



THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS®

Central Oklahoma Section Newsletter
Volume 10, Number 2, September 16, 2008

The Section is located at: Oklahoma Engineering Center, 201 Northeast 27th Street, Oklahoma City, OK 73105

The Central Oklahoma Section Newsletter is nominally published nine times per year to convey monthly meeting dates, meeting topics, section activities, and/or other ASME information to its membership.

TOUR: **New U.S. Postal Processing & Distribution Center**

4025 W. Reno Ave., Oklahoma City (west of Portland Ave. then north on Tulsa Ave.) **DATE: Thursday, September 25, 2008**

Pictured at right, this huge new facility was constructed from August 2006 to June 2008, encompassing 850,000 square feet of usable floor space and employing approximately 900 persons. This center consolidates the following five Postal facilities into one: airport mail facility, district offices, general mail facility, mail processing annex, and transportation hub.

The facility features the latest in high-tech mail handling, conveying, and sorting machinery. **This should be a great tour! Make plans to attend on September 25!**



MINIMUM AGE REQUIREMENT: 16-years.
Visitor parking is on North Side. Enter door for Credit Union to Main Lobby.
RESERVATIONS: Provide Name, ASME Member or Guest, Affiliation, PDH credit

Time: 6:00 PM: Gather at USPS P&DC Facility
6:30 – 7:00PM: Pizza Meal
7:10 – 7:30PM: Introductions & Short Presentations by Julie Gosden, District Manager and Larry Flener, Business Development Manager
7:30 – 9:00PM: Tour w/ Jennifer Haxton, Industrial Engr.
Cost: \$5 for ASME Senior & Student members and guests.
Students please bring your ASME membership card.
PLEASE PLACE YOUR RESERVATION with Albert Janco
(Ph. 405-848-1991 (leave message) or e-mail jancoa@asme.org by **TUESDAY, September 23 at noon!**

2008-2009 COS Executive Committee		Directors		John Heaton Director	
Officers		Mike Frey Professional Development	Bus: 405-736-3368 ; freym1@asme.org		Bus: 580-251-4166 ; heatonj2@asme.org
Curtis Vickery, Ph.D., P.E. Chair	Cameron Compression Systems Bus: 405-619-5013 ; Fax: 405-619-5081 e-mail: vickeryc1@asme.org	Frank Parker, P.E. Scholarship	Bus: 405-739-1813 ; frank.j.parker@gmail.com		Ex-Officio Directors
OPEN Vice-Chair	VOLUNTEER NEEDED!!!	Doug Brown, P.E. ASME Vice-President	Ph: 580-536-0363 ; brownd919@asme.org		Bryon Newberry, Ph.D. OC
John McCachern, P.E. Treasurer	Alcatel-Lucent Technologies Bus: 405-302-1651 ; jmccachern@alcatel-lucent.com	Vladimir Yun College/industry Relations	Bus: 580-251-4014 ; vd_yun@yahoo.com		Bus: 405-425-5428 ; bryon.newberry@oc.edu
Tom Betzen, P.E. Secretary	Michelin North America Bus: 580-221-2280 ; Fax: 580-221-8586 e-mail: betzent2@asme.org	Nathan Weber Past Chair	Bus: 405-419-6305 ; webern2@asme.org		Sub Gollahalli, Ph.D., P.E. OU
Albert Janco, P.E. Program Chair	Consulting Engineer Membership Chair Bus: 405-848-1991 ; Fax: 405-843-6244 e-mail: JANCOA@ASME.ORG	Frank Chambers, Ph.D., P.E. Director	Bus: 405-744-5901 ; chambersf@asme.org		Bus: 405-325-1728 ; gollahal@ou.edu
Elizabeth Schwartz Webmaster	Ford Audio-Visual Systems Bus: 405-945-2057 ; schwartze3@asme.org	Wendell Cavin, P.E. Director	Bus: 405-291-5586 ; wendell.cavin@att.com		Larry Hoberock, PhD, PE OSU-MAE
Ed Reynolds Honors & Awards	Ph: 405-721-6753 ; edwin_c_reynolds@yahoo.com	Jamal Siddiqui Director	Bus: 405-739-5456 ; siddiquij2@asme.org		Bus: 405-744-5900 ; lhobero@okstate.edu
		Ed Root Director	Phone: 405-946-3254 ; emroot@cox.net		Jim Bose, PhD, PE OSU-MET
		Tommy Lear, P.E. Director	Bus: 405-739-1827 ; thomas.a.lear@boeing.com		Bus: 405-744-9458 ; jbose@okstate.edu
		Bill Green, P.E. Director	Phone: 405-728-5849 ; wgreen@cox.net		Past Chair
					Stan Wells Consulting Engineer
					Ph: 405-330-4769 ; wellss2@asme.org
					Faculty Advisors
					Wayne Whaley, Ph.D., P.E. OC
					Bus: 405-425-5424 ; wayne.whaley@oc.edu
					Kuang-Hua Chang, Ph.D. OU
					Bus: 405-721-7149 ; khchang@ou.edu
					Hongbin Lu, Ph.D. OSU-MAE
					Bus: 405-744-5900 ; hongbin@okstate.edu
					Rick Beier, Ph.D. OSU-MET
					Bus: 405-744-9371 ; beierr@okstate.edu

ADDITIONAL SEPTEMBER PROGRAM INFORMATION

The article below is from the Wednesday, September 10, 2008 *Daily Oklahoman* Business Section, Page 2B. Used with permission from OPUBCO.

The article included a photo of Larry Flener (not shown below) who will be featured at our upcoming USPS P&DC tour.

Small business pushes growth of Postal Service

By Debbie Blossom
Business Writer

Some tough times have hit the U.S. Postal Service, and the news at the National Association of Postmasters of the United States' convention last month wasn't encouraging.

Like other big companies struggling with a sluggish economy and high fuel prices, the postal service could lose about \$2 billion this year, convention goers were told. Operating expenses increased to \$19.0 billion in the third quarter, an increase of \$178 million from the same time period last year.

One avenue of growth — beyond raising stamp prices and offering workers early retirement — is now focusing on working with small and mid-size businesses that need customized assistance with mailing and printing. And in Oklahoma City, a newly formed team of five postal employees is crisscrossing the state doing just that.

Service at the click of a mouse

After more than three decades as spokesman for the Oklahoma District of the U.S. Postal Service, Larry Flener is now manager of a business development division formed several weeks ago to target smaller companies operating with limited staffs, budgets and time.

"With thoughts of being more productive and effective with a team focused on small- and medium-size business, we began working on that concept," Flener said.

The goal is to show what services are available online with the click of a mouse, he said, and just how simple it is though the postal service to order packaging supplies, manage distribution lists, store mailing addresses, print shipping labels, create, print and send personalized postcards, and purchase postage.

There is no cost to sign up, and the site is free of the confusion of ads and distracting pop-ups. "It's about as friendly a Web site as you can get," Flener said. A cost comes only from using accounts that provide a particular service.

A one-on-one counseling approach

Although the postal service has always followed through on business tips provided by postal carriers, the business development team is bringing a one-on-one counseling approach to helping small businesses figure out mailing and shipping needs.

"One of my responsibilities is to work with postmas-

Looking for business solutions?

A list of postal service products and services can be found at usps.com/business.

Business owners wanting to contact the business development team should alert their letter carriers to complete a contact lead form that is electronically transmitted to team representatives. Return contacts are made within 24 hours.

ters and their employees to teach them how to go online and create accounts," Flener said.

At All 4 Kids, a Moore-based fundraising company that helps schools and nonprofit groups earn money, owner LaDonna Wolfes said she was looking for competitive rates and a better method of handling her company's operations, which includes shipping tons of packages containing online orders from customers buying merchandise offered through school fund raisers.

"Our volume has increased this year," said Wolfes, who estimates All 4 Kids will send out 50,000 packages in the next six weeks.

A personal visit from the business development team showed Wolfes how she could create accounts to organize a massive mailing list, figure postage on each package and print mailing labels. Boxes are delivered directly to the company, she said, and a team representative has made more than one visit to make sure accounts were working properly. "They have made a strong effort to understand our needs, and work it out," Wolfes said. "I was very impressed."

'Wide-open opportunity to connect'

Many of the postal services products and services and products are free, Flener said, or come with a minimal price tag. And with the cost of running a company constantly on the rise, looking for the most cost-efficient method is vital to today's small businesses.

Business owners can reduce costs by mailing online, save time not waiting at the post office and have the freedom to do business night or day, he said.

"I see this as such a wide open opportunity to connect with American businesses ... when businesses grow here, it's good for the state and it's good for all of us."

Contributing: The Associated Press

RECENT NEWS BRIEFS OF INTEREST

Some States Sue EPA Over Pollution Emissions from Oil Refineries

(courtesy NSPE's *Daily Designs* publication August 26, 2008)

The [Wall Street Journal](#) (8/26, A3, Campoy) reports, "New York and 11 other states sued the Environmental Protection Agency, claiming it failed to regulate global-warming gas emissions from refineries."

The [AP](#) (8/26) adds that "New York Attorney General Andrew Cuomo says the suit is aimed at forcing the EPA to adopt new regulations to reduce oil industry pollution that contributes to global warming."

According to [Dow Jones](#) (8/26, Resnick-Ault), the suit alleges that "the EPA violated the Clean Air Act when it refused to issue standards for controlling global-warming pollution emissions from oil refineries." Those "standards, known as New Source Performance Standards, target refiners who are expanding their plants, or building new plants. Cuomo argued that the Clean Air Act requires the EPA to adopt these New Source standards for oil refineries, as well as power plants and other major stationary sources, if the EPA determines they emit air pollution that poses a danger to public health and welfare."

EDITOR'S NOTE: This should get the attention of engineers everywhere. EPA is being asked to set and enforce emission targets in the name of "global warming," yet global warming has yet to be defined in quantitative terms (to my knowledge). The potential here for "moving targets" cannot be overlooked nor can possible economic impact on refining and power generation industries.

Aerospace, Defense Industries Seek Next Generation of Engineers

(courtesy NSPE's *Daily Designs* publication August 22, 2008)

Florida's [Orlando Sentinel](#) (8/21, Burnett) reported that the U.S. "defense and space industry is facing a potential engineering crisis as retiring baby boomers leave the workforce," because "many young engineers would rather go into commercial high-tech jobs than tap out computer code for the next rocket system, experts say." According to the Aerospace Industries Association, "that could leave defense and space contractors in the lurch." Moreover, "nationwide graduation rates have tailed off in the areas crucial to defense and space work." However, companies have responded by mobilizing "efforts to attract young people to engineering careers." For example, "contractors such as Lockheed Martin Corp. have joined with military agencies and industry groups to reach out to thousands of students," teachers, and administrators. And Dave Franck, "an engineer with Lockheed Martin Corp.'s Orlando simulation training operation, co-founded a group that screens future engineers and mentors younger staff members."

Steel Pipe Shortage Could Slow Oil and Gas Production

(courtesy NSPE's *Daily Designs* publication August 20, 2008)

The [Dallas Morning News](#) (8/19, Warmbrodt) reported that "the steel pipe used in [gas] wells is becoming more expensive and harder to get for oil and gas companies, putting a drag on production and driving up the cost and time it takes to plan the wells." The supply shortage's "effect on North Texas could be significant, particularly because gas drilling in the Barnett Shale requires the complex rigs that snake into the ground horizontally." The Morning News pointed out, "The rising cost of materials and the consolidation of steel pipe suppliers have collided with growing drilling demand...spurred by oil and gas price increases." However, "[n]ot all producers are in a pinch." While, "Quicksilver Resources Inc. anticipated the pipe shortage in February and expanded its steel pipe inventory," Devon Energy "said it has avoided a shortage because of its long relationships with suppliers."

Researchers Work to Turn Cars' Exhaust Into Power

(by Margaret Harding; courtesy NSPE's *Engineering Press Review*, August 18, 2008)

The Department of Energy (DOE) wants vehicles in the United States to improve fuel economy 10-percent by converting wasted exhaust heat into energy. To this end, DOE is partially funding research within the auto sector to develop thermoelectric generators. General Motors (GM) plans to test a new version of a thermoelectric device in a Chevrolet Suburban in 2009 that could boost fuel economy by about 5 percent--an improvement of 1 mile-per-gallon. The technology could lead to more dramatic results in smaller cars, according to GM researcher Jihui Yang. Researchers estimate that a 10-percent improvement in fuel economy could save more than 100 million gallons of fuel annually in the nation's GM vehicles alone. Thermoelectric devices can work in two ways: using electricity to provide

cooling or heating, or using differences in temperature to create electricity. The latter method is the focus of Yang's prototype device. Meanwhile, a company called BSST is working with Ford Motor to create climate control systems based on thermoelectric technology. The aim is to target specific areas of the body rather than simply blow large volumes of air.

District E Leadership Workshop & Management Training Seminar (MTS)

Date and Location: September 26-27, 2008 in Houston, TX

Who Should Attend? Two (2) ASME Section Officers from each District E Section, Subsection, Group

Objective: The objective of the Leadership Workshop is to hold a face-to-face meeting of unit leaders from across all of District E to share operating information and lessons learned between the District's units.

Workshop Topics will include: • District E Overview • Merit Based Funding • Best Practices Roundtable • Senior Section/Student Section Support/Activity • Section Membership Base/Volunteer Recruitment • Professional Development Courses • District Awards & Training Roundtable • ASME Resources.

One delegate from our Section will be Albert Janco. Contact Curtis Vickery or Albert Janco ASAP if you are interested in attending (contact information is on page 1).

Student Section News and Information

Upcoming Student Leadership Training Seminar (SLS)

Date and Location: September 26-27, 2008 in Houston, TX

PURPOSE: Student Leadership-training Seminar's (SLS) are specially designed events with the goal of providing student section officers and volunteers with the tools and skills they need to run their sections more effectively.

WHO SHOULD ATTEND: All Student Section Officers and Committee Chairs, Student Section Advisors, any ASME student member who would like more information on what to expect from their student section or is considering becoming a part of the Student Section Leadership Team in the future.

WHAT YOU GAIN: Knowledge of ASME's organization and structure so that you can understand the role student sections play in fostering professionalism. Tools and resources that can enhance your efficiency as a student section leader. Leadership and management skills that will better enable you to run your student section and will also carry over as you enter the workplace. A better understanding of ASME's member benefits that focuses on how you can leverage these benefits to aid your career development and also promote membership to other students. Plus opportunity to meet and network with students from other universities and with ASME district leadership. It's a fun and enjoyable experience that is also educational.

Student Sections Note: Diversity Action Grants Available

Diversity Action Grant (DAG) applications are now being accepted from ASME Student Sections for the 2008–2009 academic year. The program, which is supported by the Center for Leadership and Diversity, awards grants ranging from \$500 to \$1,500 to ASME student sections to fund activities that promote membership diversity. See http://www.asme.org/Communities/Diversity/Diversity_Action_Grant.cfm.

APPLICATION DEADLINE, SELECTION CRITERIA and REVIEW: The deadline for submission of applications is November 10th. Applications should be sent to: *ASME Center for Leadership & Diversity*; c/o Marina Stenos; ASME; Three Park Ave; New York, NY 10016-5990; Telephone: (212) 591-8614; Fax: (212) 591-7856; e-mail stenosm@asme.org.

ASME Student Loan Funds Are Available

ASME Student Loan Applications for the winter/spring 2009 loan cycle are now available!
The application deadline is October 15, 2008.

The ASME Student Loan Fund has helped over 2,300 ASME student members with low interest student loans. **The 2008-09 loan rate is a low 5.0% fixed rate!** This is **1% below** the Federal Stafford Loan variable rate. The Fund, which was started by a grant from the ASME Board of Governors, is sustained by student members repaying the loans after they've graduated --- so it is truly engineers helping student members.....members helping members! Qualified full-time undergraduate students in the United States, Canada, and Mexico may borrow up to \$3,000 per academic year to a maximum of \$9,000. Full-time graduate students may request an additional \$3,000. Contact **Amira El-Ghobashy** (El-GhobashyA@asme.org) for more information on this loan program.

Please review the application guidelines at <http://files.asme.org/asmeorg/Education/College/FinancialAid/15529.DOC>. You'll find the process quite simple and over the past few years, over 90% of the applications have been approved!

Why does the fund work so well? Simply put, your fellow student members and colleagues who have graduated make it work well. The default rate on ASME Student Loans is less than 1%!

If you're not yet an ASME student member, then please consider joining! The Student Membership fee is \$25.00/year and you may apply for membership while concurrently applying for a loan or scholarship.

For membership information check ASME's online Student Member Application, ask a member of your local ASME Student Section, or ask your school's Mechanical Engineering Faculty Advisor.

Chair's Corner

Dear ASME-Central Oklahoma Section Members:

Greetings! Labor Day is behind us, summer is coming to an end, and folks are beginning to focus upon the many fall activities and responsibilities that await. It's a great time of year so be sure to take full advantage!

Our August meeting immediately proceeded the extended Labor Day weekend, and we thank all who attended! Thanks much to Phillip Starr for providing a very interesting presentation on Halliburton's new screw-drive Wellhead Isolation Tool. Phillip's project began several years ago; as a Halliburton engineer I assisted Phillip acquire strain-gage measurements on the frame assembly. This tool had much to consider including sealing capability, column buckling, structural strength to high-pressure loading, versatility, and ease of implementation. **Thanks again Phillip!**

Our September USPS P&DC tour should be interesting to say the least. Most folks probably don't equate our Postal Service with high-tech equipment, but such is essential to minimizing overall handling and shipping costs. Remember that USPS must compete with Federal Express, UPS, DHL, and other package/parcel carriers. USPS is therefore striving to better serve business as well as ordinary customers. The page 2 article provides an overview of this. **Please come out on Thursday, September 25 for this event!**

Curtis M. Vickery, Chair

P.S. Get out and enjoy the State Fair! It's always fun to see the new cars, lawn mowers, farm equipment, livestock, vendor exhibits, all the folks, and assorted junk!



Future ASME-Central Oklahoma Section Events

Date	Location	Program Topic and Speaker
Thursday Sept. 25, 2008	4025 W. Reno Ave., OKC (north on Tulsa Ave.)	September Section Meeting: TOUR , U.S. Postal Service Processing & Distribution Center
Thursday Oct. 23, 2008	Oklahoma Engr. Center 201 NE 27 th St., OKC	October Section Meeting: TBD
Thursday Nov. 23, 2008	Oklahoma State Univ. Stillwater, OK	November-December Section Meeting: Joint meeting with OSU-MAE and OSU-MET Student Sections (TENTATIVE) Topic/Speaker: TBD
Thursday Jan. 22, 2009	Oklahoma Engr. Center 201 NE 27 th St., OKC	January Section Meeting: Joint meeting with the Oklahoma AIAA Section. Speaker: Tom Betzen, Engr., Michelin North America Program: Michelin's new Green Tire Technology to decrease rolling resistance & reduce fuel usage & vehicle emissions.
Thursday Feb. 15 - 21, 2009	MULTIPLE LOCATIONS	National Engineers Week: Activities include Engineering Fair & Joint Engineering Societies Banquet (JESB). Our February Section meeting will coincide with the JESB.

**Please visit our Section website <http://sections.asme.org/CentralOK/>
for event updates and other useful information!**

LOCAL ENGINEERING JOB OPENINGS / SITUATIONS WANTED

OPENING: An experienced and motivated product designer experienced in solid modeling with software such as ProE or SolidWorks. A Mechanical Engineering degree is preferred, and experience with sheet metal, stainless steel, and/or HVAC is desired. Compensation is dependent on experience, but ranges up to the high \$60s. The (local manufacturing) company offers a great range of employee benefits, options, and potential for advancement.

For more information contact Ashley Warne, Principal Technologies, OKC
Phone: 405-858-8800 X103, e-mail ashley@principaltechnologies.com

OPENING: Engineer for heavy equipment design and development. Mechanical Engineering (preferred) or Mechanical Engineering Technology degree required. Position requirements include use of SolidWorks modeling software and use of ASME pressure vessel codes. Compensation is dependent on experience.

For more information contact Anthony Chandler, Wilco Machine & Fab, Marlow, OK
Phone: 580-658-6993, e-mail anthony.chandler@wilcofab.com