The Academy of Mechanical and Aerospace Engineers held its 17th Annual Induction Dinner on Thursday, October 11, 2012 in the Missouri S&T Havener Center. The theme of the event was “Road-trip” complete with 50’s/60’s diner decor and a roadside picnic stop. The Academy inducted five new members: Matthew Baebler, Steven Bass, Bryan Cupples, Randy Frank, and Christopher Keene.

Matthew Baebler graduated from UMR with his BS in Mechanical Engineering in 1979. After graduation, Matt began his career in Chicago with Standard Oil of Indiana/Amoco, and for 18 years served in various engineering, maintenance, and operational positions. In 1998, Matt was Operations Manager at Amoco’s Salt Lake City Refinery when Amoco merged with BP. For the next two years, Matt was based in BP’s London, England corporate office, providing refining operation support. In 2001, Matt began working with Tesoro as a Tech Manager. Now he is the Director of Energy and Green House Gas working from Tesoro’s corporate headquarters in San Antonio.

Steven Bass received his BS in Aerospace Engineering from UMR in 1987 and then pursued a MS of Aerospace Engineering at Georgia Institute of Technology. Upon graduating from Georgia Tech, Steve began his career with Boeing at their helicopter plant in Mesa, AZ and was later transferred to St. Louis in 2002. During his career Steve has held a variety of positions of increasing responsibility in Engineering and Program Management. Currently, Steve serves as the Director of Boeing’s Advanced Global Strike organization within their Phantom Works research and development organization.

After graduating from UMR with a BS in Aerospace in 1986, Bryan Cupples began his career with Bell Helicopter, serving in various engineering, operations, and program management positions overseeing the development of numerous commercial and military products. Currently, Bryan is the Director of Advanced Quality Systems for Bell Helicopter Textron, located in Fort Worth, TX.

Upon graduating from UMR, Randy Frank (ME ’91) began his career with Ford Motor Company in the Ford College Graduate Program (FCG). After the FCG Program, Randy attended the University of Michigan on the Ford Fellowship program to obtain a Masters Degree in Engineering Management. He developed through many positions in Body Engineering and CAE, becoming the Global Front End and Underbody/CAE Manager for Ford Product Development - Body Exteriors and Stamping Engineering.

Christopher Keene (ME ’88) is currently President & CEO, Rangeland Energy, a company he founded in 2009 to develop, own and operate crude oil assets in North Dakota’s Bakken shale formation. Previously, he has held executive and leadership positions for Sunoco Logistics Partners, Unocal Corporation, El Paso/Tenneco Corporation and Panhandle Eastern Corporation. Currently, Steve serves as the Director of Boeing’s Advanced Global Strike organization within their Phantom Works research and development organization.

During the induction dinner on October 11th, Christopher Thomason (ME ’85) was inducted as the new AMAE President for 2012-2013 by Randall Wood. Chris began his career with General Motors in 1985 and has held many positions of increasing responsibility within Product Engineering. Throughout his career, he has had the opportunity to direct Product Engineering for several new vehicle programs including the Saturn VUE and Pontiac Solstice. Chris is currently the Vehicle Chief Engineer for GM’s Global Product Development. Thomason holds a U.S. patent for an automotive bumper system. He is also the functional recruiting lead for product engineering on the GM University Relations Team for Missouri S&T.
Ten of the eleven Academy Scholarship winners for the 2012-2013 Academic Year were recognized at the annual Induction dinner on October 11, 2012 by Patrick Davidson, Chairman of the Academy’s Scholarship Committee. One awardee is on co-op and could not attend the Dinner.

Two students received special awards. Andrew Sharp, received the Past President’s Scholarship award. Andrew is a senior in the mechanical engineering program. He was a national semi-finalist in the Chemistry Olympiad. He is currently working for Sandia National Laboratories. He plans to pursue a masters degree after graduation. He would like to work in research and development in the aerospace industry or for a national lab.

Margaret Eimer received the McGovern Scholarship award. Margaret is a junior, majoring in Mechanical Engineering. She interned at Doe Run in Herculaneum, MO this past summer and has worked for the Alumni Association for the past two years. She is active with ASME and the Newman Center where she served as service chair and currently as treasurer. She would like to work for a company where she can get away from her desk and work on a variety of projects.

In addition to the scholarship awards, the Academy of Mechanical and Aerospace Engineers presented two graduate teaching awards at the induction dinner.

These two awards were presented to:

Hui He, from Chenzhou, Hunan, China, will graduate with a PhD in Mechanical Engineering in December 2015. She is a graduate of Sichuan University. Among honors are a fellowship awarded at 2012 International Symposium on Flexible Automation Conference. Her interests include badminton, swimming, and fishing. She enjoys meeting people from other countries and cultures.

Ali Heydari, from Tehran-IRAN, is a PhD candidate in mechanical engineering and will receive his degree next spring. He received his BS and MS degrees from Sharif University of Technology in Tehran. He was the best paper runnerup at the 2011 AIAA Guidance, Navigation & Control Conference and in 2009 the Iranian Aerospace Society awarded him the outstanding masters thesis. His outside interests are swimming, music, politics, and most importantly raising his son Daniel.

A Day of Shopping and Wine Tasting for the Spouses

The annual Academy Spouse and Guest Event was held on Friday, October 12th. To start the day off, the group of 15 guests opted to either watch the student design team presentations or take a tour of the Missouri S&T campus. Shortly before 10 AM, they headed toward Cuba, Missouri on an antique shopping roadtrip. The guests then had a lovely luncheon at a local restaurant, Frisco’s Pub and Grill, trackside right off of Historic Route 66. After lunch, the trip headed toward St. James Winery for a tour of the facility and wine tasting.

The Spouse/Guest Event is a time to share and visit with other spouses that are only seen once a year. Though it was a drizzly chilly fall day in the Ozarks, everyone enjoyed themselves and had a great day!
After 17 years at Missouri S&T, Greg Harris retired and during the induction dinner on October 11th, he was honored for his work with the Department of Mechanical and Aerospace Engineering. As executive director of development, Greg retires from Missouri S&T after helping establish the Academy of Mechanical and Aerospace Engineers in 1995 and making it a sustainable partner. Greg also managed the development efforts for the Toomey Hall campaign and worked individually with the majority of the donors who made the $29 million project possible.

During his tenure, Harris also led four other campaigns at S&T: Bullman chairback seats, KMST digital transmitter, the first-ever faculty/staff campaign, and Bertelsmeyer Hall (the new ChE building will open in 2014).

Transformation of the MAE Instructional Laboratories

Being made possible by MAE Alumni, Jon (ME ’73) and Barbara Jansky and Rob (ME ’74) and Kathy Williams, the Department of Mechanical and Aerospace Engineering has initiated development of a new instructional lab focused on teaching the principles of internal fluid flow, pump performance, measurement of fluid flow as well as the fundamentals of control systems as applied to flow control. The fluid dynamics laboratory is the first in a series of instructional laboratories to be redesigned and integrated into the curriculum. The facility is estimated to see more than 800 students per year.

The department is on a mission to not only repair instructional laboratory equipment but to transform the laboratory experience for students. By creating experiment stations that can be used throughout a student’s curriculum, this serves three purposes: demonstrating fundamental engineering principles, teaching the fundamentals of engineering instrumentation and training the correct approaches to engineering experiment design. Each experimental station will be encountered by a student multiple times throughout their education, each time learning a new concept or principle. Besides making the facility more cost effective, the students also become familiar enough with the facility to be able to design and conduct their own experiments at the end of their program.

Entering a new era of public funding, the quality of engineering education at Missouri S&T now hinges on the generosity of our alumni, friends and other interested constituencies. With the generous gifts by the Jansky and Williams families to fund the first instructional lab, the department is actively seeking alumni and corporate support to transform the remaining labs to better educate the next generation of engineering students. With the ability to “experiment across the curriculum,” students will have the opportunity to more fully encounter the engineering principles taught in the classroom.

Senior Design Showcase

The Mechanical and Aerospace Engineering Design Showcase and Luncheon is scheduled for Friday, December 14, 2012, from 9:00 am to 3:00 pm at the Havener Center. Please mark your calendars!

The capstone senior design class project teams will make their final presentations to an audience of students and their guests, project sponsors, distinguished alumni, and academic staff. Please join us on this special occasion and enjoy the culmination of their creativity, team effort, and hard work.

Please let Kimber Crull know if you are able to join us, and if you will be bringing any guests.

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