



NASA Aeronautics

May 2023
No. 24

Monthly STEM Newsletter

INSIDE

Asian American, Native
Hawaiian & Pacific
Islander Heritage
Month

Dream with Us Design
Challenge 2023

Funding Opportunities



In April of 2023, the lower empennage or tail section of the X-59 was installed.

May 2023

April showers bring May flowers. The flowers are blooming, and summer is coming fast. This month celebrate Asian American, Native Hawaiian & Pacific Islander Heritage month. NASA celebrates diversity and recognizes members of the AANHPI community who have brought the enrichment of their culture and made great contributions to the mission. Others making great contributions, MOMs and mom-figures who come in all shapes and sizes! Celebrate Mother’s Day on Sunday, May 14th. Be sure to check deadlines coming up this month so you don’t miss a funding, scholarship, or internship opportunity with NASA and NASA partners. This month we highlight Rachel Owens, the Deputy Lead of the OSTEM Internship program. Check out her story and how she inspires NASA interns to achieve their goals and be their unique selves.

Do you need to see more of something or have a new idea for upcoming newsletters? Let us know! Do you know someone else who needs this monthly update? [Sign up for our monthly STEM newsletter](#). Have questions or want to be removed from the list? Send an email to April.a.lanotte@nasa.gov.

Let’s Fly!

Asian American, Native Hawaiian & Pacific Islander Heritage Month

History

May is the month to celebrate Asian American, Native Hawaiian and Pacific Islander heritage. This month commemorates the first Japanese immigration to the U.S. in May 1843 and the anniversary of the completion of the transcontinental railroad in May 1869 which was constructed mostly by Chinese immigrants. In 1977, Rep. Frank Horton of New York and Senator Daniel Inouye started the conversation to recognize the first 10 days of May as Asian/Pacific American Heritage week. Unfortunately, that did not come to pass, but the following year, Rep. Horton reintroduced the conversation and President Jimmy Carter signed it to become a public law on October 5, 1978. In May 1990, President George H.W. Bush extended the order to include the entire month to be recognized as Asian/Pacific American Heritage, and in 1992, May became the official month to celebrate it every year.

Today, we recognize all Americans from the Asian continent and the Pacific islands of Melanesia (*New Guinea, New Caledonia, Vanuatu, Fiji and the Solomon Islands*), Micronesia (*Marianas, Guam, Wake Island, Palau, Marshall Islands, Kiribati, Nauru and the Federated States of Micronesia*) and Polynesia (*New Zealand, Hawaiian Islands, Rotuma, Midway Islands, Samoa, American Samoa, Tonga, Tuvalu, Cook Islands, French Polynesia and Easter Island*). Learn more about these diverse people representing various countries and islands.

<https://www.asianpacificheritage.gov/>

Career Highlight: Rachel Owens, Deputy Lead of the OSTEM Internship Program



Rachel Owens is a NASA contractor from LMI and feels incredibly lucky to be serving the field of STEM education and engagement. Currently serving as the Deputy Lead of the Office of STEM (OSTEM) Internship Program, Rachel is co-collaborating on transformational efforts within NASA's NSTEM contract, serving NASA's goal of implementing a nationally recognized, hands-on experiential program.

Rachel has spent the past year and a half serving as both the Intern Specialist for NASA Headquarters and the Minority University Research and Education Project (MUREP) Coordinator for internships across the agency. Prior to NASA, Rachel worked at some of the most visited museums in the country, including the National Gallery of Art and the National Air and Space Museum (NASM). Some of her key achievements during that time include coordinating events and staffing during the Apollo 50th anniversary celebration, designing a virtual volunteer program that served as a national model for using video conference platforms during COVID-19, and advising the development of NASM's first Diversity and Inclusion Strategic Plan.

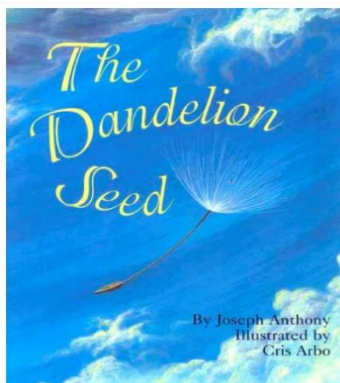
Rachel is proud of supporting interns, especially those from Minority Serving Institutions or

April showers bring May flowers

Inspired by nature, aeronautical engineers see flight happening all around us. Take a look at this activity that helps students understand form and function of flight. Read the story, "The Dandelion Seed" to learn about the lifecycle of a seed and how nature inspires humans to take flight.

(Lesson One: Gliders in Nature)

<https://www.nasa.gov/sites/default/files/atoms/files/aero-prek.pdf>



Current Items

Deadline Extended to May 29th! [2023 Dream with Us Design Challenge](#)



NASA Aeronautics and Aeronaut-X present this year's "Dream with Us" design challenge for students in grades 6-12. This year the challenge focuses on sustainable aviation. Teams of 2-4

nontraditional paths, in finding their footing in their respective fields. She hopes that anyone pursuing a career in STEM feels included, accepted, and valued for all that makes them unique and remarkable.

Professional Development:

Interested in professional development opportunities from NASA? Create a new account or log into NASA STEM Gateway and NASA CONNECTS to find a session that interests you.

<https://stemgateway.nasa.gov/public/s/explore-opportunities>

Come See Us in Person (or virtual)!

[AUVSI Xponential 2023: May 8-11, 2023.](#)
Denver, CO

Register and learn about how NASA's Advanced Air Mobility research will transform our communities by bringing the movement of people and goods off the ground, on demand, and into the sky. NASA is delivering data to guide the industry's development of electric air taxis and drones and to assist the FAA in safely integrating these vehicles into the national airspace.

<https://www.xponential.org/xponential2023/Public/Enter.aspx>

[Ames Exploration Encounter \(AEE\):](#)
May & June 2023

NASA is pleased to announce that the Ames Exploration Encounter (AEE) registration for Spring is now OPEN! This free program is available to 1st through 6th grade students with a minimum class size of 10. We are happy to announce both in person and virtual sessions available! This virtual program allows students to experience science, technology, engineering, and mathematics (STEM) in action. The AEE strives to increase student involvement in NASA programs and strengthen online education. Students of all abilities are welcome to attend. Limited spots are available for May and June, so register today to have NASA in your school.

students will work together to create a marketing plan detailing a sustainable aircraft of their own design. Students will think like a NASA engineer and imagine a new aircraft with a new sustainable design beneficial to all. Are you passionate about sustainability? Do you have ideas for the future of aeronautics? The **DEADLINE** is approaching on **May 29th, 2023**. A virtual awards recognition is also planned for June 15th. Get your team together and sign up for the 2023 Dream with Us Design Challenge [here](#). Come fly with us!

***NEW** Activities for Elementary **coming soon**:

Using Airplane Space Efficiently (K-2)

Using Airplane Space Efficiently (3-5): Students will learn the importance of using small spaces efficiently. They will learn new words and solve mathematical problems while thinking like an aeronautical engineer.

[Flight Log version 2.0](#)

Have you signed yourself or your students up for the NASA Aeronautics virtual flight log? Our latest update is now live, allowing for more interaction, additional STEM content, and new opportunities to engage with us. For new and returning participants alike, you can now sign up to receive email updates, so take a look at our new content. We have multiple flights that will be coming up in 2023 so it's a great time to fly with us!



Coming Soon

Dream with Us Virtual Awards Recognition Ceremony and Sustainable Aviation Presentation: June 15, 2023, 7:30pm EST

<https://stemgateway.nasa.gov/public/s/course-offering/a0Bt000000AmO2jEAF/ae-2223-school-year-spring-2023>

Did you know??

May:

Mental Health Awareness month shines light on the impact of trauma on the physical, emotional, and mental well-being of a person. Established in 1949, the U.S. Department of Health strives to increase awareness and understanding of prevention and treatment of mental health problems. Learn more about how to get involved and help spread the word of mental health and wellness and celebrate those in recovery.



<https://www.samhsa.gov/programs/mental-health-awareness-month>

<https://youth.gov/feature-article/may-national-mental-health-month>

May 1st:

National Principal's Day celebrates principals all over the country who inspire and support the educators fighting to give youth a brighter future. Give your principal a pat on the back or just some words of "Thank You" for all the hard work they do every day.

May 8-12th:

Celebrate a whole week of teacher contributions and achievements during Teacher Appreciation Week. Stand with your teachers and let them know they are heard and respected for their hard work inspiring the future to pursue their dreams and achieve their goals. Join NASA's Digital Learning Week in honor of educators everywhere.

<https://www.nasa.gov/feature/in-appreciation-of-educators-nasa-presents-digital-learning-week>

(open to all educators, participants, and their families).

All challenge participants are welcome to join the fun, a celebration of their accomplishments, and enjoy a special Q&A with one of our NASA experts. Submit your project by May 15th, and we'll see you at the ceremony. Happy dreaming!

Jr. Pilot Book: X-57 (in English and Spanish)

Our [first Jr. Pilot Book](#) focused on the X-59 and the science of sound. Coming soon—our X-57 book which will allow elementary-aged students to have fun while learning about the X-57 and electricity.

Current Funding Opportunities

NASA Aeronautics is seeking proposals for grants to report back on workforce skills needed for Aviation Maintenance. What are new/unique issues that'll crop up with the new forms of air vehicles that are coming?

✂️ Proposals due June 30, 2023. Solicitation details: <https://t.co/0IbbRW9FBn>

Amendment 3 to the NASA ARMD Research Opportunities in Aeronautics (ROA) 2023 NRA: Advanced Air Vehicles Program (AAVP) Fellowship Opportunities

Amendment 3 to the NASA ARMD Research Opportunities in Aeronautics (ROA) 2023 NRA has been posted on the [NSPIRES web site](#).

The announcement solicits proposals from accredited U.S. institutions for research training grants. This NOFO is designed to support independently-conceived research projects by highly qualified graduate students. AAVP Fellowship Opportunities are focused on innovation and the generation of measurable research results that contribute to NASA's current and future science and technology goals.

May 14th:

Today, celebrate moms everywhere for Mother's Day and all the great things they do. Moms of all types are superheroes and should be recognized as such. How will you show your mom that she is amazing, awesome, and all around the BEST mom in the world? Try this activity and make some sweet music for mom.

https://www.nasa.gov/sites/default/files/atoms/files/tongue_depressor_harmonica.pdf

May 24th:

National Aviation Maintenance Technician Day recognizes those who keep our aircraft safe and efficient for everyday travel. We also celebrate the birthday of Charles Edward Taylor, the technician who built the Wright Brother's engine for their first historic flight in 1903. Learn more about the contributions of Aviation Maintenance Technicians at NASA and join the challenge.

<https://www.nasa.gov/aeroresearch/celebrating-aviation-maintenance-technician-day-with-armstrongs-jc-coleman>
<https://nspires.nasaprs.com/external/solicitations/summary.do?solid=%7B5F2D388E-C5CC-92D5-D797-C742D46B9524%7D&path=&method=init>

May 26th:

National Paper Airplane Day is the perfect day to get out your favorite paper airplane design and fold away. To make your airplane more sustainable, try using recycled paper or reuse a paper bag. Looking for new and classic designs? Check out a few activities made by the NASA Aeronautics STEM team.

(Grades K-5)

https://www.nasa.gov/sites/default/files/atoms/files/nasa_plane.pdf

(Grades 3-8)

https://www.nasa.gov/sites/default/files/atoms/files/make_a_straw_plane.pdf

(Grades 5-12)

<https://www.grc.nasa.gov/WWW/K-12/WindTunnel/Activities/foldairplane.html>

Research proposals are sought to address key challenges provided in Elements of Appendix A.8.

Notices of Intent (NOIs) are not required.

Two pre-proposal teleconferences for potential proposers will be held and meeting links will be posted on NSPIRES.

Proposals are due May 31, 2023, 5PM ET. The first of two pre-proposal teleconferences will be held May 8, 2023 from 2-3pm ET. Click [here](#) to register.



Join the **NASA University Student Research Challenge** family and collaborate with peers to contribute to the evolving field of aeronautics! NASA is seeking creative ideas and concepts relevant to NASA Aeronautics from interdisciplinary student teams.

- Receive up to \$80,000 to pursue your ideas
- Gain technical and entrepreneurial experience
- Open to all majors and interdisciplinary teams (engineering, business, etc.)
- Interface with NASA experts and receive exposure to the aerospace industry

Proposals for the next round are due **June 24, 2023.**

To learn more, visit our website:
<https://nari.arc.nasa.gov/usrc>

Future Forecasting: MUREP Funding Opportunities for FY2023

While we are already well underway for FY2023, the year is far from over! If you haven't taken a look at future grant forecasting, take a look at [FY2023 opportunities](#). Some dates have passed, others are quickly approaching, and other are coming.

Internship Opportunities

2023 NASA Internships



Don't miss this opportunity to become a NASA intern! Did you know there are internships for educators, too and lots of others who may not see themselves as a "STEM person"? New projects are added weekly. Follow the link above to find out more and apply today.

Now accepting applications for Fall 2023 session. **Current application deadline is May 27th, 2023.**

NASA Postdoctoral Program

If you're an early-career or senior scientist, apply to the NASA Postdoctoral Program to help pursue NASA's mission and experience the world's most diverse technology and expertise. Become a part of the NPP and experience this unique educational program that is preparing future leaders for NASA and the academic community.

The Summer 2023 application cycle is now open. **Current application deadline is July 1, 2023.**



Links to our Aeronautics STEM Resources:

[Aeronautics Research Resources](#): (all ages) This link takes you to a wide variety of educator resources, Aeronautics@Home, ebooks, National Academies Reports, webinars, lithographs and mini posters, the NASA Aeronautics Research Institute, and more.

[Aeronautics@Home](#): (K-12) This web page contains aeronautics-based activities, videos, games, and more that can be completed at home, in the classroom, or in any number of settings. Topic areas include: "Build It!" "Explore It!" "Watch It!" "Solve It!" "Color It!" and "Aero Educator Resources". Coming soon: "Read It!" and "Do It!"

[Aeronautics Innovations Challenges](#): Keeping up with our many design challenges and opportunities for both post-secondary and K-12 can be tough. In response, we created a "one-stop shop" to pull them all together in one location.

[Flight Log Experience](#): (K-12, post-secondary, general public) Sign up to send your name with NASA Aeronautics on X-planes, UAS flights, and more as you build your virtual NASA flight log. Earn virtual endorsement stamps and mission patches and access aeronautics STEM activities and resources. Educators can sign up their entire class.

[NASA Express Sign-Up](#): (K-12, post-secondary) Have you signed up for NASA's NASA EXPRESS weekly newsletter? This newsletter contains the latest information for educators (K-12 and post-secondary) about new resources, design challenges, internships, and workshops. It is THE go-to for the latest STEM news.

[NASA Educator Professional Development Collaborative](#): (K-12 educators) Where do you go for ongoing, free NASA educator professional development opportunities? To EPDC! Take a look at webinars, digital badging and CEU opportunities, STEM teaching tips, videos, and so much more.

[Aeronaut-X](#): (K-12) Our Next Gen STEM: Aeronaut-X team provides new and exciting STEM activities that focus on cutting-edge aeronautics education and the future of flight.

[Museum and Informal Education Alliance](#): (Informal Educators and Museums) Not in a classroom? Looking for informal education materials? Join NASA's Museum and Informal Education Alliance, where you have access to NASA resources—including aeronautics—for your program, organization, museum, science center, or library. Find out about events happening near you and in the virtual world, and let the MIE Alliance help you build your programs! Access to guest speakers, the latest announcements about grant programs, and an active community network allow you to connect with other like-minded people in a supportive, engaging, and aerospace-focused neighborhood.

[NASA Aeronautics for Educators Facebook Page](#): (K-12, post-secondary) Join our NASA Aeronautics for Educators Facebook page, where the latest aeronautics updates, professional development opportunities, lessons and ideas are freely shared.

[NASA Connects](#): (K-12, post-secondary) NASA Connects is a network of educators who come together to collaborate, share NASA resources, and create personal collections of materials that can then be shared with others. Members can join groups tailored to their specific interests.