



FACT SHEET

UNITED STATES AIR FORCE

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AFRL La Luz Academy STEM Challenge Flight



The STEM Challenge Flight provides an opportunity for teams of three or four high school students to plan and carry out a real-world science, technology, engineering, and math (STEM) project, using a multi-phase engineering design process, much as real-world scientists and engineers (S&Es) do. Generally, the project involves designing and building, under certain budgetary and other constraints, a device that can execute an assigned task within certain performance guidelines.

The three phases of the engineering design process used are: Project Research and Development (R&D) and Pitch; Build, Test, Modify, and Retest; and Final Presentation. Student teams complete assignments for the phases of the project and submit their work using an online environment. As part of this process, teams formally address and document project details such as: goal, constraints, requirements, concept, approval, timelines, work breakdown, design, construction, testing, and results. Throughout the project, students can earn points for submitted assignments. S&Es from the Air Force Research Laboratory and elsewhere provide technical support and feedback to the student teams as they complete project assignments.

Teams earning a set minimum number of points on their assignments are invited to compete at the annual STEM Challenge Symposium. All student teams are invited to share their project results with peers and other invited guests at the Symposium, as they watch competing teams demonstrate how their devices will meet the set objectives of the project.

For more information, contact AFRL La Luz Academy at (505) 846-8042
or go to: <http://prs.afrl.kirtland.af.mil/LaLuz>.

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