



The Basic Facts

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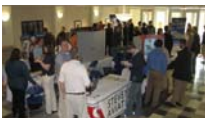
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Aerospace Career Fair

The Science of Success

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The first annual Aerospace Career Fair took place in the Business & Aerospace Building. Student members of FAE, Future Airport Executives, with the guidance of faculty mentor, **Daniel Prather**, organized all aspects of the fair including invitations, logistics, advertising and working the day of the event. Fifteen organizations attended the fair with approximately 30 representatives including five MTSU alumni. Employers included Southwest Airlines; American Airlines; Pinnacle Airlines; Aircraft Owners and Pilots Association (AOPA); and Mesa Air Group. Positions available spanned the industry and included opportunities for all Aerospace concentrations.



Recruiters were ready with information and goodies promptly at 8:00 a.m. Many students took advantage of the early start time to make contact with on site recruiters. Pinnacle Airlines held interviews in the afternoon, resulting in five ProPilot offers. Employers expressed excitement with student turnout, professionalism and preparedness. When employers were surveyed, recruiter comments included, "We are encouraged by the attendance today. Keep up the hard work." Also, "Everyone including students and faculty/staff were friendly, polite, and a pleasure to meet. Thanks for including us." Daniel Prather said of the fair, "This event is a great example of what motivated students can accomplish with faculty sup-

port. Participating companies were surveyed about their experience and the vast majority were extremely satisfied with all aspects of the Fair. Many thanks to the members of the Future Airport Executives." Not only was the First Annual Aerospace Career Fair a success, the contacts made within the industry will continue to benefit the program. For example, PB Aviation is in the process of establishing an internship program with MTSU. Planning is already underway by FAE members to improve on next year's Fair, most likely to be held in spring, 2008. "Bigger and better is the theme!" says Prather. Any students unable to attend should contact Nicole Green.



New Observatory Plaza

New Observatory Plaza

Several years ago Astronomy faculty member, **Eric Klumpe**, had a vision to create a stone-hinge type naked-eye observatory plaza where students of all ages could experience the solar system as the ancient astronomers did. The original vision was for a new astronomy building in the center of the plaza. Funding did not support this vision. On April 12, 2006, Middle Tennessee State University broke ground for a new State-of-the-Art astronomy building connected to the

naked-eye observatory plaza. Funding for both parts of this multi-year project were supported by NASA (with encouragement from Congressman Gordan and President McPhee).

CBAS Scholar's Week

On April 3, CBAS departments hosted a hands-on learning fair as part of Scholar's Week Activities. Organized by **Andrienne Friedli** (Chemistry) and **Ginger Rowell** (Math) the displays included activities from all 10

CBAS departments including popular liquid nitrogen formula for creating homemade ice cream (**Gary White**, Chemistry) moonbuggy rides from ETIS, milk tooting by ABAS, creative math puzzles (**Nancy McCormick**, Math), and robot controls (**Ken Li**, CSCI). CBAS students and faculty also presented the majority of posters at the poster seminars.



It is an accurate statement when we say that the Aerospace Department at MTSU prides itself on being on the cutting edge of Aerospace research. The Aerospace Department is continuing this trend with a new partnership with the Aircraft Owner's and Pilot's Association (AOPA). AOPA, which is the largest pilot association in the world, has awarded a \$169,000 grant to the Aerospace Department. The project is another first in Aerospace research. It is entitled, "Assessment and Implementation of Microsoft Flight Simulator X as a Complement for Private Pilot Training in the General



Aviation Population." An evaluation will be conducted to determine the effectiveness of commercially available flight simulation software when used in conjunction with introductory flight training with pilots across the United States. "This is a first for us at AOPA as we have never partnered with an academic institution on a major research project before," stated David Wright, vice president of Operations of AOPA's Air

Safety Foundation. The Foundation, founded in 1950, is dedicated to one goal which is making flying easier and safer for the general aviation population. "This is really a big deal," said **Wayne Dornan**, principal investigator on the grant. "We worked really hard to get this grant as we competed with the top aviation programs in the country." **Nate Callender**, **Paul Craig**, **Wendy Beckman**, and **Steve Gossett** are co-principal Investigators on the grant. **Paul Craig** and **Wayne Dornan** will travel to Frederick, Maryland on May 4 to make a presentation to the "Board of Visitors" at AOPA headquarters.



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The Basic B.E.S.T. (Boastful Educators Sharing Talents)

All departments are invited to submit items for this column

Aerospace

The Third Edition of **Paul A. Craig's** *Multiengine Flying* book has been translated into Chinese by the publisher, McGraw-Hill. Craig, a Professor of Aerospace and Department Chair, has had ten books published by McGraw-Hill, this being the second translated for the Chinese market.



was funded by the Tennessee Higher Education Commission. With assistance from CEE staff and additional MTSU faculty (**Amy Phelps**, Chemistry) workshops will be completed in September.

Chemistry

Judith Iriarte-Gross and **Karen Claud** presented a poster, "Girls Raised in Tennessee Sciences (GRITS):



Planning and Preparing the Future STEM Workforce," at the spring national meeting of the American Chemical Society in Chicago, IL on March 25. **Judith Iriarte-Gross** was named program chair of the national Women Chemists Committee at the same meeting. **Gary Wulfsberg** gave three poster presentations at the 233rd National Meeting of the American Chemical Society in Chicago, IL. The first poster was entitled, "Will Large Lecture Halls 'Click' in a New Science Building?" It was presented in the Division of Chemical Education and the "Sci-Mix" poster sessions, with the "Sci-Mix" session involving the best posters from all poster sessions. The last poster presentation entitled, "³⁵Cl Nuclear Quadrupole Resonance (NQR) Studies of Chlorinated Weakly Coordinating Anions" was submitted in the Division of Inorganic Chemistry poster session.

The Chemistry Club, along with co-sponsor **Gary White**, attended the student affiliates poster session at the ACS meeting in Chicago. The Club received an Honorable Mention Award from the American Chemical Society for their activities during the 2005/2006 academic year. The Chemistry Club also attended the Annual Golden Goggles Lecture where Dr. Nicola Pohl from Iowa State University received an award from club president, Ryan Parsons. Dr. Pohl gave a lecture entitled "Glycomics and Automated Solution-Phase Oligosaccharide."

Engineering Technology

David Gore presented a paper entitled, "Teaching & Technology Innovations

Improve Learning in Problems & Team-Based Course," at the 18th International Conference on Teaching and Learning.

"We are proud of the accomplishments of our students in the ETIS department,"

shared professor **Ahad Nasab**. MTSU students placed first in the Space Elevator competition in Albuquerque, NM held in conjunction with the 2007 Space Exploration Conference. The students brought home the Daniel Flour traveling trophy back to MTSU.

The Productivity Strategies class, taught by **David Gore**, attended a Society of Manufacturing Engineering tour of Stinger Medical, Inc. Stinger Medical was the recipient of the Lean Manufacturing award from Rutherford County last year. The 17 students attending took advantage of the networking opportunities with the SME Nashville Chapter members during dinner following the tour.

Mathematical Sciences

Diane Miller delivered a research report entitled, "Writing to Learn Mathematics: According to Research, the Gain Outweighs the Pain," to an audience at the annual meeting of the National Council of Teachers of Mathematics.

Chance Phelps, Actuarial Student Association president, has received an excellent job offer from Blue Cross and Blue Shield of Tennessee at Chattanooga, and **Dipti Natha** has received an offer from CIGNA in Hartford, CT, Actuary. **Zol Hooper** will be attending the University of Waterloo in the Ph.D. study in Actuarial Science.

Jason Johnson attended the NCTM Annual Conference to discuss future collaboration with colleagues interested in social justice pedagogy in the teaching of mathematics.

Micheale Chappell presented "Writing for MCTM Journals: Tips and Discussion with Editorial Panel Members."

Yuri Melnikov presented "Recent Advances in the Green's Function Method," at the Department of Mathematics at the University of Southern Mississippi.

Jennifer Dooley was a conference leader, chaired the local arrangements, and gave

the welcoming remarks to the general session of the National Association for Developmental Education in Nashville, TN.

Anhua Lin and **Rong Luo** attended the second annual Computational Systems Biology Symposium in Athens, GA.

Nursing

N. Reyome and **Karen Ward** published "Self-Reported History of Childhood Maltreatment and Codependency in Undergraduate Nursing Students" in the *Journal of Emotional Abuse*, 7 (1), 37-50 [2007].

The MTSU School of Nursing Student Nurses' Association received three awards at the "Student Organization Award's Reception" as follows: Community Service, Co-Sponsorship, and Organization of the Year.

Physics & Astronomy

Victor Montemayor presented a talk entitled, "Preparing, Happening, and Succeeding: A Career as a University Professor," at the 8th Annual Career Day at Portland High School.

Physics & Astronomy hosted regional meetings for the Society of Physics Students (SPS) and the Tennessee Section of the American Association of Physics Teachers (TAAAPT/AAPT). **Eric Klumpe** presented a history of the development of the Uranidrome (Naked-Eye Observatory), followed by a tour of the facility. Students and physics teachers attended parallel sessions that included fourteen teacher talks, fourteen student research poster presentations, and seven talks and roundtable discussions for students regarding research opportunities and the transition to graduate school. The meeting and program was planned and managed by **Victor Montemayor**, serving as president of the TAAAPT. Presentations by MTSU Physics & Astronomy faculty included: **William Robertson**, **Pavlina Pike**, **Victor Montemayor**, **Daniel Erenso**, **Charles Higgins**, and **Martha Weller**.

CBAS

TLSAMP hosted a two-day tour of important landmarks in Birmingham and Huntsville, Alabama.

Twenty-five students from the program along with chaperones, **Tom Cheatham**, **Mimi Thomas**, **Sandra Johnson** and **Terry Quinn**, visited the 16th Street Baptist Church and the National Civil Rights Institute. They also visited the Space & Rocket Center in Huntsville.

