoneaux, III, PE 2018-2019 ASCE LA Section President

> NOVEMBER 2018 VOLUME 27 • NO 1

ATKINS

Science Planning Engineering Construction

We provide our clients with innovative and integrated solutions to the nation's most challenging estuarine management issues:

- · Ecosystem and habitat restoration
- · Hydrographic and water quality modeling
- · TMDL support services
- · Storm water treatment and management
- · NPDES permitting
- · Monitoring program design
- · Field data collection and statistical analysis
- · 316 (a) & (b) studies
- Coastal engineering
- · Program management

Plan Design Enable

www.atkinsglobal.com/northamerica

```
800.477.7275
```



At Cardno, we help lower construction costs, minimize risk, and avoid costly utility damage. We have decades of experience, top notch equipment, and processes to identify, mitigate, manage risks, keeping your projects moving forward.

- > Subsurface Utility Engineering
- > Utility Coordination
- > Surveying Services
- For more info contact: **Ben Hall** - 225 752 8322 contact-us@cardno.com www.cardno.com
- > Terrestrial & Mobile LiDAR> Construction Management





NEW ADVERTISING RATES (USD) PER ISSUE FOR THE LOUISIANA CIVIL ENGINEER

Subscription/Advertisement Dimensions (Horizontal × Vertical)				
Professional Listing Card	(64mm × 35mm)	\$225.00*		
Services or Suppliers Ad Card	(64mm × 35mm)	\$250.00*		
Quarter Page Advertisement	(95mm × 120mm)	\$300.00		
	(190mm × 60mm)			
Half Page Advertisement	(190mm × 120mm)	\$550.00		
Full Page Advertisement	(190mm × 240mm)	\$950.00		

* The minimum subscription/advertisement is for 1 year (4 issues) at \$225 per year for professional listings and \$250 per year for services and suppliers advertisements respectively. Advanced Advertising Discounts Per Issue

Number of Issues	1	2	3	4
Percent Discount	0%	5%	10%	15%
Quarter Page	\$300.00	\$285.00	\$270.00	\$255.00
Half Page	\$550.00	\$522.50	\$495.00	\$467.50
Full Page	\$950.00	\$902.50	\$855.00	\$807.50

http://www.lasce.org/publications/adrates.aspx

Inquiries regarding advertisements and professional listings may also be made by email to the Editor, Nedra Hains nedrasuedavis@gmail.com



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.

PUBLICATIONS COMMITTEE:

Beau Tate, PE, *Chair* Jody White, PE Ayan Mehrotra, PE Blake S. Roussel, PE Nedra Hains, MA, *Editor* (225) 333-8234

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.





TABLE OF CONTENTS

NOVEMBER 2018 • Vol. 27 • No. 1

Section Roster	. 4
President's Message	. 5
Historic Shreveport Bridge Looks for New Life	. 6
Region News1	10
Section News1	12
ASCE – COPRI Louisiana Chapter News1	16
ASCE – Government Relations Committee News1	17
ASCE – T&DI Louisiana Chapter News1	18
History and Heritage1	19
Branch News	20
ASCE – SEI New Orleans Chapter News	24
Student Chapter News	25
Calendar of Events	29
Professional Listings	29
Service & Suppliers	22



ASCE NATIONAL CONTACT INFORMATION: Phone: 1-800-548-ASCE E-Mail: gsd_master@asce.org

LOUISIANA SECTION • AMERICAN SOCIETY OF CIVIL ENGINEERS

Louisiana Engineering Center • 9643 Brookline Avenue • Baton Rouge, Louisiana 70809

SECTION BOARD OF DIRECTORS President Rudolph A. Simoneaux, III, PE LA Coastal Protection & Restoration Authority President-Elect Beau Tate, PE Royal Engineering and Consultants, LLC Vice President Joe E. "Butch" Ford, Jr., PE Bossier Parish Secretary-Treasurer Tonja Koob, PhD, PE GAEA Engineering Consultants, LLC Past President Malay Ghose Hajra, PhD, PE The University of New Orleans Directors-at-Large Kirk Lowery, PE Argadia Arcadis Nathan Junius, PE, PLS Linfield, Hunter & Junius, Inc Branch Directors William Cenac, PE Ducks Unlimited Sarah Ollenburger, PE CDI Corporation Rob Delaune, PE Digital Engineering Marcus Taylor, PE Neel-Schffer, Inc Assigned Branch Directors Jared Veazey, MS, PE Lafayette Consolidated Government Brant Richard, PE David Smith, PE City of Shreveport Andrew Woodroof, PE Digital Engineering Digital Engineering Section Committees Chairs Government Relations Kirk Lowery, PE Arcadis History & Heritage Tonja Koob, PhD, PE GAEA Engineering Consultants, LLC Miles Bingham, PE URS LA Coast, Oceans, Ports, & Rivers Institute Paul Tschirky, PhD, PE Geosyntec Membership Sarah Ollenburger, PE CDI Corporation Public Contracts Task Force Kam Movassaghi, PhD, PE Publications Beau Tate, PE Royal Engineering and Consultants, LLC Sections Awards Brant Richard, PE Thompson Engineering Student Activities & Awards Jerome M. (Jerry) Kleir, PE GEC, Inc. **Transportation & Development Institute** Sean Daly Iteris Website Jared Veazey, MS, PE Lafayette Consolidated Government Younger Member Andrew Woodroof, PE Digital Engineering **BRANCH OFFICERS** Acadiana Branch President Will Cenac, PE **Ducks Unlimited** President-Elect Jacob Neu, El Sellers & Associates. Inc

Treasurer Jessica Caldarera, PE Lafayette Consolidated Government Secretary Algy Semien, El Fenstermaker & Associates, LLC Past President Jared Veazey, MS, PE Lafayette Consolidated Government **Baton Rouge Branch** President Sarah Ollenburger, PE CDI Corporation President-Elect Jarret Bauer, PE All South Consulting Engineers Vice President Thomas Montz Arcadis Arcadis Secretary Mary "Molly" Bourgoyne, MS, PE DOTD Office of Multimodal Commerce, Ports & Waterways Section Treasurer Tyler Branch, PE Forte and Tablada Past President Blake Roussel, PE Stanley Consultants, Inc Director of Programs Venu Tammineni, PE S&ME **Director of Membership** Nedra Hains, MA Director of Education Sergio Aviles, PE APS Engineering & Testing Younger Member Committee Chair Alicia Sellers, El GeoEngineers, Inc LSU Practitioner Advisor Robb Jewell, PE APS Engineering & Testing SUBR Practitioner Advisor Jamal Steib, El Forte and Tablada New Orleans Branch President Robert Delaune, PE Digital Engineering President-Elect Dean Nicoladis, PE N-Y Associates, Inc. Vice President Andrew Woodroof, PE Past President Karishma R. Desai, PE Eustis Engineering, LLC Stephanie Bayne, PE Stanley Consultants Inc Director at Large Kyle Galloway Gaea Consultants, LLC Erin Rooney HDR Engineering Inc H. Clay Worley, El Eustis Engineering Younger Member Committee Chair Kyle Galloway Gaea Consultants, LLC Shreveport Branch President Marcus Taylor, PE Neel-Schaffer, Inc President-Elect Linsey Olivier, El Aillet, Fenner, Jolly, & McClelland, Inc. Treasurer Ranadeep Ravula, El

Dave Rambaran Geosciences, LLC Secretary Tyler Bridges CDM Smith Past President Tim Wright, EI Halff Associates, Inc LA Tech Practitioner Advisor Sanjay Tewari, PhD **BRANCH TECHNICAL COMMITTEE CHAIRS** New Orleans SEI Chapter Kabir Mohammed, PE EDG Inc. Louisiana Civil Engineering Conference and Show (LCECS) Yelena Rivera PE C.H. Fenstermaker & Associates, LLC STUDENT CHAPTERS Presidents/Faculty Advisors La.Tech Allie Thurman Sanjay Tewari, PhD LSU Josh Olivier Aly-Mousaad Aly, PhD McNeese Robert Nodier Janardanan (Jay) O. Uppot, PE Southern Eric Thompson Jamal Steib, El ULL Mary Grace Sherlock Wayne Sharp, PE UNO Bailee L. Hurm Gianna M. Cothern, PE **REGION 5 BOARD OF GOVERNORS** Director Peter M. Moore, PE, F. ASCE, ENV SP, LEED AP Louisiana Governor Ali M. Mustapha, PE Caddo Levee District EDITOR Nedra Hains, MA The Louisiana Section is located in ASCE Region 5 that consists of the Louisiana, Mississippi, Alabama, Georgia,



The Louisiana Section is located in ASCE Region 5 that consists of the Louisiana, Mississippi, Alabama, Georgia, and Florida Sections.

and Florida Sections.

President's Message By Rudolph Simoneaux, III, PE

It is truly an honor to be elected as the President of the ASCE Louisiana Section for 2018-2019. The Louisiana Section was started in 1914 and currently serves over 2000 Louisiana Civil Engineers, Civil Engineering students, and associates. I am humbled that the membership of the Louisiana Section will allow me to serve as its President. I will strive to uphold the tradition of continuously improving our Society. This will certainly be daunting task given the dedication and hard work of the Section Presidents that have served before me.

A little bit of biographical information - I grew up in a family of sugarcane farmers from Plattenville, Louisiana, a small Assumption Parish community on Bayou Lafourche. I moved to Baton Rouge in 1998 to attend LSU and have lived here since. My wife, Claire, and I have been married since 2007 and have three beautiful children - Anna Claire (6), Joseph (2), and Mary Grace (5 months). I have enjoyed a career of developing engineering solutions to restoring and protecting Louisiana's coast with the Coastal Protection and Restoration Authority (CPRA), where I have worked since graduation in 2003. I currently serve in the position of Manager in CPRA's Engineering Division. I have been associated with ASCE for over 20 years. Adam Smith, former Baton Rouge Branch President, invited me to an LSU ASCE Student Chapter meeting in 1998 by bribing me with free pizza. Soon after, I became involved in the Student Chapter Board and multiple Concrete Canoe teams. Not long after graduation, thanks to the encouragement of former Louisiana Section President Chris Knotts, I joined the Baton Rouge Branch Board and was eventually elected the 2012-2013 Baton Rouge Branch President. In 2013, I helped established the Louisiana Chapter of the Coasts, Oceans, Ports, and River Institute (COPRI). I served as Chair of Louisiana COPRI from 2014 to 2017. I joined the Louisiana Section Board of Directors in 2013.

As a global organization, ASCE's mission is focused on several key initiatives that involve programs such as infrastructure, sustainability, and education. The Louisiana Section is generally guided by these same initiatives. As Civil Engineers in Louisiana, I don't have to tell you about the current status of our infrastructure or infrastructure funding. Through our efforts in developing and issuing the State's Infrastructure Report Card, the ASCE Louisiana Section has become a leader in infrastructure awareness, outreach, and education. This is largely due to the hard work and dedications of people such as Joey Coco, Kam Movassaghi, and Jan Evans. During my term as President, we will continue to look for opportunities to reach out to everyone from policy makers to the grade school students to make them aware of the current infrastructures issues and the long-term impacts we face if we choose not to remedy these issues now.

The Louisiana Section and its four Branches have always maintained a close bond with the six ASCE Student Chapters of Louisiana. These students are the future of our profession! Therefore, we should strive to look for ways to support them in any way we can. Each Student Chapter is provided annual financial support from the Section, and the chapters that have success in the student competitions are eligible for additional



Rudolph Simoneaux, III, PE

support. In my opinion, connecting Civil Engineering Students with practicing engineers is as valuable as any other means of student assistance. We understand the financial constraints of being a college student, which makes attending events such as conferences and seminars difficult. This year the Section will be providing assistance for the Student Chapters to attend the annual Spring Conference in Shreveport. This will allow them to network with practicing engineers and absorb some of the technical topics that will be discussed at the conference. Members of the Section Board will also be attending the Deep South Student Conference in March, which will be hosted by Louisiana Tech University. Lastly, thanks to the efforts of Jerry Klier, the Chair of Student Activities and Awards Committee, we currently honor six Outstanding Civil Engineering Seniors every year with a \$500 scholarship and plaque. This year, for the first time, we will also honor six Outstanding Civil Engineering Juniors.

In closing, I'm proud to say that I've been involved in ASCE throughout my entire Civil Engineering career; from when I was student until today. The technical and professional benefits of ASCE are numerous and well-documented - professional development, advancement of the profession, sharing of knowledge, etc. However, we often lose sight of the personal benefits of being an ASCE member. On that note, to me ASCE is also about family! How often do you go to the Spring Conference and see a former classmate that you have not seen in over a decade? Or a luncheon and see one of your former coworker or a retired former professor? I actually ran into a former classmate at the ASCE National Convention in Denver this past October! I was able to catch up with him, see pictures of his children, and learn about his career as a transportation engineer in Atlanta. Throughout our careers we've made so many connections and built so many relationships. Naturally, over time we have a tendency to lose track of them. It's amazing to me how ASCE can reconnect us!

From the bottom of my heart, thank you for allowing me to serve as your President! I am as excited as I am humbled!

HISTORIC SHREVEPORT BRIDGE LOOKS FOR NEW LIFE By Patrick Wilson, PE

The Historic Waddell A-Truss Bridge over Cross Bayou between Spring Street and Clyde Fant Parkway just north of downtown Shreveport (see Figure 1) has stood sentinel over Cross Bayou since 1926, some 92 years now. For the first 67 of those years, the bridge carried rail traffic for the Kansas City Southern Railway Company on the KCS's Douglas Island spur. And before that, the bridge carried mainline traffic on the KCS in eastern Oklahoma starting in either 1895 or 1896. On April 18, 1993, the KCS transferred ownership of the bridge to the City of Shreveport. Since the bridge is now owned by the City of Shreveport, a group of local citizens, including several ASCE members, is trying to find a third life for this bridge as a pedestrian/bicycle path bridge linking walking/riding paths on the north and south sides of Cross Bayou.

The A-Truss Bridge over Cross Bayou is historically significant because it represents the work of a master, John Alexander Low Waddell (see Figure 2). Dr. Waddell was one of the preeminent bridge engineers in the United States at the turn of the 20th century. He was known for his "boldness in innovation combined with a careful attention to detail" (Dictionary of American Biography). He was also a prolific writer. His two volume work, *Bridge Engineering*, published in 1916, became the standard work on the subject and remained so for some 30 years.

J.A.L. Waddell was born in Port Hope, Ontario, Canada in 1854. In 1875, Waddell graduated from Rensselaer Polytechnic Institute in Troy, NY with a degree in Civil Engineering. From 1875 to 1878, Waddell worked for the Marine Department of the Dominion of Canada and the Canadian Pacific Railroad. In 1878, Waddell returned to Rensselaer and served on its faculty, teaching geodesy and mechanics courses. From 1880 to 1882, he traveled west, earned an additional degree at McGill University, Montreal, and worked for the firm of Raymond and Campbell, Bridge Builders in Council Bluffs, IA.

From 1882 to 1886, Waddell served on the faculty of the Imperial University of Tokyo. It was there in Japan that Waddell began his



ASCE-

interest in developing economical and rigid medium span bridges for the railroads. At that time, the national railroads of Japan were being developed and British engineers were in the lead in the design of the railroads and railroad bridges. Waddell had numerous disagreements with the British engineers who



Patrick Wilson, PE

espoused pony trusses (i.e., trusses without bracing for the top chords) for medium span railroad bridges. These disagreements, in part, led him to develop his concept for the A-Truss bridge type, as we shall see later.

In 1886 Waddell returned to the United States and took a position as the western agent of the Phoenix Bridge Company in Kansas City, MO. In 1887, he established a practice in Kansas City as a bridge engineer and consultant. It was at this practice, in 1892, that Waddell designed the landmark South Halsted Street Bridge



Figure 2





Figure 4

in Chicago, IL (see Figure 3). This was the first modern design for a vertical lift bridge and established new standards with a span of 130 feet and a vertical clearance when opened of 155 feet. The successful completion of this bridge in 1893 brought Waddell instant fame.

Shortly after the design of the South Halsted Street Bridge, Waddell was retained by the Kansas City, Pittsburg and Gulf Railroad (a precursor firm to the Kansas City Southern Railway Company) to "design some bridges". It was at this time that he fully developed his concepts for an "A" Truss bridge. Waddell described the process suscinctly in his book *De Pontibus* (1898):

"For a number of years the author was dissatisfied with all railroad bridges for spans between the superior limit of the plate-girder and a length of about one hundred and fifty feet, ordinary pin-connected, through, Pratt trusses being too light and vibratory, and the riveted bridges as then built being clumsy, unscientific, and uneconomical. On this account he tried for some time to find an opportunity to experiment upon a design of his own to fill a portion of the gap, but the opportunity did not occur until April 1893, when he was retained by the General Manager of the Kansas City, Pittsburg and Gulf Railroad Company to design some bridges. After a little persuasion the General Manager was induced to agree to build a 100-ft. "A" truss span as an experiment; but when he saw the completed plans he ordered at once four bridges to be built therefrom, and this style of structure was soon afterwards adopted as the standard 100-ft. span for the road".

In 1894, Dr. Waddell applied for and was granted a patent for a "Truss Bridge" (see Figure 4). At first blush, it would appear that the A-Truss design was nothing more than an inverted King-post Truss (a conventional King-post Truss would have the center vertical member in compression rather than in tension as in an A-Truss); or that the design was not much more than a roof truss as used in countless buildings. Dr. Waddell recognized these points and addressed them in his patent application as follows:

"I am aware that prior to my invention there have been built roof trusses in which inclined rafters are used which abut at their upper ends and are connected to each other at their lower ends by a tie beam, a king-post being used in connection therewith,...., and I therefore do not claim broadly such a combination except where it is used in a bridge with the bracing hereinbefore described".

In any event, we know that "four bridges" according to Waddell's plans for an A-Truss bridge were built shortly after 1893 on the K.C., P. & G. Railroad. Unfortunately, the Kansas City Southern Railway does not have definitive information on where these four bridges were built. The only information the KCS could offer was contained in a letter dated November 5, 1990, from Mr. David Brookings, Chief Engineer of the Kansas City Southern Railway Company, to Mr. John Moore of the Louisiana Section of ASCE. In this letter Mr. Brookings states:

"The A-Truss span was taken out of second hand stock and modified for the Cross Bayou application. It is believed this span was originally fabricated in 1895."

So, to determine where these "four bridges" were built, and thus where Shreveport's A-Truss bridge may have come from, requires a good bit of modern detective work.

According to information obtained from the Kansas City Southern Historical Society, the K.C., P. & G. built the following sections of its mainline between 1893 and 1896:

- 1893 Sulphur Springs, AR to Siloam Springs, AR
- 1895 Siloam Springs, AR to Poteau, OK
- 1896 Poteau, OK to Mena, AR

It is possible that an A-Truss Span was built in 1893 across Spavinaw Creek south of Gravette, AR, but this seems unlikely to this writer since, by late spring of 1893, the construction contracts for the summer construction season would have already been let and Waddell most likely would not have had the plans ready for this season. In addition, he had not yet received his patent (Patent No. 529,220 would not be issued until November, 1894) and would not likely have a design out for bid without some kind of patent





protection. However, the existing span at Spavinaw Creek appears to be exactly 100 feet in length, so the possibility does exist that an A-Truss span could have been built there.

However, in the opinion of this writer, the most likely sites for the "four bridges" are in the mainline segments built in 1895 and 1896. Figure 5 shows the section of mainline railroad built by the K.C., P. & G. in 1895 from Siloam Springs, AR to Poteau, OK. According to measurements taken from Google Earth, the existing bridges at Baron Fork, Little Sallisaw Creek and Brazil Creek have (or had, in the case of Brazil Creek) spans of exactly 100 feet and thus are good candidates for having A-Truss bridge spans in the past. A personal reconnaissance to the Brazil Creek bridge site showed A-Trusstype bearing plates still in place. This confirmed that an A-Truss bridge had been in place at this location as some time in the past. However, other evidence at the site showed that the A-Truss span at this location was probably not replaced until the late 1960's or early 1970's, so the Shreveport A-Truss could not have come from Brazil Creek.

So, to continue our detective work, let's now look at the section of mainline railroad built by the K.C., P. & G. in 1896, as shown in Figure



Figure 7 ASCE

6. This section contains one location, at Black Fork in LeFlore County, OK, with two (2) spans of 100 feet. A contemporary photograph (see Figure 7) shows that two (2) 100 foot A-Trusses were built at this location. The photograph also shows the upper chord members with splice plates located at about the mid-length of each chord. This is an important piece of evidence since these splice plates are also present on the A-Truss bridge at Cross Bayou. (Not all A-Truss bridges had similar splice plates. The only other extant A-Truss bridge in the U.S., now located in a city park in Parkville, MO, has no upper chord splice plates). Thus, the photographic evidence is clear in showing that the A-Truss bridge at Cross Bayou could have come from Black Fork.

With all the above taken into consideration, it appears likely that the A-Truss span at Cross Bayou has had the following life journey, so to speak:

1895(1896) to 1911(1912)	On Mainline of KCS Railroad at either Baron Fork, Little Sallisaw Creek or Black Fork (all in OK)	
1911(1912) to 1926	In Storage in some KCS Yard	
1926 to 1993	In Service on KCS's Douglas Island Spur in Shreveport, LA	
1993 to present	Property of City of Shreveport awaiting development	

The 127-foot deck trusses which flank the A-Truss span at Cross Bayou are also historically significant since they came from the original K.C., P. & G. Railroad Bridge across the Arkansas River at Redland, OK. This bridge was built in the time period 1895-1896, and J.A.L. Waddell was the Consulting Bridge Engineer.

Since the A-Truss and adjacent deck truss spans date from 1895 (or 1896) they are good candidates for oldest bridge in the state





Figure 9

of Louisiana. Their closest competitor, as known to this writer, is the Levert-St. John Bridge in St. Martin Parish. The historical record shows that the Levert-St. John Bridge was built in 1900, some 4 or 5 years after the A-Truss and Deck Trusses were originally built. So, while the Levert-St. John Bridge has been at its present location since 1900 and the A-Truss Bridge has not, the A-Truss Bridge does appear to be older by 4 or 5 years. Which bridge is the oldest in the state is a question for another time, but it is an interesting question.

Now, with the information above, we know a lot about the past and present of the Historic ATruss Bridge across Cross Bayou. But what about the future? To try to come up with an answer to this question is why a citizens group came together in Shreveport in the fall of 2016 and formed the Historic A-Truss Bridge Steering Committee. The mission of this committee, in part, is as follows:

"to promote and to advocate for, with both private and public sector parties, the preservation and return to beneficial use of the Historic A-Truss Bridge over Cross Bayou".

Since its inception, the Steering Committee has worked to raise awareness in the Shreveport area of the important historical feature sitting just a few blocks north of downtown Shreveport and to help define possibilities for development (see Figure 9). Committee members have made presentations and outreach to local groups such as the Shreveport Branch of ASCE and Sci-Port Discovery Center, and have manned booths at local civic events such as Art Breaks at the Shreveport Convention Center and the Shreveport Water Works Museum Spring Celebration (see Figure 10). A number of ASCE members are actively serving on this committee, including Skip James, Chairman, Patrick Wilson, Secretary, Al Dumas, Treasurer, Elba Hamilton, Matthew Redmon, and Tim Wright. Several of the ASCE members on the Steering Committee are in the process of nominating the A-Truss Bridge as a National Historic



Figure 10

Civil Engineering Landmark. The bridge currently is on the National Register of Historic Places, having been listed in March, 1995.

Presently, the committee is also working to try to find sources of private funding to serve as matching funds for any funds the City of Shreveport may be able to allocate to the preservation effort. The Committee has reached an agreement with another 501(c)(3) organization to help handle private donations. Thus, any donations made to the A-Truss Bridge Initiative would be fully tax-deductible for income tax purposes. Any person who wishes to make a donation to the A-Truss Bridge Initiative is asked to contact Mr. Skip James at sjames@afjmc.com, or Mr. Al Dumas at aedumas@suddenlink.net.

Acknowledgement

The author wishes to acknowledge the assistance received from the Kansas City Southern Railway Company and the Kansas City Southern Historical Society in developing much of the information and illustrations presented.

Patrick J. Wilson, PE,

Huval & Associates, Inc. Mr. Wilson is a native of Memphis, TN and holds a B.S. in Civil Engineering from the University of Notre Dame and an M.S. in Structural

Engineering from the University of Illinois at Urbana-Champaign. He served in the U. S. Army as a Combat Engineer Platoon Leader from 1970 to 1974. Since then, he has worked in

the private sector for a number of consulting engineers in the Midwest and South. He has 48 years experience in Bridge Design, Bridge Construction, Bridge Inspection, Bridge

Rehabilitation and Bridge Load Rating. He is presently employed as a Senior Engineer with Huval and Associates, Inc., in Baton Rouge, LA.

ASCE Region 5 Director's Letter By Peter M. Moore, PE, ENV SP, F. ASCE







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

I recently read an article that was talking about the fact that parents only have 18 summers with their children. It seems obvious, because after 18 summers, every human being becomes an adult, in physical age at least, but it is an often overlooked obvious fact. We all have the tendency to get busy and push things back - "next summer we'll get to the cabin, I promise" and other similar statements have been told by parents in modern times for far too long.

Fortunately, for those of us in the South, summers aren't the only time that the weather is nice, so we often take advantage of this time to "beat the heat" and slow down a little. We aren't scrambling in the 6 months of the year that the ground isn't frozen to install that pipeline and we don't have 17 hours of sunlight to finish those bridge plans. We'd rather head to the beach and take a load off.

That being said, it is also the time for a number of Sections to have their summer meetings and while we're relaxing at the beach with family, there is a whole lot of planning going on at the student chapter, younger member group, Branch, Section and, of course, Region level.

At the Society level, we are really taking a look in the mirror. The Society has still not returned to the pre-recession membership and profit levels, despite the economy being hot. For the last couple years, we've had great profits on our investment portfolio, but we've used those profits to cover holes in the operating budget to balance our annual budget. The Board knows that this isn't sustainable. The Board also knows that every project and program that ASCE executes on is very important to some (or all) of our membership. We were asked the fundamental question, why are you an ASCE Member? I, in turn ask you to think about that same question. The Board knows it needs to take bold action. We are exploring as many options as ideas that originate from the membership. We've even created a "bold idea" thread in our Board Collaborate Group to share with senior staff to explore idea viability. If you have a big idea, no matter how off the wall, feel free to send it my way, pmoore@chenmoore.com.

2019 Region 5 Grant Program Guidelines Proposals will be accepted on an ongoing basis beginning November 1, 2018

The upcoming year holds many opportunities for ASCE. Region 5 will be offering mini-grants to help your group promote ASCE.

Proposals up to \$1,500 are eligible for Region 5 Grants. One grant proposal is required per project. Grants are intended for Sections or Branches to fund a single component of a larger program or for a one-time expense. A short proposal and report is required for each grant request.

Proposal Selection Process

Proposals will be accepted on an ongoing basis beginning November 1, 2018. The Region 5 Governors will evaluate grant proposals and select projects for FY19 funding.

Sections/Branches will be notified of the status of their proposals via email to Section/Branch presidents and treasurers within 60 days of application receipt.

Funding priority will be given to projects that are new initiatives for Sections and Branches and projects that have a measurable impact on a desired audience. The Region recognizes that all Sections and Branches have different resources, needs and goals; it's the

Region's goal that these funds will help make programs available to Sections and Branches that may not have the existing resources.

Submission Deadline

Proposals must be received by August 1, 2019. 2019 Region 5 Grant proposals must be submitted via:

- E-mail an electronic copy of your proposal to katherine. gurd@aecom.com; or
- Mail proposals to: Katherine Gurd

AECOM 1360 Peachtree Street NE, Suite 500 Atlanta, Georgia 30309

Please note that no proposal is deemed received until the submitting Section or Branch receives electronic notification from Katherine Gurd that the proposal has been received. If you have any questions about the eligibility of a program, contact Katherine Gurd at Katherine.gurd@aecom.com or 404-965-7085.

Denver National Meeting

The 2018 ASCE Convention was held on October 12-15, 2018 at the Hyatt Regency in Denver, Colorado. The conference attendance included visitors from all over the world. The Louisiana Section was represented by Section President Rudy Simoneaux, Baton Rouge Branch President Sarah Ollenburger, and New Orleans Branch President Rob Delaune. Also, Dr. Norma Jean Mattei, PhD, PE, attended and participated in her last official meeting as ASCE Past-President. Congratulations and thanks to Dr. Mattei for her service over the past three years!

The theme of the conference was Engineering>Innovating>Leading. The conference presented many opportunities for technical tours, community service projects, technical presentations, leader's luncheon, student and emerging leader's breakfast, and short courses. The sessions of the conference offered valuable lessons learned in the industry and profession. The participants were able to secure up to 14 Professional Development Hours (PDHs). The convention kicked off on Friday evening with a welcome reception that offered attendees a taste of local cuisine and beers. The following morning included the opening plenary session which included remarks from 2018 ASCE President Kristina Swallow. This was followed by the opening keynote address by Dirk Ahlborn, the CEO of the HyperloopTT project. He discussed his company's concept of designing and building a new mode of high-speed transportation that involves a passenger capsule capable of travelling 760 mph. Saturday's program also included the Celebration of Leaders Luncheon, which inducted 10 Distinguished Members of the Class of 2018. Sunday started with the Annual Business Meeting, which involved the inauguration of the 2019 President Robin Kemper. Closing remarks were given by 2018 President Kristina Swallow followed by a closing keynote address from Christine Cashen, who spoke on her campaign to "Stop Global Whining". This was all about making sure we're the absolute best was what we do with the tools that we've been given.

Technical tours included the National Earthquake Information Center, National Western Complex, I-70 Expansion Project, the Center for Infrastructure, Energy, and Space Testing at University of Colorado-Boulder, and the City of Boulder Wasterwater Treatment Plant. The program also offered several non-technical tours of local destination which included the Stanely Market Place, Denver Brew Tour, Banjo Billy Ghost Tour. The convention presentation and discussion topics included (i) State of the Industry and Profession, (ii) Professional Development, (iii) Multidisciplinary Technical, (iv) Natural and Man-Made Disasters, (v) History and Heritage, and (vi) Strategic Issues/Public Policy.

The convention included several events, breaks, and meetings that facilitated member networking. The program also provided great networking opportunity for the students as they communicated with industry leaders and students from other chapters. Sunday's



Baton Rouge Branch President, Sarah Ollenburger poses for a Take 5 With Phil at the Society Conference in Denver

program included the annual Networking Breakfast and Industry Leaders Forum. Keeping with ASCE tradition, the convention offered several opportunities to visit with Phil the Philanthropist, ASCE favorite mascot! "Selphies with Phil" were huge hit in the Communities and Pavilion area.



2018 ASCE Louisiana Section Awards and Officers Installation Luncheon

The 2018 Louisiana Section Awards and Officers Installation Luncheon was held on September 21, 2018 at the LSU Center for River Studies, which is located on the Baton Rouge Water Campus (100 Terrace Avenue, Baton Rouge, LA) and was hosted by the Baton Rouge Branch. Baton Rouge Past President Blake Roussel, PE, called the meeting to order, gave the invocation, and welcomed everyone to the luncheon. Section President Malay Ghose Hajra, PhD, PE made the opening remarks and introduced Brant Richard, Section Awards Committee Chair.



Blake Roussel, Baton Rouge President calls the meeting to order



Section Presidents makes opening remarks

Continuing the presentations, Louisiana Section Awards Committee Chair Brant Richard, PE opened the awards ceremony. The ASCE Louisiana Section Awards were instituted to recognize the outstanding contributions of Louisiana civil engineers for service to their profession and ASCE. He thanked the branches for nominating an outstanding slate of candidates for consideration for each award. The quality of the nominees for the various awards made the awards committee's task to determine this year's award recipients very difficult. Brant also thanked the awards committee for their efforts in reviewing the numerous nominations and assisting in selecting this year's recipients.



Brant Richard opens the award ceremony

After Brant presented the Section Awards, Section President Malay Ghose Hajra, PhD, PE announced the final award of the ceremony, the **President's Medal, to Butch Ford, PE.** This award was given to Butch because of his hard work on transitioning the Section's finances to the new format.

This year's Section Award recipients were: Matthew Redmon, PE – Outstanding Young Civil Engineer Stephanie C. Bayne, PE – Outreach Award Richard V. Van Wooten, PE – Lifetime Achievement Award Clinton S. Wilson, PhD, PE – Educator of the Year Award Ronald J. Rodi, PE – Wall of Fame Om P. Dixit, PE – Wall of Fame David S. Huval, Sr, PE – Wall of Fame Ronald Schumann, Jr, PE – Outstanding Civil Engineer



Butch Ford receives the President's Medal from Malay Ghose Hajra

ASCE LA Section 2018-2019 Officers:

Rudolph Simoneaux, PE, President Beau Tate, PE, President Elect Joe E. "Butch" Ford, Jr., PE, Vice President Tonja Koob Marking, PhD, PE, Secretary-Treasurer Malay Ghose Hajra, PhD, PE, Past President

The Board of Directors are: Directors-at-Large

Nathan Junius, PE, PLS, Director Kirk Lowery, PE, Director

Branch Directors

William Cenac, Acadiana President Sarah Ollenburger, PE, Baton Rouge President Rob Delaune, PE, New Orleans President

Marcus Taylor, PE, Shreveport President

Assigned Branch Directors

Andrew Woodroof, PE, Director Brant Richard, PE, Director Jared Veazey, PE, Director David Smith, PE, Director



Norma Jean Mattei, PhD, PE, 2017 National President installed the officers for the Louisiana Section of the American Society of Civil Engineers

The outgoing President Malay Ghose Hajra, PhD, PE and incoming Rudolph Simoneaux III, PE exchanging the President's Plaque and Past-President pin.

Rudy Simoneaux III, PE the new Section President then congratulated the new board stating, "I'm looking forward to the 2018-2019 term and the opportunity to serve with everyone!" Simoneaux closed the luncheon by presenting his goals for his upcoming presidency and thanked everyone for attending. A tour of the Center for River Studies and the Lower Mississippi River Physical Model followed, and the program ended with a short Section Board meeting.



Section President Malay Ghose Hajra gives incoming President Rudy Simoneaux the Section Gavel



Rudy Simoneux gives Malay Ghose Hajra the President's Pin in thanks for his service to the Section



2018-2019 ASCE Louisiana Section Officers



Rudolph Simoneaux, PE President



Beau Tate, PE President-Elect



Joe E. "Butch" Ford, Jr., PE Vice-President



Tonja Koob Marking, PhD, PE Secretary-Treasurer



Malay Ghose Hajra, PhD, PE Past President

2018 Louisiana Section Awards



Matthew Redmon, PE Outstanding Young Civil Engineer



Stephanie C. Bayne, PE Outreach Award



Richard V. Van Wooten, PE Lifetime Achievement Award



Clinton S. Wilson, PhD, PE Educator of the Year Award



Ronald J. Rodi, PE Wall of Fame



Om P. Dixit, PE Wall of Fame



David S. Huval, Sr, PE Wall of Fame

2018-2019 ASCE Louisiana Section Board of Directors



Nathan Junius, PE, PLS Director-at-Large



Kirk Lowery, PE Director-at-Large



Andrew Woodroof Assigned Branch Director



William Cenac Acadiana Branch Director



Brant Richard, PE Assigned Branch Director



Sarah Ollenburger, PE Baton Rouge Branch Director



Jared Veazey, PE Assigned Branch Director



Rob Delaune, PE New Orleans Branch Director



David Smith, PE Assigned Branch Director



2018-2019 ASCE Louisiana Section Leadership



Top row (left to right): Kirk Lowery, Will Cenac, Brant Richard, Andrew Woodroof, Marcus Taylor, Butch Ford, Rudy Simoneaux, and Jared Veazey. Bottom row (left to right): Nathan Junius, Malay Ghose Hajra, Beau Tate, Tonja Koob, Rob Delaune, Sarah Ollenburger, and Norma Jean Mattei (not pictured: David Smith)

ASCE-COPRI Louisiana Chapter News

By Venu Tammineni, PE, Director - Communications, LCOPRI@yahoo.com



PORTS AND RIVERS Louisiana Chapter

COPRI serves as a multidisciplinary and international leader in improving knowledge, education, development and the practice of civil engineering and other disciplines in the sustainable management of coastal, ocean, port, waterways, riverine and wetlands resources for the benefit of society. For more information on all COPRI conferences, please visit http://www. asce.org/coasts-oceans-ports-andrivers-engineering/coastal-engineeringconferences-and-events/.

with other professionals interested in coastal, oceans, ports, and riverine efforts in Louisiana. If you have any questions or to add your name to our mailing list, please contact Venu Tammineni, at LCOPRI@yahoo.com.

Board Members

Chair – Paul Tschirky Vice-Chair – Dennis Lambert Secretary – Tyler Ortego Treasurer – Erin Rooney Director of Programs-Andrew Woodroof Director of Communications - Venu Tammineni Director of Education – Ashly Adams-Tschirky YPG Chair - Myriam Bou-Mekhayel Past-Chair – Rudy Simoneaux

The Louisiana Chapter of the American Society of Civil Engineers (ASCE) Coasts, Oceans, Ports, and Rivers Institute (LCOPRI) is continuing to promote membership and visibility throughout the ASCE State of Louisiana. The activities of L.COPRI include seminars, workshops and other activities to benefit all ASCE and COPRI members. One does not have to be an engineer to join COPRI. These Institutes are formed for the benefit of ASCE and non-ASCE members to participate and interact

Academic and Practitioner Advisory Committee: Fhab Meselhe Nancy Powell Clint Willson

COASTS, OCEANS, PORTS, AND RIVERS INSTITUTE

Created in 2000, the Coasts, Oceans, Ports, and Rivers Institute (COPRI) is a semi-autonomous institute of the American Society of Civil

Engineers (ASCE), the country's oldest national engineering society. COPRI's services are designed to complement ASCE's traditional civil engineering base

and to attract non-engineering allied professionals who seek to enhance their professional and technical development.

COPRI is led by the COPRI Board of Governors and governed by the COPRI bylaws.

https://www.asce.org/copri/membership/

PORTS[®] '19 SEPTEMBER 15–18, 2019 • PITTSBURGH, PENNSYLVANIA **Registration Opens: March 14, 2019** https://www.portsconference.org/

Legislative Fly-in 2019



Every spring, ASCE holds its Legislative Fly-In Program in Washington, DC, an intensive two-day program that provides participants with an inside look at the public policy process. At the 2018 event, 210 ASCE members visited over 270 Congressional offices, advocating for aviation, water, and water resources infrastructure as well as urging Members of Congress to draft a comprehensive infrastructure bill. The 2019 Legislative Fly-In takes place on March 12-14, 2019 in Washington, D.C. and Arlington, VA

The Fly-in program includes:

- Meetings on The Hill with your Members of Congress or their staff
- Briefing sessions on key legislation active in Congress and ASCE's legislative priorities.
- Training on lobbying and influencing your elected leaders
- Networking with your ASCE peers from across the country
- A Younger Member Program
- Tips on continuing relationships with your elected officials once you return home





Become a Key Contact today! https://www.asce.org/keycontacts/ For additional information, please contact us at govwash@asce.org or 202-789-7850.

ASCE-T&DI Louisiana Chapter News

By Michael Paul, PE - Newsletter Editor



Election of New Officers

October 2018 marked the eighth full year of operation for the ASCE-T&DI Louisiana Chapter. The Chapter would like to acknowledge the contributions of our 2017-2018 officers. For the 2018-2019 fiscal year, Sean Daly has assumed the Chair position; Gavin Gautreau will serve as Vice Chair; Jim Simmons will continue to serve as Treasurer; and Mike Paul will continue to serve as Newsletter Editor.

Louisiana T&DI Scholarship Program

One of the long-term goals of the T&DI Louisiana chapter was to start and sustain a scholarship program. That goal was achieved during 2012 fiscal year with the formation of a scholarship subcommittee. For the seventh year in a row T&DI plans to award two \$500 scholarships; the funding is provided by using a portion of our seminar proceeds. The first announcement has been issued to various university civil engineering department heads across the state. Applications will be reviewed by the Executive Committee and awardees will be announced in the next Newsletter issue.

Louisiana Civil Engineering Conference and Show

The T&DI Chapter also contributed to the ASCE Fall Louisiana Civil Engineering Conference and Show (LCEC&S) in Kenner, Louisiana. Om Dixit and Ronnie Schumann served as planning committee members where Om was Co-Chair for the Program and Speaker Subcommittee and Ronnie served on the Speaker Subcommittee.

Lightweight Cellular Concrete for Infrastructure Seminar

In late August the T&DI Chapter, along with the Concrete and Aggregates Association of Louisiana (CAL) as co-sponsor, hosted the Lightweight Cellular Concrete for Infrastructure seminar at the UNO Engineering Auditorium. This seminar provided an overview of the applications for use of lightweight cellular concrete (LWCC) in infrastructure design and defined the unique engineering properties of LWCC as well as methods of placement. Real world case histories were presented which included NOLA's Louis Armstrong Airport and the renovation of St. Joseph Academy on North Galvez Street. At the airport, a pavement remediation project used pervious LWCC to create a zero-loading subgrade to support the new pavement. At St. Joseph Academy, the main chapel was extensively damaged during Hurricane Katrina and needed a new foundation. LWCC was used to create a 3-foot thick mat foundation that did not over-stress the underlying soft soils. The speaker was Mr. Nico Sutmoller who is a lightweight fill specialist for Aerix Industries

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 cosponsoring 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 or 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:

- Ethics
- · Mitigation Banking
- · Green Infrastructure: Integrating Infrastructure Needs
- · New Orleans Armstrong Airport
- · Bridge Approach Slabs
- · Modern Survey Techniques and Laser Scanning

The New Orleans Inner Harbor Navigation Canal Lock By Tonja Koob Marking, PhD, PE

New Orleans is approximately 94 river miles from the mouth of the Mississippi River. A canal to allow ships to reach New Orleans but bypass the long trip up and down the Mississippi River was a longheld dream of New Orleans' commercial Lock Dedication May, 1923



interests. The early Carondelet Canal (1795) and the New Basin Canal (1833) provided access to Lake Pontchartrain but stopped short of a direct connection between the Mississippi River and Lake Pontchartrain, which had to contend with the stage variation of each water body. A lock at the Mississippi River was an engineering challenge, since the river usually has a higher level than the lake, but the reverse can also be true. The Board of Commissioners of the Port of New Orleans planned and built the canal and lock to provide the navigation link. Because the canal was to contain area developed for harbor and industrial use, the project was named the Inner Harbor Navigation Canal (IHNC), but is popularly known today as the Industrial Canal and Lock. Construction began in 1918 and was completed in 1923.

The George W. Goethels Engineering Co. of New York designed and built the Inner Harbor Navigation Canal Lock for the Port of New Orleans. Goethels himself is best known for his administration and supervision of construction of the Panama Canal. The IHNC Lock system has 5 sets of gates, a lock width of 74 feet, lock depth of 50 feet, and depth over sill of 31.5 ft. First-of-their kind reverse head miter gates give the lock the capability to function with to up to 20 feet water level difference between the Mississippi River and Lake Pontchartrain. The IHNC Lock was also the first lock in the United States to utilize many features of the Panama Canal locks, and even improved on pioneering Schildhauer gate machinery developed for the Panama project. The construction of the IHNC Lock included several other regionally and nationally significant precedents, including advanced design of the lock chamber, the emergency dam system, and new theoretical approaches to reinforced concrete design in response to unique local soil conditions. On-site construction innovations included a pile-driver to drive battered piling and specialized machinery to bend reinforcement bars, greatly speeding construction.

After the opening of the canal, the Port of New Orleans added slips and docks along its length, allowing it to function as a harbor and industrial zone in addition to serving as a transit canal. In 1944, the federal government leased the Industrial Canal lock and the southern section of the canal and took over lock operation and maintenance as part of the Gulf Intracoastal Waterway (GIWW). The federal government purchased the lock in 1986. The Port of New Orleans intended the lock for deep-draft ocean-going ships, but the majority of traffic has always consisted of barge tows, and it is still an important lock in the Intracoastal Waterway system.

The US Army Corps of Engineers determined the IHNC Lock possesses national significance in



Tonja Koob Marking, PhD, PE

the history of American engineering and technology, and is eligible for listing in the National Register of Historic Places. Nevertheless, USACE has been planning to replace the IHNC Lock since it no longer is long enough to accommodate larger present-day barge tows and is a traffic bottleneck on the GIWW.



Bull Wheel







Branch News

ACADIANA BRANCH By Will Cenac, PE, Branch President

Howdy from the Acadiana Branch!

We are starting this year where we let off last year. Through the leadership of Jared Veasey, MS, PE, we continue to be active and grow the branch in order to provide services to our members. This year the branch officers are Jacob Neu, EI - President-Elect, Algy Semien, EI - Secretary, and Jessica Caldarera, Treasurer. I would like to thank them for their service and we hope to have a successful year this year.

We are off to a great start with our monthly luncheons, which are well attended. We have had luncheons with presentations by Philip Turnipseed and Marc Dubroc on the USGS Streamgaging System and the No Net Fill Requirements recently enacted by LCG, respectively. This month we have coordinated with the McNeese and UL ASCE Student Chapters to hold presentations on Engineering Ethics. We will be reaching out to our members in Alexandria, LA to hold an engineering ethics presentation this coming spring.

We also worked and coordinated with the UL and McNeese Student Chapters to hold a "Clean the Coast" event down in the Rockefeller Wildlife Refuge. Students and branch officers took time out their Saturday to travel down to Cameron Parish and visit multiple water control structures to clean up trash and remove abandoned fishing and crab lines. The students were also exposed to the real-world engineering challenges faced by practicing engineers through a presentation covering ongoing projects in the refuge. This event was funded through an ASCE STAY Grant which was successfully acquired by Jacob Neu, El. Thank you Jacob!

We are looking forward to the next few months, we have coordinated with out local LES chapter to hold a joint Christmas social and continue our monthly luncheons. 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

The Baton Rouge Branch stayed busy this past summer, and we are now preparing for a busy fall of 2018. Fall brings with it the end of the branch's operating year, and the current board of directors will be turning over on October 1, 2018. Having the opportunity to lead such an active membership group as the Baton Rouge Branch President has been inspiring and something that I have not taken for granted. I have to give my sincere thanks to our awesome board for managing all of our activities behind the scenes! Thank you! We assuredly will have a smooth transition, and I can't wait to see in which direction Ms. Sarah Ollenburger will lead us next year.

Our May luncheon was a joint luncheon hosted by LES at Juban's restaurant. Chris Knotts, LA DOTD Chief Engineer, presented to well over 120 attendees. It was a fantastic event and LES did an excellent job hosting.

Our June luncheon was also held at Juban's restaurant. This luncheon not only served as our Past President's luncheon, but we also recognized our branch's newly minted Life Members as well as presented our annual branch awards to a group of well-deserved local engineers. This year's award winners included:

ASCE Civil Engineering Wall of Fame – Ron Rodi, PE Outstanding Civil Engineer – Cindy Hall, PE Outstanding Young Civil Engineer – Ben McArdle, PE Outstanding Civil Engineering Educator – Clint Willson, PE Outreach Award – Stokka Brown, PE



New Branch President Sarah Ollenburger receives the Branch Gavel from the Past President, Blake Roussel

All branch winners were submitted to the LA Section for the Section awards. Good luck!

Although we took the month of July off from our monthly luncheons, we dove into the fall schedule with Engineer It on August 18 at LASM, our August luncheon at Juban's on August 23, and then the September luncheon was the officer installation luncheon for the Branch as well as the Louisiana Section Board on Friday, September 21.

At our September Luncheon, the new 2018-2019 Board for the Baton Rouge Branch of ASCE was installed.

President – Sarah Ollenburger, PE President-Elect – Jarret Bauer, PE Vice President – Thomas Montz, PE Secretary – Molly Bourgoyne, PE Treasurer – Tyler Branch, PE Past President – Blake Roussel, PE Programs Director – Venu Tammineni, PE Education Director – Venu Tammineni, PE Membership Director – Nedra Hains Younger Member Chair – Alicia Sellers, EI LSU Practitioner Advisor – Robb Jewell, PE SU Practitioner Advisor – Jamal Steib, EI

October 17 & 18, the LSU Chapter hosted the Bayou Regional Career Fair here locally, and many of our local companies supported this fantastic event! The Baton Rouge Branch wants to commend the



Tyler Branch demonstrates one of the Dream Big activities to students at Rougon Elementary



Alicia Sellers demonstrates one of the Dream Big activities to students at Rougon Elementary

LSU students for all of their hard work in this effort, it was truly a great success!

October 25 was a Luncheon presentation by Ehab Meselhe, PhD, PE, Vice President for Engineering of The Water Institute of the Gulf. Meselhe presented on the Purpose, History, and Future of The Water Institute of the Gulf". Thank you again Dr. Meselhe!

The November Luncheon was presented by Fox-Nesbit. Upcoming will be the Annual Christmas Party held at Bocage on December 7, and the Younger Member Social after the Christmas Party.



Above and below: Dream Big Bridge activity at Rougon Elementary



NEW ORLEANS BRANCH By Rob Delaune, PE. Branch President

The ASCE New Orleans Branch board was installed in July 2018. Below is a picture of the new board members excited and ready to lead the New Orleans Branch for the next year.

The New Orleans Branch kicked off the 2018-2019 term with our first branch luncheon. The event was hosted at Andrea's Restaurant in Metairie, LA on 11 September 2018. Mr. Shannon Land with Industrial Municipal Supply Company presented to the group on High Density Polyethylene – A Long Term Solution for Pipelines. The meeting was attended by thirty members of the New Orleans Branch and was very informative to the group on a product that is being used more and more on Civil Engineering Projects. Below is a picture of New Orleans Branch President Rob Delaune presenting Shannon Land with a token of appreciation for speaking to the group at the luncheon.

The Section Awards Ceremony was held at the LSU Center for River Studies on 21 September 2018. We are proud to announce that three of the New Orleans Branch members received Awards from the Section. Om Dixit received the Wall of Fame award, Ronnie Schumann received the Outstanding Civil Engineer Award and Stephanie Bayne received the Outreach Award. We are very grateful to have such great members of the New Orleans Branch willing to go above and beyond for ASCE!

The ASCE New Orleans Branch partners annually with the Louisiana Civil Engineering Conference & Show (LCECS), which was held on

26 and 27 September 2018 at the Pontchartrain Center in Kenner, LA. ASCE members from all over South Louisiana attended the conference and it was a great success with many vendor booths to learn about products used on Civil Engineering Projects and technical sessions to sharpen Civil Engineering knowledge in the industry and provide continuing education credits.



Shannon Land and Rob Delaune



Top, from left: Stephanie Bayne – Secretary, Clay Worley – Director at Large, Karishma Desai – Past President, Kyle Galloway – Director at Large, Erin Rooney – Director at Large. Bottom, from left: Dean Nicoladis – President Elect, Rob Delaune – President, Andrew Woodroof – Vice President/Treasurer

SHREVEPORT BRANCH

By Marcus Taylor, PE, Branch President

As the newly installed Shreveport Branch President, I am excited to begin a new fiscal year. I would like to thank our past president, Tim Wright, for a fantastic year and his dedication to our Shreveport Branch. The newly inducted officers for the 2018-2019 year are as follows:

President-Elect – Linsey Olivier, El Treasurer – Ranadeep Ravula, El Secretary – Tyler Bridges Past President – Tim Wright, El

Our October Luncheon featured Jordan Ellis and Dorcas Neathery from Southwestern Packing & Seals. The company manufactures and sells the Rainstopper Manhole Insert. They presented on how the manhole inserts help eliminate infiltration, dirt and debris and the overall cost savings they provide city sewer systems. Our November Luncheon featured Mike Bussio from Armorock, a company that produces and sells polymer concrete structures. He presented on the benefits of the Armoroch corrosion proof polymer concrete manholes compared to RCP manholes. Armorock just recently opened a new plant in close by Sulphur Springs, Texas and we have been invited as a branch to set up a sight visit anytime.

As we look forward to December, the Shreveport Branch will be cohosting this year's Christmas Social with our local LES Chapter on December 13th at Flying Heart Brewing in Bossier City, LA.

The Shreveport Branch will also be hosting this year's 2018-2019 Annual ASCE Louisiana Section Spring Conference on the dates of April 25th and 26th. The conference will take place at the Shreveport Convention Center in Shreveport, LA.

NOTICE FOR POTENTIAL CANDIDATES TO APPLY FOR VACANCIES ON THE SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY EAST AND WEST LEVEE BOARDS.

The State contact person is Ms. Stephanie Aymond at Stephanie.Aymond@LA.GOV . Applicants need to complete the official application, which can be found at the following link: http://www.coastal.louisiana.gov/wp-content/uploads/2013/09/SLFPAApplication1.pdf.

Applicants are needed to fill the following Board vacancies:

SLFPA-EAST BOARD:

- 1. Jefferson Parish East Resident
- 2. Non-Resident (a person that does not reside in the Parishes of Jefferson, Orleans, St. Bernard or Tangipahoa).

SLFPA-WEST BOARD:

1. Non-Resident (a person that does not reside in the Parishes of Jefferson or Orleans).

Note the Non-Resident applicant can apply for one or both boards. The Non-Resident means that the person can be a resident of Louisiana; but, cannot reside in the aforementioned SLFPA- E&W Board Parishes, or can be a resident of some other state.

ASCE-SEI New Orleans Chapter News

By Om Dixit, PE, FASCE, F-SEI



For past 2 months most of the civil engineering and concrete organizations of New Orleans were busy with the preparations for the 2018 Louisiana Civil Engineering Conference and Show (LCECS). SEI NO was also busy with selecting the structural presentation sessions at the conference.

SEI NO seminar "Corrosion – It's a Battle Out There" was presented by Charley Speed on August 2018 at University of New Orleans. Speed identified the various types of corrosion and discussed the basic corrosion barriers and barrier assurances including a number of corrosion related failures that designers and engineers working in the Oil and Gas Industry need to be aware of so these failures would not be repeated in future designs. Speed also mentioned that these learnings could also be applied across other industries. The seminar was attended by 67 members.

SEI NO hosted the Annual Herbert J Roussel, Jr. Lecture, "When

It All Goes Wrong: Responding to Bridge Member Failures", for 2018 Louisiana Civil Engineering Conference on September 26-27 at Pontchartrain Convention Center in Kenner. This year the HJR Lecture was delivered by Thomas Murphy, PhD, PE, (Chief Technological Officer, Modjeski and Masters, Mechanicsburg, PA). Dr. Murphy presented a case history of a recent bridge member failures due to fire and brittle fracture, with an emphasis on the process of repair and return to service, as well as forensic studies regarding the causes and process of failure. When significant failures are found in a bridge, the decision to close the structure is usually clear and unambiguous. The process of determining the cause of the failure, and ensuring that the bridge is safe to reopen in a timely manner can be challenging. The Lecture was attended by over 130 attendees.

Besides the HJR Lecture Other structural topics were "Buoyant Tower Offshore Platform – Innovative Concept and Design", "NOLA Concrete: Restoring the Past, Building the Future", "Changes to 2018 NDS[®] for Wood Construction", "ACI 318 Requirements for Controlling Cracking in Structural Concrete", "Mathews Bridge Emergency *Repair*" and "Conserving Ancient Sites from the Empire of Alexander the Great". These structural presentations were selected by SEI NO ExComm. Members Jay Jani, Zolan Prucz and Om Dixit. These and other presentations from 2018 LCECS could be downloaded from the conference website www.louisianacivilengineeringconference.org.

SEI NO had Carl J. "Chuck" Larosche, PE, (Principal, Wiss, Janney, Elstner Associates, Inc, Austin, Texas) present a 2 hours seminar Code-Based Approach for Evaluation, Repair, and Rehabilitation of Concrete Structures on November 1, 2018. American Concrete Institute (ACI) has developed a repair code that provides standard requirements for evaluating existing concrete buildings and the subsequent structural repair, rehabilitation, and strengthening of those structures. The ACI 562 Code provides the licensed design professional freedom to exercise engineering judgment when

evaluating a reinforced concrete structure. Larosche will present practical examples structural assessment, existing of material evaluation, and load testing of existing structures using the ACI Code approach while illustrating design examples meeting the performance criteria provided in the Code.

In September meeting SEI NO elected Chairman of its Executive Committee, Kabir Mohammed, PE, (EDG) to continue for another term for the term of 2017-18. Chairman Kabir Mohammed, appointed James Green, (Julien Engineering) as Vice Chairman. James Danner, PE. (Denson Engineers) continues to serve as Treasurer and Om Dixit, PE, continues to serve as Newsletter Editor. During the past year the ASCE SEI New Orleans Chapter hosted 7 two hours seminars. Among other activities the chapter sponsored awards at the Regional Science Fair. The Chapter also sponsored New Orleans Regional Math Count Competition hosted by Louisiana Engineering Society every year.

Recently SEI NO added one member to their Executive Committee, who is James Green. James has already taken the position of Vice Chairman and will try to maintain SEI NO information on our website. The Executive Committee is excited with James enthusiasm.

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 asceseinola@gmail. com. For adding your name to our mailing list, please visit ASCE New Orleans Branch website at www.asceneworleans.org 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.





Charles Murphy, PhD, PE, (Right) receiving the thank you plague from Hermann Alb, PE, for presenting the Annual Herbert Roussel Lecture at August 30 2018 at University of 2018 LCECS on September 26 2018

Charley Speed (Right) and L.T. Cooper, PE, (Seminar Coordinator) at SEI NO Chapter Seminar on New Orleans

24

Student Chapter News

LOUISIANA STATE UNIVERSITY

By Lauren Mills, Student Branch Secretary

Since being back from summer break, the ASCE chapter at LSU has held meetings and continued to plan for the first annual Bayou Region Career Fair. So far, ASCE Baton Rouge Branch Representatives, Ben McArdle from JACOBS, and Matt Lengyel from Figg Bridge Engineers, Inc. have come to give our chapter members professional insight to help us prepare for entering the work force. Our career fair team invited many companies, and a grand total of 33 will be attending on October 18th. Our chapter is excited to give members the opportunity to network with companies that are looking to recruit future engineers. The day before the main event, students will have the opportunity to network with professionals in a social setting at Walk-Ons near campus. Also, tours of the newly renovated Patrick F. Taylor Hall will be given to anyone interested

in seeing all of the neat technology that the building now holds. Students from ULL, Southern University, and UNO will also be attending the career fair. Concrete canoe and steel bridge teams have been formed and are beginning to brainstorm for the 2019 Deep South Conference. Captains for each team are ready to make their prospective designs better than last year. In addition to all of the great things happening for our chapter, elections are to be held soon for officer positions. Most of our chapter's current officers are seniors, so we are expecting fresh, new leadership for the upcoming year. The ASCE chapter at LSU is excited to see what the rest of the fall semester entails.

MCNEESE STATE UNIVERSITY By Robert F. Nodier, Student Chapter President

Greetings from PokeNation! Though political races came to a close this week, ASCE's McNeese State Student Chapter is still on record-setting pace.

Our chapter members worked hard during October. This month certainly was the busiest we have had so far. Ten of our members attended the LSU-hosted Bayou Region Career Fair to great success! 2 events, 33 companies, and 6 universities participated in what was surely the most effective interface between students and employers this state has seen in recent years. We would like to thank Taylor Brignac and the whole LSU ASCE Student Chapter for their invitation and hospitality. We will see you again in the spring!

That next weekend, five MSU ASCE members woke up early on a Saturday morning and joined our ULL comrades for the "Clean the Coast" event down at Rockefeller Wildlife Refuge. It was a cloudy and muggy morning, but our spirits were not damped like the beautiful landscape we found ourselves in. A big "thank you" goes out to Zachary Romaine with Royal Engineers, who gave an informative overview of the efforts of his company and others to stabilize and rehabilitate our coast and wetlands. Then, with Gabe Giffin as our captain and guide, we ferried from structure to structure, cleaning and learning about the brilliant wilderness surrounding our crew.

We'd to thank Gabe for hosting such a successful and fun event, Jacob Neu and Will Cenac with ASCE Acadiana for helping us organize the event yet again, and Mary Grace, ULL Student Chapter President, for coordinating efforts with us. Looking forward to next year, y'all!

The McNeese Homecoming Parade was held this year on October 25th, and our chapter coordinated with the rest of MSU's College of Engineering to enter a float. Not only did we design the walls that held the decorations, but also our very own Chelsea Couvillion was nominated to head the decoration committee. The theme of the parade was "Jurassic Park," so we decorated our float accordingly, complete with a flame-thrower volcano. After all the hard work, the team was rewarded with the 1St place prize in the "Large-School" division of the competition! Congratulations to Chelsea and everyone who worked on the float!

Fundraising for our concrete canoe and laboratory renovations continue. If you would like to make a donation, please send an email to <u>msu-rnodier@student.mcneese.edu</u>, or call (337)377-9691. You can follow the action at our Facebook and Instagram pages! Geaux Pokes!

LOUISIANA TECH UNIVERSITY By Allie Thurman, Student Chapter President

The American Society of Civil Engineers (ASCE) is preparing for another eventful year following the success of last year. ASCE placed 1st in the Engineering and Science Association's COES Cup, because of our active involvement throughout the year. Currently we are continuing to strive to be a positive impact on campus and in the community.

Our focus currently is preparing our two completion teams Steel Bridge and Concrete Canoe, for the journey ahead. Design work has started in both competition areas, and the students are itching to get the opportunity to compete in the spring. Steel Bridge is working to optimize the design from last year such that the bridge can be both stronger, but also quicker and easier to assemble. Concrete Canoe has been crafting new hull designs, testing new mixes, and started paddling practices. They have also already decided the theme for the final product will be centered on the Barksdale Airforce Base in Shreveport.

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 four months.

One of our main focuses this year, was to increase involvement in our underclassmen so they would take full advantage of the unique experiences ASCE and college life has to offer. In fact, members of One primary focus to ASCE this year is the preparation of the 2019 Deep South Conference which will be held in our beloved hometown, Ruston. We are currently raising funds, establishing rules and venues, as well as preparing to compete.

We are also doing a lot with our new addition, Transportation Leadership Council. As an organization, we will be adopting a road and hosting industry meetings within the transportation field. We also plan to be involved within the community but participating at the STEMulations Ruston's farmer's market, continuing to host student social events, and participate in the Big Event, where Tech organizations help clean the town of Ruston.

Overall, it should be an exciting year for ASCE, and we hope everyone has the opportunity to participate in our on or off campus activities, and perhaps even help us host conference.

ASCE met with students of the Civil 101 class at the beginning of the year to introduce our program and the various opportunities it/we can offer to them. In October, we met to discuss the ASCE activity filled weekend to follow the meeting. And in November, we had a joint meeting with the ASCE Acadiana Branch where LAPELS gave a talk on Ethics to both the students and professionals.

As many of you know, our Annual ASCE Barbecue was held September 20th at the Girard Park Pavilion. Thanks to the financial assistance



The UL ASCE Chapter Volleyball Team at the Louisiana Engineering Society Tournament where we came in first place amongst other Engineering Disciplines. Pictured left to right: Tyler Young, Joshua Fontenot, Ivy Thibodeaux, Brooke Smith, Alex Williams, Lani Orgeron, Laura Manuel, and Jordan Eades.

of ASCE Acadiana Branch, we were able to bring in engineering professionals, faculty, staff, along with graduate/undergraduate students to celebrate the start of the 2018-2019 school year

On October 18th, Louisiana State University held their first annual Bayou Regional Career Fair which consisted of 33 civil and environmental engineering companies. There for 200+ students from 5 different schools including: ULM, UL, LSU, UNO, and McNeese State University. We had about 15 people from UL attend and it turned out to be a success, with some students receiving interviews.

Then, on Friday, October 19th and Saturday, October 20th the UL and McNeese State students attended the biannual volunteer opportunity, Clean the Coast in Grand Chenier, Louisiana. There were about 20 people that came together to rid the coast of debris. We would like to thank Jacob Neu, ASCE Acadiana President-Elect for applying on behalf of UL ASCE and McNeese ASCE for the Student Transition Activity Grant which we received in order to pay for Clean the Coast. We would also like to thank Royal Engineers and Consultants and Zachary Romaine for volunteering their Saturday morning to educate us on coastal engineering and what Royal

Engineers&Consultants have done to better the Louisiana Coast.

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 September 8^{th} , the civil engineering team placed 3^{rd} overall; September 29^{th} , we placed 1^{st} overall, and October 20^{th} , we placed 3^{rd} overall. Though we did not come out on top this semester, there is always room for improvement for the next semester.

As you can see, the ULL Chapter of the American Society of Civil Engineers has an event filled month along with a long but exciting road ahead of us. We look forward to working closely with other ASCE Branches and Chapters at the local, state, and even the national level to make this a truly successful year. For additional information regarding the aforementioned events please contact us at <u>ullafayetteasce@gmail.com</u>. Geauxxx Cajuns!



Clean the Coast volunteer opportunity with McNeese University to rid the coast of debris. Pictured top row, left to right: , Nick Scalfano, Blade Leger, Zach Hebert, Alice Kerl, and Lani Orgeron. Pictured bottom row, left to right: Madison Terro, Brooke Smith, Mary Grace Sherlock, Samantha McKisson, and Annie Gutierrez.



Another picture from the Clean the Coast volunteer opportunity, pictured with McNeese students.





LOUISIANA CIVIL ENGINEER - NOVEMBER 2018

UNIVERSITY OF NEW ORLEANS

By Bailee Hurm, Student Chapter President

The ASCE-UNO Student Chapter has been extremely busy thus far in the 2018-2019 school year. We jump started the school year with our first general body meeting held on August 30, 2018 in which we had an astounding turn out of 65 attendees. This meeting was used to discuss the upcoming year, and to inform and generate excitement about everything we have planned. We also participated in Save Our Lake's 29th Annual Beach Sweep on September 15th. We had 10 members come out bright and early on a Saturday morning to pick up and sort trash on Ponchartrain Beach. This was a highly rewarding experience for us all as it gave us a sense of community and appreciation for the nature surrounding us here in New Orleans. Our second general body meeting was held on



Chad Netto gives the student chapter a talk on drones



Drone



LCECS 2018 Paper bridge competition from left to right are: Alexander Vu, Linh Tran, Tyler Baggett, Bailee Hurm, Renee Poole, Kevin McCord, Kevin Dinh, Sabrina Cuevas **ASCE**

September 25th in which we had guest speaker Chad Netto, GISP from Chustz Surveying, LLC come to talk about drones and their uses in the Civil Engineering world, specifically in Surveying. Mr. Chad Netto even brought a drone of his own to demo during the meeting. This drone weighed almost 55 pounds and uses LiDAR (Light Detection and Ranging) to survey large amounts of land in a vastly short amount of time compared to older forms of surveying, exhibiting how technology is being used to further advance the field of Civil Engineering.

Shortly after this successful meeting, ASCE-UNO attended the Louisiana Civil Engineering Conference and Show (LCECS) in which we held a booth at, as well as participated in the Paper Bridge Competition. We had two board members who were successful in this competition. A congratulation goes out to our Vice President Kevin McCord who won first place, and our Secretary Linh Tran who won second place. The conference was an overall success where several of our members were able to not only participate in the Paper Bridge Competition, but also networked with professionals from all over and gained valuable experience. The ASCE-UNO members have also had the opportunity to participate in STEM Fest which was held on October 20th in the Mercedes Benz Superdome where nearly 10,000 students in Louisiana were able to come and see what STEM education is all about. This was the 2nd Annual STEM Fest and has provided our members with rewarding benefits as we get to interact with future scientists and engineers and show them what it is we do here at UNO and what we do it for.

In the upcoming months, ASCE-UNO Chapter will be getting ready for the 2019 Deep South Conference being held in the Spring at Louisiana Tech University. We will also have our third and final general meeting of the semester in which we will recap the events of the semester, as well as discuss what's to come in the Spring semester.



- CALENDAR OF EVENTS -

DECEMBER 2018

December 7, 2018 7PM:

Baton Rouge Branch Christmas Party, Bocage Raquet Club

March 12-14, 2019:

The 2019 Legislative Fly-In in Washington, D.C. and Arlington, VA.

For more events visit the ASCE Events Calendar: http://www.lasce.org/calendar.html

PROFESSIONAL LISTINGS



PROFESSIONAL LISTINGS





LOUISIANA CIVIL ENGINEER

Journal of the Louisiana Section-ASCE Beau Tate, PE 9643 Brookline Ave. Suite 116 Baton Rouge, LA 70809-1488 NONPROFIT U. S. POSTAGE PAID BATON ROUGE, LA PERMIT NO. 1911

SERVICES AND SUPPLIERS

there is only one first in	pression.	BATON ROUGE PRINTING
OFFSET - — - DIGITAL - — - DIRECT MAIL		BRPRINT.COM
AILLET, FENNER, JOLLY & MCCLELLAND INC. O 318 425-7452 F 318 425-4622 3003 KNIGHT STREET, SUITE 120 SHREVEPORT, LA 7105 WWW.AFJMC.COM	MERICAN SOCIETY OF CIVIL ENGINEERS 1852 1914	Alexander INSURANCE SPECIALISTS 4610 Bluebonnet Blvd., Suite A Baton Rouge, LA 70809 Phone 225/295-2995 JUSTIN G. SANDERS Fax 225/368-2145 PRINCIPAL justin@alexsand.com
ETEC	FORTERRA	Helical Concepts, Inc. Regional Distributor
ENVIRONMENTAL TECHNICAL SALES, INC.	Concrete Pipe, Box Culverts, Manholes	P.O. Box 1238 (972) 442-4493 710 Cooper Drive (972) 442-4944 Fax
Water Wastewater Odor Control Pumping Equipment – Systems – Solutions	3-sided, Arch and Modular Bridges, Chain Walls & Pre-cast Structures	Wylie, TX 75098 joshlindberg@hotmail.com
Ronnie Hebert, P.E., President Daniel Hebert, Vice President Brady Sessums, Vice President (225) 295-1200 • 7731 Office Park Blvd., Baton Rouge, LA • Fax (225) 295-1800 www.etec-sales.com	New Orleans LaPlace St. Martinville 504-254-1596 985-652-5806 337-394-3724	CHANCE ATLAS www.helicalpier.com joshlindberg@hotmail.com
The "RAIN/TOPPER". HDPE & STAINLESS STEEL MANHOLE INSERTS DAVE NEATHERY President	SUISIANA SECTOR AMERICAN SOCIETY OF CIVIL ENGINEERS	Design/Build Contractor SUIBINIAIR [®] License No. EF 6196 License No. VF 770 Synorgy with Nature [®] Corporate Office Phone: 985.868.0001
President P. O. Box 19369 Shreveport, LA 71149-0369 Office: 318-687-4330 Mobile: 318-347-3650	1852	1711 Dunn Street Fax: 985.851.0108 Houma, LA 70360 submar@submar.com Office: 800.978.2627 www.submar.com