



STELLARXPLORERS

The National High School Space Challenge



Earn an all-expense-paid trip to the StellarXplorers Finals!

Watch the video [here](#) or <https://www.youtube.com/watch?v=_w1oktTFx3k>

STELLARXPLORERS inspires and attracts high school students to pursue studies and careers in science, technology, engineering, and mathematics (STEM) fields through a challenging, space system design competition involving all aspects of system development and operation with a spacecraft/payload focus. The Program is building a pipeline of STEM talent for the future of government and industry to supplement and succeed an aging STEM workforce. Through participation, students gain experience and confidence in problem solving, analytical skills, teamwork, and leadership.

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 teams have had the opportunity to compete in the first qualifying round. 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, as well as specific training in the use of system simulation software, Systems Tool Kit (STK). The competition leading up to the finals will be accomplished from the team's home location on any Windows-based personal computer. Teams will be asked for 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 Semi-Finals in March to continue the full learning experience. The top teams from the Semi-Finals will receive an all-expense-paid trip the Finals in April each year.

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 AFA Leaders: The program is an exceptionally good way to connect with your local schools/youth groups. Like CyberPatriot, it provides a relevant and stimulating addition to the with hands-on, real-world applications of science and technology that is widely embedded into the students' lives. If you're fortunate enough to have a chapter member with space expertise, mentors are highly valued for this appreciative young audience. AFJROTC/CAP units are especially interested in adding StellarXplorers to their programs, and they currently are the source for half of our teams. Even if you know nothing about space, your chapter can support a team by helping with the registration fee or supplying a pizza on a competition day.

For Sponsors: It 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 / StellarXplorers@afa.org / (703)-247-5800 x 4899

(Registration is open until 13 October 2018)

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

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Air Force Association, 1501 Lee Hwy, Arlington, VA 22209 www.afa.org