

Happenings in this world and beyond...

NOVEMBER 2023

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NATIONAL SPACE DESIGN COMPETITION

StellarXplorers X Competition Has Launched!



The team from Hahnville HS AFJROTC LA-933 were ready to take on StellarXplorers X QR1!

StellarXplorers X Competition is officially underway with Practice Round 1 hosted over two weekends in early October, and Qualification Round 1 the final weekend.

Nearly 20% of teams took advantage of the additional PR1 competition window. QR1 started the fastest ever, with nearly a third of teams competing on Thursday, more than any other round in recent years. Congratulations to those that have competed so far!

Official scores from PR1 and QR1 are now available online at stellarxplorers.org/scores.

Practice Round 2 (PR2) will be held November 16 - 19, 2023. Qualification Round 2 (QR2) will be held November 30 – December 3, 2023.

As a reminder, in order to help ensure teams are up-to-date on all competition round communication, we've established a new page on the StellarXplorers website: <u>Announcements</u>. All important announcements before, during, and after a competition round will be shared on this page. Teams are encouraged to have this page open (and refreshed) while competing.

Additional Training From Outside Resources Available on StellarXplorers Website

We've recently added a section to the <u>Training</u> <u>Materials page on Stellarxplorers.org</u>, containing additional training available from outside resources.

Inyalowda Space Academy Training (ISAT), created by a long-time StellarXplorers technical mentor, is a self-paced course to train students in the basics of Space Mission Design. Many lessons are based around Systems Tool Kit (STK) by Ansys Government Initiatives (AGI). Lessons will focus on satellite orbit designs, satellite components, and launch vehicle selection.



Registration Still Open for Technical Mentors



StellarXplorers teams are typically led by teachers, but not all teachers feel equipped to prepare their students for the competition. Because of this, **many teams rely on technical mentors** (aka the space professionals) to help them prepare.

If you have a strong understanding of determining orbits, selecting satelite components, and/or choosing the optimal launch vehicle for a mission – you should consider being a mentor. The time commitment is up to the mentor, and the schedule agreed up on with the team director, and mentorship can be conducted virtually or in person.

Registration is required for all new and returning mentors.

A background check will be requested of all individuals who register for this role.

Our goal is to provide a technical mentor to every team that requests assistance. <u>Click here for complete details and to register today</u>.

SPONSOR NEWS

2024 Lockheed Martin Space Summer High School Internship Applications to Open October 5

The Lockheed Martin Space High School Internship program is designed to give students the opportunity to work with aerospace scientists and engineers. Lockheed Martin Space High School Interns spend 9+ weeks over the summer working on Lockheed Martin Space projects. Interested candidates should sign up to attend one of four upcoming virtual information sessions, and can learn more about the program, recruiting timeline, and application process by visiting Lockheed Martin's High School Intern Webpage.



Links to the application will be posted to the website on Oct 5, and applications will be open from Oct 5 – Jan 5.

STEM RESOURCES

Join the StellarXplorers Alumni Network

The StellarXplorers Alumni Network is intended to connect program alumni with each other and with program sponsors and supporters from industry and academia. Within this group we will share networking opportunities, available internships, job postings, and more!



This is a private group for past and present

StellarXplorers participants. You must be at least 16 years of age to join, per LinkedIn account regulations.

All requests to join will be reviewed by StellarXplorers staff to verify participation in the program.

To join, visit: https://www.linkedin.com/groups/12721859/

SPACE NEWS



Curious About What's Happening Overhead?

Check out the Space.com <u>2023 Space Calendar</u> to stay up to date with upcoming planned rocket launches and skywatching-worthy dates.

And in case you missed it...

2 OCT 2023 | Spain's new CubeSats will fly in formation in space like geese

3 OCT 2023 | FCC issues 1st-ever space debris fine, serves DISH \$150k penalty

4 OCT 2023 | Nobel Prize in physics awarded to 3 scientists who glimpsed the inner world of atoms with tiny light pulses

6 OCT 2023 | Here's how Artemis 2 astronauts will exercise, sleep and use the toilet on their moon mission

8 OCT 2023 | Comet explosion may have started agriculture in Syria 12,800 years ago

9 OCT 2023 | Axiom Space partners with fashion house Prada to design Artemis 3 moon suits

11 OCT 2023 | NASA's Astrobee robot flies home to International Space Station hive

13 OCT 2023 | SpaceX Falcon Heavy launches NASA Psyche probe to metal asteroid

15 OCT 2023 | Annular solar eclipse wows skywatchers with spectacular 'ring of fire'

16 OCT 2023 | Future Mars astronauts may eat Earth's tiniest flowering plant to survive the Red Planet

17 OCT 2023 | Students set record with stratospheric balloon launch and recovery

20 OCT 2023 | NASA's Artemis moon astronauts may wear electric field spacesuits to fight pesky lunar dust

21 OCT 2023 | NASA Ames, UC Berkeley to build \$2 billion space center in Silicon Valley

23 OCT 2023 | The moon may be 40 million years older than we thought, Apollo 17 samples suggest

25 OCT 2023 | China launches new 3-astronaut crew to Tiangong space station

27 OCT 2023 | ULA targets Christmas Eve for debut of new Vulcan Centaur rocket

Images from space:



Satellite sees annular solar eclipse from 1 million miles away

NASA's EPIC camera aboard the DSCOVR spacecraft captured this photo of the annular solar eclipse of Oct. 14 2023 from nearly 1 million miles (1.6 million kilometers) away. (Image credit: NASA/DSCOVR EPIC team)



<u>Jupiter has a creepy 'face' in haunting Halloween photo by NASA's</u>
<u>Juno probe</u>

Swirling clouds above Jupiter's terminator — the dividing line between the day and night sides of the planet — resemble an eerie Halloween mask in a new photo captured on Sept. 7, 2023, during Juno's 54th close flyby of the gas giant. (Image credit: NASA/JPL-Caltech/SwRI/MSSS and Image processing by Vladimir Tarasov © CC BY)

JUST FOR FUN

James Webb Space Telescope photos to feature on US Priority Mail stamps in 2024



The USPS will issue Priority Mail stamps in 2024 with images by the Webb Space Telescope. (Image credit: USPS/NASA, ESA, CSA, STScI; montage by collectSPACE)

The United States Postal Service (USPS) is granting priority status to the work of the James Webb Space Telescope.

As announced on Monday (Oct. 23), the USPS plans to release two 2024 Priority Mail postage stamps, each featuring a cosmic image captured by the observatory.

"Stamps are miniature works of art and often tell a story that highlights our American culture, our people or an important point in our history," said Lisa Bobb-Semple, acting Stamp Services director for the USPS, in a statement. "Stamps also allow us to show what's important to us as we carefully select which stamp adorns our mailpieces." Click to read more on Space.com.

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