

The Ascent

Spring 2025

INSIDE THE ISSUE

- Panthers on the Rise..... 2
- Club Spotlight: Drone Club..... 3
- A+ Accolades 4
- And the Award Goes To..... 5
- Are Autonomous Systems Really Unmanned? 6
- Happenings 8
- Alumni Spotlight: Leanni Tibbetts..... 10
- Featured Photo 12



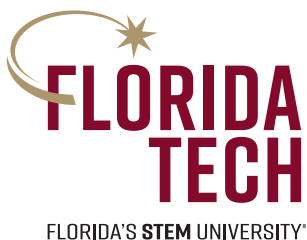
College of Aeronautics at Florida Institute of Technology



@floridatechaeronautics



coa.fit.edu



Message From Dean John Deaton

Greetings,

Welcome to the spring 2025 semester! Fall was a successful semester with another year of growth in College of Aeronautics (COA) student enrollment, mostly in our flight program. I'd like to highlight a few of our many accomplishments since our last newsletter issue in spring 2024.

First, Florida Tech Aviation and the COA are now one entity. While we have always been closely linked, this move establishes a more integrated structure, resulting in more efficient and streamlined flight training and academic program offerings under me as dean.



In our last issue, we mentioned our acquisition of four new Piper 100i aircraft, with an additional four on the way. I'm happy to report that we now have all eight new aircraft in our inventory. To support the new acquisitions, the Buehler Foundation bestowed upon us a \$1 million award to purchase additional flight simulators.

While a growing program and fleet come with certain challenges related to hangar space and maintenance personnel availability, we are working toward innovative solutions that we will share as details become available. We anticipate another large group of flight students this fall. We are preparing by instituting changes that should increase the efficiency with which we service flight students while maintaining our exemplary safety record.

As you'll read in the "And The Award Goes To ..." section, our faculty and students continue to receive awards from various illustrious organizations, and the "A+ Accolades" section highlights our programs that continue to be recognized in several forums, such as *Simple Flying* and *TechGuide*.

Finally, we are pleased to renew the popular Hangar Networking Event, at which alumni can meet with students in a casual venue. This year, the event is part of Aeronautics Week, which will bring together students, alumni and industry leaders for a dynamic week of learning, networking and celebrating aviation April 2–5. Events include a Safety Standdown with presentations on pilot mental health, an alumni panel, our biannual advisory board meeting and more. We hope you all will be able to join us and make it a memorable time.

I want to personally thank our COA Advisory Board, the University Marketing and Advancement teams and COA faculty, staff and alumni for their support and for helping make Florida Tech's COA one of the most recognized programs in the nation as we grow and increase our presence in both academic and flight training arenas.

Respectfully,
John Deaton, Ph.D.
Dean and Professor, College of Aeronautics

Panthers on the Rise

1 PAUL CECALA '85 A.S., '85

Paul Cecala '85 A.S., '85, published his second book, *Take Control of Your Job Search: A Workbook of All the Tools Needed for a Successful Job Hunt*, which hit the Top 10 Best Sellers list in its category for three weeks on Amazon.

2 UNITED ALUMNI

Neal Sorenson '86 A.S., John Champion '87 A.S., Brian Sargent '87 A.S., '88, Marcus Buchanan '88, Martin Gerhard '88 A.S., '90, Mark Homan '88 A.S., '90, Darren Patterson '93 and Dan Sullivan '93 reconnected at the United Airlines Annual Standards and Training Meeting in October 2024 in Denver.

3 JUSTIN MEYER '99

Justin Meyer '99 was awarded the Ted Bushelman Legacy Award for Creativity and Excellence from Airports Council International–North America and his North American airport industry colleagues.

4 STEVE BELTON '10, 5 LAURA CANHAM '08 AND 6 DARREN L'APPANNA '11, '13 MSA

Steve Belton '10, Laura Canham '08 and Darren L'Appanna '11, '13 MSA, were recognized as 2024 *Airport Business* Top 40 Under 40 aviation professionals. Belton is the airport operations superintendent at Philadelphia International Airport, where he leads the Airport Operations Center. Canham, a licensed pilot and airport planner, is McFarland Johnson's New England aviation planning lead, offering a unique user-focused approach to addressing complex planning challenges. L'Appanna serves as the manager of air service and business development at Orlando International Airport, where he plays a pivotal role in driving significant local economic growth.

7 GAËL LE BRIS '11 MSA AND 8 LOUP-GIANG NGUYEN '19 MSA

Gaël Le Bris '11 MSA and Loup-Giang Nguyen '19 MSA, who both work at WSP, have published *The Future of Airports: A Vision of 2040 and 2070*. The book, the result of a six-year research project that has involved over 100 aviation experts and leaders around the world, explores long-term challenges and opportunities in aviation along 11 strategic topics.

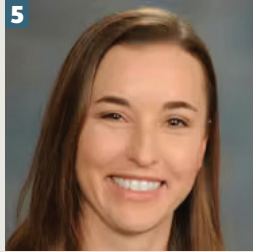
9 KODEY BOGART '22 MSA

Kodey Bogart '22 MSA has expanded her remarkable résumé—which already features roles such as wife, mother, combat veteran, entrepreneur and pilot—by becoming an author. Through her *Helo Girls* book series, she aims to inspire children's curiosity and showcase the exciting and diverse opportunities available in aviation. Currently pursuing a doctorate in aviation, Bogart also teaches as an adjunct instructor at Florida Tech. Additionally, she is CEO of KB Solutions, an aviation consulting firm specializing in the development, implementation and training of safety management systems.

10 ISABELLA HEAD

In summer 2024, COA student Isabella Head gained hands-on experience in aviation operations management during her internship at Gulfport-Biloxi International Airport in Mississippi. The program was tailored to expand her understanding of the airport's operational environment, providing her with a variety of responsibilities in aviation operations. During her internship, she explored essential aspects of airport management, including logistics, safety, engineering and the daily interactions with tenants, passengers and airport administration.





Club Spotlight



Flying High: The Revitalization of Florida Tech's Drone Club

With the rapid rise of drone technology and its influence on industries from entertainment to engineering, Florida Tech's Drone Club has become a hub of innovation and technological advancement.

Established to foster a passion for unmanned aerial systems, the Drone Club has evolved significantly over the years. Initially facing challenges such as campus drone restrictions and fluctuating member participation, the club has recently turned a corner. Eased restrictions now allow members to fly drones indoors in Skurla Hall, leading to a notable surge in engagement and activity, with the club reaching a peak of 50 to 60 members in fall 2024.

The Drone Club is divided into two groups: the design and engineering group and the professional group. Each group organizes its own events, though members can participate in both groups.

"It's about a 60-40 split between those who want to focus on design and engineering and those interested in professional videography and photography," club president Liam Pettit said.

Helping members obtain their Part 107 licenses is a significant priority for the club.

"We're trying to help students interested in obtaining their Part 107 license by assisting them with the process. Once they have the license, we want them to put it into practice by operating drones, practicing basic aerial maneuvers and doing photography," Pettit said.

Part 107 certification is crucial for legal commercial drone operation and opens numerous professional opportunities.

As the club grows and evolves, it will offer invaluable opportunities for Florida Tech students.

A+ Accolades



NO. 8 ONLINE AVIATION MANAGEMENT B.A.

TechGuide

TechGuide ranked Florida Tech's online Bachelor of Arts in aviation management program eighth out of 19 institutions and the highest of four Florida-based programs. The recognition emphasizes the program's commitment to academic excellence and educational opportunities.

TOP UNIVERSITY WITH PROFESSIONAL FLIGHT TRAINING

Simple Flying

Florida Tech's College of Aeronautics has been recognized by *Simple Flying* as one of the top universities offering professional flight training. This honor highlights the program's dedication to providing high-quality education and excellent opportunities for students in the aviation field.

TOP 30 FLIGHT TEAM

NIFA National Championship



Florida Tech's Flight Team competed in the National Intercollegiate Flying Association (NIFA) National Championship, earning a spot among the top 30 teams in the nation. This marked the team's first appearance at the national competition since 2018.

And the Award Goes To...

ZACHARY MILLER '24



Piedmont's NGPA Scholarship

Zachary Miller has been recognized as one of the 2023 National Gay Pilots Association Piedmont-sponsored scholarship recipients. Miller, who earned a bachelor's degree in aviation management with a minor in communication, is pursuing a career in airline operations and planning, combining his interests in aviation and customer service on a global scale. His goal is to contribute to the creation of policies and proposals that promote inclusivity and ensure that all individuals feel welcomed and valued.

MIKE SPLITT



HFES Best Paper Award

Professor Michael Splitt co-authored a paper that received the Best Paper Award from the aerospace systems technical group at the Human Factors and Ergonomics Society's (HFES) 2024 international annual meeting, ASPIRE. The paper was a collaboration with Barrett Caldwell and Abigail (Ev) Boerwinkle of Purdue University.

Their paper, "Effects of Weather Information Observability and Uncertainty on Pilot Assessment of Weather Conditions and Decision Making," investigated to what extent general aviation pilots can estimate the current flying conditions (VFR, MFR, IFR) at a specific location based on the weather reports at neighboring sites. They found that pilots rarely provided correct estimations of flight rule conditions at targeted locations, even when increasing the density of reports at neighboring sites.

MEREDITH CARROLL '03 M.S.



Faculty Excellence Award

In recognition of Women's History Month, the Florida Tech Alumni Association hosted the 2024 WISE—Women Inspiring Success and Excellence—Awards to honor women who embody the spirit of promoting women's participation and development within the university community. The ceremony, held in the Hartley Room, recognized four outstanding recipients, including Meredith Carroll, Ph.D., who received the Faculty Excellence Award.

NTSA Modeling and Simulation Award for Education and Human Performance

On Dec. 3, 2024, Carroll was awarded the National Training and Simulation Association (NTSA) Modeling and Simulation Award for Education and Human Performance at the Interservice/Industry Training, Simulation and Education Conference (I/ITSEC). She received the award for her work researching and developing training strategies for engaging and educating underrepresented minorities (URMs) in cybersecurity. She implemented these strategies in an introductory cybersecurity curriculum for high school students that provided training to over 100 middle and high school students, increasing cybersecurity knowledge, self-efficacy, interest and, in some cases, intent to pursue cybersecurity education or careers.

MIREIA JOVER CAMPS AND JACOB WOLFE



Laura Taber Barbour Air Safety Foundation Scholarship

Mireia Jover Camps and Jacob Wolfe have been named recipients of the Laura Taber Barbour Air Safety Foundation Scholarship. The foundation awards \$2,000 scholarships to outstanding aviation school students.

JOHN DEATON



USNAEPS Capt. Paul R. Chatelier Lifetime Achievement Award

COA Dean John Deaton was honored with the U.S. Navy Aerospace Psychology Society (USNAEPS) Capt. Paul R. Chatelier Lifetime Achievement Award. The award recognizes Deaton's "pioneering contributions to aviation research, outstanding contributions as Dean of the College of Aeronautics at Florida Tech, and unwavering dedication to advancing human factors understanding."

"I am very proud and delighted to receive this award from my Navy colleagues past and present," Deaton said.

MAUREN NAMUKASA '21 M.S.



IADA Foundation Award

Maureen Namukasa earned a \$4,000 International Aircraft Dealers Association (IADA) Foundation scholarship. One of 11 scholarship recipients, Namukasa was one of the highest scoring students out of more than 120 applicants who applied for the scholarships.

Namukasa is an aviation sciences Ph.D. student and graduate research assistant in the Advancing Technology-interaction and Learning in Aviation Systems (ATLAS) Lab. She is passionate about aviation human factors, which looks at the human element in aviation and how humans interface with machines.

Feature

ARE AUTONOMOUS SYSTEMS REALLY ‘UNMANNED’?

The Unique Contribution of Humans to Human-Autonomy Teams

By Meredith Carroll '03 M.S.

As we are seeing a dramatic increase in automation, many terms like “unmanned” or “autonomous” may excite concerns that human beings are soon to be replaced by robotic counterparts who are smarter, stronger and faster.

But as a human factors researcher who studies autonomy, I have learned that nothing is really “unmanned.” Human factors is a discipline that studies the interface between a human and a machine, ensuring that the interface provides the human operator with the necessary information to understand what is going on, but also allows the human to provide input to the machine to ensure the desired goal is achieved. This interface can range from something as simple as your smartphone display to something as intricate as a ground control station that allows a human operator to monitor and control multiple autonomous drones or air taxis.

At the heart of these autonomous systems are human monitors, designers and analysts. Although the human-machine interface may not be at the forefront of operations, “unmanned” and “autonomous” systems must be designed by humans to ensure that human operators, users and stakeholders can effectively interact with, or alongside, these machines in a safe and effective manner.

In Florida Tech’s Advancing Technology-interaction and Learning in Aviation Systems (ATLAS) Lab, we have been funded by agencies to study human-autonomy teaming.

Research in this area is not focused on how an autonomous system can replace a performer but on how we can develop autonomous teammates that can bolster human capabilities while freeing up human resources to do what they do best: problem-solve, exercise judgment and improvise.

Our autonomous counterparts are superior at calculating the best route and flying or driving that route under normal conditions, but what they aren’t good at is dealing with uncertainty or improvising when they encounter something novel for which they were not designed.

Many people hear the term artificial intelligence (AI) and equate it with some sort of magic. But the truth is that AI is nothing more than a set of mathematical models trained on limited datasets, and although they can learn and adapt, they can’t improvise, make ethical judgments or inductively reason.

This is why we have self-driving cars that can complete complex obstacle courses but, on rare occasions, drive directly into the back end of a bus stopped directly in front of them. The car worked as designed, the problem was that the car encountered a situation for which it wasn’t trained.

So, the burning question is not, “How do we prevent machines from replacing humans?” The more pertinent question is, “How do we design new autonomous technology such that it leverages the incredibly unique capabilities that we, as human operators, have in order to make more effective human-machine teams?”

This is a question we at the ATLAS Lab are working diligently to help answer.

HOW DO WE DESIGN NEW AUTONOMOUS TECHNOLOGY SUCH THAT IT LEVERAGES THE INCREDIBLY UNIQUE CAPABILITIES THAT WE, AS HUMAN OPERATORS, HAVE IN ORDER TO MAKE MORE EFFECTIVE HUMAN-MACHINE TEAMS?

Meredith Carroll '03 M.S. is a professor of aviation human factors and founder and director of the Advancing Technology-interaction and Learning in Aviation Systems (ATLAS) Lab at Florida Tech. She has over 20 years of experience studying human/team performance and training in complex systems. Her current research focuses on human-autonomy teaming, interface design for emerging aviation systems and adaptive training.



Happenings

FLORIDA TECH, VISIONARY TRAINING RESOURCES PARTNER FOR CLASSROOM VR



The College of Aeronautics is partnering with Visionary Training Resources (VTR) to integrate virtual reality (VR) technology into the classroom.

A VR headset loaded with VTR's proprietary software, FlightDeckToGo®, is being introduced into the college's Advanced Aircraft Systems course, which provides students with an overview of the systems used in air

transport category aircraft, said Warren Pittorie '15, '18 M.S., '22 Ph.D., assistant professor and flight education chair.

The system, featuring a 3D rendering of a Boeing 737 NG flight deck, will allow students to utilize VR flight deck familiarization modules with the guidance of checklist and procedures training to augment traditional learning materials, such as PowerPoint slides, diagrams and videos.

Throughout the semester, students will provide feedback on the headset's usability and their opinions of how or if the VR technology strengthens their knowledge of advanced aircraft systems.

"FlightDeckToGo® by VTR will not only make our classes a more enjoyable experience, but it will better prepare our students to operate transport category aircraft that they will operate just a few years after they graduate from Florida Tech," Pittorie said.

SAMI PARTNERSHIP OFFERS HYPOXIA TRAINING



Thanks to Florida Tech's renewed partnership with the Southern Aerospace Medical Institute (SAMI), 12 College of Aeronautics students recently participated in a lab session that simulated conditions at 20,000 feet, mimicking hypoxia, a medical condition from lack of oxygen to the brain.

The pilots-in-training completed a simulated flight in these conditions and earned a certificate of training in a

high-altitude chamber. This type of hands-on training is not only very rare but highly sought-after by professional pilots.

IN MEMORIAM: KENNETH CROOKS

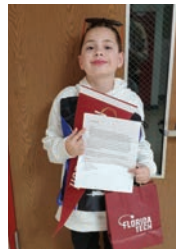


With sadness, we report the passing of Kenneth Elmer Crooks, the beloved and influential College of Aeronautics professor and administrator whose classes in aviation law and ethics—along with his caring demeanor—helped shape the lives and careers of future deans, professors and pilots over his 22 years at Florida Tech.

Crooks, a peerless pilot and retired U.S. Air Force

officer, passed away peacefully July 28, 2024, at his Melbourne home at age 92, joining his wife of 71 years, Kathleen, who passed away in December 2023 at age 93.

A PANTHER IN THE MAKING



It's never too early to start planning for the future!

Last year, the College of Aeronautics received a handwritten note from a Minnesota third-grader named Jordin, who already has his sights set on the sky—and Florida Tech.

"When I grow up, I want to be a pilot," Jordin wrote. "I looked at your school online. It looks like the perfect place for me."

The COA agrees. To encourage Jordin and his dreams, the college mailed him some Florida Tech swag, pictured here.

ALLEGiant PATHWAY PROGRAM



In March 2024, the College of Aeronautics added a new airline to its list of pathway partners: Allegiant Air.

Through Allegiant's Accelerate Pilot Pathway program, students with a private pilot certificate and an instrument rating are paired with a pilot mentor to prepare for a first officer position with the airline once they meet the minimum flight hour requirements.

This program joins a lineup of other COA pathway programs with airlines including Amerijet, United Airlines, Envoy Air, JetBlue, PSA Airlines, Endeavor Air, Frontier Airlines, Republic Airways and Spirit Airlines.

MCGEOUGH RETURNS TO COA



Distinguished leader in the aviation industry and two-time Florida Tech graduate Sean McGeough '95, '05 M.S., is back on campus—this time as an adjunct faculty member.

McGeough teaches Aviation Career Planning (AVT 2303),

allowing him to leverage his extensive industry experience to help guide the next generation of aviation professionals. He will also continue to preach the value of sustainability for those headed into the aviation industry.

"Understanding sustainability is essential for future aviation leaders as the industry adapts to global environmental standards," McGeough said. "This knowledge drives eco-friendly innovations, reduces carbon footprints and advances green technologies, ensuring aviation remains viable and responsible."

Already McGeough is leading by example: He will use his teaching salary to establish the Sean McGeough Aviation Sustainability Fund, supporting Florida Tech's mission in environmental stewardship and innovation.

"We are honored to welcome Sean McGeough back to Florida Tech," President John Nicklow said. "His expertise and dedication to the industry are invaluable, and his commitment to sustainability aligns with our vision for the future of aviation."

NASA SABBATICAL



Debbie Carstens '96 MBA spent five months on sabbatical at NASA-Kennedy Space Center gaining valuable industry experience and conducting research on two key projects:

- The In-Situ Resource Utilization (ISRU) Pilot Excavator (IPEX): a rover designed to dig up lunar soil, known as regolith, and transport it across the Moon's surface
- The Lunar Electrostatics and Dust Mitigation (LEDM) prototype: a device designed to remove dust and static from lunar spacesuits

"Witnessing the rockets and the collective dedication to safe crewed missions has been truly inspiring. I want to thank Florida Tech and NASA-KSC for allowing me this amazing opportunity," Carstens said.

Before Carstens began her sabbatical, President John Nicklow and professor Hamid Rassoul, Florida Tech's chief research officer, visited Carstens' Human Factors: Aeronautics, Safety, Sociability, Interfaces, Sustainability, and Training (HF ASSIST) Lab, where she provided a demonstration of her research, introduced her students and shared details about the grants supporting her projects.

99TH SQUADRON YOUTH GROUND SCHOOL



The 99th Squadron and the Florida Tech Alumni Association hosted the Youth Aviation Ground School commencement ceremony honoring 11 future aviators Oct. 19, 2024, at Gleason Performing Arts Center.

The Youth Aviation Ground School program is designed to expose middle- and high-school students to the vast opportunities in aviation, starting with the most basic fundamentals of the major topics that pilots study to obtain their initial certifications and segueing into related fields.

Guest speakers included Kathryn Creedy, editor-in-chief of *Future Aviation/Aerospace Workforce News*; retired U.S. Navy Lt. Cmdr. Ricardo Foster, president of Infinity Aero Club Tampa Bay; and 2024 squadron honoree flight officer Daniel Keel, a documented original Tuskegee Airman.

NASA GRANT FOR INTERFACE DESIGN RESEARCH



NASA's Langley Research Center awarded new funding to Meredith Carroll '03 M.S. and her Advancing Technology-Interaction and Learning in Aviation Systems (ATLAS) Lab to explore

ground control station interface design for flight operators managing multiple vehicles during future autonomous air taxi operations.

Carroll, a professor of aviation human factors, is studying how interfaces—or visual displays—can be designed to present essential flight information to operators to continuously assess how the vehicles are functioning and when it may be time to intervene.

While autonomous air taxis aren't taking flight just yet, current drone operations are being used in an analog environment to evaluate potential interface designs.

A GROWING FLEET



In summer 2024, Florida Tech welcomed eight new 2024 Piper Pilot 100i aircraft to its fleet, all flown in directly from Piper's manufacturing facility in Vero Beach, Florida, by our very own certified flight instructors. Equipped

with the latest in avionics, these planes integrate new technologies into our flight training program.

Shortly after he joined the university in May 2024, provost John Z. Kiss went on a discovery flight in one of the new planes. The pilot, Shayne Inniss '16, '19 MSA, flew Kiss over NASA-Kennedy Space Center, which granted special permission for the flight.

SUN 'N FUN 2024



Florida Tech and Florida Tech Aviation enjoyed a sunny week at one of the world's largest annual aviation events, the Sun 'n Fun Aerospace Expo in Lakeland, Florida.

Florida Tech Aviation was one of more than 500 groups from around the world with a booth at the expo's 50th anniversary gathering. For six days, the public, alumni and prospective students stopped by for a closer look at Florida Tech's aircraft and to learn about the university and its flight programs.

Alumni Spotlight



"It doesn't matter what box
people put you in; you can be
anything you want."

-Leanni Tibbetts '19

Leanni Tibbetts

'I'M A PILOT; I'M A SUB-LIEUTENANT; ... AND I'M A QUEEN!'



Pilot by day, pageant queen by night, Leanni Tibbetts '19 is living her dream every day.

Originally from the Cayman Islands, Tibbetts has had a connection to Florida Tech since she was young.

"Florida Tech was one of the only universities that would visit the Cayman Islands who offered a flight program," Tibbetts says. "Due to this, a lot of alumni would come back and work for Cayman Airways after graduation, so I was very familiar with the university."

After graduating, Tibbetts faced the challenge of entering a post-pandemic workforce.

While Cayman Airways was on a hiring freeze, Tibbetts began working for the Civil Aviation Authority and then transitioned into disaster management working for Hazard Management.

After a few years of working full time and starting her own business, Tibbetts entered the Cayman Islands Coast Guard, where she served for a year.

In May 2022, Cayman Airways began operation once again and hired Tibbetts as a first officer.

When she's not flying four times a week, Tibbetts trains to compete in Miss World pageants.

After working hard and winning local pageants in the Cayman Islands, Tibbetts represented her home country in the 71st Miss World competition March 9, 2024, in Mumbai, India.

At the pageant, Tibbetts advocated for two causes that represent her platform and speak to her passions: women's empowerment and sustainability.

"I'm a pilot; I'm a sub-lieutenant with the Cayman Islands Cadet Court; and I'm a queen," Tibbetts says. "These different things don't make sense, but here I am. It doesn't matter what box people put you in; you can be anything you want."

Q&A:

What's your favorite meal?

Coconut Dinner, a Caymanian stew/soup made with all coconut milk

If you can have any superpower, what would it be?

Being able to speak to someone's heart

What's your top bucket list item?

See the northern lights

What's a fun fact about you?

I am certified in scuba diving

Who inspires you?

Jesus



College of Aeronautics

Florida Institute of Technology
150 W. University Blvd.
Melbourne, FL 32901-6975

Featured Photo



FLIGHT WITH A VIEW

They call it the Space Coast for a reason! Nigel Moraes '21, '22 MSA, snapped this wildly unique picture of a SpaceX Falcon 9 rocket launch from the cockpit March 4, 2024.

**Want to see more photos from the sky?
Follow the College of Aeronautics and Florida Tech Aviation.**



@floridatechaeronautics
@fitaviation



**College of Aeronautics at
Florida Institute of Technology**
Florida Tech Aviation

