



Engineering Makes a World of Difference vol. 1 No. 3

University of South Alabama
College of Engineering



**Spotlight on the 50th Anniversary of the
College of Engineering**

This year, the College of Engineering celebrated 50 years of Engineering at USA! The College recognized many individuals and companies that have supported the College as well as made an impact on the success of our students, faculty, and our programs. Thank you to all of our sponsors and to all those that attended this memorable event. For the full press release, please select "50th Anniversary of the College of Engineering - Honoring a World of Difference."



**The William B. Burnsed
Jr. Department of Mechanical Engineering**

William B. "Bill" Burnsed Jr., a 1972 graduate of the University of South Alabama College of Engineering, has donated \$1.5 million to the college's department of mechanical engineering, which has been named the William B. Burnsed Jr. Department of Mechanical Engineering. For the full article, please select "USA College of Engineering Receives \$1.5 Million Gift."



The University of South Alabama National Alumni Association honored four alumni and a Mobile businessman for outstanding accomplishments.

They are, from left, Sr. Marilyn Joyce Aiello, O.P., M.D.; Ralph A. Hargrove; Caleb Crosby, '03; Dr. Edward A. Panacek, COM '81; and Tanya Fratto Blair, '83.

Electrical Alum, Tanya Fratto Blair Honored as Distinguished Alumni

The University of South Alabama National Alumni Association honored four alumni and a Mobile businessman for their outstanding accomplishments during the 15th annual Distinguished Alumni and Service Awards gala, March 14th at USA's Mitchell Center. For the full article, please select "Five Honored by USA National Alumni Association."

2019 Engineering Alumni Society Officers

Thank you to our previous Engineering Alumni Society Officers, President, Erik Herrboldt, Vice President, Joseph Asarisi, Secretary, Sarah Naylor, and Treasurer, Claudia Bjork. These past few years have been great thanks to all of your efforts and support!

Join us in welcoming the 2019 Engineering Alumni Society Officers:

President: Sarah Naylor
Vice President: Jaclyn Jadwin
Secretary: Brittany McMillan

Members at Large: Marquez Pickens and Justin Flint

Congratulations to Educator of the Year!

Dr. Nicholas Sylvester, Professor in the Chemical & Biomolecular Engineering Department was recognized this Spring as Educator of the Year at the annual MACE Banquet.



Congratulations to Teacher of the Year!

Dr. Brooks Rabideau, Assistant
Professor in the Chemical &
Biomolecular Engineering
Department was nominated for
"Teacher for the Year" for 2018-2019.



Congratulations to Researcher of the Year!

Dr. Edmund Spencer, Associate Professor in
the Electrical & Computer Engineering
Department was nominated for "Researcher of
the Year" for 2018-2019.



Welcome Dr. John Usher, Dean of the College of Engineering

Dr. John M. Usher has been named dean
of the College of Engineering at the
University of South Alabama. Usher
previously served as professor and head
of the department of industrial and
systems engineering at Mississippi State
University. He was selected following a
nationwide search and has began his USA
career on August 1. For the full article, see
"Dr. John Usher Named USA College of
Engineering Dean."



Research in the News

Dr. Glover (Chemical & Biomolecular engineering faculty), Dr. Russ (Electrical & Computer engineering faculty) and their undergraduate students are working on two separate projects for NASA. Russ's project focuses on automation and power management of an unmanned biological laboratory for the gateway, with a special interest in energy-efficient computing and software design. The lab would function with minimal support from a crew or mission control on Earth. For the full article, please select "South Supporting NASA's Deep Space Ambitions."



In Spring 2019, the National Science Foundation expanded their CubeSat program to include the Directorates for Engineering, Computer & Information Science & Engineering in addition to Geosciences. In a new approach called the NSF Ideas Lab, a group of 28 interdisciplinary researchers met for a week to share ideas and develop forward-looking CubeSat mission concepts. Dr. Saeed I. Latif, an Assistant Professor of the Department of Electrical and Computer Engineering at the University of South Alabama was invited as one of the researchers. The outcome of the meeting was four mission concepts, including Space Weather Atmospheric Reconfigurable Multiscale Experiment (SWARM-EX) Cubesat, which were selected to submit full proposals, two of which will be funded with \$4M grant to develop a swarm of CubeSat to conduct atmospheric science.

Dr. Latif is collaborating with researchers at University of Colorado at Boulder, Stanford University, Georgia Institute of Technology and two other institutions to develop the full proposal. Dr. Latif and one of his graduate students are spending this summer at the University of California, Irvine, to conduct research on the use of a metasurface, an artificial sheet material with sub-wavelength thickness inside which electromagnetic fields are controlled by polarization and conduction currents, to enhance the performance of future 5G cell phone antennas. This research is funded by a grant from NSF.

They allowed all to freely think, generate ideas, build teams by mixing with one another, playing games, going for a walks etc... Here they were building with legos.



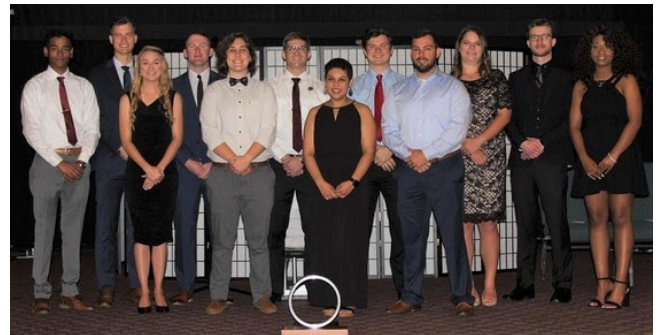
Dr. Anthony Bessios, an Assistant Professor of the Department of Electrical and Computer Engineering Department, joined the Air Force Research Lab at the Wright-Patterson Air Force Base, as a Summer Faculty Fellow. He is with the Sensors Directorate and is conducting research on radar signal processing. The Wright-Patterson AFB has a long history of flight tests spanning from the Wright Brothers into the Space Age. The Air Force Research Laboratory (AFRL) is a scientific research organization dedicated to leading the discovery, development, and integration of affordable aerospace war-fighting technologies, planning and executing the Air Force science and technology program, and providing war-fighting capabilities to United States air, space, and cyberspace forces.

\$17 Million in DOE Funding for 9 Research Projects in EPSCoR States

Congratulations to Dr. Kevin West, Professor of the Department of Chemical & Biomolecular Engineering and Dr. James Davis, Professor of the Chemistry Department for receiving the DOE/EPSCoR Research Initiation grant associated with the development of ionic liquids for novel solvent systems. For the full article and list of projects award, please select "Department of Energy Announces \$17 Million in Funding."

Congratulations to the Class of 2019

Congratulations to the Class of 2019! We had a great group of students walk through our doors, some heading to graduate schools across the country and some entering industry. We wish them all the best of luck!



Order of the Engineer

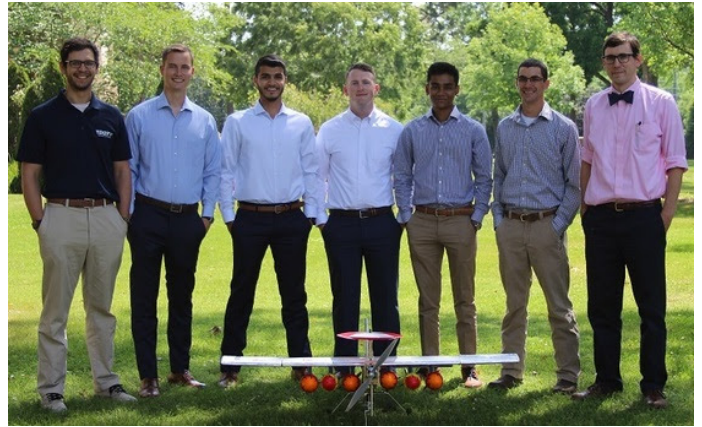
Induction into the Order of the Engineer is an exciting and honorable ceremony for our most recent grads. However, the College of Engineering also inducted University Trustee and alum, Lenus Perkins into the Order this year. We were honored he was able to participate.

We invite other engineers in our community, including but not limited to South Alabama alums, to join us for a future induction ceremony. Just send an email to jsteadman@southalabama.edu indicating your interest and we will make sure you are included and receive the Engineer's Ring.



Design/Build/Fly Competition

The annual Design, Build, Fly competition this past Spring, took place in Tucson, Arizona with the forecast weather at 18 mph winds and 95 degrees. USA had five seniors represent this year at the competition and after months of working on their plane, the Engineering Jags placed 18 out of 104 international teams. This year was different though during the designing process. The seniors took their challenge and divided it up into smaller pieces. They worked on wing design, radome, attack stores, and take off length, creating prototypes to test each individual component. The final assembled aircraft was amazing and ensured the best outcome yet for any DBF team at USA.



ASCE Rockin' in the Smokies!

USA-ASCE returned from the 2019 ASCE Southeastern Regional Conference hosted by the University of Tennessee, in Knoxville. Over the course of the 3 day conference South competed in 17 competitions against 26 universities including 3 international schools. South took home 4 awards (3 first place, and one 2nd place), the most ever in South's history of attending this particular conference.



Visit to Stennis Space Center

A group of USA Engineering students went to the Stennis Space Center in the Spring and witnessed the RS-25 engine tests. They had the opportunity to tour the Aerojet Rocketdync's Engine Assembly Facility, visited NASA's Propulsion Test Complex, and experienced a briefing at the Base of the B Test Stand. These students also participated in a drive through tour of the E Complex, ending the day with the viewing of the RS-25 Engine Test. We hope to take more groups to the Stennis Space Center in the future.



Tau Beta Pi in the News

USA's engineering honor society, Tau Beta Pi, received honorable mention for the R.C. Matthews Outstanding Chapter Award at the national convention last fall. Since 2012, the USA chapter has either received the top award (2015 and 2017) or been named honorable mention.



Five of the members were awarded national scholarships for this academic year. They are: Delane Caldwell, Civil Engineering, Spanish Fort; Nick Herring, Electrical Engineering, Vinegar Bend; Savannah Howie, Civil Engineering, McHenry IL; Alysa San Fillipo, Electrical Engineering, Hazel Green; Seth Young, Computer Engineering, Bay Minette.



Thank you Drs. John and Sally Steadman for your 16 years of service to the College of Engineering!

Upcoming Events

Friday, Sept. 6th: Welcome to the Jungle 11:00am-2:00pm

Saturday, Sept. 7th: USA vs. Jackson State Football Game - Tailgate hosted by AM/NS Calvert will begin at 4:00 PM with kick off at 6:00 PM

Saturday, Sept. 14th: USA vs. Memphis Football Game - Tailgate co-hosted by Hargrove & Phillips 66 will begin at 11:30 PM with kick off at 2:30 PM

Thursday, Oct. 3rd: USA vs. Georgia Southern Football Game - Tailgate hosted by Airbus will begin at 4:30 PM with kick off at 6:30 PM

Saturday, Oct. 26th: USA vs. Appalachian State Football Game - Tailgate hosted by Thompson Engineering - Time TBA

Saturday, Nov. 16th: USA vs. Louisiana Football Game - Tailgate hosted by ME Alum, Bill Burnsed - Time TBA

Friday, Nov. 29th: USA vs. Arkansas State Football Game - Tailgate hosted by Orion Engineering - TBD -Time TBA