

Meet us in Austin for a girls event, check out a day in the life of aerospace engineers

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Register for Invent it. Build it.



Get ready for SWE's Annual Conference, [WE17](#), and its signature [Invent it. Build it.](#) event for students in grades 6-12. There's also programming for parents and educators at Invent it. Build it. The event takes place on Saturday, October 28, 2017 at the Austin Convention Center. We hope to see you there!

[Register Today »](#)

### Consider Becoming an Aerospace Engineer

If you have passion for aircraft or spacecraft, strong math and physics skills, then a career as an Aerospace Engineer may be a great fit for you. Aerospace Engineers design aircraft, spacecraft, missiles, and propulsion systems. They also study the aerodynamic performance of aircraft, construction materials, and even golf balls!

It would be incomplete to talk about Aerospace Engineering and not mention NASA – the National Aeronautics and Space Administration. At NASA, women are working on projects from the [Mars Lander](#) to small [CubeSats](#). You can [go to NASA's site to read profiles](#) on a number of their women engineers.

### Profiles of Women in Aerospace Engineering

Anyone who has seen the movie “Hidden Figures” knows that women have been making contributions to the world of aerospace engineering for a long time. One such woman is



Yvonne C. Brill. Brill studied math and chemistry but eventually entered into the world of engineering and put her knowledge to use in the design of rocket propulsion systems. It is thanks to her that satellites are able to operate for as long as they are now. She is also a

winner of the SWE Achievement Award. [You can learn more about Ms. Brill here.](#)

Meet Adriane N. Hannah, Aerospace Engineer working at NASA at Marshall Space Flight Center in Huntsville, Alabama. She is responsible for design and development of valves for the Orion spacecraft atop SLS (Space Launch System) which will launch astronauts on missions to an asteroid and eventually Mars. A lot of mathematics and science is involved to get the valves to work correctly. They perform tests nearly every day to ensure that the valves will not fail on NASA's critical missions to deep space. Before she joined NASA, she worked as Design Engineer for five years at Jacobs Technology supporting NASA by designing Special Test Equipment for the Core Stage of NASA's Space Launch System (SLS), the world's most powerful rocket ever built.



Adriane's words of wisdom as an Aerospace Engineer: "I am truly honored to help NASA achieve milestones and reach new heights. The career I have is challenging while being fun at the same time! I could not have asked for a more rewarding career and cannot wait to see what our future engineers can design for NASA's missions. To infinity and beyond..."



Another inspiring Aerospace Engineer we get to know this month is Jen Uchida working at Gulfstream Aerospace Corp. in Savannah, Georgia. She is a project lead on the all-new Gulfstream G600 flight-test program that is responsible for the aircraft's progress toward Federal Aviation Administration (FAA) Certification. In this role, she has the opportunity to fly on some test flights, combining her passion for engineering and flying all in one!

She attended the University of Colorado in Boulder for both her bachelor's and master's

degrees in aerospace engineering. Over the course of her career, she has had opportunities to work with satellites, rockets, helicopters as well as military and civilian jets.

Jen is also a SWE member and is the fundraising chair for the Savannah Coastal Empire fundraising SWE Section, where they are working on their sixth-annual Girls Engineer It Day (GEID) event!

GEID is an afternoon of activities geared toward 6-12 graders and to the career opportunities available in engineering. Along with learning about engineering through different hands-on activities, the event offers informal sessions for parents and educators about continuing STEM learning and exploring college choices. [Click here for more information.](#)

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Congratulations Angel Chukwudi-Denis — Constance and Nano Engineering Adventure's Winner!



Angel is 10 years old from Abuja, Nigeria and is the SWENext winner of the United Technologies Constance & Nano Comic Challenge. She submitted a video showing how she built a paper airplane that can carry cargo and glide more than ten feet.



[Visit here to learn about Angel and watch her video about her paper airplane.](#)

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SWENext Engineering Challenge with a Chance to Win a Freebie



This month's activity has us thinking like aerospace engineers to determine how air drag affects the flight path of a paper airplane. [Read about the challenge here.](#)

This year, SWENext is asking students to share their results of the monthly challenge (with a picture and 2- to- 3-line description). Each month, a lucky winner will be selected from the submissions to win SWENext SWAG. Don't miss the chance! All it

takes is a few minutes and a fantastic picture. Please email your entries to [swenext@swe.org](mailto:swenext@swe.org) by October 18.

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### Shout Out to Last Month's SWENext Engineering Challenge Winner

The lucky winner for September's monthly challenge is Hailey S., age 10, from Florida. She used bubble wrap, packing foam and cotton batting as insulation material. She tested her design by putting an ice pop in the box and checked it at various time intervals to record how it worked.



Great job and congratulations Hailey! Your awesome freebie is on its way.



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