



STEM FLIGHTS

2023

Annual Report

PROGRAM & CURRICULUM

- 375 new students applied for a STEM Flight in 2023.
- Built relationships with schools and districts across the US
- **NEW** STEM + Aerospace curriculum to include 4 missions: General, Commercial, Military Aviation and Maintenance; Climate, Weather, and Environmental Sciences; Drones, Physics, and Advanced Air Mobility; and Aerospace Engineering.
- Updated STEM Flight Following™ to include better access to resources, mentoring, and scholarships.
- 2023 National Partnerships include Million Girls Moonshot, American Rocketry Challenge, and After School Alliance.
- Expanded the reach of our student recruiting to 10 additional states
- Developed and updated student surveys and testimonial platform to provide essential data for our organization
- Created a system for recording and highlighting the student application process along with updated student application questions



FLIGHT OPS AND SAFETY

- 250+ STEM Flight Missions Flown in 2023
- 154 Pilot Mentor Applications
- Implemented Pilot Mentor background checks for all new volunteers.
- Launched Mobile App for Pilot Mentors to access available flight, upload files and photos, and close missions.
- Implemented the Emergency Response Plan and Quick Response Card to improve flight safety operations.
- Hosted Pilot Mentor webinar to educate, train, and inspire new and current Pilot Mentors.
- Partnered with three flight schools: Anderson Aviation in Texas, Sweet Aviation in Indiana, and Aviation Adventures in Virginia.
- Flight Operations Director became FAA Safety Team Member (FAAST).
- Modified flight coordination software to better serve pilot volunteers and report data.



SUSTAINABILITY & GROWTH

- Hired Director of Education to write curriculum, form partnerships with educators, and advocate for students in the program
- Guest speaker AOPA HS STEM Symposium, presentation at SunNFun and AirVenture, sponsor of Air Care Alliance annual conference.
- Host of Girls in Aviation Day Winchester, VA
- Created non-flying volunteer opportunities to meet the demand of inquiries.
- Hired grant writing consultant for 2024 funding diversification.
- Implemented EOS (Entrepreneurial Operating System) for the nonprofit to increase growth, productivity, and expansion.
- Matching grant commitments from the Ray Foundation and a Michigan family foundation for 2024.
- STEM Flights has pilots and/or students 46 states.



2023 HIGHLIGHTS



Outlook 2024

STEM Flights celebrated 5 years of operations in 2023 thanks to the hundreds of flights donated by volunteer Pilot Mentors over the years. 2024 will be a milestone year with a goal of flying 500 students and expanding operations to serve all 50 states. Additional goals for the year will include national outreach and partnerships, adding 85 new Pilot Mentors to the team, increasing follow up resources for students after the flight, and serving more students all over the country.

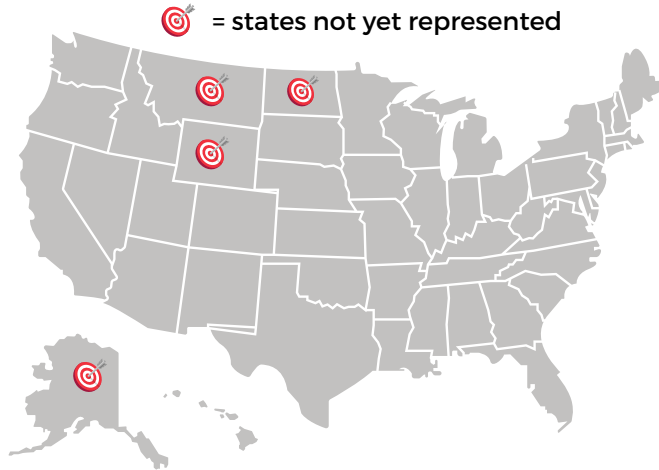
Thank you for supporting STEM Flights over the years and helping us grow to reach more kids. We are changing lives, one flight at a time.

With Gratitude,
Dave, Carley, Austin, and Maria



2023 METRICS

STEM Flights presence in 46 states

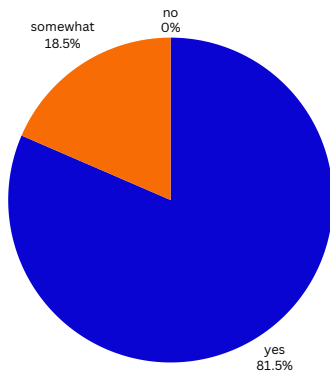


2023 By the Numbers

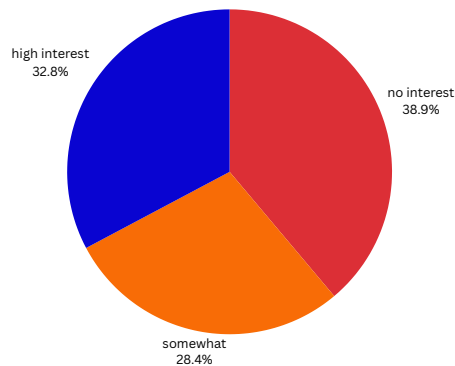
300 STEM Flights flown
375 Student Applicants
154 Pilot Mentor Applicants
4 National STEM Partnerships

Student Survey Feedback

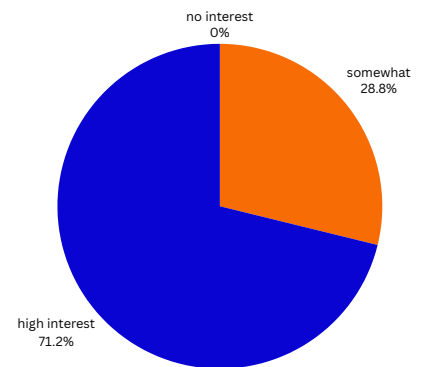
Do you want to learn more about careers in Aviation + STEM?



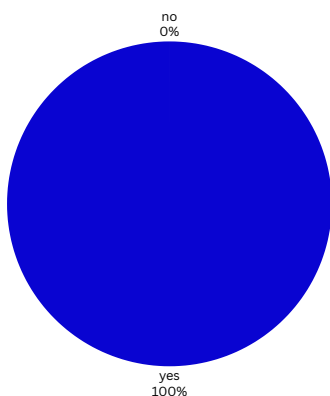
What was your interest in Aviation + STEM BEFORE your STEM Flight?



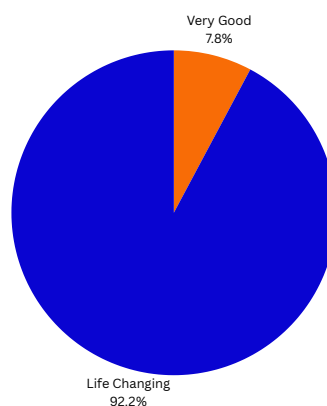
What was your interest in Aviation + STEM AFTER your STEM Flight?



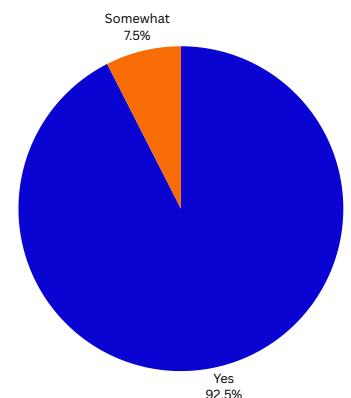
Do you hope to pursue a STEM or aviation career in the future?



How would you rate your STEM Flights Experience



Do you feel as though you learned valuable STEM and Aviation content during your STEM Flight experience



2023 Student Testimonials

"My STEM Flight was like nothing I have ever experienced before. It was amazing. I learned so much. I got to take off and land, fly through rain and see my town from birds eye view."

"It helped me learn so much and my pilot really made me feel like I could actually become a pilot. Flying was so exciting and the pilot explained so much more than I even thought he would. This made me even more excited about flying and I didn't know that was possible!"

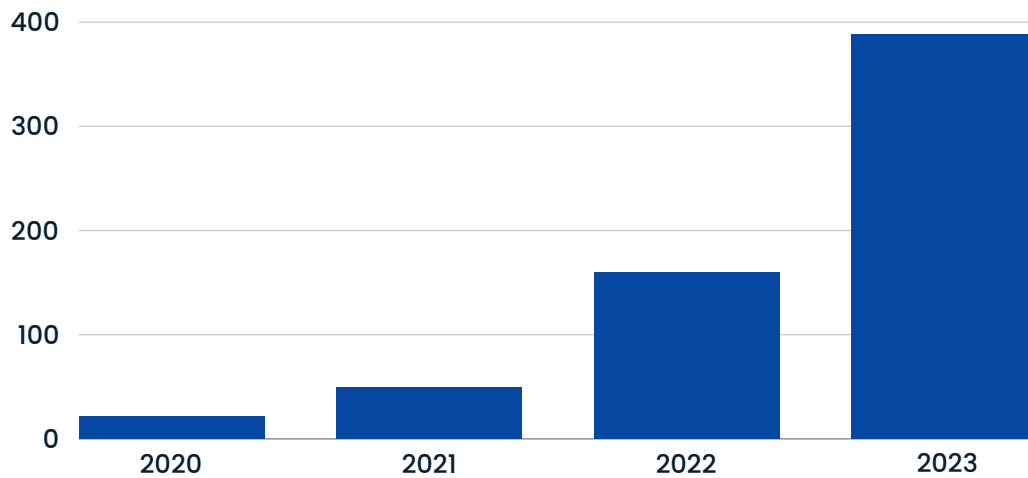
"Flying for the first time was truly life-changing. Witnessing the world from a perspective so different from the ground infused me with a profound sense of freedom. The STEM flight experience allowed me to expand my horizons and appreciate the boundless possibilities in STEM and aviation. It helped me grow closer to my goal without causing a financial constraint on my family. Thank you for this amazing opportunity."

"When the pilot let me have full control of the plane I was very excited and thought it was really cool to actually be flying a real plane. Being up in the air was cool, and the view was amazing. The experience really solidified that I do want to be a pilot when I grow up, and I look forward to being able to obtain my license."

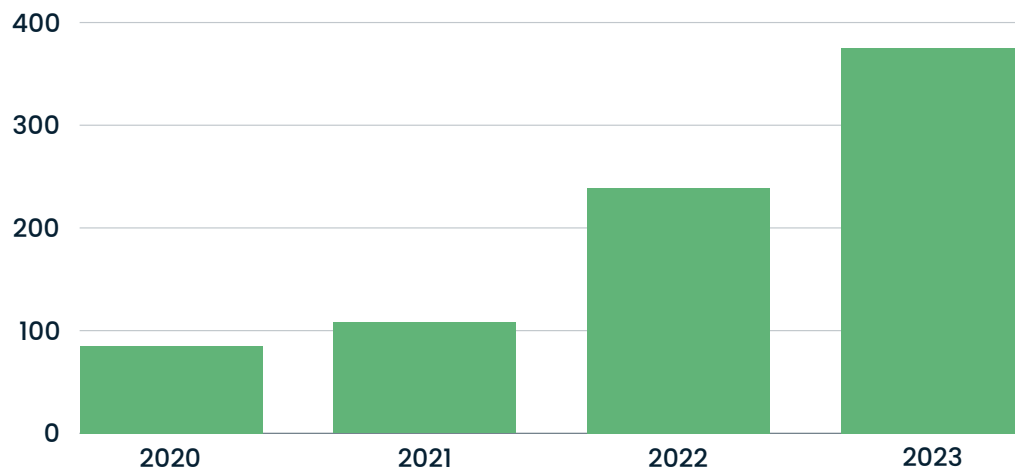
"I had the incredible opportunity to participate in a STEM Flight program, and I can't express how much of an impact it had on me. It was an experience that I'll never forget. Flying in a small aircraft in the STEM Flight program was a unique and exhilarating experience. From the moment I stepped into the cockpit, I was filled with a mix of excitement and nervousness. As the plane taxied down the runway and then smoothly took off into the sky, I couldn't help but be in awe of the beauty of the world from above. What resonated with me most during the flight was the realization of how important and interconnected the principles of science, technology, engineering, and mathematics are to aviation. The pilot explained the various aspects of aerodynamics, navigation, and the complex systems that make a flight possible. It was like a hands-on lesson in applied physics and engineering. As a student, this experience helped me see the practical applications of what I learn in the classroom and ignited a deeper interest in these subjects. The STEM Flight program not only provided me with a thrilling experience but also helped me understand the importance of STEM fields in aviation. It showed me how critical it is for pilots and engineers to work together to ensure safe and efficient flights. This insight has solidified my desire to pursue a STEM-related career. Participating in STEM Flight was a dream come true, and it has made a profound impact on my educational and career aspirations. I'm now more motivated than ever to pursue a career in a STEM field. I hope to continue learning, growing, and contributing to these fields, and I'll always be grateful for the amazing opportunity that STEM Flight provided me."

STEM Flights Growth

Total Number of Volunteer Pilot Mentor Applicants



Total Number of Student Applicants



Total Missions Flown

