HORIZONS

Views and Perspectives from

WEST MICHIGAN AVIATION ACADEMY

Fall 2023



There's a Different Standard Here

Time and again, you will hear WMAA students say that they chose this school for the challenge. Senior Seth Blanchard is no exception. "I wanted a different high school experience than I saw my brother having, so I started looking at options in 8th grade," he recalls. "As soon as I walked in the door at WMAA, I knew there was a different standard here. People greeted me and shook my hand. I connected instantly."

The culture drew him in, but Seth had no plans to explore aviation. "I was going to do engineering," he says. But then, as happens with so many students, the horizon opened up through curriculum opportunities. "By my junior year, I really leaned into the engineering track, and I chose Introduction to Maintenance as one of my courses. That, in turn, pulled me toward Build-A-Plane."

Seth was part of the team that finished the Carbon Cub EX2 this year (see story on page 2). "I worked on the exhaust system, cowling, propeller, and most of the final gas line," he says. "It's amazing to see the finished product now and know that I was one of the many students who completed it. It was a proud moment when I saw that finished plane in the WMAA hanger!" Now he's starting over this year on the new kit.

In keeping with his desire for academic challenge, Seth has also chosen AP courses in computer science, biology and physics. And he's focused on helping his classmates achieve tremendous progress with the next plane. "I think we can finish the wings and the fuselage by the end of the year," he says confidently. "The only hard part for me will be leaving the plane unfinished when I graduate. I will need to come back and see it!"

Much to his surprise, Seth's hands-on experiences with Build-A-Plane have set him on course for an aviation career. "I definitely want to get my A&P license, and then either a bachelor's or master's degree in aerospace or mechanical engineering," he shares. "With those skills, I can work on planes anywhere. As a mechanic, I can see the country and make a great living."



Excellence From Start to Finish

The Carbon Cub Is Complete!

Thanks to a gift from the Michigan Business Aviation Foundation and a matching gift from the Dick & Betsy DeVos Foundation, WMAA students began building a Carbon Cub EX2 in the fall of 2019. The simplicity of the large box and its 8,000 neatly packed parts belied the complexity of producing a truly excellent, airworthy plane.

Students spent almost 1,000 hours building the plane. In the process, they learned about logistics and supply chains. They focused on engineering requirements and quality control. They learned strict adherence to technical data, all while practicing lean manufacturing principles. They built a plane according to the same industry standards used by aerospace manufacturing companies.

And all that excellence was just the start.



Tail number N1226G honors Martin Grant, the Project Manager who has led Build-A-Plane to completion.

Getting to the Finish Line

Martin Grant is a former Royal Air Force maintenance engineer and licensed A&P mechanic. He came in as Project Manager in 2021 to assist Clayton Melby, the Build-A-Plane instructor.

"I've spent an inordinate amount of time not at school," Martin shares with a laugh. "I had to stay ahead of the project, making sure we had all the right tools, equipment, expert assistance and more." Martin needed to resource two significant tasks once the students finished the build. The plane needed to be painted, and it needed to be



Martin Grant, Build-A-Plane Project Manager

certified by the FAA. For those tasks, Martin connected with passionate local professionals from the Sparta chapter of the Experimental Aircraft Association.

Fabric & Paint

Dan Bauman is a bit of a legend in experimental air circles. In 2019, he received the Wright Brothers Master Pilot Award from the FAA for logging 50 years as a pilot. He has attended every single Oshkosh EAA event since they started 53 years ago. He is also a certified mechanic with an A&P license who's currently working on his 51st plane. Dan is a perfectionist about every plane he touches, winning awards on seven out of the nine planes he has shown at EAA.



Dan was the ideal person to help finish plane. After students applied the fabric, we brought the Cub up to Sparta. Dan applied a series of stencils that formed the basis of the plane's artwork. Then he went into action with a spray gun. Hundreds of hours later, this gorgeous paint job emerged. "Fabric and paint are an art form," he says modestly. "I've always loved doing hands-on work."

FAA Certification

Gordon Gilchrist is another of the incredibly talented and dedicated aviators who has helped WMAA build an airworthy plane. He is building his eighth plane, but has only sold five. "I kept two, including the float plane," he says with a grin.

Gordon stepped up from the beginning, showing up every month to help oversee the build and do quality checks. He also worked alongside the students on the trickiest parts of the assembly, such as the windshield, engine cowling and wing rigging.

When it was time to start the FAA approval process, Gordon came to carry out a pre-inspection. "We only had a few minor 'squawks,' or things that needed to be addressed," he says. "The students did an incredible job." Gordon was first to take the Cub airborne, helping to complete the 40 hours of Phase One testing needed to receive FAA certification. "I feel completely safe in this plane," he says. "Carbon Cub has been designing planes for 30 years. That, plus my knowledge of how the plane was built and how it flies, makes me entirely comfortable getting her up in the air."

Completing the Journey of Excellence

Now the Carbon Cub is finished and ready for sale. The proceeds will help fund the next build cycle, which already has more student interest than available slots. "We're helping kids discover their potential and turn it into a career they love," Martin says. "We're feeding the entire aviation skills pyramid with qualified, capable students."

From the very beginning, this class has drawn students from many different interest areas. We've had aspiring pilots, focused mechanics, and students with no previous interest in aviation all sign up to take the class. All of them have raved about the experience of building a plane, while highlighting the important skills they have acquired.

"I'm working on a plane that our instructors are going to fly. Here, if you make a mistake, you know the person who's going to die because of your error! We are completely focused on doing it right." (Gavin Helder, '20)

"Continuous improvement and value stream mapping, respecting other people and making deliberate decisions... these are all great skills for me no matter what I do in the future." (Samantha Perrone, '21)

"WMAA has crazy opportunities. I'm in the Build-a-Plane class and will be able to put on my college applications that I've done it. How many people can say that?" (Drew Delvaux, '23)

"I didn't initially plan on an aviation career, but working on this plane convinced me to pursue my A&P license. I'm proud of the completed product, especially knowing how much work we all put into it." (Seth Blanchard, '24)

"From beginning to end, this project demanded persistence and excellence," Martin concludes. "We could have bought a cheaper kit, but we didn't. Carbon Crafters has an excellent record, and the sale will help the sustainability of the program. We could have done a cheaper paint job, but we didn't. For buyers, confidence in what they see creates confidence in what they can't see. We are completing this project according to the motto of the aviation department: safety first, professionalism, and the pursuit of excellence."



"From beginning to end, this project demanded persistence and excellence."

Martin Grant

Martin Grant (left) and Gordon Gilchrist (right) have helped lead this project to the finish line.



The Pursuit of Excellence

Although the word "excellence" is used somewhat loosely in today's culture, we take it very seriously at WMAA. What does it mean to be excellent, and how are we working to achieve it?

"The pursuit of excellence is a journey that staff and students commit to together," says Chris Williams, Dean of Teaching and Student Learning. "It's difficult for one to achieve the goal without the other."

Our Commitment

From the school's perspective, excellence involves continuous improvement. We're always looking for ways to make our programs better. We follow the same design thinking process that we teach as we identify needs, implement new ideas, and test their impact. Programs and opportunities such as Build-A-Plane, capstone courses and community-based engineering projects are just a few examples of how our staff continues to innovate. We provide intentional opportunities to engage underrepresented populations in engineering and aviation, such as the Redtail Aviators and flight training scholarships.

Student Responsibilities

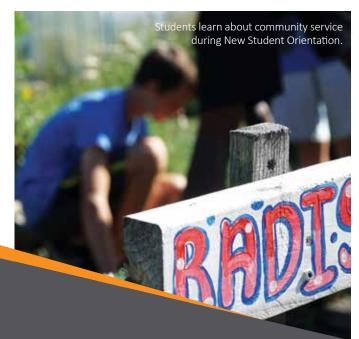
From a student perspective, the pursuit of excellence is about becoming a fully capable adult. "We have high expectations," Chris continues. "Students grow by adapting to feedback, challenging themselves, paying attention to details, serving others, and achieving new things." These expectations are set right from the beginning in New Student Orientation. They carry through every course, but perhaps the most visible examples come from the aviation department. "We've had 146 students graduate with a private pilot license," says George Pavey, Dean of Aviation & Engineering. "Another 75 have flown solo glider flights. Our students have built a fully operational airplane. Safety in aviation requires absolute commitment. I don't know of

another high school where students consistently achieve this kind of standard."

Those expectations stretch to extracurricular activities as well. "We intentionally use the phrase 'student athletes' because they are students first and athletes second," says Betsy Pott, Director of School Operations. "They know they represent WMAA in every interaction, both on and off the court."

It's equally important to note that entrance testing is not part of our pursuit of excellence. WMAA is open to any student, regardless of academic ability. Those who choose to attend know the expectations, and accept the challenge of rising to meet them. "We also provide every support needed for students to achieve," notes Jaclyn Iacco, Dean of Academic & Student Services. "That's unusual. For example, we have a full-time person supporting at-risk learners as they discover their post-high school path. We have mental health professionals on-site. We offer English Language Development to support those who need it."

"Our mission is to provide an innovative, professional and welcoming environment that inspires growth and ignites a passion for lifelong learning," says CEO Nicole Gasper. "We're consistent about our mission, vision and values. We believe in both high levels of accountability and support for our students because excellence does not happen by accident; it is a combination of intent and hard work. Our families know we are committed and they want to be a part of it."



Donor support allows us to invest in the programs and supports that make excellence possible. Thank you for helping us and our students live into the mission!





Save the Date: May 9, 2024



Our 13th annual *Leaders of Tomorrow Gala* will provide an evening of engagement and inspiration celebrating WMAA's impact on students and our community. Don't miss this signature fundraising event!

Please visit our website to learn more about the event or sponsorship opportunities. Sponsors help underwrite the cost of the event so that 100% of all gifts go to support the amazing opportunities and experiences offered to WMAA students.

Attendees and Sponsors!

We welcomed a record crowd of more than 200 guests to our sixth annual *Broadening Horizons Breakfast* on October 5. This event, along with our spring *Leaders of Tomorrow Gala*, is one of the primary fundraising events to support WMAA students.

We highlighted a signature project, the Carbon Cub EX2 that was completely built by students in our first Build-A-Plane course. George Pavey, Dean of Aviation & Engineering, and Martin Grant, Project Manager, spoke about the tremendous accomplishment. Interesting points to note:



The kit had more than 8,000 parts.



The project involved more than 130 students and required roughly 800–1,000 hours to build.



We are on track to receive FAA certification and then the Carbon Cub will be ready to sell.

We extend a special thanks to our amazing sponsors: Amway Aviation, Gulfstream, Mayday Avionics, RDV and Seamless Ventures. Thanks to their support, all gifts given at the event will go directly to support the incredible experiences that WMAA students enjoy.

> Sale of the Carbon Cub will help fund the next build, but donor support is still needed. We invite you to support WMAA through your gift. You may use the enclosed envelope, or give online at wmaafoundation.org/donate.



First Officer Justin Teegardin (L) with Captain Tori Gann (R).

Double Dreams in the Cockpit

The First All-WMAA Crew Took Flight This Year!

Students who graduate from WMAA with a private pilot license still have a lot of learning to do before they can occupy the cockpit for a commercial or charter flight. So it's pretty incredible that Tori Gann ('15) and Justin Teegardin ('16) have already reached that milestone. And it's beyond amazing that they happened to team up for the same flight!

Tori Gann attended Northwestern University in Traverse City. She earned her ratings and instructed for two years, then came to Northern Jet to fly business aviation in 2019. Justin Teegardin attended Western for the same reason, and then logged hours by instructing. "I let Tori know I'd be interested in Northern Jet if an opportunity ever came available, and I was able to join them in late 2022."

The incredible WMAA-piloted flight happened entirely by chance. "We saw each other on the schedule, but you don't get to pick your crew," Justin notes. "I saw an opening on the schedule for April 26 this year and decided to fly instead of taking the day off. It was a fantastic surprise to see Tori in the captain's seat!"

Two Journeys; Same Result

Tori and Justin are perfect examples of how WMAA inspires students to explore the aviation profession. Tori did not have flying in mind when she came to WMAA. She simply wanted an alternative to home schooling in her junior year. "My dad loved airplanes and suggested I could be a pilot. So I took ground school as an elective just to fill my schedule," she recalls. "I didn't know anything about flying. Mr. Pavey took me on a discovery flight, handed me the controls, and then asked if I wanted to join the flight class. I earned my private pilot license and loved flying. If I had not come to WMAA, I probably would not be a pilot."

Justin has a similar story. "I wanted to experience something exciting and intriguing in high school," he recalls. "My mom and I stopped at WMAA on the way home from a trip and talked to Mr. Fisher. That was it... I was hooked. In order to make it work, I lived with my dad's secretary during the week and then went home on weekends. I had to use public transportation my sophomore and junior years, which made things even more difficult. Since I've always been a tinkerer, and I love to try and make things fly, I knew this school was the perfect fit for me. However, I could not have made this investment in my future without friends, family, and the WMAA

staff behind me. Their encouragement and support is a debt I can never repay."

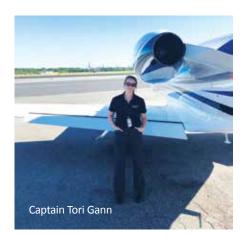
Why Business Aviation?

For Tori, business aviation is about the customer experience. "We serve some of the same customers regularly, but also have many first-time business flyers aboard," she notes. "I love to make their experience fantastic. Whether I'm taking photos on someone's first flight, handling bags, doing flight briefings, or flying, I love the interaction and the whole customer experience that we create."

Justin agrees, but is quick to point out the lure of variety as well. "I love the newness of business aviation," he says. "You're always flying to different destinations. That means exploring routes and runways and experiencing new challenges."

WMAA opened up career doors for these two young professionals in the way that founder Dick DeVos envisioned. He is fond of saying, "The higher your altitude, the broader your horizon." That elevated horizon has lifted Tori, Justin, and countless other graduates to new heights. "WMAA changed my life," Justin says simply. "Without it, I don't know where I would be."





Connect With Other Alumni

WMAA graduates are fantastic people to know and network with after high school. Visit wmaafoundation.org/alumni to learn about the Alumni Engagement Committee, find updates about former students, and sign up for email updates. And don't forget the annual *Leaders of Tomorrow Gala*, which is a great way to keep in touch while giving back to the next generation of WMAA graduates!





Welcome, New Foundation Board Members

The Foundation Board plays a pivotal role in helping to cultivate the philanthropy needed to fund the priorities set by WMAA. We sincerely appreciate the extremely capable people who generously volunteer their time to serve as Board members.

We would like to thank outgoing board members Peggy Koenigsknecht and Rick Fiddler for their service. We're also thrilled to introduce three new board members who began their terms in July: Jodie De Vries, Jeff England and Brian Lennon. You'll find a brief biography of each of them on our website. We are excited about the talents and passion for WMAA that these new board members will bring into their roles.



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