

# THE LOUISIANA CIVIL ENGINEER

ACADIANA BRANCH • BATON ROUGE BRANCH  
NEW ORLEANS BRANCH • SHREVEPORT BRANCH

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## FEATURE:

Protecting and restoring the Louisiana Coast

## NEWS:

Election of Section officers  
Mattei nominated for Region 5 Director

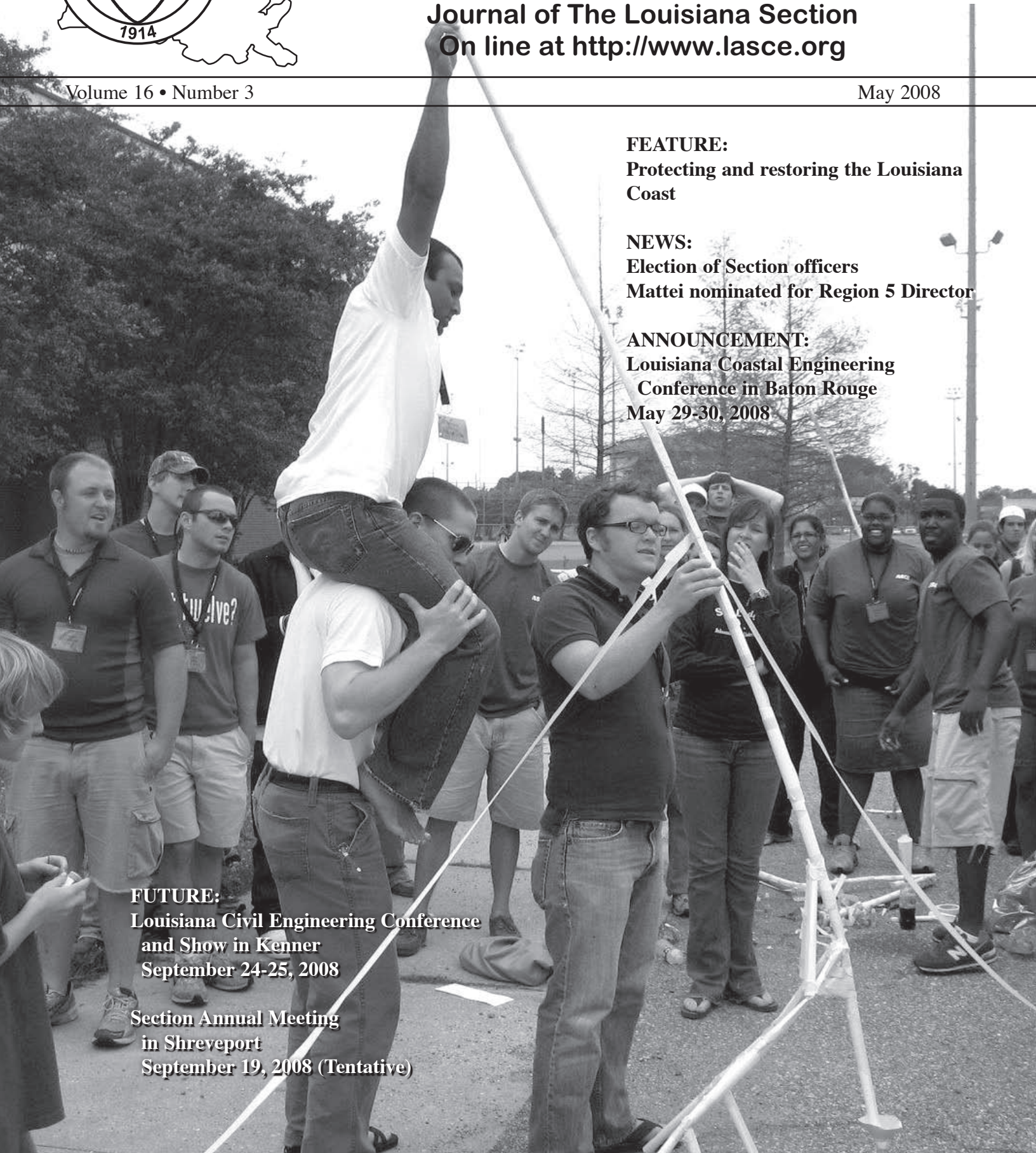
## ANNOUNCEMENT:

Louisiana Coastal Engineering  
Conference in Baton Rouge  
May 29-30, 2008

## FUTURE:

Louisiana Civil Engineering Conference  
and Show in Kenner  
September 24-25, 2008

Section Annual Meeting  
in Shreveport  
September 19, 2008 (Tentative)





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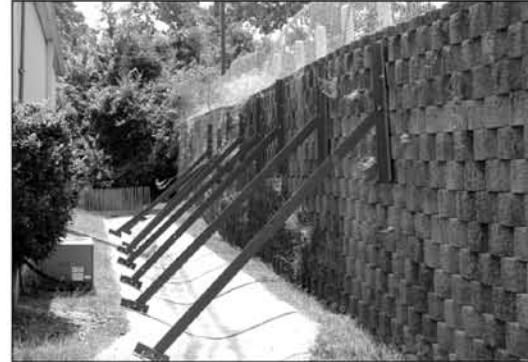
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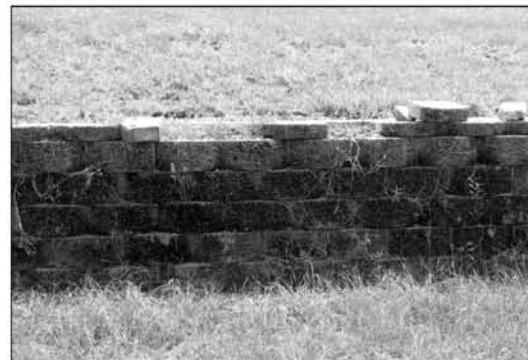


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The Louisiana Section is located in ASCE Region 5 that consists of the Louisiana, Mississippi, Alabama, Georgia and Florida Sections.



# President's Message

By E. R. (Ray) DesOrmeaux, PE

Since the last issue of this journal, the Section Board has met on two occasions, and some of its members have taken the opportunities available to attend several Conferences designed to significantly enhance their leadership abilities as they progress on behalf of the Louisiana Section in the coming years. Board members Chris Knotts and Luke LeBas attended the most recent ASCE Legislative Fly-In in Washington, D.C. They had the opportunity to visit with several members of the Louisiana congressional delegation, and visit with the ASCE headquarters staff.

Section Board meetings have been well attended by your elected and appointed representatives. It is important to note that this Board continues to be conscious of its responsibilities in providing leadership to — and on behalf of — the Section's membership, and in providing the stewardship of your section dues as an important part of its management of the financial and professional affairs of the Section.

The Annual Spring Meeting and Conference of the Section hosted by the Acadiana Branch in Lafayette in April featured several important speakers that complemented the various technical sessions scheduled over the two-day event. These speakers were

- Jeffrey Russell, PE, head of the Department of Civil and Environmental

Engineering at the University of Wisconsin - Madison. Jeff gave an excellent overview of the *Body of Knowledge (BOK)* and ASCE's *Vision for Civil Engineering in 2025*.

- William Marcuson, PE, the Past President of ASCE National. Bill was the principal speaker during the luncheon on Thursday.
- Joseph Savoie, Commissioner of Higher Education in Louisiana. He was the speaker during the Section awards banquet Thursday evening.
- Kam Movassaghi, PE, the President of the ASCE Transportation Institute. Kam was the principal speaker for the luncheon on Friday.

Friday evening following the conclusion of the Conference, a dinner meeting was held to explain in detail the current direction of the ASCE regarding the Body of Knowledge. Those invited to this dinner included current officers of the Section, LAPEL Board Members, certain education officials, and representatives of American Council of Engineering Companies and the Louisiana Engineering Society. Both Jeff Russell and Bill Marcuson served as the spokes persons for the ASCE.

It is my opinion that the BOK will be the primary topic of interest to civil engineers and the engineering profession as a whole in coming years through its development and implementa-



tion. For this reason, as your President, I believe it to my responsibility to bring the subject of the BOK to the front burner for the Section to encourage our members to give it the priority it needs and devote the time needed to become familiar with the subject and be effective contributors in its development and implementation.

The BOK and continuing education issues have been topics of much debate and controversy for a number of years. A number of revisions in future implementation have resulted from these discussions. We as Section members should position ourselves to become intimately familiar with the direction and ultimate goals expressed in ASCE's *Vision for Civil Engineering in 2025* and thereby be a significant force in deciding what the future of the civil engineering profession will be.

Recently, at the urging of many in the Section's leadership, I sent a letter addressed to the Section's members and to the print media in Louisiana commenting on the continued and highly publicized criticism of the ASCE by some in the New Orleans area. If you have not read it, it is posted on the Section website for your convenience and I encourage you to read it. Many positive responses and a few negative ones as expected were received in response to this article.

## - Observation -

### Ethics:

An early published criticism of the contents of the initial report from the technical investigation and assessment of the levee failures in the New Orleans metropolitan region that resulted from Hurricanes Katrina and Rita, observed that culpability in the engineering community was generously assessed apparently based on assumptions inappropriately drawn from the technical assessment. It was presumed that the allegations were to some degree unfounded because the scope of a technical investigation would not include a complete investigation into the intricate history of the actions and relationships between the various political and engineering organizations that are responsible. Even if these allegations of culpability are ultimately verified in the future by a thorough investigation, the source and punitive nature of the allegations identifying and accusing the alleged offenders will remain at issue.

The initiative of the leaders of the technical assessment appear to inappropriately go beyond its scope with extrapolated conclusions concerning the culpability of the engineering and/or political entities involved. It appears that culpability was addressed prematurely and in a punitive manner that stems from the arrogance and/or indiscretion of the lead investigators and this provides a disservice to the public and demonstrates a disregard for the engineering profession even if the allegations are ultimately proven true. If this act were committed by a professional

engineer, I believe that it would be judged either professionally unethical or at least questionable.

For culpability to be a legitimate subject for disclosure and discussion in the public/professional arena, I believe that it must be well beyond unsupported punitive accusation and/or condemnation. It must be in the context of settled, completely disclosed, supporting facts from a comprehensive investigation into the intricate history of the actions and relationships between the various political and engineering organizations responsible and/or resulting legal actions taken. For the engineering profession, it should additionally be in the context of the lessons learned and resulting guidance for future practice — recommendations for more appropriate and effective behavior.

The behavior I advocate here would appear to be no different than the typical disclosure and discussion normally given a real-life alleged breach of ethics. The object is not to unduly poison public confidence in professional engineering services through unsupported or unresolved accusation and condemnation — premature or otherwise. It is to effectively explain — based on the settled, supporting facts — the nature and consequences of what is considered inappropriate behavior and the lessons learned to accurately inform the public and expedite professional development. It is hoped that the Hurricane Katrina Decision Chronology Study under the auspices of the US Army Corps of Engineers appropriately addresses such issues. - Editor

**About the cover:** The Deep South Conference of ASCE student chapters was hosted this year by the LSU ASCE Student Chapter. A regular feature of the Conference is the several competitions that are planned and facilitated by the host chapter. One of the most intriguing competitions featured in this picture is the Mystery Event that is not announced in advance. The host chapter announces the specifics at the time of the event and provides each competing team representing a participating student chapter with the resources for — and the conditions of — the competition. It requires ingenuity and teamwork, and allows for serendipity to the max. See the pictorial highlights of the Conference and the Student Chapter News in this issue for more details.

# Protecting and restoring the Louisiana Coast

By Edmond J. Russo, Jr., PE

*The U.S. Army Corps of Engineers continues in its commitment to protecting and restoring the Louisiana Coast. The people living and working in South Louisiana might want to ask the Corps of Engineers, "How is the Corps determining ways to restore and sustain our coastal landscape and further to reduce hurricane damage risks to us and our economy?" The Corps has accomplished a great deal, and continues in its commitment toward realizing the objectives that are implied in this hypothetical question as they may apply all along the Louisiana Coast. The Louisiana Coastal Protection and Restoration Program known as LACPR is working in close partnership with State Master Planning efforts to establish the roadmap for a healthy and viable coastal community where the natural and built environments will be able to flourish along side of one another, for years to come.*

## History

*How we have gotten to where we are today?* South Louisiana and other parts of the Gulf Coast region have experienced approximately 40 major hurricanes and numerous tropical storms since 1900. Time and again, the resilience of the people living and working along the Gulf Coast and its ecosystems that provide natural protection from the devastating effects of hurricanes have been key to Coastal recovery. However, the catastrophic losses that resulted from Hurricanes Katrina and Rita in 2005 resulted from the effects of the greatest tidal surge to hit the United States mainland in recorded history. This signaled a need to more effectively evaluate the hurricane damage risks, and to more systematically approach how to reduce them.

The physical proximity of New Orleans to the Mississippi River — the most important water-based transportation route serving the central United States — has facilitated the growth and expansion of this major metropolitan area. Over time, it has become a vital industrial and commercial resource not only for the region, but for the entire nation. Up until the 18th century, the mouth of the Mississippi River was frequently impassable for navigation. New Orleans provided shipping access to the Mississippi River via Breton Sound, Lake Borgne, and Lake Pontchartrain so that ships could avoid having to navigate the treacherous mouth of the River.

Following World War I, the Gulf Intracoastal Waterway was built and it encouraged further industrial development along the Louisiana Coast for defense industry manufac-

turing and energy production. The Intracoastal Waterway also provided an important catalyst for the construction and operation of a series of ports on its banks in South Louisiana. They grew to become the largest collective port facility in the United States. And in 1956, Congress authorized the construction of the Mississippi River Gulf Outlet, referred to as the MRGO. It allowed for deep-draft ships and vessels to take its shorter and safer route from the Port of New Orleans to the Gulf of Mexico.

***(T)he catastrophic losses that resulted from Hurricanes Katrina and Rita... (and) the effects of the greatest tidal surge to hit the United States mainland in recorded history... signaled a need to more effectively evaluate the hurricane damage risks, and to more systematically approach how to reduce them.***

The Louisiana Coast has presented the Corps with many challenges over the years. The diverse economic, environmental, and recreational benefits that the Louisiana Coast has to offer often times can be at odds with one another. Through the Louisiana Coastal Protection and Restoration Program (LACPR) and in cooperation with the State of Louisiana and other important agencies and organizations, the Corps is poised for the expected positive change for the years to come.

## Coastal protection and restoration

*Coastal protection and restoration is critical to sustaining the Louisiana Coast.* The Louisiana Coast has endured a great deal of loss and devastation over the years, however the fury that Hurricanes Katrina and Rita unleashed along the Coast in August and September of 2005 drove home the point that much needs to be done to reduce the future risks of hurricane damage. The Louisiana legislature and the United States Congress have put in place the following legislative directives to jointly investigate and integrate hurricane damage risk reduction and coastal restoration for South Louisiana:

- The Energy and Water Development Appropriation Act of 2006 passed in November 2005.



- The Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic and Influenza Act of 2006 passed on December 30, 2005, as part of the Defense Appropriations Act.
- The State of Louisiana established the Coastal Protection and Restoration Authority, also referred to as CPRA, in December 2005 to comply with the Defense Appropriations Act.

Under the first two acts, Congress and the President directed the Secretary of the Army, acting through the Chief of Engineers, to conduct a comprehensive hurricane protection analysis and design. It was to develop a full range of flood control, coastal restoration, and hurricane protection measures exclusive of the normal policy considerations for South Louisiana and to submit a final technical report to Congress.

The LACPR is the umbrella planning and analysis process that is being undertaken by the Corps to satisfy the requirements of the aforesaid state and federal legislative directives. Importantly, although not identical, the state and Federal directives share a common fundamental objective. Together, they create the first plan in the history Louisiana designed to fully integrate hurricane damage risk reduction for coastal communities and industries with the restoration of the State's subsiding and eroding wetlands and their rapidly deteriorating natural ecosystems.

## Accomplishments

The LACPR presents a very complex water resource management challenge due to the range of interrelated human and environmental factors that need to be addressed, the size of the planning area with over 16,000 square miles of coastal area involved, and the

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*Edmond J. Russo, Jr., PE, is Chief, Coastal Engineering Branch, Coastal and Hydraulics Laboratory, at the US Army Engineer Research and Development Center. He is a licensed engineer in the State of Louisiana. On special assignment following the 2005 Atlantic hurricane season, he served as Project Manager for the Louisiana Coastal Protection and Restoration Project, completing this role in December 2007. Formerly, Russo managed navigation and ecosystem restoration projects and studies in the US Army Corps of Engineers, New Orleans District, in the planning and operations arenas. He is Vice Chair and Secretary for the Environmental Commission of the Permanent International Association of Navigation Congresses. A native of New Orleans, Russo earned his BS in Civil Engineering from Louisiana State University in 1990 and his MS in Civil Engineering from the University of New Orleans in 1997. He is currently pursuing a PhD in Civil Engineering at Louisiana State University.*

requirement for new hydromodeling methodologies. The new hydromodeling methodologies are more detailed hydrological models that are made possible by the use of supercomputers and they simulate more accurately the characteristics of oceans, rivers, and streams. The magnitude of data and the character of the software required for the analysis, will define an effort that far exceeds any prior effort by the Corps to evaluate hurricane damage risk reduction.

As part of the LACPR initiative, the Corps has accomplished the following to facilitate an accurate technical evaluation of the data that will ultimately result in best practices to reduce hurricane damage risks:

*Risk-based hurricane frequency simulation.*

Perhaps one of the most significant accomplishments by the Corps was its development and application of numerical models that replicated hurricane storm surges and statistically determined the potential frequency of storm events at discreet locations across the entire Louisiana Coast. The Federal government adopted these models for the rebuilding of the New Orleans levee system, for determining flood insurance maps, and for similarly evaluating the Mississippi Gulf Coast.

*Economic and cultural resources evaluation.*

The Corps developed a customized geographic information system (GIS) database that used data gathered by remote sensing to assess damages to

- residential and nonresidential structures and their contents
- vehicles
- agricultural resources
- roads
- railroads and
- potentially significant cultural resources

in approximately 60,000 census data blocks within the 16,000 square-mile LACPR planning area.

*Coastal restoration evaluation.* The rapidly eroding wetlands on the Louisiana Coast have been a concern for a number of years. As a result of the LACPR effort the damage reduction value of the coastal landscape has been explored quantitatively for the first time.

*Plan formulation atlas.* So that the Corps can catalogue and begin to screen the extensive numbers of risk reduction measures proposed by various groups and individuals with a vested interest in coastal protection and restoration, it prepared the LACPR Plan Formulation Atlas (April 16, 2007). Made public by the Corps, the Atlas identified hundreds of measures that could result in literally millions of potential risk reduction alternatives. Using a more defined set of criteria, the Corps reduced this universe of alternatives to a subset for further evaluation and comparison.

*Multi-criteria decision analysis.* The Corps recognizes the need to present alternatives that equitably address the many and varied concerns expressed by the stakeholders. To accomplish this more objectively, multiple criteria need to be evaluated and compared to take into account

the competing interests and varying perceptions of risk. In response to the limitations in the traditional Corps alternative evaluation methods, the Corps used *multi-criteria decision analysis* (MCDA) as a tool for objectively comparing alternatives based on stakeholder values.

*Public and stakeholder involvement.* Critical to the overall success of the LACPR is the work conducted by the Corps that has been done in *partnership* with the State of Louisiana, other Federal agencies, local interest groups and the citizens of South Louisiana. At the beginning, when the Corps was establishing the LACPR goals and objectives and its critical *path forward*, a decision analysis team was formulated to develop a transparent evaluation process that is based heavy on stakeholder involvement. Beginning in the fall of 2006, the Corps conducted public stakeholder meetings across South Louisiana to obtain input on what its citizens wanted to see included in the plans for Louisiana coastal protection and restoration. It did not stop there. The Corps continues in its commitment to engage in the involvement and decision-making process those who will be directly impacted by current and future coastal protection and restoration initiatives.

**Collaboration**

*Collaboration is the key to Louisiana coastal protection and restoration.* The complex and changing nature of Louisiana's coastal environment and communities creates a challenge for planners in the short term. Addressing these and other challenges are expected to continue well into this century. Assembling a diverse team to work effectively with local interests and the public offers the best approach for formulating a protection and restoration plan that will not only meet technical requirements, but will also achieve an important level of public understanding and acceptance.

The LACPR effort is the result of collaboration by the Corps, Louisiana's Coastal Protection and Restoration Authority and other State agencies, numerous Federal agencies, independent scientists and academicians. The latter group includes

- the National Research Council
- non-governmental organizations
- the Rijkswaterstaat Water Partnership of the Netherlands
- independent technical reviewers
- external peer reviewers
- private engineering firms in the United States and the Netherlands
- landowners
- stakeholders and
- perhaps most importantly the people who live and work on the Louisiana Coast.

**Important outcomes**

Because of the work conducted to the present by the Corps, the State of Louisiana, and its collaborating partners on the LACPR, the team now has a better understanding of the risk associated with a large range of hurricanes that could strike the Louisiana Coast. This has resulted in the development of a number of alternative risk reduction scenarios that could

address a range of potential hurricane damage risks. These alternative scenarios or plans have been evaluated using a number of potential future ecological, hydrological, and economic factors including

- relative sea level rise
- subsidence rates
- economic growth and
- population trends.

The team transmitted the draft Technical Report to the National Academy of Sciences in mid March, 2008, for external peer review. This draft report is posted on the project Web site. The evaluation resulted in the following important findings that require further consideration:

*The size and magnitude of storm threat are generally greater in the area of the central Gulf Coast near the Mississippi River.* Statistical analysis of historic storm data indicates that the probability of the occurrence of larger more intense storms — Category 2 or greater — on the Gulf Coast increases nearer the center of the Gulf Coast region near the Mississippi River.

*Population forecasts are linked to the projection of long-term employment opportunity.* South Louisiana will continue to be a population and employment center because industries founded on coastal resources including

- port facilities
- oil and gas reserves
- naval fabrication facilities and
- commercial fisheries

will be sustained. As a result, people are not likely to move away and public and private investments will likely continue along the Coast accepting the hurricane damage risks.

*Protecting and restoring coastal wetlands is a critical component of the long-term survival of communities near the Louisiana Coast.* Erosion and subsidence of the wetlands and barrier islands reduces the natural buffer separating the coastal communities from the Gulf of Mexico. As these buffers continue to disappear, coastal communities will face choices of either building higher and stronger to meet the risks of more severe winds and rising water levels; relocating to areas with lower risks; or continuing to live as they have in the high risk areas with ever-increasing risk. It will be important to include the consideration for coastal restoration in every alternate plan because coastal restoration is fundamental to the successful long-term reduction of severe wind and rising water risks. Key is long-term coastal ecosystem sustainability in concert with other water resources missions and uses approached from a regional systems perspective as it relates to the Mississippi River and Northern Gulf of Mexico.

*Individual and community decisions will play a strong role in determining future risks to both life and property.* Individuals and communities must help decide where and how to rebuild, recognizing the threat and risk of hurricanes is inherent to life in South Louisiana. They must decide whether or not to remain in known flood prone areas. Local governments also will play an important role by implementing land use



planning, zoning, and permitting ordinances that can preempt unwise individual decisions and better guide wiser decision making.

*Structural measures are not always the best solution.* In densely populated areas like the greater New Orleans area, structural features such as new levees and floodwalls may be needed and feasible as part of an overall flood risk reduction strategy. However, such measures may not be the best choice for reducing risks in all areas across the Coast. Structural features are expensive and their associated negative environmental impacts, resource availability, and potential unintended consequences must be a consideration in determining their feasibility. *Nonstructural approaches provide the most definitive risk reduction.* The total relocation or removal of assets from a flood prone zone, or raising the elevation of assets above the high risk flood stage in a flood prone zone, can significantly reduce the risks of damage.

*A multiple-lines-of-defense strategy has advantages over a single-line-of-defense strategy.* An evaluation and understanding the limitations associated with a single-line-of-defense strategy to reduce hurricane damage risk will encourage the development of the more effective redun-

dant, integrated, multiple-lines-of-defense approaches. Understanding the weaknesses of single measures will encourage planners and engineers identify and develop complementary measures that can more effectively reduce the risks and foster the development of comprehensive problem-solving approaches.

#### Future challenges

The next steps in the Technical Report development include further stakeholder engagement on their views of the draft findings and revisions to draft documents; and considering the stakeholder input and feedback from the external peer review. The efforts by the Corps in this process do not rely on any one strategy to assess the most effective approach that can be discerned to reduce hurricane damage risks. There is no single strategy for comprehensive hurricane damage risk reduction that guarantees the safety of the people living and working along the Coast other than entirely abandoning the communities in South Louisiana.

However, the economic, ecological, and cultural assets of South Louisiana collectively appear to justify continuing efforts to seek and find feasible risk reduction strategies. An integrated, comprehensive system comprised of

coastal restoration efforts and structural and nonstructural measures appears to be the most promising solution for effectively reducing hurricane damage risk along the Louisiana Coast. Ultimately, the solution that the people of South Louisiana choose will be based on a collaborative process with the stakeholders, from which no single best solution is likely to emerge. It is hoped that the multiple criteria and perspectives that evolve and emerge can be integrated into an effective coastal protection and restoration plan that best serves the community. It will be a plan that effectively reduces the hurricane damage risks in a way that responds to the multiple criteria and perspectives that emerge.

For additional LACPR materials, visit the project Web site <http://www.lacpr.usace.army.mil>.

#### References

National Research Council Committee Information Web Site

Los Alamos National Laboratory Public Affairs Office (statement on hydromodeling)

Misconceptions and Misunderstandings Surround MRGO since Hurricane Katrina (brochure)

Draft Louisiana Coastal Protection and Restoration Technical Report. February 2008

Build Safer, Stronger, Smarter (FEMA brochure)

## - Observations -

Globalization:

Richard G. Weingardt, PE, sounds the alarm in his column in the October 2004 *Structural Engineer* about the

...spiraling ramifications of outsourcing and off-shoring... using low-cost, non-US engineers by American-based companies... Given this situation, bright young Americans see the handwriting on the wall: engineering is treated like a commodity, engineers are hired according to low cost, and engineers from developing countries willingly work at salaries far lower than those of Americans. That may bode well for today's bottom-line profits..., but not for the individual engineer — nor for maintaining and improving the nation's engineering infrastructure.

His conclusion...

The practice of engineering in this country as we have known it is broken, and we engineers need to do something about it.

Weingardt's concerns have an interesting parallel with the concerns of some engineers employed in government. They visualize themselves as knowledgeable on-site stewards of the infrastructure that is owned by their employer and thereby they possess certain expertise and ability to most clearly identify and solve the related on-site engineering problems. In recent time, their jobs have been systematically eliminated in favor of privatization. This is based on mostly unfounded claims of their incompetence and that lower cost more expert engineering is available in the private practice sector. Interestingly enough, it is not uncommon that the engineers separated from government are sought as valued employees by those who accuse them of being incompetent and who are apparently likely to use low-cost offshore engineering services. The engineering of the infrastructure in

Louisiana may now be more frequently farmed out to engineers working in some other state who most probably know little about the engineering issues in Louisiana and have no experience in its environment.

Is it possible that the outsourcing and off-shoring of the jobs in the private sector is just as justifiable to the bottom line concerns for the alleged low-cost services used to justify dismantling and outsourcing government engineering services to the private sector? The ultimate concern of government employed engineers appears to be also that of Weingardt's — the replacement of the resident engineering talent in the US with engineers overseas through outsourcing practices in the US private sector. As he suggests, it may not bode well for effectively maintaining and providing the nation's engineered infrastructure.

The premise may turn out to be an illusion that there is significant value added to the engineering process by government employed engineers with a corporate memory and it is measurable in the perceived role of experienced, knowledgeable on-site stewards of the infrastructure. The premise may also turn out to be an illusion that there is value lost in the remote location of the engineer and the engineering work done in the private sector. If these premises are an illusion, then I would be led to believe engineering is a commodity. If the premises are not an illusion, I suspect that by the time it is appreciated — if it ever is — most of the engineers working in government and in domestic private practice will be residents of the Pacific rim.

Who is to say that an engineer in Shreveport or New York City is any more competent than one in Calcutta, India to solve our engineering problems here in Baton Rouge? If we are to believe the engineer in New York City is more competent and low-cost than the engineer in

Baton Rouge — the answer to this question should not be a stretch. It would seem that national security issues may offer a more salient argument against the wholesale elimination of domestic engineering talent in favor of the low-cost overseas engineering talent.

Interestingly, Weingardt calls to action his fellow practitioners in private practice to help stem the tide with this plea:

Ideally, most of those elected at the national, state and local levels will be good candidates that you support, and you already have their ear... Meet (with) those who will have key roles enacting legislation affecting laws and policies dealing with international trade and practices, and let them know where you stand.

I suspect that most of the engineers employed in government know from experience how effective this tactic is. The ongoing efforts of political influence to privatize government engineering services have been an active effort of which I have been aware since the 1960s here in Louisiana. It appears to have gained significant momentum both locally and nationally during the 1990s. On this basis, I believe that Weingardt may be overestimating the responsiveness of government to political influence if the outsourcing and off-shoring issues are as urgent and as serious as he suggests. - Editor

## ❖ Quote ❖

Global Warming: *The trouble with the global warming debate is that it has become a moral crusade when it's really an engineering problem. The inconvenient truth is that if we don't solve the engineering problem, we're helpless.*

- Robert J. Samuelson, Columnist

## Branch News and Leadership Forum

### BATON ROUGE

By Robert W. Jacobsen, PE, President

The Branch held monthly membership meetings and luncheons on January 17, March 20, and April 10. Our speakers were Robert W. (Bob) Schmidt, PE, of HNTB who discussed the proposed Baton Rouge interstate loop project; Gordon Boutwell, PE, retired president of Soil Testing Engineers, Inc. who discussed geotechnical and forensic engineering and the "lessons learned" from the post-Katrina ASCE and ILIT investigations; and Dietmar Rietschier, Executive Director of the Amite River Basin Commission who discussed the Comite River Diversion Canal Project.

The April 10 luncheon was held at Southern University, in PBS Pinchback Hall. Members were welcomed by Patrick E. Carriere, PE, Chairman of the Civil and

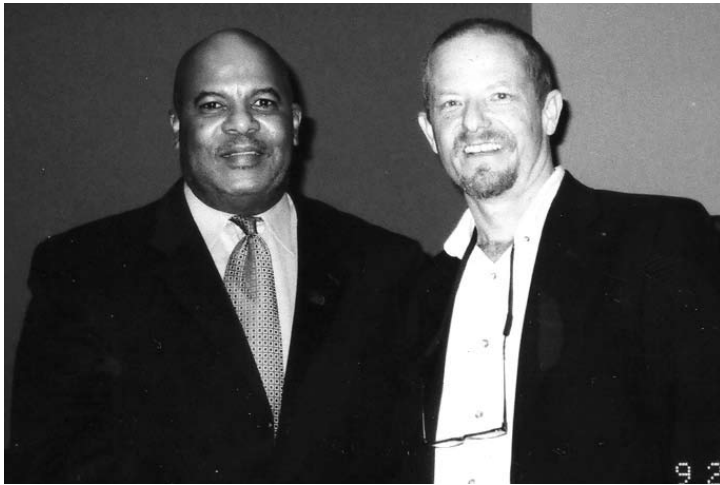
Environmental Engineering Department, and Brandon Johnson, President of the Southern University ASCE Student Chapter. The Department and students did an outstanding job of hosting the event and we look forward to an opportunity to return in the near future.

Following the April luncheon, members were taken on a tour of the Lilly Bayou Control Structure construction site and part of the Comite Diversion Canal Project. This tour of Baton Rouge's *Big Dig* was a remarkable one.

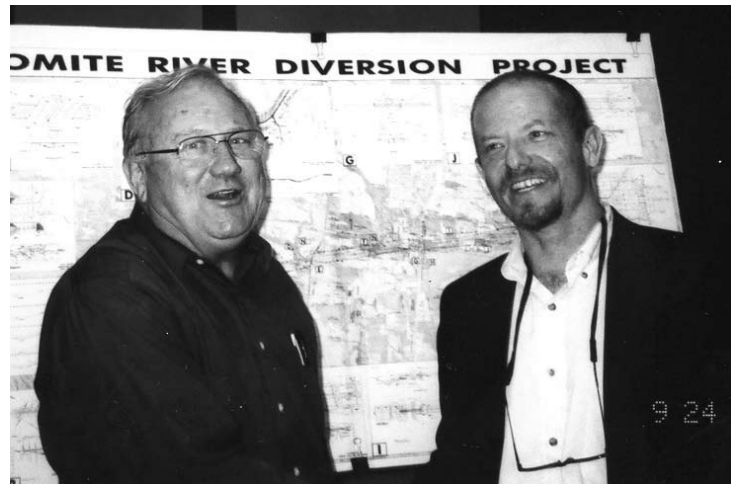
On behalf of the Branch, I wish to thank the many members who pitched in and supported the LSU ASCE Student Chapter in its efforts to host the recent Deep South Conference in Baton Rouge.

The Branch is finalizing plans in conjunction with Louisiana Department of Natural Resources and LSU to host the Coastal Engineering Conference May 29-30, 2008 at the Hilton Baton Rouge Capitol Center. The focus of the Conference is updating engineers on the key practices for designing coastal restoration projects. Information and registration forms for this limited seating conference are available at [www.ascebr.org](http://www.ascebr.org).

The Branch voted to provide additional funds for running our Public Service Announcement on upcoming 26 airings of *Design Squad* on LPB.



Patrick E. Carriere, PE, Chairman of the Civil and Environmental Engineering Department at Southern University (left) welcomes Branch President Robert W. Jacobsen, PE, and his fellow Branch members who attended the recent Branch meeting hosted by the Department.



President Jacobsen (right) thanks Dietmar Rietschier, Executive Director of the Amite River Basin Drainage and Water Conservation District following his presentation on the status of the \$180 million Comite River diversion project to the Branch membership.



The group that participated in the field trip to the Comite River diversion project.



View of the Lilly Bayou control structure that is under construction and was visited during the field trip following the Branch membership meeting at Southern University.



## NEW ORLEANS

By Ronald L. Schumann, Jr., PE, President

The Branch engages in outreach programs that provide numerous opportunities for our members to provide the young people and students in our community some understanding of the civil engineering profession and the opportunities it offers as a career choice. One of these outreach programs includes the support for the Greater New Orleans Science and Engineering Fair where the Branch sponsors and presents special awards that include 1st, 2nd and 3rd place in the Junior Division and 1st, 2nd and 3rd place in the Senior Division. Certificates of recognition were presented to each of the 6 recipients this year along with the monetary awards of \$150, \$100 and \$50 to the 1st, 2nd and 3rd place recipients in each division.

The Fair's engineering projects were judged on how well they presented and applied principles of civil engineering technologies including soils, water, the environment, structures, transportation and mapping. The judging for the projects was provided by Branch members and I had the privilege of presenting the awards on behalf of the Branch during the awards ceremony. In addition to the student awards, gift certificates of \$25 each were given to the teachers of each of the student winners. On behalf of the Branch, special thanks go to Chris Sanchez who coordinated this activity for the Branch and to the Branch members that dedicated their time and energy to supporting this event.

Each year, Jazzfest affords the Branch an important opportunity for outreach to the younger people in our community and their parents. The Jazzfest is an annual music and heritage festival in New Orleans that draws approximately 400,000 people over a 7 day period that includes the last weekend in April and the first weekend in May. The ASCE outreach feature to the children during the Jazzfest is *Rebuild New Orleans*. There are two work areas in this venue manned by our volunteers.

One area is where the children *design* their proposed structure by decorating a wooden block to represent it and they get the permit to *erect* their proposed structure in the City. The wooden blocks are recycled from rebuilding and construction waste are provided to the children to decorate. The other area is an 8' x 16' grid map of the City where the structures are placed by the children according to the rules of the permit they have. This event is and has been a popular activity for the children who attend the festival. It demonstrates some of the basic functions of civil engineering and for these children it promotes an understanding of what civil engineers do.

Kudos go out to Norma Jean Mattei, who leads this outreach activity in addition to the other duties she undertakes in support of the Branch and the ASCE on the regional level. On behalf of the Branch, I wish to express its appreciation to the several volunteers that dedicated their time and energy to this event to promote civil engineering. It is through activities like these that we are able to effectively introduce the next generation to civil engineering and instill in them an appreciation of civil engineering as a career opportunity.

The Branch continues its enthusiastic support of the activities of the UNO ASCE Student Chapter. Most recently, it supported the Chapter's participation in the Deep South Conference of ASCE student chapters. This year, it was hosted by the LSU ASCE Student Chapter in Baton Rouge. The Chapter fielded teams that participated in both the Steel Bridge and the Concrete Canoe competitions and during the Conference it managed to place 1st in the Steel Bridge Competition. Congratulations to all who participated and contributed to the Chapter's successful effort. Support of our student chapters serves to encourage the development of the future leaders in our profession and their continued participation in the ASCE.

The Branch is working on a billboard proj-

ect intended to promote and educate the public relative to the profession of civil engineering and the role of civil engineers. The billboard is funded in part through ASCE State Public Affairs Grant (SPAG) program funds that were applied for by the Branch and received from the ASCE national organization. The remaining funds will be provided by the Louisiana Section. The SPAG program was created by the ASCE to encourage public relations and community outreach initiatives at the Section and Branch level to promote the image of civil engineers as leaders and experts on America's vital infrastructure and encourage advocacy on issues that are important to civil engineers.

Nathan Junius wrote the proposal and applied for the SPAG on behalf of the Branch. Nathan is also forming the Billboard Committee that will develop the ideas for the design of the billboard message and make the arrangements for where and when it will be displayed.

The Branch website is under construction. We appreciate your patience as we continue to work on our website. Certain members of the Branch will receive training on how to manage and update the site using Content Management System software. This software allows the user to independently place content and update calendars and other information on the site without the services of a website technology company. As you may have noticed the Branch website has not been updated recently. The updating of the website will occur once the new system is in place to avoid the initial cost of having a website management company provide these services. We will notify you when the new site is up and operational.

As always, the Branch Board is interested in hearing from Branch members and other constituents, and strongly encourages your input. You can always contact me at [Ronald.Schumann@dmjmharris.com](mailto:Ronald.Schumann@dmjmharris.com) with any questions, comments or ideas about how the Branch may better serve its members.

## SEI New Orleans Chapter Report

By Om P. Dixit, PE, Newsletter Editor

### Seminars hosted

Since its report in the February issue of this journal, the *Structural Engineering Institute New Orleans Chapter* hosted the following seminars in the New Orleans Branch:

*Towards total precast construction* on February 13, 2008

**Donald (Don) Theobald** of Gulf Coast Pretress in Ocean Springs, Mississippi and **Hugh D. Ronald** of Rapid Precast Construction System in Eustis, Florida presented this seminar to an audience of approximately 60 people. Several innovative construction methods and precast concrete products that aid to accelerate construction without sacrificing material quality, strength or durability were presented.

### *The Annual David Hunter Lecture:*

*The devil is in the details* on April 10, 2008

**Edwin T. Huston**, PE, of Smith & Huston Inc. Consulting Engineers in Seattle, Washington presented the Lecture to approximately 100 people. The danger of performing structural analysis using *black box* software without an intimate understanding the assumptions that were made in the development of — and the limitations that may be built into — the software. This shortcoming in the practice has occasionally lead to a structural collapse. The inadequacy of the curricula typically leading to the BS degree in civil engineering was acknowledged as were the practices in the industry that do not provide for proper mentoring to professionally and technically develop the engineers entering their workforce. The Chapter would like to thank Ralph W. Junius, Jr., PE, for sponsoring this lecture since its inception in honor of his former partner David Hunter.

### Future seminars planned

- Construction Management; June 19, 2008
- Local Building Design Codes and IBC 2008 Code; August 14, 2008
- Design of Marine Structures; October 16, 2008

The planned dates and topics are tentative at this time. More details about the schedule and titles of these seminars will be posted on the Branch website as soon as they are finalized. The committee is seeking recommendations for potential seminar topics and speakers for future presentations. Members with expertise in above areas would be welcome to join the Executive Committee. To provide any suggestion and/or join the Executive Committee please contact SEI Chapter Chairman Mike Choudhry, PE, at [Mike.Choudhry@URSCorp.com](mailto:Mike.Choudhry@URSCorp.com).

(Continued on Page 10)

# ACADIANA

By Joseph P. Kolwe, Jr., PE, President

The Branch hosted the Section 2008 Annual Spring Meeting and Conference in Lafayette. The planning and hosting of this event consumed much of the resources of Branch leadership and its members over the weeks leading up to the event. The highlights of the Conference appear elsewhere in this issue.

The Branch hereby congratulates the first 4 recipients of its newly established *Academic Scholastic Award*. The recipients are senior stu-

dent Reid Romero and junior student Amy Henschke who are in the Civil Engineering curriculum at the University of Louisiana at Lafayette; and senior student Benjamin J. Boudreaux and junior student Jeffrey N. Tyson who are in the Civil Engineering curriculum at McNeese State University. The senior students are awarded \$300 each and the junior students are awarded \$200 each. The recipients of these awards are selected based on having a minimum grade point average of 3.5 in their engineering

curriculum, their demonstrated leadership and involvement in their ASCE Student Chapter, and their commitment to the advancement of the civil engineering profession.

*Editor's note: Joe Kolwe wishes to acknowledge the authorship of this article and the Highlights of the Annual Spring Meeting and Conference that appears elsewhere in this issue by Kristin D. LeBlanc.*

## SHREVEPORT

By Rusty L. Cooper, EI, President — NO ENTRY

(Continued from Page 9)

In February the Chapter provided judges for the New Orleans Regional Science Fair and the winners of the various events for this year are:

- Junior Division

- First Place Winner (\$100)

Dylan Duvio from John Curtis Christian

Project: *What is on Fire?*

- Second Place Winner (\$75)

Matthew Mercatante from St. Benilde

Project: *Heavy Metal*

- Senior Division

- First Place Winner (\$100)

Project: *How Does Rockwell Hardness*

*Affect The Steel We Use Today?*

Philippe Gilchrist from John Curtis

Christian

- Second Place Winner (\$75)

Ravi Mahesh from Benjamin Franklin

High School

Project: *The Effect of the Tire Pressure of a Model Car on the Energy Efficiency of the Car*

Next event supported by the Chapter will

be the Branch sponsored community outreach project in the children's activity area during the New Orleans Jazz and Heritage Festival. It is scheduled for near the end of April.

All seminars sponsored by the Chapter are held in the facilities of the University of New Orleans. Seminar dates, location, registration and other pertinent information will be found on the Branch website at [www.asceneworleans.org](http://www.asceneworleans.org). To add your name to the Chapter's mailing list, please email Om P. Dixit, PE, at [om@fenstermaker.com](mailto:om@fenstermaker.com).



Commemorative speaker's plaque for the Annual David Hunter Lecture is presented to Ed Huston. Pictured from left are Ed Huston, Om Dixit, Lecture Chair and Ralph Junius, Lecture Sponsor.



Part of the audience that attended the Annual David Hunter Lecture.

## Did you know...

...that between 2 and 3 decades ago anesthesiologists were among the medical profession's specialists with the highest medical-malpractice insurance premiums? They chose to proactively address the risks and causes for claims in their specialty and are now among the specialists with the lowest premiums? Medical errors are the leading cause of death in the United States, killing between 44,000 and 98,000 patients a year. The insurance industry and some doctors groups blame "greedy plaintiffs, lawyers and capricious juries" for the losses that escalate malpractice insurance premiums. Rather than exclusively push for laws to protect themselves against patient lawsuits, anesthesiologists have for the last 2 decades focused on improving patient safety. As a result they have for example

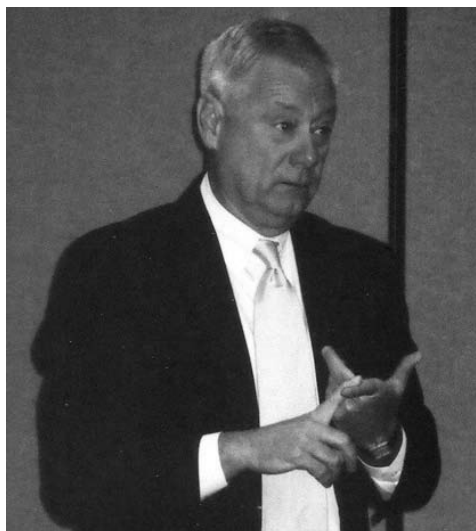
advocated the application of devices that alert doctors in the operating room of potentially fatal problems and helped develop computerized mannequins to simulate real-life surgical crises to improve proficiency in emergency procedures. As a result, the rate patient deaths from anesthesia has declined from 1 in 5,000 cases to 1 in 200,000 to 300,000 (98 percent). In 1985, the American Society of Anesthesiologists (ASA) launched the Anesthesia Patient Safety Foundation exclusively devoted to patient safety through research and improvement. Information from insurers on closed malpractice claims were collected and anesthesiologists volunteered their time to analyze them — 6400 to date — and compile the information that was computerized to create a picture of how anesthesia accidents

occur. A systems approach was used to identify and address the acute/frequent claim related problems. As a result, the portion of malpractice claims against anesthesiologists were reduced from a high of 7.9 percent to 3.8 percent — the portion of doctors in the specialty. The median claim payment in 2005 dollars declined 46 percent to \$178,000 as the rate of serious injury — death and permanent brain damage — per claim declined from more than 1/2 to less than 1/3. In 1985 dollars, the average annual malpractice premium declined 50 percent to a \$16,000 low and it is now at \$20,000 reflecting the continuing rapid growth in insurance claim payments. *The Wall Street Journal* 6/21/05

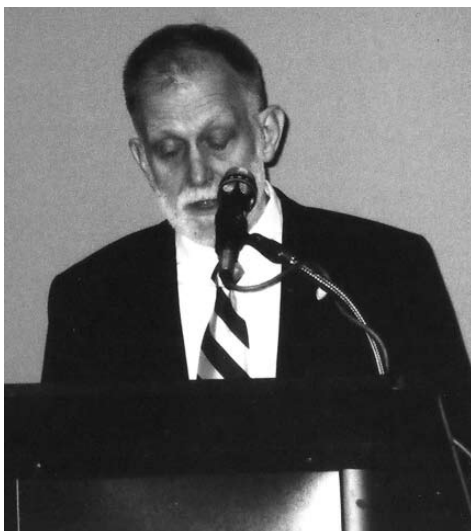


## Highlights of the Annual Spring Meeting and Conference

By Kristin D. LeBlanc



Technical session presenter Bill Gwyn of Eustis Engineering Company, Inc. and New Orleans Branch member.



Guest speaker Bill Marcuson, Past President of the ASCE.



Guest speaker Jeff Russell, Chairman of the Department of Civil and Environmental Engineering at the University of Wisconsin.

The Acadiana Branch hosted the Section's 2008 Annual Spring Meeting and Conference in Lafayette April 16-18, 2008. We are proud to report that this year's conference was a complete success! The venue for the Conference was the excellent facilities provided in the Louisiana Cajundome Convention Center. There were visiting speakers, vendors, and those in attendance who came together from near and far to share in the unique learning experiences and networking opportunities offered during the Conference. Of course, there was the great food.

The Conference began Wednesday evening at the nearby conference hotel, the Hilton

Garden Inn. The Branch hosted its traditional *Crawfish Kick-Off*. This was followed by the technical and professional sessions that were offered on Thursday and Friday. The Conference concluded Friday afternoon following the Section Annual Spring membership meeting in the Cajundome Convention Center. The Branch would like to thank all its members who were involved in planning and hosting the Convention for their time and energy expended in organizing such a successful event.

A special note of thanks is offered the many sponsors of — and contributing donors to — the Conference. They provided the early

resources to organize and execute it and thereby keep the registration costs to a minimum. The Branch is especially appreciative for the services of the distinguished speakers William F. Marcuson, III, PE, Past President of the ASCE, Kam K. Movassaghi, PE, Jeffrey S. Russell, PE, and E. Joseph Savoie, the Louisiana Commissioner of Higher Education, who provided poignant and exceptional messages to those in attendance.

The Branch was pleased to support the Section in hosting its Distinguished Civil Engineer Senior Student award recipients from the 6 civil engineering departments in

*(Continued on Page 13)*



Amanda Hamlin from LSU receives her commemorative plaque for the Distinguished Civil Engineering Senior Student award from Section President Ray DesOrmeaux.



Jonathan M. Guy from Louisiana Tech University receives his commemorative plaque for the Distinguished Civil Engineering Senior Student award from President DesOrmeaux.



Renus Kelfkens from McNeese State University receives his commemorative plaque for the Distinguished Civil Engineering Senior Student award from President DesOrmeaux.

# STUDENT CHAPTER NEWS

## LSU

By Adele Cook, President

The LSU ASCE Student Chapter was the host chapter for the 2008 Deep South Conference of student chapters held in Baton Rouge April 3-5, 2008. A major part of the hosting duties is to provide the venues, equipment and judges required for the several competitions that have become a traditional part of the Deep South Conference. There are three competition events that the regional winners have the opportunity to progress to a national competition. The concrete canoe competition — the race event was held on University Lake off of Baton Rouge Beach — the steel bridge competition — the entire event was held in the LSU Recreation Center and the student paper competition that leads to the national Daniel W. Mead Prize. There were 3 special competitions unique to the host chapter's imagination — surveying, concrete frisbee and the *mystery* event.

While expending the energy required to be the host for the Conference the Chapter managed to compete reasonably well in the various competitions:

- 2nd steel bridge
- 2nd surveying
- 4th concrete canoe
- 3rd concrete frisbee

The 2nd palace finish in the steel bridge competition earned the Chapter's steel bridge team a berth in the national steel bridge competition in Gainesville, Florida May 23-24, 2008.

## UNO

By Yelena Rivera, Secretary

This year, the Deep South Conference of ASCE student chapters was hosted by LSU ASCE Student Chapter in Baton Rouge. Each year, the members of the UNO Student Chapter dedicate countless hours to preparing for the Steel Bridge and Concrete Canoe competitions held during this Conference. The planning starts months in advance along with fund raising, brainstorming for a new model, planning, designing, and most importantly, practicing for the competition events.

This year's concrete canoe competition team won 2nd place in the competition events of

- Product Display
- Oral Presentation
- Women's Endurance Race
- Men's Endurance Race and
- Co-Ed Sprint Race.

They also placed 3rd in the Technical Report and Women's Sprint Race for an overall 2nd place finish in the regional Conference competition. Prior to their success, however, the concrete canoe team had to overcome several obstacles. These include the difficult tasks of redesigning the concrete mix, getting new

### Surveying competition

The LSU *Great Surveying Race* of 2008 was an interesting and fun event for the judges. For the participants, the experience appeared more like an old-time episode of the Keystone Kops! The race consisted of chaining and traversing the perimeter of the LSU Recreation Center building where the steel bridge competition was simultaneously being held. The "sprint" or differential leveling race consisted of a short — quarter mile — loop around some of the LSU Sorority houses and back to the Recreation Center.

First place honors went to the Louisiana Tech University student chapter — the only team to successfully achieve the minimum specified closure on the chaining and traverse. Second place honors went to the Louisiana State University student chapter — one of two teams to successfully achieve minimum specified closure on the leveling loop. Third place honors went to the Arkansas State University student chapter — the other of two teams to successfully achieve the minimum specified closure on the leveling loop, albeit a slightly higher misclosure.

The "race" portion of the event wound up not being a race at all. The difficulties apparently encountered by all teams may have been influenced by the warnings in the rules that stated that all participants would be equally liable to the hazards from tripping in crawfish holes, bites from poisonous snakes and attacks from local campus alligator dens.

One team was asked why their traverse misclosure was so spectacular. They replied that they were "shooting for the fastest time and decided to pace the distances rather than chain them ...". The judges observed that the team also happened to forget their actual pace counts! Two teams showed up for the traverse portion of the race with complete traverse sets of tribrachs and targets, and proceeded to forget how to use a traverse set! More than one team dropped a full chain length.

No time limits were imposed on the teams for their participation, but the word *race* in the event's title seemed to have a deleterious affect to all the teams. All teams appeared to have enjoyed the event with the pleasantly cool weather and all teams were well relieved when the competition came to a close! Good luck next year to all!

### Concrete frisbee

In the concrete frisbee competition, the teams from each school were asked to construct a lightweight frisbee out of concrete. The fabrication of the frisbee had several design constraints such as

- 2 inches or less in thickness
  - 12 inches or less in width
  - 15% or less of the surface could be covered with any material and
  - only non-metallic reinforcing could be used.
- Each team tested their frisbee in several

(Continued on Page 13)

Chapter members involved, and finding team members with experience.

Unfortunately, a 2nd place finish in the regional competition is not good enough to send a team to the national competition. However, we are very excited about re-establishing the Chapter as a competitive team and we are working toward next year's competition by building on to the experience we gained this year. The concrete canoe team is already planning on developing a new concrete mix design for next year's canoe, and holding canoe paddling practices during the summer months to keep team members involved.

As for the Chapter's steel bridge team, they walked off with five 1st competition finishes including

- Lightness
- Stiffness
- Economy
- Efficiency and
- Construction Speed.

Needless to say with these high finishes, they also took 1st place overall. This qualifies the team to compete in the ASCE/AISC National Student Steel Bridge Competition scheduled to

be held at the University of Florida in Gainesville, FL May 23-24, 2008.

Everyone involved in the Chapter's steel bridge persisted with hard work and surpassed the expectations of many. Currently, the team is practicing and honing different bridge building strategies such as using fewer builders, revising the building sequence of the components, and modifying connections. After an 8-year absence from this national competition, the students, faculty, and staff are extremely excited about the team's accomplishments and they are optimistic about their chances in the national competition. However, regardless of the outcome, the team is looking forward to this learning experience and applying the knowledge gained to the competition next year.

To qualify for the national competition, the Chapter needed to present an engineering-related technical paper during the Conference. Chapter Member Lacie Petitto rose to the occasion by presenting her paper on Wetlands Protection. First-hand experience and a well-written paper earned her 3rd place in this competition.



(Continued from Page 12)

events. The events included consideration of aesthetics and weight, and from the toss; distance, accuracy and durability. The distance and accuracy events encouraged the teams to fabricate useful a useful frisbee while the weight and durability events encouraged the teams to live within the design parameters. Durability was measured by taking a weight measurement before competition — the lightest received full points in the weight category — and a weight measurement after competition. If by the end of the competition, a frisbee was less than half its original weight, the team received no durability points. Since this was an engineering conference, design — the weight and durability — was weighed more heavily in the points.

Many of the competition frisbees shattered upon impact, after which the team had to select the biggest piece and continue to use it in the

competition. The winner of the competition, the University of Memphis student chapter, did well because they were able to throw the farthest without their frisbee falling apart. One of the competition judges — Tim Tate — made several suggestions about the competition with respect to set-up, the on-site materials for example. However, he stood firmly behind the rules stating that “Durability should have a high weight since a civil engineering design is judged first on not failing followed by elegance.”

#### Mystery event

The mystery event was a competition to build a track to transport one Mentos into a 16 ounce Diet Coke bottle located 3 feet away from a given starting point. A team from each participating student chapter consisted of 2 to 4 people. They had a half-hour to plan the construction

using a list of the given materials. Then the construction of the track proceeded, lasting for one hour. Each team had the same amount and the same type of materials to use. However teams utilized their materials differently. The fabrication materials consisted of

- a small container of toothpicks
- a bag of Spice Drops candy
- a roll of masking tape
- 10 sheets of cardstock and
- a pair of scissors.

Aside from fulfilling the objective to successfully direct a Mentos into the Diet Coke bottle, the teams competed to have the highest starting point on the track, thereby indirectly measuring the speed at which the mentos would slid into the bottle. The tracks with the highest starting points were approximately 6 feet to 6 feet high.

(Continued from Page 11)



Jacquole Landry from Southern University receives her commemorative plaque for the Distinguished Civil Engineering Senior Student award from President DesOrmeaux.



William Roth from the University of Louisiana at Lafayette receives his commemorative plaque for the Distinguished Civil Engineering Senior Student award from President DesOrmeaux.



Mallory Anne Davis from the University of New Orleans receives her commemorative plaque for the Distinguished Civil Engineering Senior Student award from President DesOrmeaux.

Louisiana's universities and their family members who attended the ceremonies. They were recognized during the awards banquet Thursday evening at which time they were presented with cash awards and commemorative plaques.

The Section Distinguished Civil Engineering Senior Students for 2008 are

- **Mallory Anne Davis**  
University of New Orleans
- **Jonathan M. Guy**  
Louisiana Tech University
- **Amanda Hamli**  
Louisiana State University
- **Renus Kelfkens**  
McNeese State University
- **Jacquole Landry**  
Southern University and
- **William Roth**  
University of Louisiana at Lafayette.



The recipients of the Section's Distinguished Civil Engineering Student awards presented during the Annual Spring Meeting and Conference in Lafayette are from the left Mallory Anne Davis (UNO), Amanda Hamlin (LSU), Jacquole Landry (Southern), Renus Kelfkens (McNeese), Jonathan M. Guy (La. Tech) and William Roth (ULL).

## *2008 Deep South Conference pictorial highlights*



*Preparation for one of the racing events during the concrete canoe competition.*



*UNO's concrete canoe team during the racing segment of the concrete canoe competition.*



*LSU's team erecting its bridge during the steel bridge competition.*



*Loading a bridge span during the steel bridge competition.*



*Doing what it takes during the mystery event competition.*



*A frisbee toss during the concrete frisbee competition.*

*Editor's note: These images and the competition results on the opposite page were extracted from the host's — LSU ASCE Student Chapter — webpage for the 2008 Deep South Conference. There are several other high quality images available on the site for your perusal.*



## 2008 Deep South Conference competition results

### Concrete Canoe Competition:

#### Races:

Ranking	Women's Endurance	Men's Endurance	Women's Sprint	Men's Sprint	Co-ed Sprint
1st	Louisiana Tech University	Louisiana Tech University	Louisiana Tech University	Louisiana Tech University	Louisiana Tech University
2nd	University of New Orleans	University of New Orleans	Louisiana State University	Louisiana State University	University of New Orleans
3rd	University of Mississippi	Arkansas State University	University of New Orleans	McNeese State University	Louisiana State University

#### Other Aspects:

Ranking	Design Paper	Oral Presentation	Final Product	Overall Placement
1st	Louisiana Tech University	Louisiana Tech University	Louisiana Tech University	Louisiana Tech University
2nd	Mississippi State University	University of New Orleans	University of New Orleans	University of New Orleans
3rd	University of New Orleans	Mississippi State University	Arkansas State University	Mississippi State University

### Steel Bridge Competition:

Category	First Place in Category	Ranking	Overall Placement
Economy	University of New Orleans	1st	University of New Orleans
Aesthetics	Mississippi State University	2nd	Louisiana State University
Construction Speed	University of New Orleans	3rd	Arkansas State University
Stiffness	University of New Orleans		
Lightness	University of New Orleans		
Efficiency	University of New Orleans		

### Concrete Frisbee Competition:

Category	Winner	Ranking	Overall Placement
Aesthetics	Christian Brothers University	1st	University of Memphis
Distance	University of Memphis	2nd	University of Tennessee at Martin
Accuracy	Mississippi State University	3rd	Louisiana State University
Lightest Weight	University of Memphis		
Most Durable	Southern University		

#### Competition:

Ranking	<u>Mystery Event:</u> Overall Placement	<u>Surveying:</u> Overall Placement
1st	Arkansas State University	Louisiana Tech University
2nd	University of Memphis	Louisiana State University
3rd	University of Tennessee at Martin	Arkansas State University

#### Technical Paper:

Overall Placement
Louisiana Tech University (Brandon Parker)
University of Mississippi (Jessica Headrick)
University of New Orleans (Lacie Petitto)

## Section News and Information

### *Highlights of the February Board of Directors meeting*

The ad hoc committee to decide the future direction of the Section's communications with its general membership and more particularly the fate of the Section journal and website has been meeting by telephone and with President DesOrmeaux to discuss and develop plans. However, no details are available at this time.

Christopher P. Knotts, PE and Luke E. LeBas, PE will represent the Section as participants in the 2008 ASCE Leadership Training in Government Relations Program in Washington, DC. Commonly referred to as the legislative *Fly-In*, the 2-day program offers participating members the opportunity to learn about legislative issues that affect civil engineering and meet with their elected representatives on Capitol Hill. It was noted that the revised Section Operating Guide will reflect a future procedure giving the Section President-Elect first refusal to attend the Fly-In. If the President-Elect does choose not attend, the Board would appoint an alternate.

The 2008 Section Annual Spring Meeting and Conference will feature presentations by William F. Marcuson, ASCE Past President; E. Joseph Savoie, the Louisiana Commissioner of Higher Education; Jeffrey S. Russell, PE, who chaired the ASCE Committee on Academic Prerequisites for Professional Practice; an Order of the Engineer ring ceremony; and an icebreaker crawfish boil. Members of the Board who plan to attend the Conference were requested to introduce the presenters of the various technical sessions. As guidance for future conferences it was recommended that Board members actively participate with the host branch in developing the technical program particularly in selecting topics and procuring speakers.

Elba U. Hamilton, EI, agreed to serve as the Section's Younger Member Committee Chair. She inquired about the specific duties of the Committee. There being none, it was noted that past YMC Chair, Yvette P. Weatherston, PE, and her branch counterparts independently initiated and developed a photography contest for

highschool students resident in the Section. President-Elect Mustapha took the liberty to develop a list of proposed YMC activities to be considered. It was also noted that Hamilton was being considered for service with the ASCE national Committee on Diversity and Women in Civil Engineering.

Another round of Hurricane Relief Fund graduate fellowships administered by a Committee consisting of E.R. DesOrmeaux, PE, Norma Jean Mattei, PE, and Timothy M. Ruppert, PE, are planned to be awarded. The qualifications for the graduate student candidates for the \$12,000 fellowship matched by the recipients' university have on occasion been difficult to meet. An alternate proposal for the distribution of the fellowship funds has been accepted to divide the funds among undergraduate students with otherwise the same qualifications. Another proposal being considered is to disburse the remainder of the Hurricane Relief Fund by October 2008 by dividing the remainder of the Fund equally between ASCE student chapters in the Section to subsidize 2 students from each chapter (approximately \$1200 each) to attend the 2009 Multi-Regional Leadership Conference.

The Baton Rouge Branch is in the early stages of developing a workshop that will be in conjunction with the Louisiana Department of Natural Resources and Louisiana State University interests. The workshop would focus on developing more clarity about the applied disciplines and the scope of the applications that will be required for coastal restoration projects unique to the Louisiana Gulf coast. The urgency of this workshop comes as substantial funds dedicated to coastal restoration become available and related projects are advertised. The intent of the workshop is to stimulate an effective exchange of information among user agencies, contractors and other participants concerning such matters as project design, scope, concepts and discipline experience required.

The Region 5 Board of Governors has been attempting to define its future functions and activities as an organization. Some functions identified are

- to be a source of technical information to the public
- develop and publish a newsletter
- develop an operations manual
- host a section presidents' meeting and
- identify and resolve barriers to ASCE participation.

The New Orleans Branch historically the Section's largest population center has been the traditional host for the Section Annual Meeting since its inception. The Branch has recently changed its schedule of activities that reduces the desirability of it continuing as the regular host the Section Annual Meeting. The ground rules are changed for the Louisiana Civil Engineering Conference and Show that was originally sponsored by the Branch and scheduled to be held in conjunction with its hosting of the Section Annual Meeting.

The Conference is now jointly hosted by the Branch and the Louisiana Chapter of the American Concrete Institute. Its administration has become more independent of the Branch but its operations are heavily dependent on volunteers from the Branch leadership. Due to scheduling conflicts in the facility currently used, the Conference is now scheduled to end Thursday rather than Friday when the Section Annual Meeting is normally held to accommodate optimum member participation. The long range plan is to move the Conference to a later date in the Winter that is out of the hurricane season and outside of the Section's Constitutional window for holding the Section Annual Meeting.

To accommodate these changes, the Board acted to move the venue of the Section Annual Meeting. It will generally be hosted by the home branch of the Section President-Elect and incoming Section President. President-Elect Mustapha agreed on behalf of the Shreveport Branch to host the 2008 Section Annual Meeting.

### *Highlights of the April Board of Directors meeting*

A letter to the Corps of Engineers by the ASCE External Review Panel (ERP) dated 4/15/08 and providing preliminary comments to Draft Volume VIII, *Engineering and Operational Risks and Reliability Analysis* published by the Interagency Performance Evaluation Taskforce (IPET) of the Corps was discussed briefly. The contents of the letter are available as a pdf file on the ASCE website. It will be referenced in — and linked through — the Section website for the convenience of the Section's members.

The past, spotty performance and participation of the branches in the Section awards program to recognize outstanding members was discussed at length. A goal was set for the 2008 Section awards program for each branch to sub-

mit on time a candidate for each of the Section's 8 awards to recognize its outstanding members and their achievements. These awards are

- The Wall of Fame
- Educator of the Year
- Lifetime Achievement
- Outstanding Young Civil Engineer
- Outstanding Civil Engineer
- Outstanding Young Government Civil Engineer
- Outstanding Government Civil Engineer
- Outreach

It has been common for mostly one and sometimes two branches to participate in the Section's awards program in a given year and then candidates for all of the awards are not usually provided.

It was announced that the inaugural 2008

Coastal Engineering Conference is scheduled for May 29-30 in Baton Rouge and it is sponsored by the Baton Rouge Branch, Louisiana Department of Natural Resources, the LSU Department of Civil and Environmental Engineering. The Conference will be devoted to presentation of coastal engineering principles applicable to restoration efforts in Louisiana, and discussions of active coastal restoration projects in Louisiana. Attendance is limited but will open to all Section members.

A new nominating committee for the levee boards will be forming in the near future to nominate members to the levee boards for the Governor's consideration. The ASCE is one of the organizations identified in the Louisiana

(Continued on Page 17)



# Mattei nominated for Region 5 Director

The name of past Section President Norma Jean Mattei, PE, has been submitted by the Section in nomination for Region 5 Director. In his February 23, 2008 letter of nomination to current Region 5 Director Kathy Caldwell Section President E.R. (Ray) DesOrmeaux, PE, stated

The Louisiana Section of ASCE takes great pride in nominating Dr. Norma J. Mattei as Director of ASCE Region 5.

Her many years of service to the profession includes ASCE Branch and Section leadership positions. Her dedication to the Louisiana Section of ASCE culminated in being Section President four (4) years ago. In addition to her current responsibility as a Region 5 Governor, she is an active member and participant in the Committee on Diversity and Women in Civil Engineering.

The Louisiana Section is fortunate in having a person with extensive education-

al, professional, and leadership skills as one of its outstanding members and spokespersons. Her ability to motivate others and inspire consensus, all leading to well informed decision making, are recognized and admired by many members within our Section.

We, the Louisiana Section, without hesitation or exception, therefore petition the Region 5 Board to accept this nomination.

Mattei an Associate Professor employed by the University of New Orleans in its Department of Civil and Environmental Engineering was appointed to an abbreviated term as the Section's first Governor to serve on the newly formed ASCE Region 5 Board of Governors and she was reappointed to serve a full term. Mattei continues to be active in her home branch as the Chair of its Outreach Committee that annually sponsors a children's event during the New Orleans Jazz and Heritage Festival. Last year Mattei was appointed and



Norma Jena Mattei

now serves as a member of the Louisiana Professional Engineering and Land Surveying Board.

(Continued from Page 16)

Revised Statutes to provide a member to the nominating committee. Jerome M. (Jerry) Klier, PE, indicated his interest to be reappointed as the ASCE representative on the nominating committee. The Board accepted his offer to continue on the nominating committee and will pursue the approval of its choice with the national ASCE according to the memorandum of understanding between national ASCE and the Section. The members of the levee boards whose terms are ending have served abbreviated terms that were initially assigned to stagger the future full term appointments. Some members have indicated that their abbreviated service has not given them a chance to effectively serve the purpose for which they were intended and have expressed interest in being nominated for a second full term.

In other business the Board

- received a preliminary report of the ad hoc committee studying the future of the Section journal that recommends the Section retain a professional editor for the journal.
- dropped as an ongoing issue the negative concerns expressed in the Section about adequate/appropriate support of the LSU ASCE Student Chapter by the LSU faculty/administration.

## ❖ Quote ❖

Professional Development: *It is shortsighted to presume... that rules or expectations will somehow infuse the profession with some level of expertise that would otherwise be lacking. It is the engineer's own innate interest in solving problems and building relationships that perpetuate and allow for lifelong learning... Knowledge and experience will continually build on one another, but not without the engineer's entrepreneurial attitude and (the) support... to promote the necessary growth.*

- Jason D. Burk, PE  
Allied Engineering Services, Inc.  
Bozeman, Montana

## Keeping current

For your information, a mass email was sent to the Section's members March 4, 2008 to correct an error in the announcement of the 2008 Section Spring Meeting and Conference that appeared in the February 2008 issue of *The Louisiana Civil Engineer* and to update the conference agenda and technical program and registration that had been recently released by the host branch leadership. In summary, there are

- **1946** members are in the Section
- **1695** had email addresses and
- **1623** emails were deliverable.

There were 251 members (13%) that do not provide email addresses in their contact information. There were 72 of these email messages not deliverable at the address provided or a total of 323 Section members (16%) that did not receive the email message. If you did not

receive this email or a later one, you are most likely among this number.

Also, in compiling the mailing address list for the February 2008 issue of *The Louisiana Civil Engineer* there were two clearly invalid postal addresses discovered. These members cannot be contacted and their ASCE membership will lapse due to a failure to receive their dues statement. Also, there were two postal addresses randomly observed to be different from what is listed with the Louisiana Professional Engineering and Land Surveying Board. If you haven't done so recently, please go on line at <http://www.asce.org> and review *all* of your current contact and other membership database information and correct it if necessary so that you will receive the communications from the ASCE and gain the full benefit of your membership.

## Election of Section officers

The 2008-2009 Board of Directors are

- Ali M. Mustapha, PE, President
- Christopher P. Knotts, PE, President-Elect
- Patrick Landry, PE, Vice President
- Ronald Schumann, PE, Secretary-Treasurer
- C. Eric Hudson, PE, Director-at-Large
- Jeffrey L. Duplantis, PE, Director-at-Large
- Vacant, Director-at-Large
- Vacant, Director-at-Large
- Clint S. McDowell, PE, Branch Director
- William H. Wall, PE, Branch Director
- Nathan J. Junius, PE, Branch Director
- Todd E. Henry, PE, Branch Director
- Luke E. LeBas, PE, Assigned Branch Director and
- Christopher L. Sanchez, PE, Assigned Branch Director

The election of Section officers for the 2008-2009 Board of Directors occurred during the Section membership meeting during the Annual Spring Meeting and Conference in Lafayette. This Board will serve during the 2008-2009 administrative year that begins at the close of the Section Annual Meeting that will be hosted by the Shreveport Branch and it is expected to be scheduled sometime in September. President Ali Mustapha did not stand for election but as the current President-Elect he will succeed to the office of President. Eric Hudson and Jeff Duplantis continue the 2nd year of their 2 year term as Directors-at-Large. No candidates were nominated or elected for the other 2 Director-at-Large offices. The Branch Directors and Assigned Branch Directors are all appointed by their respective branches.

# 2008 ASCE Leadership Training in Government Relations

By Christopher P. Knotts, PE and Luke E. LeBas, PE

We both had the privilege of representing the Louisiana Section in Washington, D.C. during the ASCE sponsored 2008 Leadership Training in Government Relations. The event is commonly referred to as the legislative *Fly-In*. It is a concentrated effort to get civil engineers and more particularly ASCE members acclimated to — and experienced in — talking with their elected representatives in support of issues relevant to civil works projects such as the infrastructure.

Arriving in Washington March 4, 2008, that afternoon we attended a training session conducted by the ASCE staff referred to as *beginners* training. It is for those who are participating in this event for the first time. This beginners training is also referred to as *Lobbying 101*. It included a Capital area orientation and some information that was distributed.

Wednesday began with breakfast where all the participants were given a packet containing information about pending infrastructure legislation. The packet included an ASCE publication *Raising the Grades — An Action Plan for the 110th Congress*. It is a summary of the pending legislation that is related to

- national infrastructure
- aviation
- bridges, roads and transit
- brownfields
- dams and levees
- drinking water and wastewater, and
- inland waterways.

The ASCE staff from its Washington D.C. office also conducted training on legislation related to each of the aforementioned topics. The proposed legislation discussed included current bills such as the

- National Infrastructure Improvement Act
- FAA Reauthorization
- SAFETEA-LU 2008
- Highway Trust Fund Fix
- Dam Rehabilitation & Repair Act
- National Levee Safety Act

- Safe Drinking Water Act Reauthorization and
- Water Resources Development Act (WRDA) 2008.

After lunch, everyone dispersed to attend meetings with their respective elected state Congressional representatives that had been previously scheduled by the ASCE staff. We were joined by fellow Section members Kam K. Movassaghi, PE, and Marc L. Levitan who were attending an ASCE committee meeting associated with *Policy Week*. We first met with Senator Mary Landrieu's staff and discussed the infrastructure items. Later that afternoon, we met with Senator David Vitter's staff to discuss the same issues. The first day closed with a scheduled dinner hosted by ASCE President David G. Mongan, PE.

On Thursday, we accompanied Kam Movassaghi to a meeting with Louisiana's Representative Charles W. Boustany, Jr. The congressman graciously met with us for as much time as he could spare before he had to leave to cast a vote on the floor of the House. We delivered the ASCE Infrastructure packets to the offices of congressmen McCreary and Melancon. Chris DeBosier on Melancon's staff was kind enough to meet with us briefly considering this is the period of time in Washington that is known as *March Madness* — nothing to do with basketball.

It was obvious that some ASCE members attend this event every year and it is an apparent effort on their part to develop closer relationships with their elected officials. We encourage everyone that gets the opportunity to attend this event in the future to do so. It allows you to serve your profession in a very special way, inform our elected representatives about the importance of the nation's infrastructure and become more effective in lobbying your elected representatives on behalf of ASCE and the profession in general.

## Section members serve on national committees

There are numerous Louisiana Section members who volunteer their service on national ASCE committees. The roster of these members and the committees they serve are provided on the opposite page. These members may be of significant value to Section and branch committee volunteers with parallel activities because of their unique positions in the national organization. They can possibly

- provide current information about national ASCE activities.
- serve as a liaison between local and national committee activities.
- facilitate local involvement in national ASCE activities.

For a more detailed tabulation of the committee and member contact information provided for these Section members, go to the Section website and view the information on its Member page.

## Did you know...

...that methane has emerged as a viable power source to supplement hydroelectric power in Washington State. There is a single landfill gas-to-energy plant at the Roosevelt Landfill in eastern Washington. Construction on a second power plant at the Cedar Hills Regional Landfill is scheduled in 2005. Energy Development Inc., that operates 47 landfill gas-to-energy plants worldwide, will handle its design, construction, and operation. King County wanted to use the landfill gas since the mid-1980s, but cheap energy prices postponed the initiative. The plant reportedly will be one of the largest plants of its kind in the country. It is scheduled to be completed in roughly 12 months and begin operating in mid-2006. - *Public Works 11/04*

... that composite materials are becoming a more common choice for civil engineering projects. Being light-weight and not subject to corrosion, composites are used in rehabilitating bridges. In August, for example, an open steel grid deck on the Broadway Bridge in Portland, Oregon, was replaced with glass-fiber-reinforced polymer deck panels small and light enough to be handled with fork-lift trucks instead of cranes to install them. The job was done in 4 days, reducing disruption to road and river traffic. The great impetus for the use of composites in civil engineering came 9 years ago when an earthquake in Kobe, Japan, caused extensive damage to the city's elevated roadway. Some of its damaged concrete columns were successfully reinforced by wrapping them with numerous layers of carbon fiber as opposed to conventionally using structural steel reinforcement. Composites are also being used to blast-proof buildings vulnerable to terrorist attack. - *New Scientist 12/10/04*



Louisiana delegation from the Section visits Representative Charles Boustany (R-La.) in his Washington office during the Legislative Fly-In. From the left are Kam Movassaghi, Luke LeBas, Boustany and Chris Knotts.



# Roster of Section members who serve on national ASCE committees

COMMITTEE	NAME: LAST	FIRST	COMMITTEE	NAME: LAST	FIRST
CAP <sup>3</sup> Body of Knowledge Committee	Seals	Roger	Groundwater Symposia and Continuing Education Committee	Tsai	Frank
CAP <sup>3</sup> Body of Knowledge Educational Fulfillment Committee	McManis	Kenneth	Irrigation and Drainage Council	Thomas	Daniel
CAP <sup>3</sup> Committee Applicants	McManis	Kenneth	Irrigation Delivery & Drainage Systems	Thomas	Daniel
CAP <sup>3</sup> Committee on Academic Prerequisites for Prof Practice	Price	Bobby	KSTAT Standards Committee	Sharma	Radhey
CAP <sup>3</sup> Licensing Committee	Hawkins	Kerry	KSTAT Standards Committee	Tsai	Frank
CAP <sup>3</sup> Licensing Committee	Price	Bobby	On-Farm Irrigation	Thomas	Daniel
Committee on Critical Infrastructure (CCI)	Keller	Deborah	Stormwater Infrastructure	Martin, Jr.	James
Committee on Diversity and Women in Civil Engineering	Mattei	Norma	Technical Activities Executive Committee	Thomas	Daniel
Infrastructure & Research Policy Committee	Levitan	Marc	Water Quality and Drainage	Thomas	Daniel
Past & Active Officers	Dyson	Gerald	Well Hydraulics	Willson	Clinton
Past & Active Officers	Blessey	Walter	Design of Shore Protection Systems Standards	Miller	William
Past & Active Officers	Held, Jr.	Lloyd	Engineering Geology and Site Characterization	Abufarsakh	Murad
Past & Active Officers	Jackson	Thomas	Engineering Geology and Site Characterization	Alshibli	Khalid
Past & Active Officers	Webb	James	Engineering Geology and Site Characterization	Ghose Hajra	Malay
Past Presidents Council	Blessey	Walter	Geoenvironmental Engineering	Boutwell, Jr.	Gordon
Past Presidents Council	Jackson	Thomas	Geoenvironmental Engineering	Sharma	Radhey
Program Committee Past Members	Jackson	Thomas	Geoenvironmental Engineering	Willson	Clinton
Society Awards Committee	Jackson	Thomas	Inspection of Dams Standards	Bakeer	Reda
Transportation Policy Committee	Movassaghi	Kam	Pavements	Mohammad	Louay
CPP Committee on Licensure and Ethics	Duncan	Angela	Shallow Foundations	Boutwell, Jr.	Gordon
CPP Committee on Licensure and Ethics	Mattei	Norma	Shallow Foundations	Cotton	Blake
Design of Blast Resistant Bldgs in Petrochemical Facilities	Fong	Kwo-Chang	Shallow Foundations	Ghose Hajra	Malay
Petrochemical	Levitan	Marc	Soil Properties and Modeling	Alshibli	Khalid
Publications	Levitan	Marc	Soil Properties and Modeling	Sharma	Radhey
Seismic Evaluation and Design of Petrochemical Facilities	Lenox, Jr.	Benny	Technical Coordination Council	Boutwell, Jr.	Gordon
Pipeline Planning and Design	Richard, Jr.	Joe	Underground Construction	Allouche	Erez
Forensic Practices Committee	Anderson	Robert	Unsaturated Soils	Sharma	Radhey
Earthquake Investigation	Tavera	Eduardo	Aesthetics in Design	Levitan	Marc
Structural Wind Engineering Committee	Cai	Chunsheng	Design of Engineered Wood Construction Standards	Kaake	Catherine
Technical Region Board of Governors	Movassaghi	Kam	Design of Steel Transmission Pole Structures Standards	Legrand, II	Paul
Regional Sediment Management	Powell	Nancy	Design of Steel Transmission Towers Standards	Smith, II	Perry
Wetlands and Sediment Committee	Powell	Nancy	Design of Steel Transmission Towers Standards	Legrand, II	Paul
Bituminous Materials	Mohammad	Louay	Minimum Design Loads for Buildings and Other Structures	Levitan	Marc
Bituminous Materials	Shirazi	Hadi	Performance-Based Design for Buildings	Levitan	Marc
Bituminous Materials	Wu	Zhong	Prestressed Concrete (W/ACI 423)	Cai	Chunsheng
Direct Design of Buried Concrete Pipe Box Sections Standards	Delery, Jr.	Oliver	Structural Condition Assessment and Rehabilitation of Buildings	Hall	Neil
Specifications	Rials	Ray	Wood - Technical Administrative Committee	Gopu	Vijaya K
Board of Governors	Voyiadjis	George	Wood Research	Gopu	Vijaya K
By-Laws Committee	Voyiadjis	George	Advanced Technologies Committee	Sun	Xiaoduan
Computational Mechanics	Cai	Chunsheng	Board of Governors	Movassaghi	Kam
Dynamics	Cai	Chunsheng	Journal of Infrastructure Systems Editorial Board	Tumay	Mehmet
Experimental Analysis and Instrumentation	Cai	Chunsheng	Journal of Infrastructure Systems Editorial Board	Sterling	Raymond
Properties of Materials	Voyiadjis	George	Membership Committee	Movassaghi	Kam
Computational Modeling of Hydraulic Structures	Meselhe	Ehab	Planning and Economics Committee	Sun	Xiaoduan
Eco-hydraulics	Meselhe	Ehab	Planning and Economics Committee	Wilmot	Chester
Education & Research Council	Thomas	Daniel	Security Committee	Lambert, II	Laurence
EWRI Governing Board	Thomas	Daniel	Transportation Safety Committee	Sun	Xiaoduan
Ground Water Management	Tsai	Frank			

## — Calendar of Events —

May 28-30, 2008	Baton Rouge Branch, Louisiana DNR and LSU Dept of Civil and Environmental Engineering co-host the 2008 Louisiana Coastal Engineering Conference, Baton Rouge. Visit Baton Rouge Branch website for more information at <a href="http://www.ascebr.org">http://www.ascebr.org</a>
May 28-30, 2008	ASCE Seminar * Design of Foundations For Dynamic Loads, Atlanta, Georgia
May 29-30, 2008	ASCE Seminar * Design of Buildings in Coastal Regions, Corpus Christi, Texas.
May 29-30, 2008	ASCE Seminar * Effective Project Risk Management, San Antonio, Texas.
May 29-30, 2008	ASCE Seminar * Soil and Rock Slope Stability, Nashville, Tennessee.
June 5-6, 2008	ASCE Seminar * Deep Foundations: Design, Construction and Quality Control, Atlanta, Georgia.
June 5-6, 2008	ASCE Seminar * Design of Cold Formed Steel Structures, Nashville, Tennessee.
June 5-6, 2008	ASCE Seminar * Introduction to Detention Pond Design — Parking Lots and Urban Drainage, Atlanta, Georgia.
June 12-13, 2008	ASCE Seminar * Seismic Design of Highway Bridges, Nashville, Tennessee.
June 12-13, 2008	ASCE Seminar * Steel Framed Buildings: Practical Issues in Design and Renovation, Nashville, Tennessee.
June 19-20, 2008	ASCE Seminar * Financial Management for the Professional Engineer, Dallas, Texas.
July 22-27, 2008	ASCE Conference * International Pipelines Conference 2008, Atlanta, Georgia.
July 24-25, 2008	ASCE Seminar * Earthquake Induced Ground Motions, Nashville, Tennessee.
July 24-25, 2008	ASCE Seminar * Structural Design of Residential Buildings Using the 2006 International Residential Code, Nashville, Tennessee.
August 6-8, 2008	ASCE Seminar * Sediment Transport Analysis Using HEC-RAS, Atlanta, Georgia.
September 11-12, 2008	ASCE Seminar * Pipe and Pipeline Renewal, San Antonio, Texas.
September 18-19, 2008	ASCE Seminar * Engineering Design and Performance of Bioreactor Landfills, Nashville, Tennessee.
September 25-26, 2008	ASCE Seminar * Construction Cost Estimating for Civil Engineers, San Antonio, Texas.
September 25-26, 2008	ASCE Seminar * Residential Land Development Strategies, New Orleans.

\* For more information, call ASCE toll free at (800)548-2723 or visit the ASCE website: [www.asce.org](http://www.asce.org).

For the schedule and registration for the ASCE web seminar continuing education regularly offered: Visit the ASCE website / continuing education / distance learning / live interactive web seminars.

## — Career Benchmarks —

Section members **Sergio L. Aviles, PE, Joseph Cains, III, PE, Rusty L. Cooper, PE, Gerard P. Doyle, PE, Benjamin G. Foley, PE, Henry Clyde Foust, III, PE, Emad H. Habib, PE, James P. Hymel, PE, William J. Koutnik, PE, Benjamin N. Mader, PE, and Brenda Novoa, PE** recently earned their professional engineering license in Louisiana. If you are in contact with any of them, please offer your congratulations on their accomplishment.

Louisiana residents **Jeffrey D. Bergeron, PE, Grant N. Broussard, PE, Neal A. DeForest Jr., PE, Christopher N. Dupre, PE, Tracy M. Fazio, PE, Stephen F. Knox, PE, Quang V. Lai, PE, Dan M. LeBlanc, PE, David P. Lovett, Jr., PE, Andrew V. Mancuso, PE, William J. Metcalf, Jr., PE, Andre C. Monnot, PE, Dale M. Mouch, Jr., PE, Joseph G. Parent, PE, Lauren T. Picou, PE, Beau M. Pleasant, PE, Matthew G. Schaar, PE, Jesse S. Sherrow, PE, Julie A. Solomon, PE, Wayne L. Westerfield, PE, and Md A. Zahid, PE** recently earned their professional engineering license in Louisiana. They are civil engineers or in a related discipline and they are not members of the ASCE. A copy of this issue of the journal is sent to them as an informal introduction to the Section. If any of them wish to join and/or find out more about the ASCE, they are hereby invited to visit the ASCE national website, <http://www.asce.org>. If you are in contact with any of these engineers, please consider formally introducing them to the Section by inviting them to attend a branch membership meeting as your guest.

*Editor's note: The environmental, structural and architectural engineering disciplines licensed by the Louisiana Professional Engineering and Land Surveying Board may be considered closely related to civil engineering. As of June 2007, the active engineering licenses conferred by the Board were approximately 5054 in civil, 725 in environmental, 87 in structural and 12 in architectural.*

## - Observations -

Change:

More than 20 years ago during an effort to consider revisions to improve the effectiveness of the administration of the engineer licensing law in Louisiana it was generally agreed that the 9-year term of service with unlimited succession for members of the engineer licensing board was too long of a commitment for even one term. An excellent reason was that it preempted the opportunity for service on the licensing board of the many other equally capable engineers in the community. A proposal was made to reduce the term length to 6 years and limit service to one full term. This proposal was opposed by some of the seated board members because: 1) Their tenure as members of the NCEE (the National Council of Engineering Examiners now the National Council of Examiners for Engineering and Surveying) — the national organization for

state engineering licensing boards — the means to political influence would be lost. 2) At the time there were 9 members on the licensing board; each with a 9-year term. This allowed all the members an opportunity to serve a one-year term as the chairman of the licensing board. The one full 6-year term was implemented, the members of the licensing board were always able to indefinitely continue service as members of the NCEES after their service on the board ended, and no one of which I am aware has expired because they did not get to serve as chairman of the licensing board. - *Editor*

Infrastructure repair

In their article "Fitting the pieces together: a complete system philosophy for concrete repair" Alexander Vayshurd and Peter Emmons

(*Structural Engineering* 8/07) offer some poignant insights into the current practice of concrete repair, and propose process changes. They observe that "...the way we approach repair/rehabilitation projects may be described by two extremes: unorganized complexity and organized simplification." They clarify the usual and reasonable objective of a repair project noting that "...very rarely is a repair-project objective related to prevention of further deterioration. A more realistic objective is to ensure sufficiently slow deterioration, or to prolong the next remedial action, for as long as possible." They urge care in material choices, field inspection and sharing experience noting for example that "...[In a repair,] one can allow for lack of strength or stiffness in design, but it is much more difficult to allow for cracks, which are *life-threatening wounds* to concrete structures." - *Editor*



# EDITORIALS

By James C. Porter, PE

## Farewell

For me, as editor of your journal for the past 14 years, it has been a long, productive and satisfying journey. Why would anyone volunteer for this service year-after-year, you may ask with great curiosity. It is because it resonates with one of my most important and yet frustrated professional chords that I have experienced. It is only second to my interest in — and equal commitment to — the professional development of civil engineering students through their ASCE student chapters. I previously served 15 years as an ASCE student chapter contact member that followed the service and the example of a significant other in my career, Gerald R. Dyson, PE.

As of the August 2008 issue of *The Louisiana Civil Engineer* when I conclude my service, I will have continuously served as your editor since the November 1994 issue — the first issue that I worked on as an editor. I was first appointed editor by Om P. Dixit, PE, the incoming President of the Section and the previous editor of the Section journal. The Section journal in its current format had just been initiated in November 1992 by then Section President Kam K. Movassaghi, PE, and Section President-Elect, Paul B. Fossier, PE, who thoughtfully established its format and organization that has been perpetuated to this day. Both of them along with Om Dixit were then and still are long time acquaintances who I consider well respected colleagues.

How can it be that I would volunteer to seemingly step back from a progression of leadership positions in my home branch and the Louisiana Section that “ended” with a term as Section president in 1986? That’s easy. After nearly 20 years of active service in 3 different

professional engineering societies serving in various elected and appointed capacities, I continually suffered a serious frustration. Though they possessed the resources and sometimes the actual vehicle, none of them in my opinion communicated effectively with their rank and file members. Most of their relatively inactive membership — usually 80 to 90 percent — had no idea — and no opportunity to know — what was going on except for maybe a brief passage in a president’s message that covered the *history* and not the *news* of the society.

Issues that I knew to be hotly contested among the leadership were seldom reported or discussed outside board meetings until they were resolved. Once resolved, they were then reported as if their conclusion was obvious and forgone, and it had been reached harmoniously and unanimously. This being far from the truth, I am inclined to say it was an intentional lie, a disservice to our members and most seriously a failure to lead. However, to characterize this behavior as *intentional* is not entirely fair because I am not certain — just suspicious — of the motives for it.

The frustrating part to me is that a near complete lack of awareness leaves the membership with no opportunity to appreciate the depth and the breadth of the issues or to participate in the debate or even know that there is a debate among the caring and concerned members who represent them. I view this as undemocratic. I believe that an effective representative government, must function in an open environment where the constituents are aware of the current issues and have the opportunity to share their views with their representatives while the issues

are still issues, undecided and being debated.

To provide the *opportunity* for Section members to participate in the debate of the issues while they are issues, I regularly attend Section Board meetings and report the *highlights* to you in the Section News and Information feature of the journal. These highlights are not the minutes published on the Section website but selected contents/discussion that I would like to know about to be a better informed Section member. It was not long before some of the content reported in the highlights were deemed to sensitive to be reported. Though I generally disagree, the Board rarely but on occasion does consciously declare — for me — the discussion that it does not want shared in the journal.

An earlier experience with a startup newsletter in another organization demonstrated how important effective communication with the general membership is. There was substantial resistance to publishing this newsletter. The prevailing perception was that very good communications existed between the board of directors and their respective constituents making a newsletter redundant. The first issue of the newsletter met with a most unexpected reaction. Several board members were stunned by the response of some of their closest constituents — “It is about time that you (the board of directors) started doing something.” The fact was that the board had always been a very effective and hard working representative and business manager of the society since its inception — a well kept *secret*.

My conclusions. You and I have been part of a growing example measured and inspired by my professional sensibilities. We cannot com-

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## Corrupting influence of success

The corrupting influence of success was recently the indirect subject of interest and the observation — though not a unique one — of an editorial. The thesis is that protracted *success* in the political arena tends to lead to complacency and arrogance followed by ineffectiveness, corruption and other unacceptable behavior that lead to failure. We may have recently witnessed two cycles of this phenomenon with the Clinton/Democrat era and the Bush/Republican era.

The greatest stability in governing and government seems to have been facilitated in less partisan times when there was a “loyal” opposition interested in — and willing to — mutually contribute to successful governance. This is as opposed to bickering partisan opponents ignoring governance and being mutually devoted to sabotaging and discrediting each other at all costs. Calling this *gridlock* does it no justice in terms of the loss of public confidence in government and the general failure of government.

I believe that there are no clearly and consistently defined partisan issues/constituents in the Section — a *technical* organization. However, there is and has been a perceived sense of a par-

tisan constituency in the Louisiana Engineering Society — the *professional* organization. The experience with the many unaddressed needs of its engineers in government led to the successful formation and ongoing operation for more than 40 years of the Louisiana Society of Professional Engineers in Civil Service. It effectively addresses the professional issues important to engineers in government that the LES historically ignored while expending its resources from their dues exclusively on other issues deemed more important.

It is my belief that the Louisiana Section is and has been a remarkably nonpartisan organization but it may not have escaped the sins of success — complacency if not arrogance — and the results — ineffectiveness if not corruption. The “success” for the Section appears to be measured by a low hurdle that may be abetted by the low needs and low — or no — expectations of its rank-and-file constituent members. Since no one is or has been aggrieved by the Section’s action or inaction and no one is demanding or has demanded anything of it — can it therefore be concluded that the Section is successful as a

leader in the civil engineering community? In this context, I suggest yes. Can it be concluded that the Section modestly and effectively uses the resources it has available to be a leader in the civil engineering community? I suggest — as I am sure some others may — a resounding No!

I believe that the one who volunteers to lead through election or appointment in the government of a professional/technical society accepts and thereby has an obligation to do more than a perfunctory “service” in exchange for the resume filler. It is interesting that the Section — as in other professional society venues — has its share of do-nothing hangers-on mixed with conscientious leaders attempting to breathe life and substance into its being. It is the life and substance that reflects the parallel professional experience of the Section’s constituent members and that of its leaders. The winners and losers in the struggle for relevance are not defined between the Section’s conscientious leaders and its do-nothings but by its members who are poorly served and who should unanimously expect effective leadership.

As we enter the 16th year of the publication of the Section journal in its magazine format, it cannot be avoided that it is time to revisit what was clearly an excellent choice to move to this format. The Section newsletter prior to the magazine format was for years a aperiodic typed (with a typewriter) manuscript on several legal-size pages, reproduced by copier and mailed first class. Its cost consumed a substantial portion of the Section's operating budget and its production consumed the substantial energies of the Secretary-Treasurer or newsletter editor. There was little or no branch, student chapter or for that matter Section *news* in this newsletter outside of meeting notices and they were often a separate mailing.

Fifteen years ago, there was no general access to the internet for personal and business communications as there is today. Today, the relatively inexpensive, easily established and maintained website in conjunction with ubiquitous internet access among Section members has completely changed our communications environment and opportunities. The early response to this has been in our branch communications. The printed/copied and mailed meeting notice and newsletter has been abandoned in favor of the much less expensive and more easily produced email newsletter or *e-newsletter*. It requires the development of the digital manuscript already being used, no paper, no reproduction, no handling and no postage.

Considering the opportunities an e-newsletter presents, it was frustrating to continuously compile a manuscript for 3 months before publishing it as a quarterly journal. By the time it arrives in your mailbox, the *news* is mostly *history* and the value in sharing it can be all but lost. Related to the timeliness of the contents of our section journal, I estimate that typically more than 75 percent of its contents are either timely or appropriate to be published on a quarterly basis. The untimely remainder of less than 25 percent of the journal's contents provoked my frustration. Typically, the untimely contents are the branch, student chapter and Section news and information entries — the principal reasons for the journal. Much of their contents are stale on arrival. You probably notice that many of the news entries refer to dates that have passed as if they are in the future. They were in the future

when the news entries were written.

After paying close attention to several e-newsletters I receive, it appears that it may be appropriate for the Section to begin to seriously consider moving away from its printed quarterly journal and toward a e-newsletter format. This becomes more feasible as Section members who do not have internet access continue to decline in number. This is predicated on its potential for substantial improvement in communication effectiveness and reduced costs. Some like me may still prefer to read from a hard copy. This is easily accomplished by printing the digital file.

We have already entered a transition phase where the printed quarterly journal is now supplemented with its news entries and announcements being published on the Section website as they are prepared. Important and urgent information can be sent immediately to each Section member via its mass email facility. The email announcements can provide a synopsis with the *URL* (uniform resource locator) for the detailed information posted on the Section website. This avoids the email attachment of the relatively large e-newsletter file that is a nuisance to some members that have older computers with limited capacity. Depending on the predilections of the Section leadership and the demands of its members, the length of the transition phase away from printed media may be measured in months rather than years.

A fully implemented e-newsletter can be the formally developed journal in the .pdf file that we currently post on the website. It just would not be printed and mailed. Compiling the news entries and announcements that become untimely contents when published in the journal at the end of a quarter can be published realtime on the website as they are now. Periodically — maybe quarterly — a mass email message can be sent to each Section member to announce the availability of the e-newsletter with or without the accumulated untimely contents that were previously published on the website during the quarter.

A recent development in the printing business facilitates the professionally produced e-newsletter if it is desirable. The prepress service that produces the .pdf file of the journal and the source document for the printing press evolved as part of the vertically integrated services offered in the printing business. Prepress

services are beginning to be provided by separate businesses sometimes combined with digital graphic and website design services. The professional production of a .pdf file produced by a prepress service business can then more logically be an end product published as an e-newsletter on a website. There are now printing presses that can economically and feasibly print short on-demand production runs such as one or a dozen books. If this service becomes available locally, it may be possible that a few bound copies of the journal can be economically printed for a selective distribution and archiving.

Concern has been expressed about the character of the Section journal as it may evolve from print to digital media. Some perceive that there is *literary value* in some of the contents of the journal. As such, it may lose some attractiveness or value to prospective authors and to our readers if not provided in print. This concern has merit. If literary value can be measured in historic significance it may justify preservation of a printed journal for future reference. The importance and preservation of historical documents is a legitimate issue that begs serious consideration by the Section's leadership. This should help clarify the underlying purpose of the journal, where its value may lie and its future format.

In summary, a quarterly Section e-newsletter is somewhat different from the smaller, more frequently published branch newsletter and meeting notice that is usually attached to an email message. A Section e-newsletter is continuously compiled and its timely contents — particularly the news and announcements — can be published realtime on a Section website. Its quarterly publication can be announced by mass email and accessed by its email published URL hot button. The .pdf files of the printed journals currently archived on the Section website, would continue without printing and mailing them. Equally important, members accessing the e-newsletter URL to the Section website will increase the probability that they will become familiar with its assets that may be of value to them and thereby reasonably direct the appropriate development and use of the site and the e-newsletter in the future.

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municate effectively unless we communicate effectively. Representative government is ineffective and unappreciated if its constituency is not well informed in a timely manner. Without effective communication, those in the society who wish to be informed have little opportunity to be informed and those with leadership interests may not be aware that there are significant opportunities to lead in their society. Effective communications gives an entire organization the opportunity to be informed, and thereby, it contributes to its cohesiveness, its culture, and a mutual appreciation shared among its leaders and interested members. Though not easily measurable, I believe that it directly contributes to mem-

ber interest, leadership and professional development because members have the opportunity to more intimately know their organization through its purpose in *action* and to which they choose contribute a part of their hard earned income in dues.

You may have noticed the frequent choice of the word *service* rather than *position* or some other reference. This is because it is the way I view what I have been doing as your editor — providing *you* with a service that I deeply believe is important and with which I would want to be provided. Obviously, I cannot and will not speak for the values and the motives of the 3 volunteer leaders and past Section presidents; Kam

Movassaghi — the one who started this journal — Charles L. Eustis, PE, and William W. Gwyn, PE, who will decide the fate and the future character of this Section's mass communications related to its journal and its website beginning in September 2008.

What I do know is that I consider these leaders respected colleagues. To my knowledge, they have consistently acted in ways that resonate with my professional sensibilities. On this basis, I believe that however our individual professional values and talents may differ, I am confident that whatever trajectory the Section's mass communications may take it should be both interesting and satisfying.



## The Camelot syndrome

The wistful remembrance of Camelot as a once ideal and more desirable time can simply be a metaphor for one's memory of the good ole days that have past. There is a common theme whether it is in reference to the ancient, mythological King Arthur and his knights of the round table or to the more recent President John Kennedy and his administration that is remembered kindly as Camelot by those inspired by his youth, charisma and eloquent expression of the prevailing political ideals of his time. That common theme is what I dub here as the *Camelot syndrome*. More specifically dwelling — if not obsessing — on the sense of loss of the good ole days. It is a notion that seems to transcend generations and specific issues through small but significant groups that appear to include a segment of engineers.

It seems to me that the perceptions that would lead engineers to predict the disintegration of our profession as they knew it may be both right and wrong. It would appear that the incipient changes they observe that lead to the dire consequences they predict are founded in reality and are right on. However, the actual consequences — good, bad or indifferent — are not as clear to me to the extent that the consequences I have experienced seem to be typically and seri-

ously overestimated. The consequences I have experienced due to changes often seem to be more somewhere between indifferent to good.

I bring this up because I believe that I may be modestly infected by the Camelot syndrome. I suspect that it is partially caused by the typical career trajectory of an engineer that begins in service with experienced engineers who teach us how to effectively apply our schooled knowledge and provide us with comfortable, well honed examples of professional behavior in practice that serve us well throughout our careers. This experience happens in a time of youthful optimism and in the beginning of a career when we are most receptive to the leadership of our elders and more accepting of the conditions on the ground where we land professionally since we have little or no experience to compare it with.

Something happens in the maturing process. To various degrees, our youthful optimism — the wide-eyed, trusting and receptive kind anyway — declines and our values right or wrong tend to calcify. At the same time technologies change, personal, professional and workplace values change, the political environment changes, the competition changes and we change too. These are all driving forces that effect an intrinsic metamorphosis of our professional persona.

Today, the practically nonexistent maternal/paternal relationship between the employer and employee that I believe was never a reality is as overtly acknowledged as it was once declared. When the new engineer employee senses the tenuous nature of his/her employment, the emphasis tends to shift from “How can I fit in to the scheme of things?” to “What’s in it for me?” The high value that is often placed in corporate memory that relies on continuity and experience in the workforce is being challenged by the more rapid turnover of less connected employees and the revolving door of contract services. Its real importance may — or may not — prove to be minimal and part of the mythology of the Camelot syndrome.

The value some place on experience and the effective leadership it is supposed to enable may be trending toward a different balance in the workplace. On the other hand Charles deGaulle who has passed out of this life and onto history observed, History continues even though the graveyard is full of indispensable leaders. My favorite and unchallenged Camelot syndrome myth is: “This place is going to fall apart after I leave.” “Do you want to bet?”

## Innovation through necessity: Engineering response to Katrina

A comparative disaster to Hurricane Katrina that befell the United States was the Great Mississippi River Flood of 1927. It resulted in the U.S. Army Corps of Engineers Mississippi River and Tributaries Project authorization (*Flood Control Act of 1928*) to protect the lower Mississippi River Valley from being flooded. There was an engineer appointed as the czar over the resulting flood protection system reconstruction who reported to the public about the need and progress being made in the work on the Mississippi River. This effort effectively kept the disaster and the progress in its relief in the front of the American consciousness along with the sense of urgency and importance to complete the flood protection work. This czar was none other than Herbert Hoover. (*Herbert C. Hoover a mining engineer was serving as Secretary of Commerce when he was dispatched by then President Calvin Coolidge to mobilize the recovery from the great Mississippi River flood of 1927. Hoover later became the 31st President of the United States.*)

After Hurricanes Katrina and Rita, apparently there has been no effort like Hoover's in 1927 to focus and sustain a sense of importance and urgency on the disaster relief or to keep the efforts that are being made in the public consciousness. As the unmitigated disaster goes unresolved because of lack of effective leadership and thereby forced into the background, it is quickly fading from public memory. The consequences will be loss of public support in the sense of its importance and urgency that will be followed by loss of public support for funding long before the recovery work is completed.

The infrastructure such as the hurricane flood protection system in south Louisiana is a gift and the legacy of our engineer forebears.

The ongoing responsibility of the engineering profession is to provide the services to preserve this legacy and to improve it. The \$6 billion estimate to repair the hurricane flood protection system in the New Orleans region may be on the low side. For such a large undertaking, innovative means are called for to accomplish the work and they may be found in part in private/public partnerships where financing, ownership, operations and maintenance would be turned over to private enterprise. Some will protest the “selling” of the infrastructure to private enterprise is risky. However, history indicates this can be a successful solution.

The contested decision over the alternative use of T-walls or I-walls that were constructed on top of the flood protection levees in New Orleans was ultimately decided on cost issues rather than on reliability. Considering that the consequences of their failure would and did result in property losses of 2 to 3 orders of magnitude more than the cost of the walls, the premise of a direct cost-based decision on the selection of the flood wall seems inappropriate if not hollow.

A grade of “D” was given by the ASCE to the general condition of America's public infrastructure. Considering that the consequences of the failure of much of this infrastructure can be as devastating should give one pause for concern. Experience indicates that public hope and awareness are inspired by the building and the rebuilding of the infrastructure. It is no small consideration that 80 percent of the commerce in the United States is affected by the Mississippi River and New Orleans is a large part of the commerce on the River. Innovation, cooperation and collaboration in the engineering community necessarily will be a key to solving the serious infrastructure problems being faced in the United States.

It will take years to construct the hurricane flood protection system in the way that it should be for the New Orleans region. Some of the facilities that were quickly restored and replaced in the months following the hurricanes leave serious concerns about the level of protection and the resulting public safety actually provided. The engineering profession must aggressively step into its trusted role to provide an adequate level of protection against hurricane flooding.

Engineers “bury” so many of the vital public works projects they provide like sewer systems and foundations that go unnoticed and therefore unappreciated by the public — out of sight and out of mind. Herbert Hoover convinced America to support, fund and complete the Mississippi River flood control project by helping it to visualize the seriousness of problems in the Mississippi River basin and how they would be solved. There is a comparable yet unfulfilled role for the leadership in the engineering profession today.

*\* Editors Note: These notes were extracted from the remarks made by Robert B. Flowers, Lieutenant General (Retired) while listening to his presentation by the same title. Previously the Commanding General of the U.S. Army Corps of Engineers, Flowers is a professional engineer and currently the CEO of HNTB Federal Services Corporation — a newly formed company. Flowers was the guest speaker during the January 25, 2007 membership meeting of the Baton Rouge Chapter of the Louisiana Engineering Society. Flowers is now developing the strategic plan to guide his new company in addressing government facility, infrastructure and security needs.*

## Ethics 101: Don't Lie! — Don't Steal! — Don't Cheat!

Until recently, I had have never had my socks knocked off in an ethics seminar presentation. As we all have, I have obediently attended the several mandatory ethics seminars in recent years. Baton Rouge attorney Jimmy Gill made the ethics seminar presentation in a plenary session of the 2007 Louisiana Transportation Engineering Conference. I believe that the 1500 people in attendance got their money's worth and then some in these first hours of the Conference.

Most of this money's worth was collected in equal parts from Gill's enthusiastic and dynamic presentation, his deep personal understanding of morals and ethics, and his willingness to openly share his personal experience on the path to discovery of his own ethical/moral center. What follows is the remaining "pocket change" because I cannot do Gill's presentation justice in either content or written form. Seeing and hearing Gill is believing and appreciating professional ethics for what they should and can be.

What is *professional ethics*? Gill notes that ethical behavior specified by a code of ethics can be legally enforced by a professional society of the individual members of a profession but to the contrary, trade associations cannot legally enforce codes of ethics. This is because of the character of their membership for which the courts consider such enforcement a violation of the anti-trust law. Gill discussed the conventional subtle-

ties in the differences between one's *legal* and *ethical* obligations, but most importantly how they apply to being a loyal servant to an employer.

When it comes to the guiding principles for ethical behavior, Gill repeatedly stated them in stark and profound terms — *Don't lie! — Don't steal! — Don't cheat!* The application of these principles according to Gill are equally as profound. These principles cannot be successfully applied to just selected facets of one's life such as to one's work but not to one's professional society or family. To be successfully applied the principles must be consistently applied to *every* facet of one's life. We should each have a personal (unwritten) code of ethics for our informal, personal relationships that is different from a professional (written) code of ethics that is for our formal, professional relationships.

Failure to consistently abide by an agreed to professional code of ethics is living a lie and it is cheating. It steals from one's professional society constituents and it lets down fellow professional society members. Why do we even have a written professional code of ethics? It is a simple matter of consciously agreeing on how we will treat one another. It is how we honor contractual and business *relationships*. Though the government provides the legal foundation or the fabric for business and contractual relationships through

the power of the law, Gill avers that only ethical behavior is ultimately at the core of their success.

In an honest moral deliberation, it should be discovered that the sense of ethical right and wrong are as universal in all facets of one's life as the force of gravity is anywhere on the earth in consistently pulling objects toward its center. The observation and acceptance of this ultimate reality should form one's core beliefs. From such shared core beliefs among the members of a professional society, a philosophy can be developed leading to a code of ethics, and its general acceptance, application and enforcement.

Gill avers that for ethical behavior *planning* is the road map to success. It requires managing the risks for *ethical profitability*. This is done by setting boundaries with a code of ethics in a world that is driven almost exclusively by economics. Part of *cultivating* ethical relationships is a matter of consistently being aware of — and sensitive to — the needs of others. Principally, this is accomplished by taking care in what one says and how it is said in this context. Gill offers a quote attributed to the Greek philosopher Aristotle "We are what we repeatedly do. Excellence, then, is not an act but a habit." The same can be said for ethical behavior.

## Titling laws

Columnist George F. Will in his 3/23/07 essay titled "Designing a bad law in Arizona" is critical of indiscriminate government regulation with no justification that provides those in an occupation 1) control over the number of competitors and 2) the "pleasure" of status. These are *titling laws* that regulate — restrict — the use of job descriptions and the precursors of occupational licensing — mandatory credentialing — to control entry into an occupation with a particular title. The motive is to create an artificial scarcity through government regulation of the services provided to raise the fees that can be demanded by the few still entitled to perform them.

Will observes that in Las Vegas where almost nothing is illegal, it is illegal by Nevada law to move a piece of furniture that is more than 96" tall in the role of an *interior designer* — one of our "fellow" building *professions*. Will says that according to a Nevada bureaucrat "placement of furniture" is an aspect of "space planning" and therefore a regulated service — restricted to a State registered interior designer. The offence is "placing furniture without a license."

If the interior designers are politically astute and aggressive enough to do to the architects what the architects have done to the civil engineers in Louisiana, the architects in Nevada will not be able to effectively set the dimensions of a building, its rooms or locate its windows and doors without the "space plan" from an registered professional interior designer. The tail that wags the this dog would just get that much lon-

ger and more ridiculous.

The State of Arizona is now under pressure from an active minority of its interior designers to follow Nevada's example. Interestingly enough Will notes that there is an Arizona chapter of the Institute of Justice. They are libertarian litigators that have had success in resisting *rent-seeking* — the practice of using public power to confer private advantage or government regulation to impose hardship on the competition of established businesses and occupations. This is little more than a perverse means to satisfy the "metabolic urge" of business to make money. The occupations have another more specious motive — the prestige of a government recognized and certified *profession*.

Where was Louisiana's chapter of the Institute of Justice when our legislature gave us certified professional flower arrangers — see LRS 3:24 Horticulture — §3808 B.(2) "A retail florist's license authorizes the holder thereof to arrange or supervise the arrangement of floral designs..." and §3808 I. "A cut flower dealer's permit authorizes the holder thereof to sell cut flowers either singly or in bunches, or both..."

A few years back there were suspicions that the professional land surveyors in Louisiana were attempting to delineate and define every land measurement and description technology from topographic surveys to geographic information systems as the exclusive domain and practice of professional land surveying. The reality is that *legal* boundary measurement and definition of real property — not the technolo-

gies to achieve it — are the exclusive domain of professional land surveying and this is basis of the law that separates professional land surveying from civil engineering.

Louisiana's professional land surveyors have apparently not yet been successful in defining all land measurement and description technologies as the exclusive domain of the professional land surveyor. It is interesting however — as reported in NSPE's magazine, *PE* 3/07 — that the New Jersey Society Professional Land Surveyors is using an aggressive strategy "...to let local code officials know that engineers cannot do any measurements..." and thereby enforce a nonexistent domain of land measuring and description technologies for the exclusive practice of professional land surveyors. This has prompted the professional engineers through the New Jersey Society of Professional Engineers to seek from their common licensing board a definition of "engineering measurements" that will allow them to use these technologies for other than legal measurement and description of real property.

The illegitimacy of this whole mess of inappropriate government abetted aggression by occupations/professions screams out across the centuries back to the observation of the English philosopher Thomas Hobbes (1588-1679). He is often quoted in his claim that much of our freedom in civil society "...depends on the silence of the laws..."



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## Professional investment

In the article "Investing in your PE society: What's the payoff?" that appeared in the August/September 06 issue of the National Society of Professional Engineers' magazine, *P.E.*, its author, Thomas C. Leslie, PE, attempts to define and explain the motives of the engineers who belong to and invest more than their dues — time and talent — in the NSPE. It appears to me that he thoroughly visits every high minded notion that I can remember ever being espoused on the subject.

A key value of any PE society as discussed by Leslie and a key value for me also is *networking*. Though I believe we may generally agree on its definition, I may emphasize it with a different thrust. Networking to me is an important part of the engineer's *external* professional life as opposed to the *internal* part that is exclusive to the workplace. The engineer's internal professional life may be considered job-specific, work-related and confined to engineering practice in the workplace and the relationships with fellow employees that are about the work — engineering, production and internal administration. It may be described as employment or work-focused *micro-networking*.

Networking in the PE society context may be described as *macro-networking*. It is a different unique set of experiences and relationships found by participating in PE society functions where *society* rather than *work* may be a more operational word. Networking is often the incidental forming of relationships and sharing values with fellow society members and others while dealing with issues of mutual interest that

are important to the general character of the engineering profession — what PE societies do. Networking is also incidental to — and facilitated by — the social events typically scheduled in conjunction with PE society functions.

I believe that the character and direction of our profession is not effectively addressed if at all in the narrow confines of the ordinary workplace. Through participating with the broader engineering community facilitated by the PE society, the individual engineer makes an opportunity to be part of a forum that actively and effectively guides the evolution of the engineering profession. This participation also provides the individual engineer with an opportunity to personally evolve into a professional engineer who is more intimately connected to the profession and to the world. This is the *other engineering education* effectively gained through the networking that "happens" while working with others in the setting uniquely provided by the focus, the issues and the joint efforts pursued by a PE society. This experience is not ordinarily found in the workplace.

Participation in a PE society is an opportunity to effectively and selflessly invest in the service to one's profession in a way that can perceptibly improve its vitality to better serve the public. The incidental networking is a self-service to one's own professional improvement as one may easily perceive but not entirely like one may expect. Surely the broader constituency that one may develop may provide the security of future employment opportunities and broader contacts for sharing/solving technical and pro-

fessional problems. There have been many elegant words written about the uplifting experience of truly *receiving* by giving back through the gifts with which you have been so richly blessed. In this case, I believe that you have to experience it firsthand using the same currency in service to others. I have — and for me there are — no elegant words to do justice in explaining my personal experience.

## ❖ Quote ❖

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