EMBRY-RIDDLEAeronautical University

Fly Into
Summer

As the academic year comes to a close, the School of Graduate Studies extends its warmest wishes for a rejuvenating and transformative summer.



EMBRY-RIDDLE AERONAUTICAL UNIVERSITY COLLEGE OF AVIATION

School of Graduate Studies

Newsletter

Our Impact

The School of Graduate Studies in the College of Aviation, Daytona Beach Campus, at Embry-Riddle Aeronautical University, provides an exceptional educational experience with diverse, intellectually rigorous, and multidisciplinary programs. These programs are tailored to prepare our graduates with the necessary skills to impact the aviation and aerospace industry worldwide.

Table of Contents

- 1 Message from the Associate Dean
- 2 Ph.D. in Aviation News
- 3 MS in Aviation News
- 4 MSOSM News
- 5 MSUS News
- 6 Faculty Focus
- 7 Student Spotlight
- 8 ChatGTP: Artificial intelligence (AI)
- 9 Predictive Analytics Research in Aviation Safety
- 10 Dissertion Defenses
- 11 College of Aviation Academic Awards
- 12 Doctoral Medallion Ceremony
- 13 Scholarly Activity



Programs

Explore our exceptional programs and stay informed on the newest education trends.



Faculty Focus

Meet Dr. Kevin Adkins, an expert in unmanned aircraft systems and aerodynamics.



$\mathsf{Chat}\mathsf{GPT}$

Is artificial intelligence a friend or foe? Jacob Welch delves into this question.



Research

SGS faculty use predictive aviation analytics to prevent accidents in a crowded airspace system.



It is great to see our graduates from both the Master's and Ph.D. programs receiving honors and awards. Please let us know if you are a recipient or are aware of others who receive a notable award.

I am happy to announce that the Board of Trustees has approved the Master of Science in Space Operations (MSSO), we will be accepting applications for the program soon with the first cohort starting the fall semester of 2023. The program will provide a research/science core to the MSO that is currently offered through the Daytona Beach and the Worldwide campuses. Students currently in the MSAv program with a Space Specialization will also have the opportunity to switch to the new degree program. The MSSO is an exciting program offering opportunities to students interested in Space Operations careers in a growing industry that has major hubs in Florida, Texas, California and other states, as well as across the globe.

As the enrollments grow across our five (5) graduate programs, the number of faculty and staff needed to support the programs continue to grow as well.



João S. D. Garcia

Please join me in welcoming our new School of Graduate Studies (SGS) faculty member, Professor João Garcia, who brings a wealth of industry/government experience to SGS from Brazil, where he was most recently the Government head for aviation safety for the commercial airline industry, with a strong focus Safety Management Systems (SMS). Professor Garcia also has extensive international experience supporting/attending ICAO in the aviation safety field. João will focus on Aviation Safety, supporting both the MSA and MSUS programs.

João holds bachelor's and master's degrees in Electrical Engineering from Universidade Federal de Santa Catarina (UFSC) and a master's degree in Aeronautical and Mechanical Engineering from Instituto Tecnológico de Aeronáutica (ITA). He is currently pursuing a Ph.D. with ERAU.

João is a Fellow of the Royal Aeronautical Society (RAeS) and a member of the International Society of Air Safety Investigators (ISASI) and the International System Safety Society (ISSS).

Message from the Associate Dean





T





Producing exceptional scholars for research and teaching careers in the aviation field.



We are officially a Daytona Beach program. Our team works very hard in the transition process. Thank you, Flavia, Katie, and Steve, for your hard work. As with any transition, we are adapting to the Daytona Beach requirements. There are a few changes we need to make to comply with the campus policies and streamline the graduation process for students. I summarized those changes below.

I am also pleased to announce that as of May 1, 2023, we have 67 graduates, a very impressive number. In Spring 2023, we had four successful dissertation defenses by Drs. Roger Lee, Thomas Pellegrin, Andrew Koch, and Ross Stephenson. They received their medallion on May 7, 2023 and attended the hooding ceremony on May 8, 2023. Congratulations to all Ph.D. in Aviation graduates!

We have admitted 16 new students to Cohort 15 based on the recommendation of the Admissions Committee, led by Dr. Scott Winter. Many thanks to our Marketing and Admissions Coordinator, Katie Esguerra, for her diligent work in this process.

Semester

Our official semesters are Fall, Spring, and Summer D. Summer E is reserved primarily for the Residency seminar courses.

F-1 Visa Requirements

International students who attend the Residencies, work as a residential student, or defend the dissertation in Daytona Beach must have a valid F-1 visa. Contact the ISSS Office for the I-20 or if you have any questions regarding this requirement.

DAV 800

To streamline the process and avoid any delay in graduation, under the recommendation of the Registrar's Office, effective May 1, 2023, we replace DAV900 with DAV800 (Research Prospectus in Aviation). This course is optional and provides students with an extra semester to complete the research prospectus for the qualifying exam purpose.

Final Semester Registration

APD 05 (Graduation Requirements & Degree Conferral) requires that the student must be enrolled in the term in which they graduate. Work with your dissertation chair to plan your dissertation defense to meet this requirement.

Start and End Dates

The start date for each semester is determined by the Registrar's Office. You can find the <u>Doctoral Calendar</u> (ERNIE login required) on their website. The website is updated periodically. **Note** that the calendar keeps the end dates open for Fall and Spring because Ph.D. programs have different end dates. Our semesters run for 12 weeks, so our end date will be the last day of the twelfth week of the semester. Important: Due to the system restrictions, the end date appearing in the course is the same for the whole campus. So, make sure to use this calendar and the 12-week term to determine the actual end date. Contact our office if you have questions.

O DB-COA 119



Ph.D. in Aviation News

MS IN AVIATION NEWS



Our program provides students with a strong data analysis and project management foundation, empowering them with the skills necessary to excel in the aviation and aerospace industries.



Join me in congratulating our graduates: Magdelina Allen, Teng Hsuan Chang, Takafumi Fukuzawa, Hansrai Imrit, Jun Sang Lee, Suppanut Piromsartkoon, Rishi Shah, and Kayla Taylor.

We are pleased to announce that our student enrollment remains robust, and we expect an increase in the number of new students beginning with the Fall enrollment. We are proud to provide students with a comprehensive and diverse curriculum that prepares them for successful careers in the aviation and aerospace industries. We are thrilled to report that our graduates are landing high-paying jobs with some of the top companies in the industry, including Delta Air Lines, Raytheon, and the Federal Aviation Administration (FAA). Our graduates' success is a testament to the quality of education they receive from our faculty.



Kayla Taylor

Congratulations to Kayla Taylor for being selected as the M.S. in Aviation Student of the Year. Kayla graduated "With Distinction" at the May 2023 ceremony. In addition, Kayla was one of our outstanding Graduate Teaching Assistants. We wish her well in all her future endeavors and are grateful for all her help and hard work in the program. We also want to welcome Grant Marsh, who will replace Kayla as our new Graduate Assistant for writing and statistics.

Kayla Taylor



Grant Marsh

Grant Marsh

Grant, a recent graduate with a Bachelor's degree in Aeronautical Science, has taken his passion for aviation to the next level by enrolling in the Master of Science in Aviation program at his alma mater. Throughout this journey, Grant has been grateful for the unwavering support and encouragement he has received from his professors and peers. The university's commitment to providing cutting-edge resources and practical experiences has continued to motivate him. Looking back on his time at ERAU, Grant considers himself fortunate to have found a community that has pushed him to grow, inspired him to achieve his goals, and nurtured his passion for aviation. He expresses his heartfelt thanks to ERAU for this invaluable experience.

MS in Aviation News







MSOSM NEWS



Making a difference in the safety and health of the people around you.



The MSOSM program currently has a total of 34 students. Grant funding from the National Institute for Occupational Safety and Health (NIOSH) financially aids six of them through the University of South Florida (USF) Education and Research Center (ERC). Funding from the ERC is about to double as a new Industrial Hygiene option was recently approved for the Fall. Students are likely to transfer from USF to this program as they are phasing out their industrial hygiene program due to retirements. In addition, a fast track for undergraduate students in BS in Aviation and Occupational Safety will soon take place. Undergraduate students will be permitted to enroll in classes in the MS program as they finish their bachelor's degrees. Employment has been substantial. Recent graduates have accepted jobs at NASA, Cummings, Boeing, Tesla, and Motional Autonomous Vehicles.





Meet the industry's newest innovator: Rebecca Demian

Rebecca Demian, who graduated with an MS in Occupational Safety Management in 2021, has worked in various positions, including safety engineering in the defense industry and as an intern in EHS and Risk Management at Genentech.

Recently, she started working as an Operational Safety Management Systems (SMS) Engineer at Motional in Pittsburgh, a company that develops and deploys autonomous vehicles for ride-hail and delivery networks. Her responsibilities involve planning, developing, and implementing a safety management system (SMS) that focuses on fostering a safe culture and encouraging voluntary participation in corporate safety policy. With her knowledge and experience in safety engineering, EHS, and risk management, Ms. Demian will bring aviation safety principles to the automated vehicle (AV) industry, aligning with the four pillars of SMS set by the FAA.

MSOSM News







MSUS NEWS



A pathway to a greater learning experience and research exposure.



The MSUS continues to advance with exciting program improvements. The program will have a formalized thesis option available to our students starting in the 2023-2024 academic year. The thesis option can be a valuable one available to students. Based on this new offering, you may wonder whether to consider completing a graduate capstone project or a thesis. The answer to this question will be unique to each student, and I am happy to discuss your specific situation one-on-one. In general, most students will likely complete the graduate capstone project. This project allows students to complete a small research project throughout the course of one semester to demonstrate their knowledge of research methods and statistics in the subject domain related to unmanned systems. For those students wishing to pursue a possible career in a research field or continue their education with a doctorate, the thesis option may provide a valuable learning experience and greater exposure to research than the graduate capstone project. The thesis is completed over two semesters instead of one, and it also requires the formation of a committee of faculty instead of a single course instructor. Some additional aspects of the thesis are the defense presentation at the end of the research study. Regardless of which path you select, the incorporation of this option into the program allows for a more personalized plan of study to help you reach your goals in completing your Master's degree.

Get Funded!

Grants 101 Workshop Series

A large aspect of being a researcher is pursuing externally funded opportunities through grants or contracts. To help decipher this process, the College of Aviation Research Council has created a series of workshops highlighting some of the main aspects of searching for a request for proposals, building a proposal/budget, and leading a grant after winning it. These series were held in person but are also available for on-demand streaming through the links on the right. This repository of the content may be beneficial to faculty, staff, and students who are interested to learn more about the grant process. Each session is about one hour long, and the research council would like to thank our faculty colleagues who served as presenters for this year's events so far: Drs. Kevin Adkins, Dan Halperin, Dahai Liu, Jane Pan, Joe Keebler, Dothang Truong, and Ryan Wallace.

Join Our Grants 101 Workshop Series for Researchers

Watch Our Video Series Today!

- 1. How to Find and Read an RFP
- 2. Organizing a Response
- 3. Building a Budget
- 4. Getting Started After a Win
- 5. Managing a Grant

MSUS News









Faculty Focus

Read about the expertise of our talented faculty member.

Meet Dr. Kevin Adkins: A leading expert in unmanned aircraft systems and aerodynamics at Embry-Riddle Aeronautical University.

Dr. Kevin Adkins holds bachelor, master, and doctoral degrees in aerospace engineering, along with advanced coursework in physics and atmospheric science. He is an associate professor at Embry-Riddle Aeronautical University and teaches aerodynamics, aircraft performance, and topics in uncrewed aircraft systems (UAS) within the College of Aviation. Professor Adkins' research interests include UAS and their applications, using UAS and numerical methods to analyze nearsurface (ABL/UBL) meteorology, micrometeorology, advanced air mobility (AAM), and UAS flight test. Dr. Adkins is the Director of the Unmanned Vehicle and Atmospheric Investigation Lab (UNVAIL) at Embry-Riddle. Prior to coming to Embry-Riddle, Kevin served as an officer and pilot in the U.S. Air Force and spent over a decade in engineering industry, working as both an aircraft system design and lead flight test engineer. Dr. Adkins holds numerous professional memberships and is an elected Fellow of the Royal Aeronautical Society.

Student Engagement

I have tremendously enjoyed engaging with the students in MSA 534 this spring. The students bring diverse backgrounds to the class and, with that, unique perspectives. With that being said, the class has really gelled and capitalized on this diversity of thought to make their individual, small group, and class-wide deliverables very meaningful and pragmatic. We have divided the course into two main themes, one focusing on large uncrewed aircraft (UA) in an advanced air mobility (AAM) context and another segment focusing on small uncrewed aircraft system (sUAS) applications. The students' varied academic backgrounds and unique personal skills and past experiences have allowed us to flesh out many aspects of a notional AAM ecosystem. Elsewhere in the course, students have brought forward their varied backgrounds to learn from one another about how sUAS can serve in many existing and unrealized niche roles.

On the Embry-Riddle campus, Dr. Adkins, a highly respected aviation expert, demonstrated his proficiency in unmanned aircraft by carrying out practical exercises with his students.









Kayla Taylor, MS in Aviation student and SGS Graduate Teaching Assistant, will graduate in May 2023 after 6 years at Embry-Riddle. She graduated Summa Cum Laude from the Department of Physical Sciences with her Bachelor of Science in Astronomy/Astrophysics and a minor in Applied Mathematics in May 2021 and has worked for the SGS ever since.

Kayla often credits Mary Pope Osbourne's *Magic Tree House* series for inspiring her love of the physical sciences and outer space. Her love for science is clearly exhibited through her interdisciplinary research and the passion she exhibits in her Space Studies classes.

Since her freshman year, Kayla has worked for the Humanities and Communication Department in the College of Arts and Sciences as a student assistant, where she developed a unique passion for writing in the disciplines. Her work with the undergraduate Writing Center during her junior and senior years positioned her to take on the role of "Writing TA" for the SGS, but her accomplishments extend beyond her experiences as a TA.

Kayla investigates and questions important issues, often applying creative processes that lead to innovative answers. Her research at Embry-Riddle began with Dr. Ted von Hippel during her senior year to examine the growing light pollution crisis on Embry-Riddle's Daytona Beach campus. Kayla continues to advocate for "dark sky" policies on campus to ensure equitable use of the 1-meter telescope on top of the College of Arts and Sciences. Since starting her graduate program, she has worked extensively with Dr. Ashley Lear to understand the experiences of women in STEM in order to tell their stories and foster a heightened awareness of women's struggles for advancement in the sciences. Her research with Dr. Lear was accepted at two international conferences, including the notable International Astronautical Congress that took place in Paris, France, in September 2022. Kayla has also been working with Dr. Sara Langston to publish a policy paper on the growing conflicts between commercial satellite operators and astronomers for "dark" and "quiet" skies. She hopes that her research will propel her into a prestigious Ph.D. program in the physical sciences within the next year.

Although Kayla continues to stay open-minded about her career path, she hopes to find employment that will allow her to share her love of science through STEM Outreach and interdisciplinary research. In her free time, Kayla enjoys a wide variety of activities, such as taking her mother to see live theater performances, watching movies with her twin brother, and traveling around the world.



Earlier this semester, I was tasked by the School of Graduate Studies to study and create a briefing on ChatGPT, a then relatively niche but now a fairly ubiquitous tool that is setting academia abuzz. ChatGPT is a language model developed by OpenAI that can generate human-like responses to a wide range of text-based prompts. ChatGPT has been used for various applications, including language translation, content generation, and customer support. The question has morphed across this department and the academic world: is it ethical to use it as a tool while writing?

Let's start by writing about the potential risks of using ChatGPT. One significant risk is that the model may generate inappropriate, inaccurate, or harmful content if writers use it. ChatGPT needs help understanding the holistic way writers must interface with information from sources. Indeed, ChatGPT has a habit of generating its own sources when asked to provide them. This is slowly being updated out of the program, but the potential for error is significant. The referenced documents do not exist, but the program generates citations like any other text to reinforce its credibility. For now, analyzing the sources is the most accurate way to verify the authenticity of writing without software tools. Another way a user may use ChatGPT is to generate guided content. Using ChatGPT with specific prompts to do the grunt work of writing and then manually adding sources and quotes. This type of intelligent ChatGPT use is harder to determine without software tools.

Even so, there is an honest conversation to be had about whether or not this should be considered plagiarism. At what point does AI become another tool no different from Grammarly or a search engine? A recent announcement by Turnitin indicates they will soon be releasing tools designed to detect the AI's writing. Sites like ZeroGPT.com also provide ways of seeing the usage of ChatGPT. Still, until then, the best method of detecting ChatGPT use to prevent plagiarism is to keep an eye on students' writing and ensure there are no radical jumps in writing quality or voice. The human element of writing is where ChatGPT struggles when generating content. Responses can be formulaic, and it follows distinct patterns of behavior when studied at length. ChatGPT is an emerging technology and all signs point to it being the future. Until a solution is firmly established, there will be a learning curve for those involved in guiding student writing as we move into a distinctly post-ChatGPT world.

By Jacob Welch

Predictive Analytics Research in Aviation Safety

By Dr. Dothang Truong

As the aviation industry continues to grow, the air space system gets very crowded with a large number of flight operations, including manned aircraft and unmanned aircraft systems (UAS). Aviation safety is the top priority for the Federal Aviation Administration (FAA). There are many organizations that collect aviation safety data, including but not limited to Flight Operational Quality Assurance (FOQA), National Transportation Safety Board's (NTSB) accident/incident data, NASA Aviation Safety Reporting System (ASRS) safety data, FAA Aviation Safety Information Analysis and Sharing (ASIAS) system, FAA Aviation Safety Action Program (ASAP) programs, and FAA UAS sighting reports. These data sources provide a very large amount of aviation safety data collected frequently.

Predictive aviation analytics is a method of using machine learning algorithms to detect unknown patents from big aviation safety data that enable us to assess risks of aviation incidents and accidents and predict the likelihood of an incident/accident before it happens. Predictive analytics requires training and validating the model using the safety data with multiple machine learning algorithms to find the champion model, the model with the most predictive power. This champion model, in its turn, can be developed into a predictive system that processes real-time data and makes a prediction. This prediction would allow the airline authorities or aviation safety officers to make necessary decisions to either mitigate the risk or prevent it from happening.

SGS faculty and students have worked on multiple predictive aviation analytics projects to improve aviation safety. Their efforts have been recognized by President Butler in his article on October 10, 2022, in Aviation Week, "Leveraging Data Analytics to Improve Aviation Safety". Following are some examples of predictive analytics research in aviation safety that we have done as a collaboration between SGS faculty and graduate students.



Project 1: Predict the unstable approach risk misperception (UARM)

Authors: Edwin Odisho, Dothang Truong, Robert Joslin **Data:** FOQA data for commercial transport aircraft

Algorithm: CHAID decision tree **Accuracy:** 99%; Recall: 95%

Publication: Odisho, E., Truong, D., & Joslin, B. (2022). Applying Machine Learning to Enhance Runway Safety through Runway Excursion Risk Mitigation. *Journal of Aerospace Information Systems*, 19(2), 98-112.

https://doi.org/10.2514/1.I010972



Project 2: Predict the unstable approach for General Aviation aircraft

Authors: Tanish Jain, Shlok Mirsa, Dothang Truong **Data:** FDM data for light multi-engine aircraft

Algorithm: Deep learning - recurrent neural network (RNN)

Accuracy: 84%; Recall: 91%

Publication: Jain, T., Mirsa, S., & Truong, D. (2022). Utilizing Deep Learning to Predict Unstabilized Approaches for General Aviation Aircraft. *Journal of Aerospace Information Systems*, 19(12), 811-817.

https://doi.org/10.2514/1.l011132



Project 3: Predict the risk of undesirable air quality

Authors: Mary O'Connor (Advisor: Dothang Truong) **Data:** ASRS data – Part 121 (quantitative + qualitative)

Algorithm: Text mining + Gradient boosting

Accuracy: 96%; Recall: 98%

Publication: O'Connor, M.B. (2021). Identification of Factors Associated with Fume Events Using Text Mining and Data Mining Methods (Publication No. 682). Doctoral Dissertations, Embry-Riddle Aeronautical University.

https://commons.erau.edu/edt/682



Project 4: Predict the risk of sUAS violations in NAS

Data: FAA sighting data **Algorithms:** Gradient boosting **Accuracy:** 95%; Recall: 95%

Publication: Truong, D., & Choi, W. (2020). Using machine learning algorithms to predict the risk of small Unmanned Aircraft System violations in the National Airspace System. *Journal of Air Transport Management*,

86, 101822. https://doi.org/10.1016/j.jairtraman.2020.101822

In conclusion, we live in a world of big data. Predictive analytics enables us to transform a large amount of aviation safety data collected by many organizations into insights that assist us in making better decisions to ensure aviation safety. With access to the datasets in a timely manner, we can develop the predictive model and make accurate predictions on time, which allows us to mitigate aviation risks or even stop them from happening.

Predictive Analytics Research in Aviation Safety



Dissertation Defenses



Achieving a Ph.D. in Aviation at Embry-Riddle Aeronautical University involves more than just academic success. It reflects the individual's commitment to excellence in a dynamic and continually changing field. We extend our sincere congratulations to Thomas Pellegrin, Andrew Koch, Ross Stephenson, and Roger Lee for successfully defending their dissertations.



Andrew Koch, Ph.D. in Aviation candidate, successfully defended his dissertation, "The Influence of In-School Time (IST) and Out-of-School Time (OST) Learning Experiences on Aviation Career Entry" on Tuesday, March 21, 2023.

Photo: (left to right) Dr. Dothang Truong, Dr. David Esser, Dr. Jennifer Thropp, Andrew Koch, Dr. Mike Wiggins, and Dr. Jing Yu (Jane) Pan



Roger Lee, Ph.D. in Aviation candidate, successfully defended his dissertation, Loss of Control In-Flight (LOC-I): A Multivariate Study of Voluntary Versus Mandatory Reports from the United States of America, on Monday, February 27, 2023.

Photo: (left to right) Dr. Jing Yu (Jane) Pan, Dr. Frank Ayers, Dr. Michael O'Toole, Dr. Kwok Chan, Roger Lee, Dr. David Esser, and Dr. Dothang Truong



Thomas D. Pellegrin, Ph.D. in Aviation candidate, successfully defended his dissertation, A Simulation of the Impacts of Climate Change on Civil Aircraft Takeoff Performance, on Monday, March 13, 2023.

Photo: (left to right) Dr. Dothang Truong, Dr. Juan Merkt, Thomas Pellegrin, Dr. Steven Hampton, and Dr. David Esser



Ross L. Stephenson, Jr., Ph.D. in Aviation candidate, successfully defended his dissertation, "Small Unmanned Aircraft Systems: Operator Workload and Situation Awareness Utilizing First Person View Techniques," on Tuesday, April 18, 2023.

Photo: (left to right) Dr. David Esser, Dr. Dothang Truong, Dr. Jennifer Thropp, Dr. Paul Myers, Ross Stephenson, and Dr. Cynthia Pugh

The College of Aviation (COA) is proud to announce the winners of its 2023 academic awards. The ceremony was held on Thursday, April 27th, 2023, at 4 pm in the COA atrium. The event was attended by esteemed faculty members, proud parents, and peers of the recipients.

The awards recognized outstanding students who excelled academically and demonstrated a strong commitment to the aviation industry. The recipients were selected based on their academic performance, research accomplishments, and leadership abilities. Please join us in congratulating all of our award recipients.



Dr. Don Metscher (Program Coordinator), Kayla Taylor Outstanding Student Award, MS in Aviation



Dr. Mark Friend (Program Coordinator), Nicholas Nieves Outstanding Student Award, MS in Occupational Safety Management



Dr. Scott Winter (Program Coordinator), Blake Neal Outstanding Student Award, MS in Unmanned Systems

Aeronautical Science

Matthew Schnappauf - Chairman's Award, Aeronautical Science Ijeoma Deborah Ngozichukwu Okere - Chairman's Award, Aeronautics Michael D'Alonzo - Chairman's Award, Unmanned Aircraft Systems Science Jack Coulehan - Most Outstanding Alpha Omicron Alpha Member

Applied Aviation Sciences

Kelsey Ennis - Outstanding Student Award, Meteorology Susan Nitch - Outstanding Student Award, Aerospace & Occupational Safety Maaliyah Holloman Bowden - Outstanding Student Award, Air Traffic Management Shelby Delano - Outstanding Student Award, Spaceflight Operations

Aviation Maintenance Science

Tea Galon-Walraven - Chairman's Award

Flight

Alexis Deichmann - Chairman's Award Dominic Barbagallo - Outstanding Flight Team Member

School of Graduate Studies

Kayla Taylor - Outstanding Student Award, MS in Aviation
Nicholas Nieves - Outstanding Student Award, MS in Occupational Safety
Management
Plake Neel Outstanding Student Award MS in Unmanned Systems

Blake Neal - Outstanding Student Award, MS in Unmanned Systems

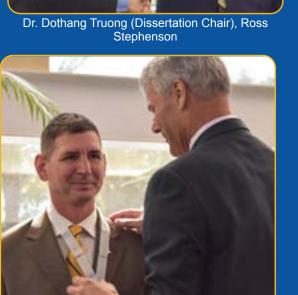


Doctoral Medallion Ceremony

The College of Aviation's atrium was the venue for the semi-annual Doctoral Medallion Ceremony honoring our 2023 Graduates, which took place on Sunday, May 8th. This prestigious event is held twice a year to celebrate the academic achievements of our doctoral students. The ceremony includes the presentation of medallions to the graduates, marking their completion of rigorous academic programs and their induction into the distinguished community of doctoral scholars.

Join us in giving a round of applause to Ross Stephenson, Andrew Koch, Cory Trunkhill, and Brian Musselman for their outstanding achievements at the prestigious ceremony! We are honored to acknowledge the hard work and dedication of the recipients. Additionally, we would like to recognize Thomas Pellegrin and Roger Lee, who couldn't attend the ceremony but deserve equal recognition for their achievements.





Dr. Robert Joslin (Dissertation Chair), Cory Trunkhill



Dr. Jennifer Thropp (Dissertation Chair), Andrew Koch



Brian Musselman

Doctoral Medallion Ceremony



Scholarly Activity

Combs, E., Ellis, S., Haley, D., Taranto, M. et al., "Predicting eVTOL Simulator Performance Using Basic Performance Resources," *SAE Technical Paper* 2023-01-1008, 2023, https://doi.org/10.4271/2023-01-1008.

Lear, A., & Taylor, K. (2023, June). "A woman 'in the snow among the clocks and instruments": How Adrienne Rich reimagined the lives of women astronomers. *Acta Astronautica*, 207, 283–294. https://doi.org/10.1016/j.actaastro.2023.03.025

Mirsa, S., Dsouza, G., & Truong, D. (2022). A Machine Learning Approach Towards Analyzing Impact of Surface Weather on Expect Departure Clearance Times in Aviation. *Collegiate Aviation Review International*, 40(2), 79-102. https://ojs.library.okstate.edu/osu/index.php/CARI/article/view/9356/8433

Jain, T., Mirsa, S., & Truong, D. (2022). Utilizing Deep Learning to Predict Unstabilized Approaches for General Aviation Aircraft. *Journal of Aerospace Information Systems*, October 25. https://doi.org/10.2514/1.1011132

Excellence in Aviation

Please join us in honoring two exceptional alumni of the Royal Thai Air Force, Wing Commander Dr. Thapanat Buaphiban, and Flight Lieutenant Jittraphon Sangsiri, for their outstanding achievements.

Wing Commander, Dr. Thapanat Buaphiban (Mond), pictured on the left, was recently awarded the Outstanding Royal Thai Air Force Officer Award for 2022. He is an Associate Professor and Deputy Head of the Department of Industrial Engineering and Aviation Management Navaminda Kasatriyadhiraj Royal Air Force Academy (NKRAFA), Thailand. He graduated "With Distinction" in the Summer of 2008 with an M.S. in Aeronautics. He also graduated from the ERAU Ph.D. in Aviation program in December 2015.

Flight Lieutenant Jittraphon Sangsiri (Tui) is on the right, also works at NKRAFA, and was recently awarded the Outstanding Academic and Practice Award from the Flight Safety Office of the Royal Thai Air Force Safety Center. He graduated "With Distinction" in the Summer of 2022 with an M.S. in Aeronautics.





School of Graduate Studies Contacts

Associate Dean

Dr. Steven Hampton 386.226.6725

Ph.D. in Aviation

Dr. Dothang Truong 386. 323.5080

M.S. in Aviation (MSAv)

Dr. Don Metscher 386. 323.5061

M.S. in Occupational Safety Management (MSOSM)

Dr. Mark Friend 386.226.7747

M.S. in Unmanned Systems (MSUS) / Associate Dean for Research

Dr. Scott Winter 386.226.6491

SGS Administrative Assistant

Flavia Danskine 386.226.7499

MSAv Advising Coordinator

Bee Bee Leong 386,226,7219

Ph.D., MSOSM, MSUS Program Administrator

Donna Ferrell 386.241.6010

SGS Marketing & Admissions Coordinator

Katie Esguerra 386. 226.6546

Ph.D. Production Coordinator II / SGS Newsletter Editor/Designer

Stephen Anest 386.226.7560