

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY | COLLEGE OF AVIATION

SCHOOL OF GRADUATE STUDIES

NEWSLETTER

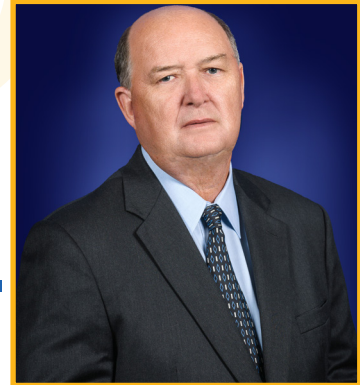
Table of Contents

- 1 Message from the Associate Dean
- 2 Ph.D. in Aviation News
- 3 MS in Aviation News
- 4 MSOSM News
- 5 MSUS News
- 6 Eagle News
- 7 Forever an Eagle
- 8 College of Aviation Academic Awards
- 9 Scholarly Activity



MESSAGE FROM THE ASSOCIATE DEAN

Dr. Steven Hampton



The School of Graduate Studies faculty, staff, and students continue to exceed all expectations, our programs continue to grow, and we have a great Ph.D. incoming class.

As our enrollments grow across our four graduate programs, our faculty and staff continue to grow and change as well. Please join me in welcoming our new School of Graduate Studies faculty member, Dr. Christopher Johnson, who brings a wealth of experience and a solid background in Uncrewed Systems. Dr. Johnson will support the MSUS program and dissertations and thesis for those interested in uncrewed topics such as eVTOL, AMM, UAM, etc. I encourage you to reach out to him.

One significant change to the SGS programs will be the movement of the Ph.D. in Aviation from Worldwide to the Daytona Beach campus. The change will help our residential students, and the university to change its Carnegie ranking to an R2 Research institution. The move will cause minimal changes to the program processes. There will be no changes to the classes except for start dates for the fall and spring, which will follow the Daytona Beach calendar. Our summer semester will continue to begin on the 7th of May. More details follow in Dr. Truong's message to the Ph.D. students, and all classes will maintain the same 12 weeks duration.

I hope you have a safe and enjoyable summer! I'm looking forward to an engaging summer residency for our Ph.D. in Aviation program and an even brighter year ahead for all.



As you may know our Administrative Assistant Susie Sprowl has retired after 20 years of outstanding service to the university. Susie has been with the Ph.D. in Aviation program since its inception in 2010, a key cog in the wheel that has helped to make the program the largest Ph.D. program at Embry-Riddle with over 50 graduates, we wish her well.

I am very pleased to announce that Flavia Danskine from International and Graduate Admissions has accepted my offer to be the new Administrative Assistant to the Associate Dean supporting Research and the School of Graduate Studies. Flavia has extensive experience working with our graduate students (MSA, MSOSM, MSUS) during the admissions process, and also worked previously as an administrative assistant. I am confident that Flavia will quickly become an outstanding member of the SGS team in the College of Aviation.

Please join me in congratulating our 2021/22 scholar's

MSA, Pooja Amonkar
Ph.D. in Aviation, Sean Crouse

MSUS, Gabriella Pelz
MSOSM, William R. Fearn IV

Steven Hampton

PH.D. IN AVIATION NEWS

Dr. Dothang Truong
Program Coordinator



I hope everyone had a productive January term. We have exciting news to share with you. The University has decided to make the Ph.D. in Aviation a full Daytona Beach program, which helps streamline the processes and improve operational efficiency. In addition, all current students are now categorized as Daytona Beach students, which allows them to access full campus services and facilities. Finally, this transition enables us to provide international residential students with the student visa (F-1 visa). The curriculum has been adjusted to allow international residential students to meet the federal requirements. This change will help us expand the residential program, which will strengthen our research performance.

The University had assigned a specific task force, consisting of many offices and departments, to make this transition happen. We are very grateful for their support and assistance in this process. They had been working very diligently to ensure the transition was smooth and seamless. The transition is complete, and effective as of May 7, 2022, we are a Daytona Beach Ph.D. program, along with six other Ph.D. programs on the campus.

What Changes?

- **Semesters**
 - Fall and Spring: check Daytona Beach calendar
 - Summer D: starts on May 7
 - Summer E (Residency courses): starts right after Summer D
- Enrollment, course registration, tuition payment, financial aid, financial services, graduation, and reporting are handled by the Daytona Beach campus.
- Students have full access to campus services.
- The Registrar's Office is updating academic Advising Reports (AARs) based on the new catalog, which has all current courses. Students can choose the catalog that fits their courses.
- Very limited face-to-face courses (special topics and dissertation courses) are offered to allow international residential students to meet the federal requirements.

What Remains the Same?

- All DAV courses are online, 12-weeks long
- Program policies, requirements, processes
- Guides, forms, templates, documents
- Canvas course sites
- Students' profiles, accounts, and academic records
- Academic advisors and dissertation chairs
- Academic planning

We are excited and look forward to this new chapter of our program. If you have any questions about the transition, please contact Mrs. Flavia Danskine at carreirf@erau.edu.

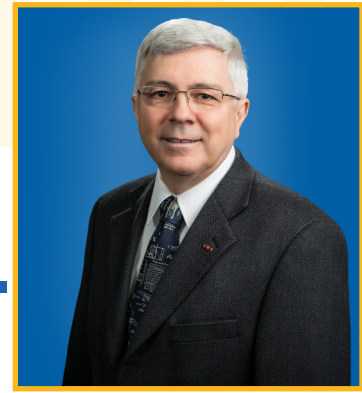
I am also pleased to announce that we have admitted 16 new students to Cohort 14, based on the recommendation of the Admissions Committee, led by Dr. Scott Winter. Cohort 14 will start in Summer E 2022. Many thanks to our Marketing and Admissions Coordinator, Katie Esguerra, for her diligent work in processing the applications, communicating with applicants, and coordinating the interviews and documentation in this process. Also, please join me in congratulating our recent graduate, Dr. Robert G. Brents.

Last but not least, there is more good news. Sean Crouse has been selected as the recipient of the COA Outstanding Student Award, Ph.D. in Aviation in 2022. This award is to recognize the student with exceptional academic achievement, integrity, selflessness, leadership, and service to the Ph.D. in Aviation program, ERAU, and the world of aviation. The selection is determined based on nominations and votes of Ph.D. faculty. Congratulations, Sean, for your outstanding accomplishment!



MS IN AVIATION NEWS

Dr. Donald Metscher
Program Coordinator



Join me in congratulating the Spring 2022 graduates: Travis Billette, Hiro Funatsu, Saiful Jihad, Kavya Karnati, Jessica Keddy, Chandra Sai Manoj Kilaru, Luiz M Costa, Aditya Mody, Alvin, Ng, Garrett Noltemeyer, Jilenny Ortiz Rivera, Rawan Pornbowornkiat, Kira Ramos, Vaishnavi Veerapalli, Mykyta Zhyla, Frederick Missel, Daanish Shaikh, Priyanka Shetty, and Christopher Williams.

Also in congratulating the Summer 2022 graduates: Daniel Botes, Myojeong Cho, Jared Cohen, Michael Perry, Steven Remington Ten, Jittraphon Sangsiri, Daniel Shepherd, Amelia Johnson and Jason Yazuardi.

Our student enrollment remains strong and we are expecting an increase in the number of new students beginning with the summer enrollment. It appears we are beginning to return to normalcy from the Covid-19 pandemic.

The M.S. in Aviation program would like to recognize our Program Administrator and Advisor Ms. Hock-Luan (Bee Bee) Leong for 20 years of outstanding service to Embry-Riddle Aeronautical University. Bee Bee worked in the Information Technology (IT) Department before coming to the College of Aviation. Bee Bee consistently goes above and beyond her current duties as the Program Administrator for the M.S. in Aeronautics/Aviation (MSA) degree by assisting with the M.S. in Unmanned Systems and M.S. in Occupational Safety degree programs recently added to the School of Graduate Studies (SGS).



Bee Bee has a very unique background. She came to this country from Malaysia in 1987 on a tourist passport to meet her "pen pal" and future husband. She had very little knowledge of English at the time, but in 1990, she began working in the restaurant industry and taking courses in English at Daytona State College.

Later, she worked for the University of Central Florida (UCF) at the Daytona Beach Campus while pursuing a B.S. in Business Administration with a concentration in Management Information Systems. After completing the degree in 2000, she began looking for employment in Information Technology (IT) and was hired by the Embry-Riddle IT Department in 2001.

While working for IT, she also enrolled in the M.S. in Aeronautics (MSA) degree program and completed the degree (With Distinction) in 2012. When the MSA degree program needed a fulltime administrator/advisor, Bee Bee was the ideal choice and transferred from the IT department to work in the MSA program in 2014.

Bee Bee became very familiar with the different departments here at the Daytona Beach Campus during her work as an IT representative and graduate student.

This experience provided a tremendous advantage when she accepted the position in the MSA Program. Bee Bee's background has allowed her to engage in creative processes that always lead to innovative answers. She is able to assist our students, particularly the international students, navigate the different administration offices of the University all while fostering an environment of mutual respect and accountability. Her incredible work ethic combined with a personable nature makes her an excellent leader AND an excellent team player—a rare combination.

Bee Bee meets with every student enrolled in the M.S. in Aviation (100 students) each semester to review their program progress, update their degree plan of study, and register for their future courses. Among her many additional duties, she also works closely with the Graduate Admissions office to schedule the new student orientation and arrange the Information Sessions for the SGS Master's programs. Two thirds of the MSA students are international students from all over the globe, but Bee Bee is always available to help them with their unique questions, concerns, and requirements. She has become an invaluable addition to the MSA degree program and the SGS team. We recognize her growth mindset, fostered by an intrinsic motivation to do her very best and to inspire our students to reach their potential as well.

MSOSM NEWS

Dr. Mark Friend
Program Coordinator



The Master of Science in Occupational Safety Management (MSOSM) is preparing to finish the academic year with approximately 30 students in the program. Ten new students have been accepted and 29 more have applied for the program. Activities during this academic year included safety inspections and recommendations for four, local manufacturing facilities. Students also inspected ERAU labs and facilities. They wrote reports with safety recommendations, and received requests for additional assistance.

Support continues from the University of South Florida (USF) Education and Research Center (ERC). A number of students receive financial assistance toward scholarships and conference travel. In addition, the collaboration between the two universities has resulted in the creation of an online course that students from both locations take. Expertise from both sides of the state truly add to the knowledge base of those enrolled.

The MSOSM is doing well with enrollments expected to increase during the spring term, and employment opportunities to be strong. All of our five previous graduates are currently working in the field of safety.

Please join me in congratulating our recent graduates, Jakob Rouleau, Amanda Dargie, Rebecca Demian, and MacKenzie Dickson.



Dr. Mark Friend, MSOSM Coordinator, was recently selected to receive the 2022 Board of Certified Safety Professionals' (CSP) Award of Excellence. This award recognizes one top CSP who best represents certificants' outstanding leadership, knowledgeable expertise, and commitment to the advancement of the safety, health, and environmental (SH&E) profession. The award will be given at a ceremony at the BCSP headquarters in Indianapolis near the end of April.

MSUS NEWS

Dr. Scott Winter
Program Coordinator



We are very excited for this fall semester in the MSUS program! Our first program graduate will walk across the stage at the spring commencement, our accelerated programs will become effective in May 2022, and we will welcome our new faculty member to campus starting fall 2022. The program now has 12 students, and great interest was expressed from several students who attended our information session in March.

For more information on the new accelerated undergraduate to graduate degree programs, undergraduates in the B.S. in Aeronautics, Aeronautical Science, or Unmanned Aircraft Systems majors are eligible. Interested students should apply at the start of their junior year. Eligibility requirements are the following:

1. Have earned at least 75 semester credit hours
2. A cumulative GPA of 3.00 or better
3. Two letters of recommendation from undergraduate faculty members
4. Complete the application and interviews with their undergraduate program coordinator and the MSUS program coordinator.

If admitted in the first semester of their junior year, students will complete one 500-level course each of their last three semesters for a total of 9-credits that can be counted on their undergraduate and graduate plan of study. The program helps shorten the time necessary to finish the master's degree.

Please join me in congratulating our recent graduates, Gabriella Pelz, Michael Forte, and John Wardell.

Welcome Dr. Chris Johnson



Assistant Professor Chris Johnson is an Air Force Veteran who recently joined SGS as MSUS faculty. He comes to Embry Riddle from the University of Wisconsin - Madison (UW), where he completed his Ph.D. and served in various research, teaching, and consulting capacities during his 12 years at UW. He most recently served as Senior Scientist in UW's American Family Data Science Institute. He is bringing his lab from UW to Embry Riddle to continue his research as simulation lead under Carnegie Mellon University for an Army-funded project entitled AI-Assisted Detection and Target Recognition, building next-generation robotic combat vehicles. Prof. Johnson also led UW's involvement as a primary school in the FAA's Center of Excellence for Human Performance and Technical Training, which Embry Riddle still leads. He also built several manned and unmanned aviation courses at UW; served as a safety consultant to the Office of the Vice Chancellor for Research and Graduate Education; and he co-authored the UW's policy on drone governance.

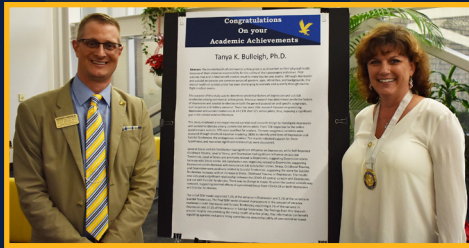
After completing his Ph.D. and Post Doc in UW's College of Engineering, Prof. Johnson launched his consulting practice in which he built enterprise drone programs for UW and dozens of companies such as Verizon, Disney, Foxconn, and American Family Insurance. A long-time CFI, CFII, and MEI, Johnson also launched a free eLearning system for private-pilot and commercial drone-pilot certification (see www.PilotTrainingSystem.com) as well as an advanced weather-simulation product called ClimaDrive (see www.ClimaDrive.com).

Eagle News

We were pleased to be able to hold our traditional Medallion Ceremony for our Fall 2021 and Spring 2022 graduates. Please join me in congratulating Dr. Tanya Bulleigh (Fall 2021), Dr. Mary O'Connor (Fall 2021), and Dr. Brents (Spring 2022) on their achievement.



Dr. Robert Brents, Jr. (Graduate 54)



Left to Right: Dr. Scott Winter (Committee Chair) and Dr. Tanya Bulleigh (Graduate)



Left to Right: Dr. Mark Friend (Committee Member), Dr. Mary O'Connor (Graduate), and Dr. Dothang Truong (Committee Chair and Program Coordinator for Ph.D. in Aviation)



Stephanie Fussell, Ph.D. Appointed to Fellowship with Air Force

Dr. Fussell said, "The Air Force is investing in commercial-off-the-shelf immersive technologies to create and or leverage methods that blend real world and synthetic environment engagement, and the effect these variables have upon each other in the VE. Along with input from the sponsor, AR and VR head-mounted displays (HMDs) will be evaluated and chosen based on objective and subjective measures, while also assessing specific learning outcomes."



Abaris Training Resources Inc. announces that Dr. Greg M. Mellema has rejoined the organization as Director of Operations for Abaris, worldwide (Dr. Mellema was a full-time instructor at Abaris from 1998 to 2008). Dr. Mellema's new responsibilities as director of operations will consist of developing new curricula as well as overseeing existing course material, professional development of faculty and staff, managing and developing strategic partnerships, overseeing day-to-day training operations, supporting business development, and conducting both funded and internal research.

Dr. Mellema is a co-author of *Essentials of Advanced Composite Fabrication and Repair* (Dorthworth et al., 2009, 20019), chairman of CertTEC's composite certification committee, and is a member of SAMPE, AMT Society, holding certifications in composites/composite repair from both SAE and CertTEC.

Kayla Taylor, MS in Aviation student and SGS Graduate Teaching Assistant, was invited to interview Apollo 13 astronaut Fred Haise as part of her work with the Avion student newspaper. Haise was the Lunar Module Pilot assigned to NASA's Apollo 13 mission that experienced a catastrophic mid-flight explosion in one of the service module oxygen tanks. The Apollo 13 crew was forced to sacrifice their moon-landing and return back to Earth. Their perilous journey has been dramatized in various media, but the Oscar-winning Apollo 13 movie is perhaps the most widely recognized version of their story.

Kayla's interview will be broadcast on the WIKD 102.5 FM on-campus radio station, but she admitted that the most memorable part of the interview happened off the record. "Fred's cell phone started ringing before we pressed 'record,' and when he pulled the phone out of his pocket, we noticed it was a flip phone. He then allowed the phone to ring until it went to voicemail. It was such an amusing juxtaposition to the technical abilities you think are inherent to NASA astronauts, but Haise playfully acknowledged this and laughed with us."



Forever an Eagle

Success Story: My name is Cristhian Padilla, and I graduated from ERAU with a B.S. in Aeronautics degree in May 2021. I am currently a graduate student pursuing a Master's in Occupational Safety Management (MSOSM) on the Daytona Beach campus.

Since January 2022, I have had the opportunity to work with Cummins Inc. as a Health, Safety, and Environment (HSE) Engineer Co-op for the North American regional team. I began looking for internships at the beginning of my MS program in the fall, and I followed the suggestions of my peers to participate in the Great Minds in Stem (GMIS) conference. At GMIS I had the opportunity to learn from people with similar backgrounds like myself, who are currently working in well-known companies (i.e., NASA, Cummins, and Boeing). As well as participating in the College Bowl program, where I had the opportunity to showcase my skills by completing different individual and group assignments over a 24-hour period to a group of panelists. This was a great experience and opportunity to show the companies in the conference how well I can manage stress, teamwork, and meet deliverables of a project which led help me stand apart from the rest of the participants. Fast forward to the virtual career fair of the conference, where I only had 15 minutes with each company to try to get a job. I used every single tool I had learned from the many times I talked with career services. At first, I was not expecting much after my chat with the recruiter from Cummins, since it is very hard to sell yourself over a 15-minute chat window. However, after 20 minutes of that initial talk, I received an email scheduling an interview with a hiring manager of the HSE department, and after a week, I got the official offer from Cummins.



My Co-op has been interesting and unique. I am officially a Co-op supporting the work of the North American regional HSE team, but I am located at one of the company's manufacturing sites in Seymour, Indiana, where I also have some responsibilities as a Co-op. Technically, I have had two jobs in one and two managers that I must report to. I have experienced both sides of the health and safety career paths during my time at Cummins. One with the corporate team, where I was tasked to find new ways of training workers in different topics using 4.0 technologies like augmented reality, simulation, and virtual reality. Other projects included the development of a resource page that all the sites across North America can use to support their efforts of safety training so the company can stay compliant with OSHA and ISO standards. I also performed some data analysis to help the sites see their incidents and accidents record in a simplified way.

As for the projects on site, I have performed various ergonomic assessment to the workers and helped the leadership team define action items to reduce the risk of ergonomic issues. I reorganized a secondary chemical storage area following RCRA and 5S guidelines to reduce slips, trips, and falls and reduce product waste. I performed 40+ machine risk and hazard assessments and determined if they require the installation of any machine guarding or presence sensing devices. Lastly, I have led more than 5 incident investigations, where I used the COMET methodology to determine the root cause of the incident and presented to leadership, the different corrective actions to eliminate the possibility of it occurring again.

This opportunity has helped me expand my knowledge and apply the theories learned in the classes I have had with Dr. Friend and Dr. Cuevas, as well as fueling my desire to finish the degree and seek more opportunities where I can help a company reach a safer workplace.

Achieving Goals

Please join me in congratulating one of our distinguished alumna, Dr. Sabrina Woods, as she launches into her new role with the National Transportation Safety Board. Dr. Woods will serve as the most recent Human Performance Investigator.

“ This has been a lifelong goal of mine, and finally achieving it is amazing. Thank you, Dr. Winter and Dr. Cuevas, for your unwavering support! ”

Left to right: Evan Byrne, Director of Human and Survival Factors Division Chair, Dr. Sabrina Woods, Jennifer Homendy.



College of Aviation Academic Awards

We also want to congratulate the College of Aviation 2022 Academic Award recipients. Pooja Amonkar (MSA), Sean Crouse (Ph.D. in Aviation), Gabriella Pelz (MSUS), and William R. Fearn IV (MSOSM).



Sean Crouse & Family
Outstanding Student Award, Ph.D. in Aviation



Dr. Steve Hampton
Associate Dean



Gabriella Pelz & Support Team
Outstanding Student Award, MS in Unmanned Systems



Dr. Dothang Truong (Program Coordinator), Sean Crouse
Outstanding Student Award, Ph.D. in Aviation



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



Dr. Mark Friend (Program Coordinator), William R. Fearn IV
Outstanding Student Award, MS in Occupational Safety Management



Dr. Don Metscher (Program Coordinator), Pooja Amonkar
Outstanding Student Award, MS in Aeronautics

Master's Students Publications

Rice, S., Winter, S. R., Crouse, S., & Ruskin, K. J. (2022). Vertiport and air taxi features valued by consumers in the United States and India. *Case Studies on Transport Policy*, 10(1), 500–506. <https://doi.org/10.1016/j.cstp.2022.01.010>

Crouse, S. R., Combs, E., Bell, K., Lopez, G., Bern, L., Bracewell, K., Winter, S.R., & Rice, S. (2022). What Type of Person Would Be Willing to Fly with Children? A Multi-Model Analysis. Presentation at the 25th Air Transport Research Society's World Conference, Kobe Japan.

Zubowski, D. R. (2022). Applying Lessons from Safety-II Proof of Concept in Line Operational Safety Audit to Aviation Maintenance. *Journal of Aviation/Aerospace Education & Research*, 31(1). <https://doi.org/10.15394/jaaer.2022.1904>

Danita Baghdasarin, Shereen Hashemi

Prediction models for willingness to support private and government space ventures: A regression study. *International Journal of Aviation, Aeronautics, and Aerospace*, 8(4). <https://commons.erau.edu/ijaaa/vol8/iss4/5>

Faculty Publications

Truong, D. & Truong, M.D. (2022). How do customers change their purchasing behaviors during the COVID-19 pandemic? *Journal of Retailing and Consumer Services* 67, 102963. <https://doi.org/10.1016/j.jretconser.2022.102963> (Impact factor: 7.135; CiteScore: 11.2; h-index: 89)

Truong, D. & Truong, M.D. (2022). Impacts of Daily Travel by Distances on the Spread of COVID-19: An Artificial Neural Network Model. *Transportation Research Record*, January 29. <https://doi.org/10.1177/03611981211066899> (CiteScore: 3.0; h-index: 119)

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/10.2514/1.1010972> (Impact factor: 2.023; CiteScore: 3.0; h-index: 30)



Presentations



Sang-A Lee, one of our new PhD in Aviation students, presented at the 2022 ERAU Sustainability Conference on April 12, 2022. Everything necessary for human survival depends on our ability to establish stewardship practices that preserve critical resources and foster conditions to ensure long-term protection of Earth's natural environment for future generations. Sustainability practices rely upon individuals to adhere to conscientious principles to establish a reasonable balance between environmental, social, and economic influences. This presentation seeks to establish a candid dialogue about how to identify opportunities for sustainability, how to implement policies that reinforce sustainability practices, and encourage the formulation of a community of practice to reinforce accountability and continuous improvement of sustainability efforts.



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