



American Society of Mechanical Engineers

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.

Central Oklahoma Section Newsletter Volume 6, Number 1, August 12, 2004

***** August Meeting Tour Announcement *****



TOUR: Pro-Fab, Inc. 910 N. Morgan Road, OKC Thursday, August 26

Pro-Fab is a leader in high-speed, ultra precise machining, manufacturing, and processing for the global aerospace and defense industry of today. Pro-Fab has a state of the art facility equipped and staffed to produce complex components and assemblies.

According to Mr. Jim Rice, owner and founder of Pro-Fab: "Pro-Fab is the premier machining and manufacturing facility in the industry. We are globally recognized for our high quality, reasonable costs, and ultimate customer service. We strive to be the *best* in the industry and will continue this achievement through our high performance workforce and cutting edge technology." Mr. Rice will provide a short company overview before the tour begins. **Note: Attendees must be 12-years old to participate in the tour. Bring PPE if possible. Make plans to join us August 26 to begin our 2004-2005 program year!!!**

Schedule and Contact Information

Time: 6:00PM: Registration and Social. 6:30PM: Pizza Meal.
7:00PM: Introductions and Program in Pro-Fab Meeting Room.
7:30PM: Pro-Fab Plant Tour. 9:00PM: Conclusion

Cost: \$5 each for all Senior Members, Student Members, and Guests.

PLEASE PLACE RESERVATIONS BY 12:00PM (noon) TUESDAY, August 24

Students please 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 and/or student)

2004-2005 CENTRAL OKLAHOMA SECTION EXECUTIVE COMMITTEE

OFFICERS

Ed Reynolds, PE Chair
History & Heritage ; Honors & Awards
B (405) 721-6753 • edwin_c_reynolds@yahoo.com

Frank Parker, PE 1st Vice-Chair
Boeing Aerospace
B (405) 739-1813 • parkerfj@asme.org

Tom Betzen, PE Secretary
Michelin Tire & Rubber Co.
B (580) 221-2280 • tom.betzen@us.michelin.com

Mike Frey Treasurer
Boeing Aerospace
B (405) 734-0150 • michael.j.frey@boeing.com

Albert Janco, PE Vice-Chair, Programs
Vice-Chair, Membership
Consulting Engineer
B (405) 848-1991 • F (405) 843-6244
JANCOA@ASME.ORG

Elizabeth Schwartz Webmaster
Diversity & Outreach
(405) 945-2057 • schwartz3@asme.org

Curtis Vickery, PhD, PE Newsletter Editor
(580) 255-0255 • vickeryc1@asme.org

Jon Akins Member Interests
B (405) 789-1884 • jon@rupturepin.com

DIRECTORS

Frank Chambers, PhD, PE Director
B (405) 744-5901 □ chambersf@asme.org

Wendell Cavin, PE Director
H (405) 946-3254 □ eroot@worldnet.att.net

Bill Green, PE Director
B (405) 377-1164 □ greenwr@oge.com

John Heaton, PE Director
B (580) 251-4166 □ john.heaton@halliburton.com

Tommy Lear Director
B (405) 739-1827 • thomas.a.lear@boeing.com

Ed Root Director
B (405) 946-3254 • eroot@worldnet.att.net

Jamal Siddique Director
B (405) 739-7191 • siddiquij2@asme.org

Nathan Weber Director
B (405) 419-6305 • nathan.weber@york.com

EX-OFFICIO DIRECTORS

Byron Newberry, PhD OC
B (405) 425-5428 • byron.newberry@oc.edu

Sub Gollahalli, PhD, PE OU
B (405) 325-1742 • gollahal@ou.edu

Larry L. Hoberock, PhD, PE... OSU-MAE
(405) 744-5900 • lhobero@okstate.edu

Jim Bose, PhD, PE .. OSU-MET
(405) 744-9458 • jbose@ceat.okstate.edu

PAST CHAIR & Region X Vice-President
Doug Brown • brownd919@asme.org
Goodyear Tire & Rubber Co.
B (580) 531-5871 • F (580) 531-6000

FACULTY ADVISORS

Wayne Whaley, PhD, PE OC
B (405) 425-5424 • wayne.whaley@oc.edu

Hongbing Lu, PhD OSU-MAE
B (405) 744-5900 • hongbin@okstate.edu

Rick Beier, PhD OSU-MET
B (405) 744-9371 • beier@okstate.edu

Rong Zhu Gan, PhD OU-AEME
B (405) 325-1099 • rgan@ou.edu

Additional August Meeting Information

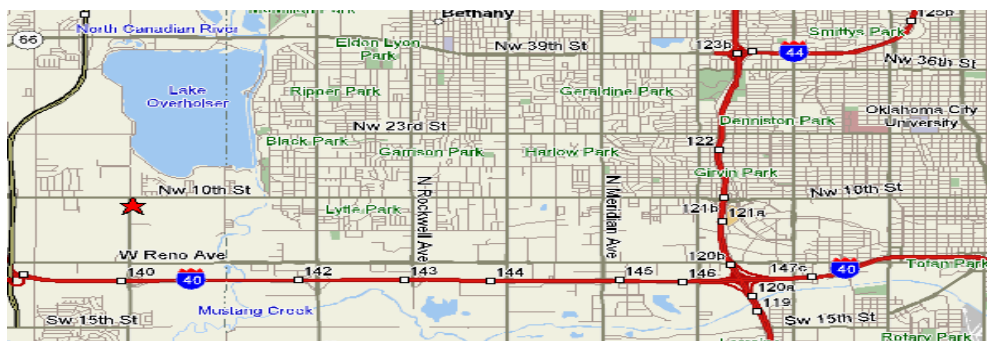
Mr. Jim Rice began his company in his garage in 1986 with one piece of equipment. He incorporated in the State of Oklahoma in 1987, became Pro-Fab, Inc., and moved into a 10,000 square foot manufacturing facility with eight employees.

The company continued to grow after Mr. Rice learned the complexities and intricacies of bidding and winning government contracts. Pro-Fab moved again in 1988 into a 20,000 square foot facility, adding new machines and additional employees.

As their reputation grew for delivering quality products on time, their customer base likewise increased. By the early 1990 Pro-Fab's customer base included names including: Gulfstream Aerospace Corp., Boeing Commercial Airplane Group, British Aerospace Aero Structures Limited, U.S. Department of Defense, and Cessna Aircraft Company.

In May, 1996 Pro-Fab moved its 80+ employee workforce and all their machinery to their present environmentally controlled, 150,000 square foot manufacturing facility. Pro-Fab has continued to grow to over 200 employees with annual gross sales near \$20-million. Pro-Fab, Inc. continues to be recognized as one of the premier privately owned companies in Oklahoma City and the surrounding area.

Its reputation continues to grow around the world as a company that can provide quality products and services to commercial and military aerospace industries. For more information on Pro-Fab, Inc. visit their website at <http://www.profab.com>.



MAP: Take I-40 west to Morgan Road. Pro-Fab is just south of NW 10th Street.

May Blue Canyon Wind Farm Tour Highlights

Our May 2004 Blue Canyon Wind Farm tour was a great climax to our 2003-2004 ASME Central Oklahoma Section program year. Turnout was very good with nearly 50 members and guests attending. The Blue Canyon wind energy farm was developed by Zilkha Energy Corporation on behalf of the Western Farmers Electric Cooperative (WFEC). The Blue Canyon site is located north of Lawton, OK in the Wichita Mountains "Slick Hills" region.

Below are photographs from the tour. As you can see, the turbine generator units are quite large (see Housing photo). These units are placed atop 220-ft towers that have base diameter of nearly 20-feet. Nearly 50 turbines are presently on line, with plans calling for an additional 100 units to be deployed along the ridge (see Panoramic View photo).

We were blessed with great weather during the tour, with wind speed on the order 25-30 mph on the ridge. The turbines are capable of shifting orientation depending on the wind direction, with blades quietly turning at approximately 17 rpm. Within each tower is power monitoring/conditioning equipment (see Albert Janco photo). Power is then boosted via transformers (see Transformer photo) before being routed via underground cable to WFEC's Washita Switch Station near Anadarko, OK.

The Blue Canyon control center allows on-site WFEC engineers to monitor each turbine, collect power, weather, and other data (see Antenna photo), and gauge total power capacity. Wind power, although environmentally clean and abundant, is inherently unpredictable in that wind speed may be weak at times of maximum energy demand and vice-versa. WFEC engineers work to anticipate times of maximum power demand and adjust distribution accordingly. This was a truly enjoyable, informative tour on a splendid spring day at one of Oklahoma's most scenic areas. **Thanks very much to WFEC and Zilkha Corp. for a providing this tour!**



(left) Attendees at Headquarters. (center) Ground View Turbine Housing. (right) Panoramic View from Ridge.



(left) Albert Janco and WFEC Engineer within Tower. (center) Antenna for Data Transmission.
(right) Tower Base and Transformer.

Chair's Corner

Dear ASME-Central Oklahoma Section Members:

Welcome back! Summer is over and a new, exciting year for ASME is upon us. We are in the process of planning an interesting slate of programs for the year and we need your input & support in order to bring YOU, our members, the topics that are of interest to YOU. If YOU have any ideas/suggestions that YOU wish to share about program topics, meeting locations, facility tours, etc., then please inform one of our executive committee members.

I appreciate this opportunity to welcome everyone to our ASME Section and encourage your participation in our Section activities. We have approx. 400 members in the Central Oklahoma Section and yet, only 5-10% regularly attend our monthly activities. On behalf of our executive committee members, we look forward to serving YOU, our membership, to make this a very successful year with your participation and involvement in our Section activities.

Again, Welcome back! Hope to see YOU at our tour of the Pro-Fab, Inc. facility in Oklahoma City on Thursday, August 26th.

Ed Reynolds -- Chair

ASME to Celebrate 125th Anniversary this Coming Year!

ASME will mark their 125th Anniversary in 2005. Local ASME Sections will therefore be taking major roles in engineering activities this year. For example, ASME is the host society for Engineering Week, 2005 to be held in February.

You may view ASME's 2005 video introduction to the launching of the new anniversary logo at <http://www.asme.org/anniversary/events17Nov03.shtml>. This video highlights the history of ASME and the vision of its Continuity and Change program.

The 125th anniversary of ASME provides an opportunity to showcase the contributions of engineers in improving the general quality of life. ASME's Anniversary Steering Committee invites all to participate in the celebration, as events and activities are planned for 2005. See <http://www.asme.org/anniversary/events.shtml> for a list of events and <http://www.asme.org/anniversary/involved.shtml> for ideas on how you can get involved.

2003-2004 PDH Certificates Available for Pick-Up

If you have not yet received your PDH (Professional Development Hour) certificate from last year, they will be available at our August Section meeting. **Professional Engineers Alert:** Keep in mind that continuing education is a requirement for continued PE registration. Many of our ASME-COS meetings qualify for PDH awards. **Please attend our monthly Section meetings and earning your PDHs with us!**

"Getting to Know You" Column

Last year we initiated a "Getting to Know You" column to feature Central Oklahoma Section members. This feature allows us a chance to introduce our membership and highlight their unique backgrounds and skills. **You can help here: please nominate members for inclusion here.** Together with the nominee we will gather the necessary information and construct the column. Contact me, Curtis Vickery, at vickeryc1@asme.org.

Future ASME-Central Oklahoma Section and Other Events

Date	Location	Program Topic and Speaker
August 26, 2004 (Thursday)	Pro-Fab, Inc. 910 N. Morgan Rd., OKC	TOUR: Pro-Fab, Inc. Plant
Sept. 23, 2004 (Thursday)	TBA	Sorry – More Info Next Month!
October 28, 2004 (Thursday)	TBA	Sorry – More Info Next Month!
October 29-30, 2004 (Friday, Saturday)	See http://www.pels.state.ok.us for location information	FE (Fundamentals of Engineering) and PE (Professional Engineers) Exams

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

<http://www.asme.org/Sections/CentralOK>

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

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

**The American Society of
Mechanical Engineers
OKLAHOMA ENGINEERING CENTER
201 NORTHEAST 27TH
OKLAHOMA CITY, OKLAHOMA 73105**

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