NASA Aeronautics Monthly STEM Newsletter

May 2021



May is the month of all-things-drones. May 1st is Drone Day, AUVSI is holding their XPonential "All Things Unmanned" hybrid conference May 4-6th, and NASA Aeronautics is hosting our first virtual Advanced Air Mobility Career Day on May 12th. In this month's aeronautics STEM update, take a look at the many ways to get students—and you—engaged. Do you know someone else who needs this update, too? Feel free to forward this along, and share the link to sign up: <u>https://forms.gle/sNmNTWqJdGG383Zf7</u>. Have questions? Contact me: <u>April.a.lanotte@nasa.gov</u>.

Educators, how we appreciate you! The first week of May is Teacher Appreciation Week, and we want you to showcase all of the amazing things you are doing with students! Are you building aircraft, flying drones, integrating flight simulators into your classrooms? Do you have an amazing afterschool program? Please share what you are doing on our NASA Aeronautics for Facebook Educator page: https://www.facebook.com/groups/nasaaeronauticsforeducators. Not a member yet? Join us!

Coming May 12th: Advanced Air Mobility Career Day: The Future is Flying Cars (Virtual Event). Aimed at educators, high school, and post-secondary students, this virtual career day from 12:00-2:30pm EST will highlight NASA's Advanced Air Mobility (AAM) mission and the wide variety of careers associated with AAM. Hear from NASA engineers, pilots, technicians, attorneys, project managers and more. The event is free but registration is required: <u>https://nari.arc.nasa.gov/aamcareers</u>.

The Mars Ingenuity helicopter has made three powered flights on Mars, with more to come! Follow along with JPL and NASA as we prepare for the Wright Brothers-type of flight deomonstrations. Want to get students excited? These helpful sites are included here: the NASA Science Mars Helicopter Tech Demo site contains the latest status updates, blogs, raw images, and more: <u>https://mars.nasa.gov/technology/helicopter/#</u>. Our NASA Aeronautics on Mars (and Earth) materials site has videos, articles, STEM activities, with more added all the time! <u>https://www.nasa.gov/aeroresearch/nasa-aeronautics-on-mars-and-earth/</u>

<u>ARMD Solicitations</u>: Opportunities for universities to collaborate with NASA's aeronautical innovators and/or contribute to their research is available now! <u>https://www.nasa.gov/aeroresearch/solicitations</u>

 DC31BFDA752B%7d&path=&method=init (Released April 19, 2021, closes Sept. 30, 2021). If you are a part of a museum or informal education institution, find out more and access lots of content focused on you at NASA's Museum and Informal Education Alliance: NASA MIE Alliance

Newest STEM activities: Take a look at the newest STEM content we've added to our <u>Aeronautics@Home</u> page. As mentioned last month, we created a story about NASA Acoustics Engineer Danielle Koch and her team, which is available in three reading levels:

https://www.nasa.gov/aeroresearch/resources/leveled-readers. A video from the series "Nature Knows Best: Sound and GRC Acoustics Engineer Danielle Koch" highlights what she is doing at Glenn Research Center and is also available at the link above.



Coming Soon from Aeronaut-X: A new activity guide focused on unmanned aircraft systems is in the works and will be released soon, just in time for summer!

Also Coming Soon—Aeronaut-X in Spanish! Several Aeronaut-X activities have been translated into Spanish and are nearly ready for you. Stay tuned here, or watch for their release on the Aeronaut-X site: https://www.nasa.gov/stem/nextgenstem/aeronaut-x/index.html.

Upcoming Educator Professional Development events: Take a look at just some of the <u>Upcoming</u> <u>Educator Professional Development events</u> for the month of May. These sessions are free, and some are available en espanol as well! Our <u>Explore Flight: Bernoulli's Principles</u> session will occur on May 5th from 3-4pm EST, <u>Explore Flight: Flying Beyond the Earth</u> will occur May 6 from 7:30-8:30pm EST, <u>Explore</u> <u>Flight: Aeronaut-X: 3...2...1...Takeoff!</u> is on May 11 from 7:30-8:30pm and more. Workshops are free but registration is required.

NASA STEM Stars: Each month, <u>NASA STEM Stars</u> hosts webchats that connect students ages 13+ with NASA experts of all types. Episodes are live-streamed on YouTube and occur at 2pm EST. May's lineup continues to include aeronautics and our Advanced Air Mobility experts (and take a look at three from April 2021 that are now archived on the STEM Stars site linked above):

• May 19th: Julie Blackett, Glenn Research Center, Lead Resource Analyst

Links to our Aeronautics STEM Resources:

- <u>Aeronautics Research Resources</u>: (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.
- <u>Aeronautics@Home</u>: (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!"
- <u>NASA Express Sign-Up</u>: (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.

- <u>NASA Educator Professional Development Collaborative</u>: (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.
- <u>Aeronaut-X</u>: (K-12) Our Next Gen STEM: Aeronaut-X program provides new and exciting STEM activities that focus on cutting-edge aeronautics education and the future of flight.
- <u>Museum and Informal Education Alliance</u>: (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.
- <u>NASA Aeronautics for Educators Facebook Page</u>: (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.
- <u>NASA STEM Stars</u>: (students ages 13+) Webchats that connect students ages 13+ with NASA experts of all types. Each chat introduces a STEM career, addresses a STEM topic, and highlights a NASA mission. Webchats are streamed live at 2pm EST via YouTube, and students can ask questions via the chat feature in real time. Or, you can choose from a growing library of archived sessions.