



StellarXplorers is the National High School Challenge which provides a challenging, space system design competition involving all aspects of system development and operation with a spacecraft and payload focus.

Contents

- [Program News](#)
- [Stellar Spotlight](#)
- [Sponsor Update](#)
- [Aerospace News](#)
- [Soaring Explorer](#)
- [Sponsors](#)
- [Newsletter Name](#)
- [Board of Advisors](#)



Program News

STLX VII Competition

Practice Round 3: 14-17 Jan
Qual Round 3: 4-7 Feb

StellarCamps

Stay tuned in the January 2021 newsletter for an update of StellarCamps for 2021 Summer and how you may participate. Stellarxplorers is developing a 20-hour (5-day) StellarCamp for students.

Stellar Spotlight

Stephen Gourley: Program Director



STEM education programs now and into the future need to encompass the fact everyone learns best by a specific means - some read, some listen, some do. The best educational efforts combine all aspects. The competitors in StellarXplorers gain insight

and experience into the analytical skills, problem solving, and teamwork needed to be successful in a complex, multi-variate mission. Not immediately evident to the students is that teamwork engrains the understanding of the value of diversity of thought and the blending of individual talents and skills.

A person's life experiences are perceived and interpreted through the filter of these traits and applied to team engagement back through those same traits. This is the basis of the inherent value of team engagements, such as athletic sports or team competitions. How a team recognizes those differences and works to blend those inherent characteristics effectively are life lessons, applicable in any endeavor, especially STEM fields.

In 2014 I was told about a concept SECAF had posed regarding creating a space-related high school competition. It was entrepreneurial, a space program, and educational. What could be better?! So began years of hard, time-consuming, frustrating, and imminently satisfying effort to "pay it forward," inspiring and motivating the next generation of space system engineers and rocket scientists for our commercial, civil, and national security space programs.

Notable Quote

"I design our scenarios to really challenge the teams. I am always pleased and surprised when they come up with unique and outstanding solutions to our exercises. Lots of future Aerospace Engineers out there."

Tim Brock
STLX Competition Manager

Presenting Sponsor: Lockheed Martin

ARLINGTON, Va., Nov. 5, 2020 /PRNewswire/ -- The Air Force Association (AFA) today announced that Lockheed Martin will be the 2020-2021 Presenting Sponsor for its StellarXplorers Program.

This sponsorship will allow for even more growth in the program by significantly expanding student outreach and enabling full-time professional staffing. StellarXplorers is AFA's National High School Space Challenge, which invites teams of students across the country to use space systems engineering principles to solve a problem remotely through four rounds of competition.



Students involved in any youth organization – including high schools, Boys & Girls Clubs, scouting units, and home-school students – may participate. Winners are planned to receive an all-expense-paid trip to the National Finals, which will be held in the Houston, TX area in April 2021.

"AFA is honored to welcome Lockheed Martin as Presenting Sponsor," said Bernie Skoch, AFA's STEM Executive. "It's gratifying to have as a partner an enterprise so firmly focused on improving STEM opportunities for young women and young men of all backgrounds."



The generous support of Lockheed Martin allows AFA to build on the great work of its volunteers who

initiated the program and successfully led its growth to this point by now putting in place staff members to accelerate the growth of the program. "We're excited to be a part of the StellarXplorers program," commented Rick Ambrose, executive vice president, Lockheed Martin Space.

It's important that we embrace our youth and provide opportunities for them to explore, create and succeed in STEM. We're looking forward to seeing what the students produce.



Aerospace News

Liftoff! SpaceX-NASA mission



SpaceX successfully launched an international crew of astronauts from Kennedy Space Center to the International Space Station on November 15. The Dragon spacecraft, nicknamed Resilience, arrived at the International Space Station the following day.

Curiosity takes selfie with “Mary Anning”

NASA’s Curiosity Mars rover has taken another selfie, this time from location “Mary Anning”, Curiosity has been at the site since July, taking and analyzing drill samples, and has been on Mars for over 3,000 days, still exploring the Gale Crater to search for conditions that might have once supported life.



StellarXplorers Newsletter Naming Competition

Last month we held a contest for naming the StellarXplorers Newsletter. Congratulations to Team 0096, “Space of Ades” from South High School, Torrance, California for their submission of StellarXpress. Thank you to all the teams that submitted a name!

StellarXplorers Board of Advisors

The StellarXplorers Board of Advisors is a high-level advisory group formed to engage with Aerospace Stakeholders. We welcome Norman Augustine as our new Chairman of the Board. Norm brings a wealth of experience in the Space Field, including serving as Lockheed Martin Corporation’s president, CEO, and later Chairman of the Board. He has chaired the Advisory Committee on the Future of US Space Programs, Review of the United States Human Space Flight Plans Committee, and many other space and technology related ventures. We look forward to soaring even high under his guidance.

Take Up Space!

For more information about StellarXplorers, please contact us at StellarXplorers@afa.org

Soaring Explorer

Tom Brown—Cosmos Ranger

Five years ago, Tom Brown, his Rangeview High School team and four other Colorado teams were founding competitors of StellarXplorers. As a Team Director coaching a new group of students each year, Tom has seen the competition grow with now over 200 teams from across the country.



“StellarXplorers gives our students a unique opportunity to learn.”, Tom notes. “This program attracts a great variety of students, not just those who are already interested in engineering and science. The experience provides participating students an understanding of what is possible for them to achieve. And they have fun doing it.”

Tom emphasizes that a StellarXplorers Team Director does not have to be a STEM educator or have an aerospace background. During the competition season, Tom’s team gathers for 1-hour weekly meetings. There are training guides, checklists, videos, and the on-call StellarXplorers program team available to assist new and returning Team Directors prepare and compete.

StellarXplorers Sponsors

Presenting Sponsor—Lockheed Martin



Stellar Diamond



Stellar Platinum



Educational Alliance Partners

