

American Society of Mechanical Engineers

Central Oklahoma Section Newsletter

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Inside this issue:

Rubber Band Power Vehicle Competition	2
MATHCOUNTS 2005	2
Chair's Corner	3
Diversity and Outreach	3
AIAA/ASME Oklahoma Symposium XXV	3
Calendar	4
Ballot (Enclosed)	

March ASME COS Meeting Announcement

Speaker: George T. Gibson, P.E. Past Chair, Oklahoma State Board of Registration for Professional Engineers and Land Surveyors

Topic: "Rules for Professional Conduct: Case Studies and Consequences of Ethical Lapses in the Engineering Profession"

Place: Oklahoma Engineering Center
201 NE 27th St, Oklahoma City, OK

Time: Thursday, March 24th
6:00PM: Registration & Social
7:15PM: Meeting & Announcements
6:30PM: Catered Meal
7:30PM: Presentation

Cost: \$10 for all Senior Members and Guests, \$5 for Student Section Members
PLEASE PLACE RESERVATIONS BY 12:00PM TUESDAY MARCH 22

Students make reservations at your respective university's Mechanical Engineering office
Members make reservations with ED REYNOLDS; edwin_c_reynolds@yahoo.com;
Ph. (405) 721-6753 (with each reservation, please include the name of each guest &/or student)

This month's program will be of special interest for all of us. Not only because more attention is being paid to unethical business conduct in the press these days, but also because it deals with the core of an individual's self-



image and the public's perception of our professional integrity. Ethical lapses in engineering practice not only lead to scandal, but can result in costly disasters, injury, and loss of lives. The Oklahoma County jail and the Kansas City Hyatt Regency balcony collapse are cases in point. This month's meeting will feature specific, recent cases reviewed by the State of Oklahoma, which resulted

from ethical lapses in the engineering profession. Professionals throughout the world are facing new ethical challenges. Engineers and business managers now face greater scrutiny of their projects and designs. Scandals in government and industry require even more attention to proper professional conduct. Oklahoma State Statutes and ASME Code of Ethics *Please turn to Page 2*

******This program will qualify for 1.0 PDH for attending Professional Engineers******

2004-2005 CENTRAL OKLAHOMA SECTION EXECUTIVE COMMITTEE OFFICERS	Jon Akins B (405) 789-1884 • akinsj2@asme.org Nathan Weber B (405) 419-6305 • webern2@asme.org	Public Relations; Newsletter Membership Director Director Director Director Director Director Director Director Director Director Director	EX-OFFICIO DIRECTORS Byron Newberry, PhD B (405) 425-5428 • byron.newberry@oc.edu OC Sub Gollahalli, PhD, PE B (405) 325-1728 • gollahal@ou.edu OU Larry L. Hoberock, PhD, PE B (405) 744-5900 • lhobero@okstate.edu OSU-MAE Jim Bose, PhD, PE B (405) 744-9458 • jbose@ceat.okstate.edu OSU-MET Doug Brown Goodyear Tire & Rubber Co. B (580) 531-5871 • brownd919@asme.org Region X VP; Past Chair FACULTY ADVISORS Wayne Whaley, PhD, PE B (405) 425-5424 • wayne.whaley@oc.edu OC Hongbing Lu, PhD B (405) 744-5900 • hongbin@okstate.edu OSU-MAE Rick Beier, PhD B (405) 744-9371 • beierr@okstate.edu OSU-MET Rong Zhu Gan, PhD B (405) 325-1099 • rgan@ou.edu OU-AME
Ed Reynolds, PE History & Heritage; Honors & Awards B (405) 721-6753 • edwin_c_reynolds@yahoo.com	Chair DIRECTORS 1st Vice Chair Secretary Treasurer Vice Chair; Programs Webmaster; Div. & Outreach	Frank Chambers, PhD, PE B (405) 744-5901 • chambersf@asme.org Wendell Cavin, PE H (405) 946-3254 • wc064a@sbc.com Bill Green, PE B (405) 728-5849 • wgreen@cox.net John Heaton, PE B (580) 251-4166 • john.heaton@halliburton.com Tommy Lear B (405) 739-1827 • tommy.a.lear@boeing.com Ed Root B (405) 946-3254 • emroot@cox.net Jamal Siddique B (405) 739-7191 • siddiquij2@asme.org Curtis Vickery, PhD, PE B (580) 255-0255 • vickeryc1@asme.org	Frank Parker Boeing Aerospace B (405) 739-1813 • parkerfj@asme.org Tom Betzen, PE Michelin Tire & Rubber Co. B (580) 221-2280 • betzent2@asme.org Mike Frey Boeing Aerospace B (405) 734-0150 • michael.j.frey@boeing.com Albert Janco, PE Consulting Engineer B (405) 848-1991 • JANCOA@ASME.ORG Elizabeth Schwartz Ford Audio-Video (405) 488-1898 • schwartz3@asme.org

Additional March Meeting Information

speaking to the rules all Professional Engineers must follow in their conduct. Cases studies will be presented to illustrate these ethical standards. There will be discussion about the failures in these cases. The group will analyze other cases and determine what should be a proper solution. Opportunities for further education in the field of Ethics will be offered.



George T. Gibson, P.E., served as the Chair of the Oklahoma State Board of Registration for Professional Engineers and Land Surveyors for 2003-2004. He was re-appointed by Governor Henry to serve as a member on the same board for a term, which

expires in June 2011. George Gibson retired in April 1990 as Assistant to the President for Southwestern Bell Telephone Co—Oklahoma. He was responsible for planning and implementing the Company's nearly \$200 million per year construction program throughout the state. This included administration, planning, engineering and maintenance of the system, with approximately 2,000 employees under his supervision.

George Gibson holds a BA in Mathematics with a minor in Physics (from the University of Tulsa) and was elected to the Hall of Fame at TU in 1991. He is also a graduate of the OETP, Master's level degree program from Bell Laboratories. He has also



taught graduate courses at the University of Oklahoma's School of Industrial Engineering.

As a long time member of the Oklahoma State Board of Registration for Professional Engineers & Land Surveyors, George Gibson was involved in several investigations of engineering firms for a variety of professional violations. Be sure to attend this meeting to learn from past mistakes and for a lively discussion of the points of such cases.

Rubber Band Powered Vehicle Competition

Approximately 3000 Jr. High and High School students attended the 24th Annual OEF Engineering Fair at the Oklahoma City Omniplex on Wednesday February 23rd. The Central Oklahoma Section of ASME sponsored the Rubber Band Powered Vehicle contest. Judges from the Section were Bill Green, Frank Parker, Albert Janco, Ed Reynolds and Wendell Cavin. There were 75 students that registered and participated in the completion. The contest was the culmination of the competition from previous "preliminary competitions" that were held at the students individual schools. Each school was "limited" to 3 entries.

The competition was a design competition where the students designed and built a vehicle that would carry a 1-pound load (box of baking powder) over a

distance being powered solely by 1 rubber band. This year's winner was Zoey Hartpence from Mustang Middle School who will be the Bruce Stout Memorial Award winner as sponsored by the Central Oklahoma Section of ASME. She and her school will also receive \$40 awards from the OEF.

The Official results were:

1st Place Zoey Hartpence - 63'1"

Mustang Middle School

2nd Place Kim Ward - 55'3"

Fairview Chamberlain MS

3rd Place

Zach Hartpence - 51'3"

Mustang High School

These vehicle designs provided superior results compared to the rest of the field as the mean distance traveled was 15 feet and the standard deviation was 15 feet — so Zoey's vehicle actually traveled almost 50 feet past the mean (3 standard deviations further).

Registration of the vehicles during the competition was handled by ASME Student Section volunteers. Chris and Kyle Filson from OSU Mech Tech worked the early morning registration and Laura Kite and Kevin Plumlee from Oklahoma Christian provided the late morning registration. Thanks also to Brandon Mills from OU for the afternoon help.

MATHCOUNTS 2005

The 2005 Central Oklahoma MATHCOUNTS competition was held February 5th at Oklahoma City Community College. This year's competition was attended by 142 students representing 23 schools. Classen School of Advanced Studies in Oklahoma City was the winning school for the third consecutive year. Second place went to Whittier Middle School from Norman. Longfellow Middle School of Norman finished third, and Casady School of Oklahoma City finished fourth. These four teams, along

with an all-star squad consisting of the top four individuals not already on these teams, will compete in the Oklahoma state competition on March 5th in Oklahoma City, with a chance to advance to the national competition to be held at the General Motors headquarters in Detroit, May 5th – 8th. Over 30 people from various engineering societies, including ASME, volunteered to work at the competition as test proctors or graders and were an integral part of the success of the event.

MATHCOUNTS is a national enrichment, coaching and competition program that promotes middle school mathematics achievement through grassroots involvement in every U.S. state and territory. For more information, visit the MATHCOUNTS website at www.mathcounts.org, or contact Tommy Lear, Central Oklahoma MATHCOUNTS coordinator, at thomas.a.lear@boeing.com.

Chair's Corner

Our February 24th meeting attended by 16 ASME members & guests, was held jointly with other Engineering Societies in Central Oklahoma. Our speaker, Dr. Bob Blackburn, Executive Director, Oklahoma Historical Society, made an informative presentation on "A Story of Innovation: Exhibits planned for the new Oklahoma History Center" that included technological accomplishments by Oklahomans. Total meeting attendance was 155.

The month of February offered many opportunities for our ASME members to be involved with activities to promote our engineering heritage. We thank ASME member Tommy Lear, Central Oklahoma Mathcount Coordinator, for his work & efforts in coordinating this years Mathcount competition that was attended by 142 students representing 23 schools. We also thank ASME member Wendell Cavin, for his work & efforts in our Section sponsored Rubber Band Powered contest held at the Engineer-

ing Fair on Feb 23, 2005. There were 75 participants in this contest, ranging from 6th to 12th graders, with over 2000 students from 68 schools in attendance at the Engineering

"The month of February offered many opportunities for our ASME members to be involved with activities to promote our engineering heritage."

Fair this year. In addition, we thank ASME member Frank Chambers, PhD., P.E., Oklahoma State University, for his work & efforts in coordinating the 25th Oklahoma AIAA/ASME Symposium held this year in Stillwater, Ok. This event had over 127 participants register to hear 72 technical presentations offering many opportunities to learn about new developments in an array of mechanical & aerospace engineering fields.

Our March 24th meeting will be of special interest for all of us. Our speaker, George Gibson, P.E., Past Chair, Oklahoma State Board of Registration for Professional Engineers & Land Surveyors, presentation entitled "Rules for Professional Conduct: Case Studies and Consequences of Ethical Lapses in the Engineering Profession" will be used to illustrate Oklahoma State Statutes & ASME Code of Ethics that address the rules all Professional Engineers must follow in their conduct. His presentation will feature specific recent cases reviewed by the State of Oklahoma, which resulted from ethical lapses in the engineering profession.

Hope you can join us for our next Section meeting on Thursday, Mar 24th. Please plan to attend & bring a friend.

Ed Reynolds
Chair

Diversity and Outreach

In an initiative to reach all of our ASME members, the Central Oklahoma Section held a luncheon for the women members of our section on Mar 5th in Stillwater, Ok. Through this meeting hosted by Elizabeth Schwartz, Diversity & Outreach Chairperson, the women members were able to meet together, network, discuss various topics especially of interest to women & enjoy delicious pizza at Hide-

away's. Attendees of the event were Roshani Jayasekara, an OSU student working towards her PhD in Biosystems Engineering, Shirley Chen, an engineer with John Zink Company in Tulsa and her guest, Weiping Li, another OSU student working towards her PhD in Geophysics. This outreach event, and others to come, are designed to encourage participation in COS events. Future issues that we hope to ad-

dress include the possibility of having luncheon meetings at other locations so as to include more members, both men & women. If you have any suggestions on future initiatives, please contact: Elizabeth Schwartz, Diversity & Outreach Chairperson, E-mail: schwartz3@asme.org

AIAA/ASME Oklahoma Symposium XXV Summary

The 25th annual Oklahoma AIAA/ASME Symposium was held on the Oklahoma State University campus in Stillwater on Saturday, February 12, 2005. We believe that the Symposium's goals of fostering communication and technical interchange among the engineers of Oklahoma's universities and industries were well-served by the 72 technical presentations covering a wide range of topics in mechanical and aerospace engineering. The attendance was comprised of 37 engineering professionals, 90 registered student attendees, and nine OSU student assistants. There were participants from all the area engineering schools: Oklahoma Christian University, Oklahoma State University, Oral Roberts University, the University of Oklahoma, the University of Tulsa, as well as the University of Arkansas (part of the Oklahoma Section of AIAA). Those who were not able to attend also can benefit from the presentations through the online proceedings, which can be found at the Symposium website: <http://acl.okstate.edu/users/symp25/>. The proceedings are in the form of a searchable Adobe

Acrobat document containing abstracts of all the presentations. The abstracts have contact information for the authors and many include active links to the authors' research web sites. We are having another run of proceedings CD's produced and soon will have them available. Practicing engineers who attended can request a certificate documenting the 3.25 Professional Development Hours (PDH) that they earned. To order a proceedings CD or request a PDH certificate, please contact us via e-mail at: symposium2005@acl.okstate.edu.

The Symposium Committee thanks all who attended and particularly the presenters and their coauthors who were so directly responsible for making the Symposium a success. We also thank the Session Chairs, Charles Bert, Satish Bukkapatnam, Demir Coker, Greg Hughes, Michael R. Kessler, Ranga Komanduri, David G. Lilley, David McGhee, Frank J. Parker, Edwin Reynolds, Bill Ryan, Khaled Sallam, Nathan Weber, and Yunjun Xu, who contributed to making the meeting run smoothly. We also want to thank

Dean Karl Reid for his welcoming remarks and our luncheon speaker, James F. (Red) Jones of Sandia National Laboratories, for a fascinating look at assembly techniques for micro components. We sincerely appreciate the support of the participating schools and the Central Oklahoma and Mid-Continent Sections of ASME and the Oklahoma Section of AIAA. OSU MAE secretaries Diane Compton and Sharon Green deserve lots of thanks for the outstanding job they did on the proceedings. I personally want to thank all the other members of the Symposium Committee at OSU, notably Andy Arena, Rick Beier, Demir Coker, Hongbing Lu, Eduardo Misawa, and Khaled Sallam, as well as the OSU student assistants for their hard work.

Frank Chambers, Chair

AIAA/ASME Oklahoma Symposium XXV

Future ASME-Central Oklahoma Section and Other Events

DATE	LOCATION	PROGRAM TOPIC AND SPEAKER
March 24	Oklahoma Engineering Center 201 NE 27th St	"Rules for Professional Conduct: Case Studies and Consequences of Ethical Lapses in the Engineering Profession" by George Gibson, PE
April 1-2	Texas Tech University Lubbock, TX	Region X RAC Conference
April 28	Oklahoma Engineering Center 201 NE 27th St	TBD

FOR UPDATES ON THESE AND OTHER EVENTS, VISIT OUR SECTION WEB SITE AT

<http://sections.asme.org/CentralOK>

ALSO VISIT THE ASME SOUTHERN FIELD OFFICE, DALLAS, TX AT

<http://www.asme.org/regions/sro/>

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