

SAAC NOTAM

SAAC

Fall 2022

THE OFFICIAL STUDENT PUBLICATION OF THE
JOHN D. ODEGARD SCHOOL OF AEROSPACE SCIENCES

Leader In Aerobatics

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for World's*

Celebrating Diversity

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Faculty Spotlight

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Recognizing Veterans

*UND, FAA launch
Vets 2 Wings*





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Leader In Aerobatics

By Ryan Peene
SAAC VP & Aerobatics Team Member

UND Professor Michael Lents Qualifies for the 2023 Aerobatic World Championships

Michael Lents, an assistant professor at the University of North Dakota placed top eight in the Advanced Category at the US Nationals back in October. This qualifies him to represent the United States on the World stage at Las Vegas in 2023 for the FAI (Fédération Aéronautique Internationale) World Championships. In 2018, Lents competed on the world stage placing 5th overall, the highest placing American at Worlds's.

For the uninitiated, the qualification process at Nationals for the Advanced Category includes four total flights. The first flight or "Known" is where every competitor flies the exact same sequence and is graded on their performance for each "figure" in the sequence on a scale of 1-10 depending on how much they deviate from perfection. This 1-10 score is then multiplied by a "K value" which represents the difficulty of the figure. Add all the multiplied scores factoring in a "Presentation score" and you get a total score for the sequence.

The second flight is a "Free" where each competitor gets to design their own sequence within the rules of the category. Many competitors use this opportunity to





Team USA - 2023 World Advanced Aerobatic Championship

showcase the specific advantages of their aircraft and flight style and is generally the highest-scoring flight of the four. However, the third and fourth flight is where it gets interesting. The Third and Fourth Flights are the “Unknown” where the top eight competitors get to submit 1 figure each, every competitor must then take these eight figures and with four transition figures of their choosing need to build and execute their sequence without practicing it. Needless to say, these two are generally the lowest-scoring flights of the bunch.

Due to the lack of suitable aerobatic aircraft at UND, Lents was unable to fully practice the Known and his designed Free. Borrowing an aircraft from a fellow competitor, Lents had two practice flights with the new plane before competing in it. Placing 13th on the known, and 9th on the free this put him just outside qualification range going into the Unknowns. Though that’s where he excelled, nearly maxing out the G tolerances for the Extra aircraft on the first Unknown he placed 4th, propelling him into qualification range. Then capitalizing on that success he then placed 6th on his final flight, moving him up to 8th overall, ending at a coveted world’s qualification spot.

Faces of the Industry

On October 11th, UND Aerospace hosted its second Faces of Industry conference. Pilots, industry professionals, faculty, and students from UND and across the country came together to discuss the ideals of diversity, equity, and inclusion in aviation. Across three panels, fifteen speakers shared their personal stories and their hopes for the future. Recent UND Aerospace Hall of Fame Inductee and JetBlue Base Chief Pilot Eric Poole spoke as keynote and shared his tragic childhood and the resulting journey to his success. Through it all, the audience ebbed and flowed, as students and faculty alike came to hear from the industry's most influential.

According to the US Bureau of Labor Statistics, 92.5 percent of professional pilots are male, and 93.7 percent are White. Why does it matter? Where's the need for change? It's true: it is unlikely that reducing the inequality in these demographics would have any effect on the bottom line: moving passengers and cargo from place to place. Why then, is diversity a prominent topic not just in aerospace, but across all industries?



Humanity's greatest strength is knowledge - we spend every waking moment of our lives learning. Depth and scope of knowledge have changed the world, and fundamentally adapted how we solve problems. If we increase diversity in aerospace, we become privy to more information, information that turns into knowledge. We hear more perspectives, more stories, more approaches to problem-solving, and different viewpoints on issues. We increase our knowledge of the world, and in turn, we become more effective - at flying, at learning, and at living. We become global citizens.

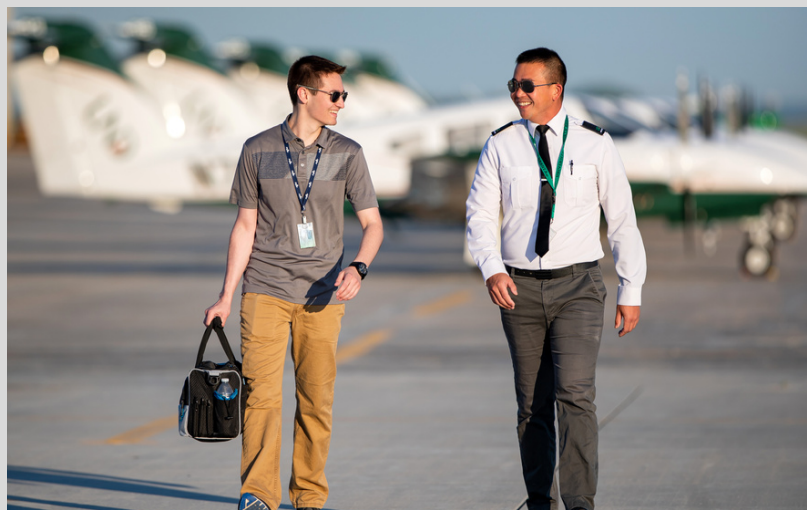
If this doesn't serve as an effective argument for the need for diversity in aerospace, perhaps it is our peers, people like Joey Besong, a Delta Air Lines First Officer who will. At FOI, Joey said, "The first time I thought this was maybe something I could do was when I saw my first African American pilot walking through the F Concourse... and I thought, I want to do that."

Faces of the Industry

For the children around the world, entranced by the metal birds above them, seeking to one day do what we do, we must do better. We will do better.

Erick Hendrick, Delta Air Lines' Director of Public Outreach poignantly compared the history of CRM to diversity. He said, "...FAA and industry continued to push Crew Resource Management. Now it's to the point where we don't think about it. It's just what we do."

I look forward to the day when diversity isn't talked about anymore - when it's simply what we do.



UND Launches Vets 2 Wings

By Dr. Beth Bjerke

UND was awarded \$2.5 million in a cooperative agreement from the Federal Aviation Administration to assist U.S. military veterans with paying for flight training and providing extra support to ensure a successful transition to the airline workforce. The Vets 2 Wings program was launched on October 4, 2022, and as of today there are 39 students enrolled in the program, with the ability to expand.

Not only does the program help cover the financial burden related to flight training, it also serves as a resource to help veteran students transition into the aviation industry. There has been great industry support to connect with these students. In December, the Delta Propel team met with the Vets 2 Wings participants, and in the coming academic year, we hope to host additional industry visits.



The program is being administered by a team dedicated to its success who will be meeting monthly with the FAA to provide data and updates. **For more information, contact anyone of the following administrative team members: Elizabeth Bjerke, Jason Evans, Shane Mendez, Andrew Frelich, Alexa Vilven, or Angie Carpenter.**

Faculty Spotlight



Dr. Montana Etten-Bohm

By Cassidy Holth
SAAC Director of Student Outreach

"I am Dr. Montana Etten-Bohm, I am originally from Alabama. I grew up there in the south where a lot of different weather happens, so tornadoes, hurricanes, and an occasional snowfall or two. I went to get my undergrad at the University of Alabama in Huntsville in Earth Systems Science, then moved on to Texas A&M where I recently got my master's and Ph.D. in Meteorology, looking at lightning parameterizations within global climate models".

What made you interested in the weather?

It started as a kid. Growing up in the south I experienced quite a lot, but living through April 27th, 2011 was hard for me, and I still have a lot of trauma when it comes to that. I think the educational side of meteorology within public communities is still lacking, and that's why I wanted to go the educational route when it comes to meteorology, because everyone deserves to have a meteorology class. Whether that [class] be in middle school or high school, but often that's not taught. So having one in college is recommended and I think everyone should have a class like that.

Describe your educational experience.

When you're looking at an educational position like a professor you have to have a Ph.D. and I didn't necessarily want to get a Ph.D., but at the same time I knew what I wanted to do. I knew that was to help and educate others in the field of meteorology. I did end up getting a Ph.D., but I also found a love for the educational research side of things. How do we help students learn best in the classroom? That's something that if I had not gone to grad school I would have not known I could do, so I'm very grateful for that experience.

Meet Prof. Etten-Bohm

What are your goals when teaching weather topics to students?

My main goal is that students stay safe. I have unfortunately had two friends die due to weather related situations. I've seen a lot of devastation and destruction when it comes to tornadoes and lightning and other things. So priority number one is student safety, but number two is just to help give them tools that they can use in their everyday lives in terms of using weather. Whether that's for an aviation major, weather plays a huge role in their careers, but even your average joe on the street has to figure out if he's going to wear a raincoat or not today. Helping to give them the tools that they need to make a little weather prediction of their own I think is super important.

What is your favorite ATSC 110 lab?

I did bring a new one this semester, and I do love it. It's a weather front in a tank. So what we do is we put cold blue water on one side and warm red water on the other side and there is a divider in the middle. When you lift the divider you can see that the cold water sinks and the warm water rises, and it represents a weather front. People often don't think of weather fronts as being 3D so it's cool to see how that happens, especially the four different types of precipitation within a warm front.

What is your favorite kind of weather?

I have had a friend die due to a lightning incident, and I do hate lightning in that aspect, but at the same time I love what we're able to learn from lightning, and I do love being snuggled up on my couch during a thunderstorm. I love lightning but from a distance.

In your opinion, what is the best part of Grand Forks?

I do like the riverwalk, I think that area and downtown are super nice and I love farmer's markets in the summer on Saturday mornings, and that whole area. And I think this just goes back to the people in Grand Forks, everyone has been super nice and accommodating. And I come from the south where southern hospitality is a huge thing, but I would almost say it's better here in a way, people aren't as judgmental here as they are in the south! And everyone within the department has been amazing, and the students are so nice, they even bring me cookies sometimes.

Do you have any fun hobbies you would like to share?

I have two cats who I love very much, one is ENSO, named after El Nino Southern Oscillation, and the other is Mara, she's named after the Giants ownership. Which leads into my second hobby. I'm a huge New York Giants fan. I also play soccer in my free time, I rowed in college and I really miss rowing. I generally just love to play sports and move my body, and I am fitness driven, so I try to get to the gym as much as I'm able to.



UpLift...Off the Ground

Ryan Peene (SAAC VP & UpLift Chair)

UpLift, UND's peer support program has officially launched and is currently supporting students. Peer support programs have been used in the industry for close to a decade now, though the addition of one to a training environment is a novel concept. **UpLift is one of the first aviation peer support programs in the United States for a collegiate setting.** It was designed with confidentiality in mind, from the form submission not even requiring your real name, to the website being hosted all the way in Europe, outside the UND domain, and only accessible to Peers in the program and the embedded aviation psychologist.

The history of Peer support programs for aviation is fairly brief, only being around for around a decade or so. Following the Germanwings crash in 2014, the European Union Aviation Safety Agency regulated that all major carriers have a peer support program. In the United States, however, they are not presently required by regulation, though the FAA is a strong supporter of the program. The regulators have concluded that fear of losing a license can be the primary factor in concealing vital information. Therefore, they are actively creating a non-threatening environment where peers could

guide pilots to identify the root cause of their problems with no severe consequences to follow after reporting the issue. This means that Peer support programs are not required to report specifics to regulators or their administration while supporting peers.

While initially slow in utilization across the industry, these programs have reported continuous growth throughout their implementation and are looking to provide readily apparent tools to help pilots who are struggling with mental health issues.

Despite only being active for a few weeks, UpLift already has seen some student usage, averaging a couple of contacts per week. If you or someone you know needs peer support or simply has a question that they'd otherwise be afraid to ask a professional, feel free to reach out at UpliftPeer.com at their earliest convenience. **#timetoUpLift**

Flight Operations Update

By Musharrat Faiza Ashraf
SAAC President

"We are still negotiating with Swift Fuels on the price per gallon of UL94 unleaded aviation fuel as the supplier ran into supply chain issues. This is a direct cost that is covered by the student and we want to ensure we are getting the best price per gallon so for now, we will still use 100LL while continuing discussions with Swift Fuels.."

-Dick Schultz, Director of Flight Operations.



Interested to know more about the new Flight Operations building?

Go to the link below to learn more:

<https://blogs.und.edu/und-today/2022/08/und-aerospace-plans-new-flight-operations-center/>



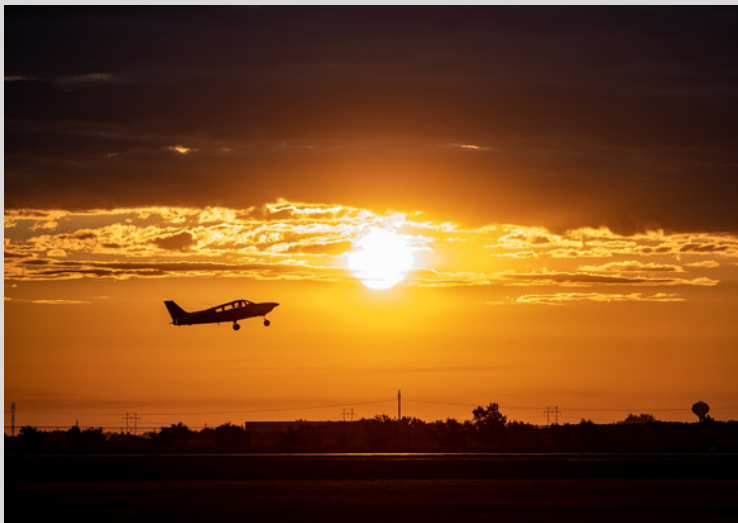
Updates from SAAC

New SAAC Members

This past month, current SAAC members had the pleasure of reviewing, interviewing, and choosing new council members! After a marathon 2-days of interviews, we are pleased to announce our newest members of UND's Student Aerospace Advisory Council:

Josh Salmi, Julia Raker, and Carson Calhoun.

Welcome Aboard!



Graduating Seniors:

Congratulations! From everyone on SAAC, we wish you the absolute best in all your future endeavors. You have worked so hard over the last few years and your dedication doesn't go unnoticed. Through hard classes, tough instructors, and everything in between you persevered and made it to the end. Whether Grand Forks is home for you or you are moving across the world, remember that your UND family is so proud of you and always wishes you clear skies!

We also say goodbye to members **Faiza Ashraf** and **Amanda Higginbotham** who will be graduating from the council this semester. We thank you for your service to the students of the Aerospace College!

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Suggestion Box:

Odegard 101

Meetings:

Sundays at 4:00PM Robin 136