SPRING 2024

Saac ^{*} NOTAM



THE OFFICIAL STUDENT PUBLICATION OF THE JOHN D. ODEGARD SCHOOL OF AEROSPACE SCIENCES dr. robert j. kraus Advisor and dean, john d. odegard school of Aerospace sciences

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saac is excited to welcome david manzke, evelyn jordan, logan harden, riley zarm, santiago echeverria-robinson, and zachary hagengruber for the fall of 2024







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In 1974, founder and Dean John D. Odegard created the Student Aviation Advisory Council to better hear the voices of students in the then-fledgling program. Odegard knew the key to the college's success was the students' voice, so he entrusted a group of student leaders to find it, sculpt it, and work to answer it. In the years that followed, and through a name change or two, SAAC has continually improved the lives of UND Aerospace students. We're proud to represent an increasingly diverse group of students, both by background and field of study, and we're excited to see what the future holds for our peers.

This year, SAAC's goal was to reestablish itself as a champion for students. We knew our peers had a lot to say - so we started by increasing the communication channels open to us. The response we received was incredible - an amazing breadth of ideas and concerns.

With a bigger think tank, we got to work. I started "Flight Ops Update," a twice-monthly email newsletter for students on the flight line. From holiday hours and closures, airport construction, parking updates, weak areas on stage checks, and aircraft availability, I'm proud to say our aviator peers are more informed than ever before.

Julianne, SAAC's secretary, collaborated with UND Career Services to create up-to-date resume and interview preparation documents to help our peers pursue their careers. Kal, our treasurer, doubled the Collegiate Mentorship Program's active participation rate. The CMP links first-year students with upperclassmen, which eases the transition from high school to college. Josh, our Director of Public Relations, and I helped implement a new mentorship program in collaboration with the Aerospace Alumni Advisory Board - the Industry Mentorship Program ties our upperclassmen students with alumni in the industry with respect to their desired career track or place of employment.

In the coming months, we're excited to see more of our projects come to life - from airport Skycams, improved access to free menstrual products, external scholarship lists, and having a bigger voice in administrative decisions, we can't wait for what's to come. If you have concerns, suggestions, or comments about your experience at UND Aerospace, please let us know.

In closing, I want to take a moment to thank everyone who brought up their concerns or shared their vision for a better future. Your words helped create lasting change for you and your peers. Know that there's work to do, and we'll need your help to ensure that UND Aerospace continues to train the best aerospace professionals in the world.

Have a great summer, and we'll see you in the fall.

Arjun Jagada President, Student Aerospace Advisory Council



Mental Health Aviation Rulemaking Committee

By Carson Calhoun | Director of Industry Relations

On December 4th, 2023, the FAA established the Mental Health & Aviation Medical Clearances Rulemaking Committee.

This Aviation Rulemaking Committee, or ARC, served as a forum that allowed for the United States aviation community to discuss the barriers that prevent pilots and air traffic controllers from reporting and seeking care for mental health issues. From these discussions, the Mental Health ARC created a recommendation report directed toward the FAA to help address these mental health barriers in order to mitigate aviation safety risks.

This recommendation report was submitted to the FAA by the end of March 2024, and was made publicly accessible shortly after.

A summary of their recomendations:

 Create a non-punitive pathway for disclosing mental health conditions and treatments

- Revise and evaluate the requirements for reporting and certification/qualification of psychotherapy (talk therapy), depression/anxiety; attention deficit hyperactivity disorder, and post-traumatic stress disorders
- Ensure that aeromedical screening protocols and requirements are based on Safety Management System principles (proportionate, relevant, and risk-based), and appropriately communicated to applicants
- Expand the use and promotion of Peer Support Programs
- Develop mental health literacy, education, and awareness campaigns
- Increase mental health training and improve quality assurance for Aviation Medical Examiners (AMEs)

We're confident that change will come, and pilots will be able to access the healthcare they need.



Piper Seminole Service Bulletin 1354

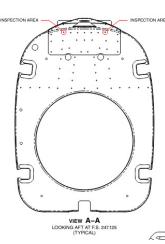
By Arjun Jagada | President

In October of 2023, Piper Aircraft issued service bulletin 1354, "Fuselage Station 247 Bulkhead Inspection," for the PA-44 Seminole. The SB calls for inspections to detect fractures in the rear bulkhead, where the vertical tail is attached to the fuselage.

For aircraft operated under FAR part 91, compliance with a manufacturer's service bulletin is not a legal requirement. An aircraft with an outstanding service bulletin is considered airworthy. The FAA recommends that owners/operators comply with SBs to reduce risk to the lowest possible level. However, Piper Aircraft considered compliance with SB 1354 mandatory.

As maintenance began their inspections, they found eight aircraft with cracked bulkheads. Due to the location of the cracks and the criticality of the bulkhead, the organization took the preemptive step to ground these aircraft, with concerns of further fracture propagation that might prove catastrophic in flight. In the weeks that followed, UND Aerospace began the process of repairing and returning the affected Seminoles to the flight line.

Maintenance ordered new bulkheads from Piper Aircraft. Most of these new parts were faulty and did not conform to the service bulletin's technical specifications, nor UND's standards. This process continued, and eventually, UND maintenance representatives traveled to Vero Beach to meet with Piper's management team.







During this visit, UND expressed their concerns regarding the quality of the bulkheads and Piper's quality control process. While this visit began a slow stream of suitable parts, UND also continued to receive several faulty bulkheads.

While in Vero Beach, and as one of Piper's largest customers, UND was able to negotiate priority on the first eight available bulkheads. The Seminole assembly line at Piper was halted, and the bulkheads that were assigned to production aircraft were instead diverted to Grand Forks.

At the end of March, three Seminoles had been returned to service. At the time of writing, UND is on track to return all Seminoles to the flight line by the end of April.

While every effort was made to minimize the impact on flight training, some changes were required to ensure an overall successful resolution.

324 and 325 flight training were delayed or restricted in terms of class size to accommodate the reduced flight training availability. Priority was given to students who started Seminole training in the summer and fall, and as availability allowed, spring students filled the gaps in the schedule.

To supplement the ongoing maintenance process, and to ensure a successful resolution for students in Seminole flight courses, UND began the process of returning several of our old Seminoles back to Grand Forks. In late April, N688ND re-joined the fleet, and helped to improve aircraft availability.

It is always difficult when circumstances outside the control of students and administration affect our ability to train.

As many of us seek to enter the industry as soon as possible, delays create undue stress. It is important to remember that while frustrating, circumstances will always arise that affect our ability to follow and execute our plans.

Flight training, a highly variable environment, is subject to many of these circumstances.



Aerospace Community Day

By Mateo Garcia | Director of Technology

Community Day at UND Aerospace is an incredibly engaging and educational event for people of all ages. On April 6th, 2023, UND Aerospace opened its buildings to the community, showcasing its various departments to inspire interest in future aviators, air traffic controllers, meteorologists, scientists, and even astronauts.

This biennial event allows visitors to participate in hands-on activities, utilizing the altitude chamber, the spatial disorientation trainer, and the air traffic control radar simulators

Each gives a fun new way to learn about the aerospace industry. There were additional activites such as launching radiosonde weather balloons and flying drones, giving kids and their families cool opportunities that they would not get to do or see every day. Familiar faces and industry sponsors, like Delta Air Lines were present to host an information table and provide more opportunities for visitors.

The success of the day hinged on the volunteer students and staff giving their time to better serve the Grand Forks community with a great event.

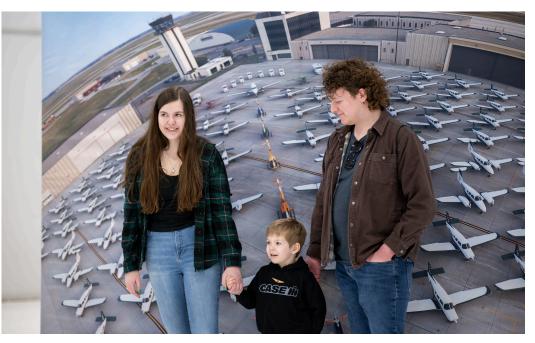
It is important that the people around us see our passion for aerospace and view the continuous development of the John D. Odegard School of Aerospace Sciences as a whole.

The goal of this event is to spark curiosity and passion for aerospace-related careers and opportunities in young minds, thereby potentially paving the way for future UND Aerospace students and industry professionals.















Pilot Mental Health Campaign

A guest story by Lucas Sutcliffe | upLIFT Peer Supporter

students attended advocacy day in washington d.c. to support the pilot mental health campaign

⁶⁶ On Tuesday, March 12, 2024, I, along with two other Uplift Peer Supporters, attended Advocacy Day in Washington, D.C., on behalf of the Pilot Mental Health Campaign.

Our group of over 50 passionate mental health advocates from across the aviation industry descended on Capitol Hill to meet with members of Congress to voice our support for aviation medical reform. Supporters ranged from student pilots to Part 121 captains, Part 135 drone operators, and air traffic controllers.

Although our backgrounds varied, we all had a common goal to remove the mental health barriers that hinder pilots in the United States.

That morning, we met with Representative Sean Casten of Illinois to discuss current and future pieces of legislation relating to federal aviation rulemaking -the most pertinent being the FAA Reauthorization Act, which secures various funding for the agency.







Currently, there are members of Congress attempting to secure more mental health related funding in the bill before it re-enters committee discussions in the House and Senate. After messages of good luck and support, we split into smaller groups to attend as many meetings as possible.

Members of UND's UpLift Peer Support Program were invited to attend these meetings to better represent the newer generation of pilots negatively affected by current aeromedical policies. Thanks to generous donations on behalf of the Pilot Mental Health Campaign and Anne Suh (mother of the late John Hauser), Kallen Wachi, Quin McCarroll, and I were able to share our experiences directly with our nation's lawmakers.

My group of six met with the offices of Representative Alma Adams, Dusty Johnson, Steve Cohen, Andre Carson, Senator Shelley Moore Capito, and members of the House Transportation and Infrastructure Committee.

During these meetings, we discussed how each of us was affected by medical policies adopted by the FAA, special issuance medical processes, wait times, and general industry stigma towards potential mental health problems.



To summarize a statement by Latifa Gaisi, First Officer at American Airlines, "It's not me or Andy [Reitz] who are really suffering from these policies; it's Lucas and Brayan: students. The next generation is being scared out of this profession. With such a shortage of pilots looming, we can't let that continue."

It was inspiring to be surrounded by airline pilots who are fighting for the same change that you, a student, are so passionate about. As more and more aviation professionals retire, it is this generation who will inevitably inherit the current system — one that has unfortunately fostered a culture of silence regarding mental health struggles.

Since we are the next generation of pilots, it is important we speak up for those affected by an outdated aeromedical system. This status quo affecting our peers captivated us to attend these meetings, and we will stay involved in this ongoing discourse around mental health in aviation. While our presence was small that day, it was evident that students came to join the conversation, and I'm incredibly proud of the work we started that day on Capitol Hill.⁹⁹



A Farewell to Fred Remer

By Ethan Mathews | Director of Programming

From teaching every aviation student's favorite class, Aviation Meteorology, to flying for research on UND's Citation research jet, there's almost nothing Associate Professor Fred Remer hasn't done during his time at the University of North Dakota. Having taught at the University for over 30 years, he has had an impact on generations of students and now gets to look forward to retirement and all the time he'll have to fly his Mooney.

background

Fred began flight training at the age of 16, but his love for flying began years before that when he saw his older brother flying in the Civil Air Patrol. Thinking flying would be an exciting career path, and even looking up to the "Aces" of World War II like gods, he originally wanted to fly fighters. He would go out to his local airport just a few miles from his house and offer to wash planes, hoping the owners would offer him a flight, and that's how he got his first flight in a Piper Comanche 260C, which still holds a special place in his heart. Now, of course, most students know Professor Remer as their Aviation Meteorology professor, so what got him into meteorology? As it turns out, he was also an afternoon paper boy when he was young and got stuck in an afternoon thunderstorm when delivering the paper. He thought it would be an excellent idea to learn how to forecast storms and that knowing meteorology as a pilot would also be helpful.

With a desire to fly and get a degree in meteorology, Remer went to the University of Oklahoma in Norman, OK, in 1977 for their Atmospheric Sciences program. There, he was involved as a student researcher with the development of Doppler radar at the National Severe Storms Laboratory and OU's storm chase team. On the team, his job was to take Polaroid photos of the Doppler radar returns and analyze the data generated during storms. It was also during his time at OU that he got his instrument rating and commercial certificate, as well as his CFI and CFII. After graduating from OU, he attended the University of Wyoming in Laramie, WY, for his master's program. There, he was involved with microburst and wind shear research for NOAA's Joint Airport Weather Studies project with the University's King Air as a technician. He also ran the University's flying club with a Cessna 172, which often struggled with the high-density altitudes of Wyoming in the summer.

Personally, he flew a Piper Cheyenne to build his multiengine time. During his time at Wyoming, Fred took a gap year to travel across the Atlantic to Greece for a weather modification research project. Reflecting on his time there, he said it was "just awful" sitting on the beach on sunny days when not doing research!

Once back in Wyoming, he got frustrated with research and decided to fly for a freight operator based out of Cheyenne, flying Piper Senecas and Cessna 402s for a little under a year. He originally wanted to be a commercial airline pilot, but jobs were scarce in the late 70s and early 80s without military experience. However, he



said that he's happy that things ended up working out as they did. Once he graduated from Wyoming, he came to UND.

time at und

Fred first met Mike Poellet, the then-Chair of the Atmospheric Sciences Department, in 1986 at a conference Remer was speaking at. He expressed interest in cloud seeding and weather modification research and got hired in 1989, at first, to teach contract students.

He began teaching Aviation Meteorology in 1990 and Intro to Synoptic Meteorology in 1991. With his flight experience, he was also involved as a stage check pilot from 1989 until 1994, the year his first daughter was born. That same year, George Hammond, the then-Director of Flight Operations and Chair of the Aviation Department, hired Fred as an associate professor of aviation, a position he held until the flood of 1997.

During his time in that position, he developed the first PowerPoint presentations for Aerodynamics and Multiengine Systems classes and introduced MELs to UND with Al Johnson.

Just before the flood, the Remers had moved to Fargo because Mrs. Remer had been promoted to the manager for the state of North Dakota for State Farm Insurance.

This made Fred's commute incredibly difficult, and he missed a lot of classes because he couldn't make it in.



This frustrated him, so he told Kent Lovelace that he quit at the beginning of April 1997. Unbeknowst to him, this later proved futile. Fred took 1998 off and started as the Chief Meteorologist for Weather Modification, Inc., running their domestic and international projects, but couldn't travel with two young daughters, so Fred left that position after a couple of years.

During this time, he also started as a weekend meteorologist for the news channel in Fargo and stayed there until 2007. He first returned to UND temporarily in 1999 to teach Aviation Meteorology and was teaching full-time in 2000.

When he returned, he flew right seat in UND's Citation for icing and wind shear research and eventually became the undergraduate Atmospheric Sciences program director when Leon Osborne stepped down.

Reflecting on his time at UND, Remer said that he doesn't necessarily have a favorite class that he's taught but that the chemistry of each class is what "makes" the class. He's enjoyed having fun over the years, though, like teaching his Instrumentation class how to make thermometers or sharing donuts with the juniors in his Thermodynamics class.

This year in Instrumentation, for example, a student attached their thermometer to a drone and flew it around. The winning thermometer was attached to the KiwiBot named "Frederick," exemplifying Fred's personality.

As for Aviation Meteorology, he wishes that the class could be less "death by PowerPoint," but without lab sections, that's the best way to expose students to the material. Over the years, he's added a lot of material to what the class was originally developed with as he gained more experience and said that it's much more than students need to fly.

However, he believes that UND's role is to produce the best pilots possible, and his role is to give students a thorough background in meteorology, doing the best he can with what he's got.





If he had to change anything about his time at UND, Fred would have liked to keep flying. He fondly recounted that at one point, he had offices in Clifford Hall, Ryan Hall, and behind Dispatch at the airport. He misses teaching and seeing students at the airport and wants to encourage students to keep flying fun during their time at UND.

retirement

In the short term, more flying is the plan! Fred's Mooney, one of four airplanes he's owned with partners over the years, recently had an engine overhaul, so he plans to stay busy flying cross countries to break it in.

He also wants to get more involved with the local branch of the Civil Air Patrol, including flying their Cessna 182. As for projects, he has a 1974 VW Convertible he plans on restoring, which he's looking forward to because he hasn't touched the project since 2012, and Fred also plans on building a garden railroad with model trains around his backyard for his wife. In the long term, he plans to keep flying and wants to get back into flight instruction because he has always enjoyed teaching private pilots how to do their first landing or signing them off solo.

Undoubtedly, Fred Remer has had a lasting impact on UND Aerospace. The University, and especially the students Fred has had over the years, have been fortunate to learn from his experiences and share laughs, successes, and time together learning about the jet stream in Aviation Meteorology. We will all miss him and wish him the best in retirement! saac

JOIN US FOR A MEETING Sundays @ 4:00PM | Robin 136



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