### ISSUE

# Horizons Newspaper

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# ERAU Prescott's Plans for the Future

# Addressing Campus Concerns in the Wake of Spring 2024

TAYLOR BROWN
Editor In Chief

In the spring of 2024, students and faculty at Embry-Riddle Aeronautical University, Prescott expressed concern at the implementation of a new administrative policy regarding tenure. The campus community was unsure of what the future held under the new policy, and panic arose.

The Prescott Chancellor, Dr. Kenneth Witcher, believes these frustrations "were rooted in ineffective communication." Chancellor Witcher emphasized that based upon feedback from college leadership and the Faculty Senates, such policies are "adjusted and amended as appropriate."

Last spring, a primary concern among students was the potential for professors to leave ERAU, and thus, leave students in need of critical classes and faculty support. While some faculty members left the university, ERAU Prescott hired enough new professors to ensure that all necessary courses are covered and that students will have the support needed to succeed.

These concerns were particularly prevalent among engineering

students. But Dr. Dietmar Rempfer, Dean of the College of Engineering (COE), stressed that "we are not seeing any significant ongoing impact from last semester's events. Faculty numbers are steady, and we haven't had to change any of our operations."

While COE welcomed 6.5 new faculty members over the summer and were able to cover all engineering courses, a concern remains for students studying Alternative Energy. The engineering faculty member involved in the Alternative Energy track has left the university, and there are currently no professors at ERAU Prescott specializing in that field.

In response, Dean Rempfer told Horizons that "We are dedicated to ensuring that the Alternative Energy track remains a valuable part of our curriculum. We're currently in the process of evaluating the best way to offer these courses, and we are confident that students will continue to receive the quality instruction they need. This area remains a priority for us, and we are considering both potential hires and existing faculty expertise to enhance our offerings."

Dean Rempfer insisted that "There's

really no need for concern. COE is in a strong position, and we're continuously working on making our programs even better." This semester, Dean Rempfer launched several initiatives, such as experiential learning, enhanced use of computational tools, and entrepreneurial thinking to continue improving the engineering student experience. The Dean also mentioned the potential for a forum where students can give departmental feedback, ask questions, and express their concerns.

While ERAU Prescott has largely recovered from last semester's concerns, it is safe to say that the campus community needs to heal. The events that transpired last year marked a divide between students, faculty, and the administration that endangers the campus's ability to productively move forward.

Dean Witcher has expressed a sincere determination to help bridge this divide and foster a new era for ERAU Prescott: "Relationships with students, faculty, and staff require constant work to be effective. I believe we are engaging in that work and getting better every day."

Continued on Pg. 2...

#### ...Addressing Campus Concerns from Pg. 1

Lauren Bailey, the Student Government Association's COE Representative, is optimistic about what lies ahead for her college, and for her university as a whole. "After the challenges we faced last semester, the relationship between students and professors has grown stronger.

There's a shared understanding now that we're all in this together, and that sense of mutual support has been vital," said Bailey.

Bailey reported that COE "has worked diligently to ensure that classes are effectively covered," and "while the transition has been tough, I think the efforts to maintain consistency and the open communication channels between

students and faculty have been key to navigating this period successfully."

Chancellor Witcher assured staff, students, and faculty that ERAU Prescott will continue to "focus on undergraduate education that emphasizes problem-based discovery" and "become a top-ranked destination for its undergraduate STEM programs."

"Our Campus is a special place with gifted/talented faculty and staff who are focused on providing a world class education to the amazing students who trust us to prepare them to support the aviation, aerospace, and space industries," said Chancellor Witcher, "I am so proud of this place and the amazing work that happens here each day. I look forward to what the future holds for our Campus and our graduates."

### Flight Line Student Advisory Board New Flight Student Safety Orientation

NEVAEH ALLEN Chief Online Editor

Embry-Riddle Prescott's Flight Line Student Advisory Board (FLSAB) started off strong this fall semester with a well-attended (72 people) event alongside the Aviation Safety Department.

Although this safety briefing was mandatory for all incoming flight students, the Advisory Board and Safety Department hosted an informational event that all flight students were welcome to attend.

To kick off the event in the Davis Learning Center Auditorium, FLSAB President Cody Skartveit and Treasurer Henry Stanley introduced themselves and the board. They shared their purpose and what they hope to be for the students.

FLSAB is currently working on a way to streamline the efficiency and speed of solutions for any problems that students bring to them, the flight department, or the College of Aviation (COA). They are looking to be more present on campus so students can easily reach out about any ideas they have for improving current flight training and operations.

This specific event with the Aviation Safety Department is just one of the connections they utilize and hope to strengthen. Mik Quesenberry, the presenter of the safety briefing, said that their goal for the briefing was to "get students familiar"



Hunter Hourany for Horizons

with the safety program and the safety department to build a foundation of trust."

Quesenberry stated that the safety briefings occur twice during the first two weeks of every semester allowing all new flight students and transfers to learn about the safety culture at the Embry-Riddle Flight Line. Reminders on what to file reports on and who to contact in the case of an accident or emergency at the flight line were key points.

The presentation overall was filled with words of comfort, caution, and general reminders for all flight students.

Near the beginning of the presentation, Quesenberry started strong by engaging the students with questions and real experiences that related to the policies and statements they were sharing. One statement from the

presentation laid the foundation of why this briefing is so important: "[s]afety is a judgement about the acceptability of risk."

Quesenberry continued to share that they understand mistakes will be made as they are often inevitable, especially since the students are just starting out. In the end, President Butler, Quesenberry's team, and the student hold responsibility for those mistakes. That said, the safety team is there to help students through any consequences that might come about from their actions.

Just as Quesenberry communicated all the necessary information to the students about safety, they stated that communication is one of the essentials to an effective safety culture: one which the students can contribute to.

Communication at this

event was found to be quite effective as Andrew Quillan Perry, a transfer student who attended the briefing, shared, "This presentation made me feel a lot more comfortable," as it should for all flight students. Perry shared with Quesenberry that he felt these topics were necessary and he was glad they had done this presentation.

After the event, Skartveit and Stanley restated their main goal of acting as a liaison between the students and the head(s) of the Flight and Aviation Departments. Currently, they are working to get each new flight student an instructor as quickly as possible and start an Avi-

ation Safety Advisory Council that will mirror ERAU Daytona's program.

They hope to start projects that students with all aviation related majors and minors can work on to actively impact the flight program to create lasting change. Stanley shared that having these projects will show "your values as a human being, that you value others and service more than yourself."

Whether you want to join as a member or an officer, Skartveit shares that he wants to expand the program but will still listen to each member. He "doesn't want to limit the officers in their creativity for how to grow the organization, to improve flight training quality."

Getting involved in these events and FLSAB in general is quite simple: either head over to their office in the dispatch center of the flight line Main Operations Building, email their President [skartvec@my.erau,edu], or visit their website [https://eaglelife.erau.edu/fsab/home/].

Thanks can be given to the Aviation Safety Department in conjunction with FLSAB for this insightful event encouraging new flight students that the University is there to see them succeed.



### State of the University Address

#### President Butler Speaks on the Future of Embry-Riddle

NYOMI GARZA Correspondent

Before students returned to campus for the 2024-2025 academic year, the President of the university, P. Barry Butler, Ph.D., conducted the annual State of University address. The presentation was given to all Embry-Riddle Aeronautical University campuses, including Worldwide. Those in attendance included faculty, staff, and Student Government Association (SGA) leaders.

President Butler described the annual State of University address as a presentation that "allows me to highlight university-wide achievements over the past year and communicate expectations for the coming year."

The plan focuses on five areas for improvement including "the student experience, enrollment management, academic and faculty excellence, research and innovation, and philanthropy and alumni relations."

According to the document outlining the Strategic Plan for 2023-2028, the plan was developed by Strategic Implementation Teams by surveying the ERAU community about issues and how to improve in those areas. The document describes



FRALL for Horizons

five goals and their progress towards those goals. Along with outlining goals and their progress, the document outlines the strategies to complete them, such as the tenure review to improve university instruction. To read more about the future of ERAU students can go to the Embry-Riddle website and click the last tab on the right named "Our strategic Plan." A link at the bottom of the page goes directly to the document stating the vision for the future.

As president, President Butler aims to "promote and support our outstanding departments and serve as a champion for our students." He would also like students to know "that student success

is at the heart of everything we do at Embry-Riddle."

"This year he [Dr. Butler] spent a lot of time talking about the buildings and renovations on campus," said SGA President Christopher Sorenson.

President Butler spoke about the changes coming soon and spent time "recognizing new university officials, we have three new members to the Board of Trustees." The new members include Leanne Caret, Ken Ricci, and Steve Varsano. Sorensen also stated, "His [President Butler] projection is that the university is doing great, I'm going to leave that up to each individual person and their experience."

Recent changes around campus can cause students to feel unsure about the future of Embry-Riddle but Sorensen reassured students that although "there have definitely been challenges with the university, but as much as I've been able to tell things look like they're making steady improvement at improving."

Check out the Strategic Plan at this ERAU page: [https://erau.edu/leadership/president/our-strategic-plan]

### SGA Holds First Open Meeting of the Year

YOUSSEF ALLAM Correspondent

On Sep. 4 at 6 p.m., the Student Government Association (SGA) held the first open meeting of the year in the Davis Learning Center (DLC), instead of the usual location in the Student Union Lower Hangar.

The meeting opened with Christopher Sorenson, the new SGA President, giving his report, followed by the rest of the SGA executives and organization representatives doing the same. For the most part, these reports detailed what the various executives and representatives had done in preparation for the school year, such as talking to faculty, admin, and coordinating among student groups. Many organization representatives also let those attending know of upcoming events, such as the Movie Night at Watson Lake on Sep. 6.

During the public comments section, the Director of Student Engagement informed those in



Claire Ross for Horizons



Claire Ross for Horizons

attendance of a leadership summit that would take place on Sep. 6. Shortly after, a student voiced their opinion that the barriers around the library's second floor computers were obstructive, especially for group work, which many students explicitly go to the library to do. Abby Best, a member of the Library Committee, noted his comment and told those in attendance to ask her questions about the library.

There were no discussion items, nor open discussion items. The meeting adjourned shortly after at 6:16 p.m.

E.C. Hatcher, a sophomore and SGA officer told Horizons that he "appreciates how open they [SGA] are," and commented that, for the semester he has been an officer, "The SGA has been very proactive." He also talked about the

leadership summit, and how beneficial it was for student organizations to attend.

Sorenson, the new SGA President and former Vice President, told the newspaper that, "We have a lot of pop-up events planned. We really want to engage with the students on a day-to-day basis... more than just having them come to the SGA office." When asked about communication with administration in light of the tenure policy change, he responded, "It has actually been really good... I've had meetings with almost every major university administration member... and at the end of all those meetings they've said, 'Please reach out, even if it's not a meeting."

The next open meeting will be on Sep. 16 at 5:30 p.m. in the Lower Hangar.

# Can We Build It? Yes, We Can!

### A Comprehensive Update on Campus Construction

NYOMI GARZA Correspondent

Recently, students may look around the Embry-Riddle Prescott campus and see boarded-up buildings with caution tape around them. Do not be alarmed, for these changes indicate new buildings are coming to the Prescott campus.

The most recent changes have occurred to the Flight Line, which now boasts a new simulation building. The large, white structure can be viewed directly from the entrance to Riddle Operations on Corradi Way. Parker Northup, chair of the Prescott Flight Department described the new building as "16,000 square feet of modern digital infrastructure to support high-fidelity simulators and student-focused spaces, including study areas and learning labs."

According to Northrup, the new simulation building houses "New Frasca simulators [which] will feature high-fidelity motion-cueing systems that, when combined with realistic replicas of an aircraft's flight deck, offer students a fully immersive learning system." The new simulation building provides "space to expand its [ERAU's] virtual and

augmented reality technology offerings, allowing flight students to learn in a safe environment while on the ground."

Assembling the simulation building for the aeronautical students required time and effort from multiple sources, including students from ERAU.

Hannah Shrum, a Forensic Biology student, spent the summer assisting "in the assembly of the cabinets in several of the rooms throughout the building." The experience was eye-opening for Shrum because "it was cool to know that the school utilizes local businesses and see how it contribute[s] to the community."

The new construction on campus is part of a five-year plan aiming to enhance the ERAU experience. Other additions at the Prescott campus include a new Student Union and residence hall. P. Barry Butler, University President, expressed that "both the new Student Union and residence hall will provide rich living and learning environments."

Butler also shared details about the new buildings, "The new residence hall will be multifunctional, with

the ground floor offering student service offices and collaborative spaces, while suite-type living spaces will make up the higher levels."

According to Butler, "the dramatically modernized student union will serve as the cornerstone of a redesigned campus quadrangle." Butler also believes the modernization of the facilities will "not only provide students with an enjoyable place to eat, study, and gather but offer them a true sense of place on campus."

Along with the boarded-up buildings, students can also find posters on campus with the location of the new buildings highlighted in red. According to the map, the new student union will go next to the Aerospace Experimentation and Fabrication Building (AXFAB), and the new residence hall will go between the village and the softball field.

Butler projected construction will "begin in 60 days, with all new facilities slated for completion by Fall 2026." Although some students will not see the completion of these projects, President Butler looks "forward to the invaluable ways this transformation will elevate the student experience on the Prescott campus."



Rahul Iyer for Horizons



Rahul Iyer for Horizons



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# Welcome New Eagles! A Recap of Fall 2024 Orientation

GREYSON CRAIG Correspondent

Embry-Riddle Aeronautical University (ERAU) kicked off the 2024-2025 academic year with their typical Orientation Week, designed to introduce new students into the campus community in Prescott, Ariz. The week was filled with a mix of informative sessions, social events, and hands-on experiences to help show students what to expect, and how to survive on their own on campus.

Orientation began on Aug. 21 with the traditional Convocation ceremony, where university officials, including Chancellor Dr. Laura Kennedy, welcomed the incoming class of future leaders and pioneers across different industries. Dr. Kennedy's message to the new Eagles emphasized the importance of embracing challenges and the

boundless opportunities ERAU offers. Following the Convocation, students participated in various orientation sessions tailored to introduce them to the unwiversity's resources and support systems. Tutoring, Advising, Accessibility Services, and Upward Bound were just some of the stops on the orientation tour. The tour also provided insight to tutoring services, academic advising, and the tools necessary for navigating the rigorous curriculum. Workshops on time management, study skills, and mental health awareness were also key highlights. "More then 40 Orientation leaders, including our heads Christopher Sorenson and Julia Rieth, helped welcome almost 800 new Eagles to Embry-Riddle this year!" Said Kelsey Tamps with the Department of Student Engagement (DSE).

Social activities played a significant role throughout the week, offering students a chance to start



Connor McShane, Wilson Van Ness for Horizons



Connor McShane, Wilson Van Ness for Horizons



Connor McShane, Wilson Van Ness for Horizons meeting their peers. The Eagle Fest, held on Aug. 24, was a standout event, featuring music, food trucks, and club showcases. Molly Webb with ERAU's Department of Student Engagement remarked, "This is a wonderful way to help the new students get familiar with their new home away from home and feel comfortable to utilize the resources we offer to all students." This event gave students a glimpse into campus life, with representatives from various student organizations eager to recruit new members. From the Robotics Club to the Golden Eagles Flight Team, there was something for everyone to get involved in.

A particular highlight of Orientation Week was the Flight Line Tour, an exclusive opportunity for students in the College of Aviation to explore ERAU's impressive fleet of aircraft. The tour allowed aspiring pilots and aeronautical engineers to get up close and personal with the planes they will eventually command and maintain. The tour kickstarted the excitement for the hands-on learning experiences that lie ahead.

Orientation Week at ERAU was more than just an introduction to campus life; it was a celebration of the unique community that defines all students that make it what it is. The friendships formed, the knowledge gained, and the experiences shared will undoubtedly serve as a strong foundation for the incoming class as they soar through their time at Embry-Riddle during their next 4 years.

# The Fall 2024 Organization Fair Meet the Student Organizations of ERAU

ISABELLA PIWOWAR Correspondent

On September 5, 2024, the semesterly Organization Fair was held in the Activity Center from 6:00 p.m. - 8:00 p.m. This event was a showcase for all the clubs on the Prescott campus. The room was set up with hundreds of tables, that allowed the clubs to show off their accomplishments and provide fun gifts to the attendants.

Officials from the Prescott Student Engagement attended the event to help things run smoothly. The engagement team could be seen helping organizations check in for their designated table and help attendees find where certain organizations are. Alexis Marquez, an officer for Psi Chi- The International Honors Society of Psychology, shared some insight on what the planning for this event was like. Marquez shared with Horizons that her and the club's President "applied through Eagle Life" in order to participate in the Organization Fair.

The room was filled with 122 clubs, formally known as Recognized Student Organizations, ranging from major focused clubs to non-major focused clubs. Claire Hitzges expressed to Horizons how much she enjoyed the variety of clubs around the Fair. "There's definitely a lot of stuff to look at... I like that we have a lot of clubs here, it makes me happy." Due to the variety of clubs around the Fair, attendants could find a club that aligns with their hobbies and



Hunter Hourany for Horizons

values.

The goal of the Organization Fair was for clubs to preach their club goals and connect with potential new members. Clubs around the Fair could be seen with trophies, photo collages, instruments, robots, and other memorabilia to show what their club is all about. Other clubs could be seen giving out candy and other free merchandise to the wandering attendants.

Paper and digital logs with new member information were filled up throughout the two- hour long fair, showing that the Organization Fair was successful for the registered organizations. Couldn't make this semester's organization fair?

No worries!

You can check out and register for ERAU Prescott's wide-variety of student clubs and organizations on Eagle Life.

Make sure to keep an eye out for the Spring 2025 organization fair!



Hunter Hourany for Horizons

# Girls in Aviation Day

#### **Volunteers Needed!**

We are looking for volunteers to help put on our event. We look forward to celebrating GIAD with you!



Scan for more information



Sept 71

7am-5pm

# Engineering Students Protect African Elephants with Mechanical Engineering Problem Solving Across the World

FRANCESCA KEEL Chief Copy Editor

This past May, Embry-Riddle mechanical engineering students traveled to South Africa and Namibia to apply their ME446 project in the real-world environment. ME 446, also known as Thermal Fluid Science and Energy Management Lab, had one project for the spring 2024 semester; preventing the poaching of elephants while deterring them from entering human villages. The students who were involved in the project include: Gabriel Ledezma, Zachary Garcia, Katheryn Rolle, Olivia Wood, Duncan Shour, Gabe Corneaux, and Isaiah Veidmark.

Dr. Elliot Bryner, the mechanical engineering department chair and professor for ME 446, was approached by Elephants, Rhinos, People (ERP) to develop a system to detect and deter elephants in populated areas in Namibia. ERP is a South African company dedicated to protecting elephants and rhinos from poachers, while conserving their natural population. Dr. Bryner took this brief to his students and throughout the semester, they developed a system that detected elephants then deterred them..

This project used both long- and short-range detection. For the long-range detection of elephants, students used a geophone to sense vibrations in the ground, called infrasound. Dr. Bryner described the geophone as "essentially a microphone that gets buried in the ground and detects vibrations. Elephants communicate using soundwaves at very low frequencies, less than 20Hz. We detect the vibrations of the elephants in the area using the geophone at which point the device switches to an active mode that uses a camera and image recognition software to detect the presence of elephants in a localized area."

Elephants communicate with each other through vibrations too low for the human ear to hear. Gabe Corneaux, a student who is involved in in the project told Horizons, "We could detect elephants communicating through the ground at a frequency of about 15Hz. Using a state space



Gabe Corneaux for Horizons

python code, the geophone turned on our shortrange detection: a small infrared camera with AI recognition that was able to identify a picture of an elephant during both night and day."

The short-range detection system in turn triggered a bass shaker underground to vibrate at a frequency that elephants would interpret as a predator approaching. This would cause the elephants to leave the area, preventing them from becoming revealed to poachers and damaging villages.

Dr. Bryner likened the vibrations to a tool used in the science fiction series Dune, "The students ended up calling it a Thumper. But instead of attracting a worm, it deterred elephants." The bass shaker was indeed buried underground just like the fictional sound machine and used rebar to extend the range of the vibrations through the sandy soil of Namibia.

Applying engineering skills to a real-world problem is what made this project so valuable. Collaborating with people from a different country on a problem not as prevalent in the United States provided both Dr. Bryner and his students with a different perspective. Dr. Bryner told Horizons, "Engineers are problem solvers...we are citizens of the world." The impact that engineers have can be felt across the world in areas where it might not seem like engineering is the most prevalent solution. Corneaux said, "Everyone on the team was very involved in this project, because knowing how big of an impact we were making made us all very excited to see this project succeed."



Gabe Corneaux for Horizons



Gabe Corneaux for Horizons

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# PARSEC

### The Embry-Riddle Student Finalists at NASA

RITI DINESH Correspondent

For over a year, a six-person research team from Embry-Riddle Aeronautical University Prescott has worked on their submission for NASA's Human Lander Challenge (HuLC), pouring hours into researching, testing, problem-solving, and more. This summer, their hard work paid off: they were selected as one of only twelve finalists, and were invited to Huntsville, Alabama to present their findings to a panel of judges, all prominent figures at NASA.

The Embry-Riddle group is called PARSEC, which stands for Plume Additive for Reducing Surface Ejecta and Cratering. PARSEC's project focuses on addressing the challenges posed by the harsh lunar environment during landings, mitigating plume surface interactions on the lunar surface—a critical yet often overlooked risk in moon landings. Even small impacts can hurl rocky debris over a wide radius, with many bits of shrapnel traveling at the speed of a shotgun blast.



**ERAU** for Horizons

Media Officer Sanaya Nichani explained their research as "a solution for mitigating plume surface interactions on the lunar surface," hence the name PARSEC. The team hopes their research will "help cultivate a safer future for space exploration."

At the U.S. Space and Rocket Center, the team was given 25 minutes to present their idea, followed by 20 minutes of questioning from the judges. PARSEC Finance Officer Aidan Kihm admitted that it sounded "super scary" at first, but after meeting the judges in person, the team realized that it was "an exciting opportunity to share and discuss" rather than a setting for criticism.

The team's efforts were rewarded with invaluable experience and an Excellence in Systems Engineering award. Team Lead David Clay applauded fellow team members' initiative, knowledge, and willingness to take on a challenge. "Looking back on what we've accomplished really frames a unique perspective of education for me," Clay remarked.

Testing officer Grant Bowers echoed the sentiment, describing seeing the results of their hard work at a NASA finalist forum as "one of the most satisfying feelings."

PARSEC's Safety Officer Jakobe Denby also emphasized the trip's educational value, particularly the opportunity to interact with the NASA engineers working on the much-anticipated Artemis Program. "Talking with them about their experiences and hearing their stories was one of the best aspects of the trip," Denby noted.

Looking ahead, PARSEC's Deputy Lead Bruce Noble confirms that the team will be competing again in the 2025 Human Lander Challenge, which will focus on cryogenic fuels. Noble also announced that PARSEC will be opening up to new members this year. For students interested in participating in PARSEC, email David Clay at [claclayd6@my.erau. edu].

Through their dedication and innovative research, PARSEC has not only made contributions to lunar exploration technology, but also gained experiences that will shape their careers in aerospace. With their sights set on future challenges, there's no limit to what the team could achieve to drive the aerospace industry forward.

# The Student Partner Program Changing the Way Students and Professors Connect

ISABELLA PIWOWAR Correspondent

At Embry-Riddle, the Student Partner Program is changing the way students and professors connect. It is not just about going to class and getting through assignments anymore—it's about real collaboration and making sure both students and professors are heard. This program gives students a seat at the table, allowing them to work alongside their professors to shape courses in ways that work better for everyone.

Mahalia Phillips, a student lead in the program, talked about how the program is helping bridge the gap between students and professors. Students get to share their perspective on courses, and professors in turn get to see things from a fresh angle. It's not just about improving class content—student partners also act as learning coaches, helping their classmates develop skills that go beyond one course or one semester. They're setting their peers up for

success in the long run.

The program isn't just making waves for students. Faculty are seeing real benefits too. Aimee Fleming, Associate Director at the Center for Teaching and Learning Excellence (CTLE), said that the program has helped professors better understand how to communicate with their students. "The student partner has helped me gain a better understanding of how to engage students in learning," she shared with Horizons. Professors are even starting to rethink how they teach. Fleming mentioned that some faculty have decided to adjust their curriculum in other courses based on the positive experiences they've had with student partners.

For Fleming, it's not just about academics—it's about life skills. College should be more than just attending class and doing homework. It's a time to learn about leadership, teamwork, and how to advocate for yourself. And this program does just

that. It helps students build confidence, speak up for their needs, and take control of their learning experience.

One of the best parts, according to Philips, is watching the Embry-Riddle community grow. Students are feeling more comfortable talking to professors, and professors are becoming more open to feedback. It's creating a partnership where everyone is learning from each other. Both students and professors are adapting and evolving together, and that's something pretty special.

In the end, the Student Partner Program is about more than improving academics. It's about empowering students to shape their own learning and helping professors understand their students better. By working together, they're building a stronger, more connected Riddle community. It's a win-win for everyone involved.



ERAU for Horizons

# Women's Cross Country: Noriega Leads ERAU in First Race

FLAGSTAFF, ARIZ. – Embry-Riddle freshman Sophia Noreiga (Chandler, Ariz.) led the Eagles to a 5th place finish as she finished 20th overall in the George Kyte Classic hosted by NAU at Buffalo Park in Flagstaff on Saturday.

Noreiga ran the 2.5 mile course in 15:43.84. The next Embry-Riddle finisher was Zoe Tizard (Gilbert, Ariz.). Tizard finished with a time of 16:20.97. Right behind Tizard was Kylie Monson (Rancho Cordova, Calif.) who finished in 16:22.78. Tiffany Terry (Calimesa, Calif.) and



Elyse Grant (Newbury Park, Calif.) finished 4th and 5th on the ERAU team. Mia Kemp (Newtown, Victoria, Australia) ran the race in 17:00.39 to finish 6th on the Eagles and 44th overall in the race. Rounding out the Eagle line up was Fionnula Carew (Manhattan Beach, Calif.) and Kamryn Hoehne (Santa Fe, N.M.).

Next weekend, Embry-Riddle will race in Prescott as the Eagles host the ERAU Invitational with the race beginning at 10am on campus.

#### Women's Soccer: Eagles Tie Oklahoma Wesleyan

SILOAM SPRINGS, ARKAN. – In another battle with a top 25 team, Embry-Riddle tied the Eagles of Oklahoma Wesleyan 1-1 in Siloam Springs, Arkansas on the campus of John Brown.

ERAU struck first in the 45th minute. Scarlett Frohardt (Gilbert, Ariz.) found Sophia Bohon (Surprise, Ariz.) in the middle of the field. Bohon then played the ball through to Kari Kasun (Prescott, Ariz.). With a single touch, Kasun fired a shot that nestled into the far left corner



of the net, giving the Eagles a 1-0 advantage at

halftime.

Oklahoma Wesleyan tied the game in the 77th minute on a breakaway goal by Tania Mocholi.

Annabelle Ruckle (Phoenix, Ariz.) made six saves in goal for Embry-Riddle.

ERAU will play again on Saturday night against the Golden Eagles of John Brown with kickoff scheduled for 5pm Arizona time.

#### Women's Volleyball: Eagles Sweep Spires

PARKVILLE, MISSOU. – Embry-Riddle got back into the win column with a three game sweep of Saint Mary's from Kansas on Friday afternoon in Parkville, Missouri. ERAU took the first set 25-18, the second 25-23, and finished the match with a 25-19 win.

The Eagles came out swinging in the first set and hit a remarkable .414 in the win. After trailing 2-0, Alexsandra Rodriguez (Phoenix, Ariz.), Katie Rolle (Missoula, Montana) and Dalia Haase (Tucson, Ariz.) each had a kill to quickly catch ERAU up. The score was tied 9-9 until Embry-Riddle used a 5-0 run to open up a lead. The Spires never got within three points the rest of the set and the Eagles closed it out 25-18.

In the second set, ERAU jumped out to a 5-1 lead — mistakes in a row by the Spires and a kill from



but Saint Mary's was able to tie the score at 9-9 on an error by the Eagles. Anela Chew (Pearl City, Hawaii) and Kelly Hansen (El Dorado Hills, Calif) put Embry-Riddle back in front with back to back kills and make the score 12-10. Three mistakes in a row by the Spires and a kill from

Hannah Clear (Fort Worth, Texas) gave ERAU the 18-13 advantage. Saint Mary's did not go away quietly though as they were able to get back within one point at 19-18. Embry-Riddle closed out the set with two big blocks the first by Clear and Hansen and the second by Clear and Rodriguez as the Eagles won 25-23.

After ERAU took another lead to start the third set, Saint Mary's went on a 5-1 run to tie the score up at 10-10. Embry-Riddle used a 4-1 run of their own to retake the lead as Rodriguez added two more kills to her total for the day. The Eagles closed out the final set 25-19.

Embry-Riddle will continue their play in the Park Classic on Saturday with two matches. The first begins at 8am Arizona time.

#### Men's Cross Country: Eagles Take 3rd in Flagstaff

FLAGSTAFF, ARIZ. – Embry-Riddle looked strong in their first race of 2024 as the Eagles took 3rd in the George Kyte Classic hosted at Buffalo Park.

Demetris Love, Jr. (Phoenix, Ariz.) led ERAU with a 14th place finish in a time of 23:11.5. Just behind Love, Jr. was Jacob Ortiz (Chandler, Ariz.). Ortiz ran the 4.5 mile course in 23:16.8. Dillon Eisner (Paulden, Ariz.) and Ben Smith (Spokane, Wash.) were 3rd and 4th for Embry-Riddle. Coming in 25th overall and 5th for the Eagles was Nick Logan (Phoenix, Ariz.).



Rounding out the scoring was Nathan Kutscher (Huntington Beach, Calif.) and Ben Kovach (Chandler, Ariz.).

Austin Lemus (Chino, Calif.), Nicolas Urquidez (Austin, Texas), Maxwell Kilstrom (Webster Groves, Mo.) and Tyler Rafferty (Surprise, Ariz.) all ran strong for ERAU as well.

Embry-Riddle will host the ERAU Invitational next weekend in Prescott with the men's race beginning at 9:00am.



# Remembering I

# Saying Goodbye to a Valued Me

MATHEUS PAULI Correspondent

The unexpected passing of Eileen Ferzacca, on June 2, 2024, has left the Embry-Riddle community reflecting on the profound impact this Embry-Riddle staff member had on everyone she met.

Eileen was known for far more than her role— our very own "hot dog cart lady" who ran the Turbo cart. She was cherished for the way she made people feel valued and, heard, connecting with everyone she talked to.

Christine Repp, a Sodexo Dining Services employee who worked alongside Eileen, captured her spirit well, "There's only one Eileen. It was a very

dynamic and exciting experience to work for her."

More than just a colleague, Eileen was a driving force behind improving the quality of service and creating a warm, welcoming environment for students.

She made it a priority to listen to their requests, concerns, and ideas, turning something as simple as serving food into a cultural event on campus.

"She empowered everyone around her," Repp said, describing Eileen's presence as one of true leadership and care. "The students felt they were heard."

Brandon Hammer, another co-worker, echoed similar sentiments. "She made an impact on everyone," said Hammer. Eileen wasn't just doing a job—she was there for everyone, regardless of their background or major.

"You'd talk to her about anything, and she would just listen," Hammer added, marveling at her ability to make each person feel seen and heard.

For Eileen, it was always about connection. "She was there for everyone," Hammer noted, reflecting on her unique ability to bring people together.

Whether interacting with students, colleagues, or campus visitors, she had a gift for making people feel welcome and import-

ant.

Owen Smith fondly recalls his time interacting with Eileen: "She knew everyone on a first-name basis, asked how classes were, how you were doing – she was just a great person. Even in the toughest days, such as finals, I could always count on Eileen being there to brighten my day."

Personally, I always made it a point to stop by and have a chat with her. Her warmth and genuine interest in everyone she met made those moments special.

Eileen had a rare gift for making people feel heard and valued, and her presence will be deeply missed. I will forever cherish her words of wisdom and her truly invaluable advice

Eileen Ferzacca may have left us too soon, but her legacy of warmth, empowerment, and deep listening will live on in the countless memories shared by those fortunate enough to have known her.

Eileen turned everyday moments into lasting connections, leaving behind a community that will never forget her kindness and care.

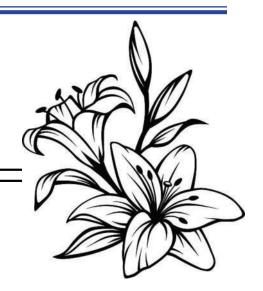
Horizons thanks Eileen
Ferzacca for her years of
service to the staff,
students, and faculty of
ERAU Prescott. Her impact
on our campus still
resonates, and she will not
be forgotten.

The Horizons team sincerely thanks all who contributed to the creation of this tribute.



# Eileen Ferzacca

## ember of the ERAU Community



"She made an impact on everyone. You'd talk to her about anything, and she would just listen."

Brandon Hammer, Co-worker



**ERAU Dining for Horizons** 



ERAU Dining for Horizons

Eileen Ferzacca may have left us too soon, but her legacy of warmth, empowerment, and deep listening will live on in the countless memories shared by those fortunate enough to have known her.

"She knew everyone on a first-name basis, asked how classes were, how you were doing - she was just a great person. Even in the toughest days, such as finals, I could always count on Eileen to brighten my day."

- Owen Davis, ERAU Student



**ERAU** Dining for Horizons



#### **Word Search**

N	Α	Α	Α	L	Ε	С	Α	Ε	0	0	С	Р	С
N	L	Н	Α	L	Α	I	٧	F	Р	R	N	I	С
С	Ε	S	R	Α	Р	Т	I	R	Р	G	Н	С	G
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Ι	L	I	L	U	0	S	L	L	N	0	S	I	Ε
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#### AVIATION

CONSTRUCTION
ELEPHANTS
ORGANIZATION
EAGLE
PARSEC
FLIGHT
SGA
NUGGET
ADDRESS

**SAFETY** 

#### Sudoku

2		5	1		9			
		7	3					
				4			7	1
				9	8			2
4	5		2		1		9	6
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7	8			1				
					3	5		
			8		7	6		4

Difficulty Level: Medium

How am I doing? Pause Print... Clear Options...

# TAJIKISTAN: Migrant Workers' Return Likely to Cause Social, Economic Unrest

**Summary:** Numerous Tajiks are leaving Russia due to harassment. This will likely lead to economic downturn and social unrest in both countries and increased radicalization in Tajikistan.

Development: On 22 March, four Tajik nationals attacked the Crocus City Hall, a concert hall in Moscow, shooting numerous patrons before setting the venue on fire, killing 145 and wounding hundreds more. All four suspects in the attack are Tajik nationals, and Moscow arrested at least six other Tajiks in connection to the attack. Islamic State – Khorasan (ISIS-K), which has operated within and recruited fighters from Tajikistan for numerous years, claimed responsibility for the attack.

Tajiks living in Russia are facing significant and increased harassment, including arbitrary deportations, beatings by police, and more. This has led numerous Tajiks to leave Russia or attempt to, according to a statement made by Tajik Deputy Labor Minister Shahnoza Nodiri on 30 March. Tajikistan, the poorest country in the former Soviet Union, has a population of approximately 9.2 million. Russia has a GDP approximately 6.7 times as large as Tajikistan's, and migrant workers earn approximately four times as much in Russia than they do in Tajikistan, often with a higher standard of living than they would have in Tajikistan, according to Radio Free Europe/Radio Liberty. Tajikistan also has widespread unemployment, and 50.9% of the Tajik GDP comes from remittances, an overwhelming majority of which comes from Russia.

**Analysis**: Tajik workers will likely continue to leave Russia in large numbers, leading to social unrest and economic downturn in both countries, including a potential spike in terrorist

radicalization in Tajikistan. Anti-immigrant sentiment in Russia will likely persist for several years. While Moscow likely will not significantly tighten immigration protocols due to the country's labor shortage, numerous Tajiks will likely leave the country anyway due to increasingly widespread harassment, leading to labor shortages in certain industries, reduced production, and economic downturn in Russia. Tajikistan's unemployment crisis and critical infrastructure overburdening will likely become considerably worse due to an influx of returning workers. Even more significantly, poverty in Tajikistan will almost certainly spike in the absence of these workers' wages. This unemployment, harassment, and poverty will likely increase the number of Tajiks susceptible to terrorist radicalization, especially by the already-present ISIS-K.

[Christina Muchow]

# IRAN: Jerusalem Strike on Tehran Leaders Will Likely Escalate Ongoing Proxy War

Summary: Jerusalem's most recent strike on Iranian leaders will likely lead to a heightened conflict with Tehran. Tehran has vowed to retaliate, which will likely lead to an increase in the frequency of alternating attacks. Tehran's retaliation will likely involve the use of proxy groups to strike, while Jerusalem will likely continue air strikes and attacks on Iranian targets in Syria.

Background: On 1 April, Jerusalem struck an Iranian Embassy in Syria, killing seven people, including two high-ranking Iranian commanders, according to Al-Jazeera. The strike killed Brigadier General Mohammad Reza Zahedi of Iran's Islamic Revolutionary Guard Corps (IRGC), Jerusalem pinning him as a target many years ago, according to Al-Jazeera. This strike will fuel Tehran's retaliation, perpetuating the conflict between Israel and Iran, according to France 24. With conflicting beliefs after the 1979 Revolution, Tehran and Jerusalem engaged in an ongoing proxy war, also known as the Israel-Iran Shadow War. Both Tehran and Jerusalem often deny involvement in attacks on each other, deeming the conflict "shadow war." In the last few decades, Jerusalem carried out several attacks on Iranian targets, including nuclear scientists, ships, and, most recently, an embassy, according to the Center for Strategic & International Studies. Jerusalem also struck targets in Syria on many occasions, as Tehran's "Axis of Resistance" remains well supported in that area. Tehran utilizes its proxy groups to discretely attack Israeli targets such as ships, military posts, and even innocent citizens, according to Al-Jazeera. Tehran cannot directly link itself to some of these attacks due to its lack of complete control over these groups; however, the fact that they provide funds, weapons, and training to these groups connects them.



Tehran's Use of Proxies to Attack: Tehran will almost certainly continue its use of the "Axis of Resistance" to attack Israel and will almost certainly retaliate for the most recent airstrike using its proxy groups. Tehran's proxy groups form the "Axis of Resistance," allowing Iran to hold militia power in several locations across the Middle East, putting it in a strategic position to attack adversaries throughout the region, according to The New York Times. This network will likely continue to boost Tehran's influence and give it more power to confront its enemies. Tehran relayed its intent to retaliate to Jerusalem's assassination of high-ranking Iranian generals, according to The Times of Israel. The retaliation will likely display intense animosity and strategy, reflecting the intention of Tehran to respond forcefully to the strike.

Jerusalem's Use of Air Strikes to Remain Anonymous: Because Jerusalem does not possess proxy group power, Jerusalem will almost certainly

continue air strikes that it denies responsibility for as its main form of attack. As shown in Jerusalem's most recent strike on Tehran, Jerusalem launched an air strike and refused to comment on the situation, according to Al-Jazeera. The determination of both sides to remain anonymous will likely escalate into a wider conflict, as both Jerusalem and Tehran refuse to claim responsibility. This escalating tension will likely further destabilize the region and draw in other actors, exacerbating an already volatile situation. In a shadow war, covert actions often occur, often through deniable means, to achieve strategic objectives without openly declaring hostilities, according to the Digital Scientific Archive. The lack of accountability begins a cycle of retaliation and escalation, which poses significant consequences for regional stability and global security, according to the Digital Scientific Archive.

**Outlook and Implications**: The air strike on Iranian leaders will likely lead to an escalation of conflict between Tehran and Jerusalem and may lead to a dispute involving surrounding nations. Tehran's vows to retaliate will likely lead to a response from Jerusalem and the continuation of this ongoing dispute. Tehran will almost certainly use its "Axis of Resistance" to retaliate against Israel. While Tehran continues to use proxy groups to strike, Jerusalem will likely continue to use air strikes to avoid claiming responsibility. As Tehran continues to use its proxy groups in surrounding nations to execute attacks, conflicts may arise with nations where the "Axis of Resistance" operates actively. As Jerusalem does not possess proxy group power, Jerusalem will almost certainly continue anonymous air strikes to attack foreign combatants.

[Caileigh Tax]

September 12, 2024 Diversions

# Student Profile: Kelly Husted Psycho-analyzing Success

TAYLOR BROWN Editor In Chief

Many know Kelly Husted, a second-year forensic psychology student, as the Student Government Association College of Arts and Sciences Representative. Shifting her dreams from professional ballet to forensic psychology, Husted moved from Kansas to ERAU Prescott.

"I chose my major because I was really interested in psychology and in the legal system and how they overlap," Husted told Horizons, "But I also love how diverse the field can be. There's so much you can do within forensic psychology, and you can make a difference in so many ways in so many jobs."

Currently, Husted works as a research student under Dr. John Woodman, focusing on "establishing a guardianship for older adults who don't have the capabilities to function on their own but are also



Jordan Stephens for Horizons

still capable enough to not be forced into an intensive care program." Dr. Woodman and Husted spent the Spring 2024 semester collecting data and are now working with Yavapai County to implement the program.

But there's more to Kelly Husted than outstanding academic perfor-

mance and student service. When asked which animal's legs she would choose if her legs had to be replaced with animal legs, Husted chose "goat legs, like the dude from the Chronicles of Narnia."

In her free time, she also enjoys reading, having a social life, and

spending time outside. "Ideally, if I could be hammocking at a park and reading a book, then life is good," said Husted.

Looking to the future, Husted is unsure of how she wants to use her degree. "I'm hoping to go to law school or grad school after undergrad, but I'm not entirely sure yet. In the long run though, I hope to work for a government agency at some point and then work privately afterwards," Husted told Horizons.

When asked for her secret to success, Husted said "My secret is 100% Maybelline. Not actually. My biggest piece of advice is to reach out for help and get involved!"

Husted emphasized, "Reaching out for help is incredibly important, especially as a freshman. Everything was so unfamiliar to me, but with the help of some upperclassmen and amazing professors, I really found my place."

## Movie Review: Borderlands The (no) Good, The Bad, The Ugly

ISABELLA PIWOWAR Correspondent

This past month, the film adaptation for the popular video game 'Borderlands' was released in theaters. With notable actors and actresses like Kevin Hart and Jamie Lee Curtis, the film was sure to have positive reviews. However, even with the well-known characters, this movie fell flat.

Due to the game's popularity, the players of 'Borderlands' were excited to view its adaptation. In the adaptation, the audience could see their favorite characters come to life. Some of the characters, like Lilith the bounty hunter, did not behave how viewers expect. In the game, she is known for her hard-hitting attitude., and the video game proj-

ects this character's actions scene as intense and heroic. However, in the film, she is dull. The script of the game holds a lot of funny one liners for Lilith, but sadly, this script was not the same for the movie.

In 'Borderlands', the characters work together to solve various quests, like collecting keys to a vault. While this quest occurs both in the video game and the movie, the two scenes were not comparable. The film's adaptation was slim to nothing in terms of eventful when compared to the vault in 'Borderlands 2'. The vault in the game is portrayed as a molten world, with a unique boss enemy, whereas...

In the games, the vault seekers were hunting wealth and fame. While this is true for some of the characters in the film, the main characters were trying to prevent this from happening, by hiding valuable information that would help find the vault and its key. Though, in the end, they got the contents of the vault themselves, they had to fight off the corporation ATLAS to gain wealth from the vault. This corporation take down exists in the game but is more complex and thought out than the one in the film. The corporations' characters have development and opportunities to grow in the game, which they did not have in the film.

While the film is not what the 'Borderlands' community expected, the film provides a way to visualize the characters and their abilities. However, with the discrepancies between the film and the game, one may not be able to enjoy the film for what it was advertised to be. If you are thinking of going out to the theaters



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to watch the movie, I would say to save your money and wait for it to come out on a streaming service. September 12, 2024 Diversions

# Navigating the Storm: A Student's Guide to Handling Stress

MATHEUS PAULI Correspondent

University is described as a time for freedom and self-discovery, but for many students, it can also be a time filled with stress and anxiety. With academic-related duties, social pressures, and other responsibilities, it is very easy to get overwhelmed. That's why with the right strategies, you can navigate the storm and make your university experience significantly less stressful.

The first step for stress management should always be to understand your stress triggers. These can vary from academic pressure, social anxieties, financial situations, and other uncertainties. A good way to keep track of such triggers is to write some of them on a simple note, this will allow you to better understand what is causing you stress and possibly how to avoid it in the future.

Creating an organized schedule is deeply important for managing your stress. A good idea is to use a planner or a calendar to keep track of your class assignments and other important deadlines, this way nothing ever catches you by surprise. A huge, deeply important thing should be to always give yourself ample breaks and free time to avoid burnout. Always prioritize your tasks based on



Collins Dictionary for Horizons

deadlines and importance in a way that will not result in burnout.

Building a strong support network can have an incredible impact on managing stress. Always strive to surround yourself with friends, family, and mentors. Never be afraid to ask for help and support if you ever become overwhelmed. Joining clubs, attending campus events, and participating in RA programs are great ways of meeting people.

Finally, setting realistic expectations is a great way to manage your stress. Always set achievable goals for yourself, and always remember that missing a deadline, or making mistakes is completely okay. Focus on progress and improvement rather than perfection. Always celebrate your accomplishments, no matter how small.

Stress is a natural part of being human, but stress does not need to control your life. Understanding your triggers, keeping organized, having a strong support network, and setting realistic expectations are the keys to maintaining a healthier balance while in university. With these strategies, you will be better equipped to navigate the storm of stress.

# Pet of the Week: Nugget the Big Dog

NAVAEH ALLEN Chief Online Editor

Nugget the big dog is here to rock his time on the Embry-Riddle Prescott campus! Born on Oct. 29, 2023, at four whole pounds, he didn't yet know how his life was going to go. This changed when his human, Maggie Colwell, went looking for an Emotional Support Animal (ESA). She told Horizons, "Nugget's picture and little tail spoke right to my soul."

Nugget is a Bichon Frise Poodle who is already full sized at 10 months old, weighing in at 11 lbs. His journey began when Colwell's mother, brother, and cousin drove all the way from Wisconsin to Pennsylvania and back to bring him home to his forever family. As any new grandchild might do, Nugget spent his first winter and summer with his grandma to start his training while Colwell was here on campus. This August, following Miley Cyrus, he "hopped on a plane at LAX" to come join his human at Embry-Riddle.

He was given a name that kickstarted the stardom that he has gained in the brief time he has been on campus. One of Colwell's family friend met him and stated he was a nugget (in the sense of a gold nugget, not a chicken nugget) which Colwell thought was the perfect name.

Nugget is doing a wonderful job as an ESA and is absolutely perfect for his human. Colwell states that he will eventually train towards becoming a service animal,

especially since he is very smart and always knows when she is talking to him. Nugget learns very quickly, which is shown in his abilities to ride a skateboard (on his own) and do a front roll (where he puts his head down and throws his legs over in a roll fashion).

Between sitting in windows, looking outside, and being outside with everyone he meets, he has terribly busy days. Despite the packed schedule, he always has time for his favorite snack: cheese. Colwell said, "He likes cheese, like a true Wisconsinite" - it doesn't matter what kind, so Colwell must pay the cheese tax every time she has some. Other than that, he doesn't get much people food since he already has a small stomach.

Nugget is overall an extraor-

dinarily talented and sweet dog with an occasional attitude. He certainly has the personality of a big dog, which makes him even more lovable. If you're lucky, you might see him in his favorite spots around campus (any window, the grass outside of Village Hall 7, or even in the basketball courts). Be sure to keep up with his adventures on Instagram @nuggetthe-bigdog.



Jordan Stephens for Horizons

### Professor Profile: Dr. Christopher Bennett The Man Who Does It All

MATHEUS PAULI Correspondent

Dr. Christopher Bennett is an Associate Professor in the Aerospace Engineering Department at Embry-Riddle Aeronautical University's Prescott campus. Originally from the UK, Dr. Bennett's path to Arizona was shaped by his passion for aviation and education.

"I was working as a postdoc at Cranfield University in the UK," he explained, noting the institution's aeronautical focus. "We ran a few flight test campaigns to look into some applied aerodynamic research." At Cranfield, Dr. Bennett worked in a department responsible for managing the university's research aircraft, an experience that deepened his expertise in flight test research.

Despite his work in the UK, Dr. Bennett was drawn to Embry-Riddle's reputation, telling Horizons, "I was aware of Embry-Riddle and



ERAU for Horizons

its reputation in the aeronautical domain."

After considering a position at the Daytona Beach campus, Bennett ultimately chose Prescott, moving there in 2019. Reflecting on the move, he said, "My passion for

teaching, my passion for airplanes and aviation, and my desire to move to the U.S. ultimately led me to a perfect fit."

For Dr. Bennett, one of the most striking aspects of Embry-Riddle Prescott is the strong sense of community. "Because it's such a small student body...everybody knows everybody else," he said. "I could walk from my office to my next class, and I'd say 90% of the people I pass on the way, I know them by first name." He mentioned that this was a completely different experience from when he was a student at the University of Birmingham, which had a much larger, more impersonal atmosphere.

Regarding student success, Dr. Bennett believes that organization and balance are key. "Students that have something else going on (sports, clubs, extracurriculars) tend to have the right strategy and mindset for success," he said, pointing out that students involved in extracurriculars

often manage their time better. His advice is to start thinking about assignments early, even if just passively. "It sets them up very well."

In addition to his academic role, Dr. Bennett is deeply involved in the local music scene. "I've always played music of some sort," he shares, adding that when he moved to Arizona, music became a way for him to connect with the community.

He now plays guitar in two bands— The Dirty Halos and Buffalo Star and performs six to eight shows a month across Arizona. "It gets me out of the office," Dr. Bennett said with a laugh, appreciating the balance it provides to his life in the university.

Ultimately, for Dr. Bennett, learning is more about the process than the result. "It's about how you get there," he said, emphasizing the importance of persistence and making connections between classes to build a deeper understanding.

### Big Bark for Financial Aid: Nerissa the Guide Dog Graduated

NEVAEH ALLEN Chief Online Editor

In March 2023, Shannon Jones at the Financial Aid Office brought in a new furry friend to campus whom students and faculty came to love and adore. Nerissa the puppy was here to start her training to become a guide dog for the blind under the Guide Dogs for the Blind (GDB) school. The GDB is the largest school for guide dogs for the blind in North America.

The GDB is a complete non-profit organization that does not receive any government funding, running strictly off donations. They work closely with those who are in need of guide dogs by paying for flights and over-night stays when getting their guide dog, and they match them with their furever friends for free. Although the wait list is a yearlong, they work as efficiently as they can to get new dogs like Nerissa available for those individuals.

While Nerissa started her journey with Shannon, she has been on quite the extensive journey to where she is now, as a graduate. When she first got involved, Shannon got introduced to the GDB club in Flagstaff,

went to bi-monthly meetings and training for herself before she even knew Nerissa. When it was time, Shannon received only Nerissa's first initial and gender to give her, the puppy raiser, her own chance to learn Nerissa's personality.

During the year Shannon had Nerissa, they worked through basic puppy training: how to potty on command, socialization with other dogs and people, and general exposure to high stimuli environments to desensitize her in preparation for official training.

In April 2024, Nerissa was flown to the San Rafeal, Calif. to start her college level training at one of the GDB campuses as she completed her lower education with Shannon. During her time in San Rafeal, Nerissa went through eight extensive training phases that taught her the specifics of how to be a guide dog for the blind. These trainings include escalators, handling booties on her paws, urban traffic situational training, intelligent disobedience (not going when its unsafe despite commands), and other crucial situational trainings.

Although everyone knew Nerissa



would make it through, no one suspected that she would almost skip a phase because she was doing so well. She also went from phase seven to phase eight in a week when it would typically take two or more. After Nerissa passed the initial medical exam, all eight phases, and another medical examination, she was deemed "class ready." This meant she could now train with her forever human.

With any guide dog, despite the human diagnosis, it is crucial to find the right match for both the dog and the human since they will bond on a level many people might not come to realize. While the dogs are training, the applicants are screened based on their lifestyle and pace of daily life. A fast dog for example

might get placed with a runner or hiker while a slower dog might get placed with a more indoor styled human.

Once they are paired, the human gets flown to their dog's campus to complete a two-week training directly with their dog and a sighted trainer. If the match does not pan out, GDB always ensures that other dogs are available, so the individual does not leave without a dog. Nerissa was placed with her first match, and they started a new phase of life together after she graduated on Sept. 7, 2024. Along with working hard for her human, she will still have time to run around and show off her goofy personality as shown through training

As for Shannon Jones in Financial Aid, she has loved being a part of the GDB organization, but she is retiring from Embry-Riddle this semester. This will bring the GDB socialization on campus to an end unless another faculty member gets involved. Having Nerissa on campus was an incredible opportunity but now we tip tap our paws in congratulations as she joins her new human as a graduate of the Guide Dog for the Blind school.

# Photography Column

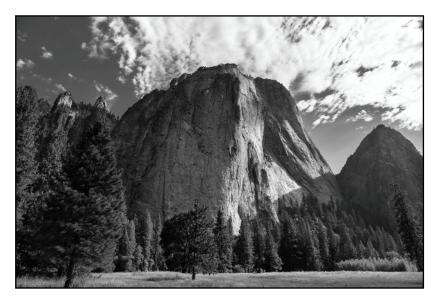
# "Black and White"

JORDAN STEPHENS Photographer DHANUSH BALUSA Photographer HUNTER HOURANY Chief Photographer RAHUL IYER Photographer CLAIRE ROSS Photographer

















## Historical Figures in STEM:

Dr. Grace Hopper, The Compiler Pioneer

LAUREN BAILEY Correspondent



USN for Horizons

"A ship in port is safe, but that's not what ships are built for. Sail out to sea and do new things." – Dr. Grace Hopper

Dr. Grace Hopper was a remarkable individual and an outstanding model for leadership. Dr. Hopper was an American computer scientist and naval officer who was instrumental in the initial stages of computer programming development. The most notable accomplishments of Dr. Hopper are her groundbreaking work in software development, computer programming, and the creation and application of programming languages. She had lengthy and significant careers in both the computer industry and the U.S. Navy, demonstrating her innovative and maverick nature.

Grace Brewster Murray was born in 1906 in New York City to Walter Fletcher Murray and Mary Campbell Van Horne. As a young girl, she showed interest in engineering by taking things apart and putting them back together. She attended a preparatory school in New Jersey. Later, she enrolled at Vassar College and graduated with bachelor's degrees in mathematics and physics in 1928. She proceeded to Yale University, where she received her master's degree in mathematics in 1930. She began teaching at Vassar College while pursuing her studies at Yale, where she earned her Ph.D. in Mathematics in 1934. Then, she began a career in computing. [3]

After the bombing of Pearl Harbor and the United States' entry into World War Two, Dr. Hopper took a temporary leave of her professor position at Vassar College and joined the Navy. She was initially rejected because of her age and diminutive size, but she persisted and received a waiver

to join the Navy WAVES (Women Accepted for Voluntary Emergency Service).

Dr. Hopper was assigned to the Bureau of Ships Computation Project at Harvard University after being commissioned as a Lieutenant junior grade. Under Howard Aiken's supervision, she worked on the IBM Automatic Sequence Controlled Calculator, known as the MARK I, one of the country's first electromechanical computers.

Dr. Hopper and her group carried out top-secret calculations that were essential to the war effort, such as minesweeper calibration and rocket trajectory calculations. In addition, she wrote the MARK I's 561-page user manual, confirming her place among the first three coders (or programmers, as we now refer to them). [2]

Dr. Hopper stayed in the Navy Reserve after the war, leaving active duty in 1946 after her age prevented her from receiving a regular commission. She also turned down a full professorship at Vassar to focus on her computer research. [2]

She was employed by the Navy on the MARK II and MARK III computers until 1949 when she started working for Eckert-Mauchly Corporation. She created the first compiler there, which converted instructions into computer-readable code, and contributed to the development of the UNIVAC, the first all-electronic digital computer. The Common Business-Oriented Language, or COBOL, was created due to her work and enabled computers to process words and numbers. [1]

Dr. Hopper was also a prolific lecturer, delivering around 300 talks annually, and she predicted that computers would one day be small enough to fit on a desk, making them accessible for everyday use. [1]

Dr. Hopper continued to serve as a Navy reservist during her tenure, but age constraints compelled her to leave the Navy as a commander in 1966. She was called back to active duty a few months later, to help harmonize the Navy's numerous computer languages and applications. In 1971, she announced her retirement from the UNIVAC division. [2]

Dr. Hopper, known as "Amazing Grace," by her colleagues, served as an active-duty member for nineteen years. At the age of 79, she became the oldest serving officer in the United States armed forces when she retired from the Navy as a Rear Admiral. She started working as a senior public relations consultant at Digital Equipment Corporation and remained there until she died in 1992. [2]

Throughout her career, Dr. Grace Hopper received many honorary degrees. In 1973, she became the first woman and the first American to become a Distinguished Fellow of the British Computer Society. In 1991, President George

Bush awarded Dr. Hopper the National Medal of Technology for her accomplishments in computer technology and for opening doors for all. In 1996, the Navy commissioned the USS Hopper, a guided military destroyer. In 2016, Dr. Hopper posthumously received the Presidential Medal of Freedom, the nation's highest civilian honor, in recognition of her leadership role in her field. [2]

Dr. Grace Hopper's story inspired many generations of women, from pushing the boundaries in computing to highlighting her unwavering commitment. In her field, especially in the Navy, she was met with skepticism and resistance, but she not only excelled but left a legacy that continues to shape the landscape of technology today. Her legacy of courage, perseverance, and ingenuity is within all women of STEM and can remind us that we can break down barriers and make our own impact.

"You don't have to know everything. You just need to know where to find it." – Dr. Grace Hopper



Computer History Museum for Horizons

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### Aviation Safety Watch: Turkish Airlines Flight 6491

#### Unveiling the Causes and Lessons from Air Incidents and Accidents





MATHEUS PAULI Correspondent

On September 29, 2006, a routine flight turned into one of the worst aviation disasters in Brazil's history. Gol Transportes Aéreos Flight 1907, a Boeing 737-800, was en route from Manaus to Rio de Janeiro, with a scheduled stopover in Brasilia. At 37,000 feet above the Amazon rainforest, the unthinkable happened—a midair collision with an Embraer Legacy 600 jet. The impact tore off a significant portion of the 737's wing, causing the plane to break apart midair. Tragically, all 154 passengers and crew on the Boeing lost their lives as the wreckage plunged into the dense jungle below. In contrast, the Legacy, though severely damaged, managed to land safely at a military airfield. Its passengers and crew were shaken andescaped with only minor injuries.

The Brazilian government responded by launching a massive search-and-rescue operation. The Brazilian Air Force (FAB), local police, and indigenous groups familiar with the area worked together to locate the wreckage. The remote crash site was found two days after the collision, but the harsh environment of the Amazon delayed the recovery efforts. It took nearly two months before all the victims were finally recovered and identified.

Investigators soon determined that the collision was caused by a series of missteps involving human error and technical failures. Air traffic controllers had cleared both planes to fly at the same altitude on intersecting paths. The Legacy's crew, unknowingly, turned off their transponder, disabling the aircraft's Traffic Collision Avoidance System (TCAS). This meant that neither aircraft received critical warnings about the impending collision. These mistakes went unnoticed for nearly an hour, ultimately leading to the catastrophic impact.

The CENIPA (Aeronautical Accidents Investigation and Prevention Center) report on this midair collision highlighted multiple contributing factors. CENIPA criticized the air traffic control system and the flight crew's failure to notice the deactivated transponder and emphasized the need for improved training, communication protocols, and technical design adjustments.

The final reports from CENIPA and the U.S. National Transportation Safety Board (NTSB) reached conflicting conclusions. While both investigations agreed on the sequence of events, they differed in assigning blame. CENIPA placed responsibility on both the controllers and the Legacy crew, citing pilot error alongside systemic issues within Brazil's air traffic control. In contrast, the NTSB focused solely on the failures of the air traffic control system, arguing that the Legacy crew acted within acceptable procedures and bore little responsibility for the crash. The U.S. report contended that the controllers were primarily at fault for failing to maintain the necessary separation between the aircraft.

The 2006 midair collision between Gol Flight 1907 and the Embraer Legacy jet is a great case study for the complexity of aviation safety, where multiple factors often come together to contribute to a tragic outcome. The differing perspectives between CENIPA and the NTSB reports illustrate the challenges in assigning blame in international accidents, with each agency emphasizing different elements of responsibility.

While the CENIPA report called for improvements in both air traffic control procedures and pilot awareness, the NTSB focused primarily on the systemic failures of Brazil's air traffic control. This accident demonstrates the need for enhanced collaboration between nations, improved technology, and rigorous training to prevent future accidents of this nature.

If you have any comments or suggestions about this or future issues for this column at Horizons, please reach out to me at [paulim@my.erau.edu].



FAB for Horizons



Jovem Pan for Horizons

# Not too Swell Braunies

FRANCESCA KEEL Chief Copy Editor

Congrats on surviving the first couple weeks of school! While harder things are still to come, getting back into the swing of things after summer is still a big accomplishment and merits a sweet treat. Something that always feels like a reward to me is brownies.

I love a healthy dose of chocolate every now and then, and brownies are my go-to. Making brownies from scratch can be extra rewarding when they come out with that shiny crackly top, just like a box mix. But homemade ones are not too sweet and taste even better. Read below to learn how to make the perfect, fudgy brownie with the classic shiny top!

To begin, preheat your oven to 350 degrees and grease a 9 by 13-inch baking pan. Melt the butter in a saucepan over medium heat on the stove. Once the butter has begun to melt, add the brown sugar and vegetable oil. Mix well to combine and stir occasionally as the butter melts.

Combine the granulated sugar and eggs in a mixing bowl, whisking until the mixture is pale yellow and thick. By this time the butter should be melted. Remove the pot from the stove to cool slightly.

Carefully stream in the butter and brown sugar into the egg mixture, taking care to constantly mix. Do not pour too much of the butter in at once. By streaming in the melted

#### Ingredients:

1 cup all-purpose flour.

1/2 tsp baking powder.

1/2 tsp salt.

1 cup cocoa powder.

3/4 cup butter.

2 tbsp vegetable oil.

1 cup granulated sugar.

1/2 cup dark brown sugar.

3 eggs.

1 tsp vanilla extract.

Optional: 3 /4 cup chocolate chips or chopped nuts.

butter in small amounts at a time, you are making an emulsion with the eggs and sugar. This is how the brownies will have that signature shiny crackly top.

In a separate bowl, whisk together the flour, salt, baking powder, and cocoa powder. Then gently fold in the dry ingredients into the wet. Mix until there are no streaks of flour in the batter. Over mixing will result in tough brownies. At this point you can add in chocolate chips or nuts if you like your brownies with extra texture.

Pour the batter into the greased baking dish and bake for twenty to twenty-five minutes. If you prefer a gooier brownie, take them out of the oven while the brownies still have a slight jiggle. Allow the brownies to cool on the counter all the way before cutting and serving. Enjoy!



Rahul Ilyer for Horizons



Rahul Ilyer for Horizons

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