



# STELLARXPLORERS VI



The National High School Space Challenge

## Earn an all-expense-paid trip to the **STELLARXPLORERS** Finals!

Your invitation to this year's competition from the International Space Station is [here](http://www.stellarxplorers.org/) or <http://www.stellarxplorers.org/>

Watch the program video [here](https://www.youtube.com/watch?v=_w10ktF3k) or <https://www.youtube.com/watch?v=\_w10ktF3k >

**STELLARXPLORERS** inspires and attracts high school students to pursue studies and careers in science, technology, engineering, and mathematics (STEM) through a challenging, space system design competition involving all aspects of system development/operation with a spacecraft/payload focus. In this 50<sup>th</sup> Anniversary year of Apollo 11, the Finals will be at the home of Mission Control and the Astronauts – Houston, Texas!!!

**Who can participate?** Teams can come from any high school (including home schools), JROTC, CAP, School Clubs, Boy/Girl Scouts, Boys & Girls Clubs, or any organized youth organization. Teams consist of an adult Team Director (usually a teacher) and two to six students. Team Mentors with space experience are available in-person or online. Participation is free until after the first qualifying round in November. A nominal \$200 registration fee for the team is payable in December, with waivers available to Title I schools upon request.

**How does it work?** The Program supplies a self-contained academic/education component accessed online as a curriculum supplement, including specific training in the use of system simulation software, Systems Tool Kit (STK). The competition leading up to the finals is accomplished from the team's home location on any Windows-based personal computer. Teams will provide their solutions to typical space design problems, such as orbit determination, satellite component selection, and launch vehicle planning, as outlined in a scenario describing the system's mission and constraints. Practice Rounds will precede three Qualification/Prestige Rounds in November, December, and February that will determine teams advancing to Semifinals in March. The top teams from the Semifinals will receive an all-expense-paid trip the Finals in April.

**For Students:** This is an exciting hands-on learning experience that develops commercially valuable skills and increases appreciation for the critical role of space in our daily lives. The competition attracts all types of students with diverse backgrounds who gain confidence by establishing their own experiential base of accomplishment, all while building teamwork and leadership skills. Most of all ... it is **FUN!!!**

**For Teachers & Mentors:** The program is a great fit with any STEM curriculum as a year-long project for your most promising students. It provides a stimulating addition to your classroom with hands-on, real-world applications of science and technology widely embedded into your students' lives. Mentors share their knowledge with an appreciative young audience in an endeavor that they chose as their life's work.

**For AFA Chapters:** The perfect path for interaction and support of your local high school educators! No particular expertise is required, but space experience is especially valuable either face-to-face or online.

**For Sponsors:** **STELLARXPLORERS** allows you to "grow your own" future workforce! You'll have access to a pipeline of talented individuals, interested your business, most U.S. citizens eligible for advanced clearances and uniquely positioned to be your interns and future employees. At the same time, you'll boost U.S. competitiveness and STEM education, while enhancing your visibility with customers and peers.

**More Information/Register at:** [www.StellarXplorers.org](http://www.StellarXplorers.org) / [StellarXplorers@afa.org](mailto:StellarXplorers@afa.org) / (703)-247-5800 x 4899  
(Registration is open 15 April – 5 October 2019)

**Sponsors Contact:** Stephen Gourley, [stephen.k.gourley@gmail.com](mailto:stephen.k.gourley@gmail.com) / (720) 253-3474

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