National Aeronautics and Space Administration



NASA TECHRISE STUDENT CHALLENGE

Challenge Opens August 10, 2022!

The NASA TechRise Student Challenge empowers teams of sixth to 12th-grade students to design, build, and launch experiments on NASA-supported suborbital flight tests. Guided by an educator, student teams affiliated with U.S. public, private, and charter schools can submit ideas for experiments to test on a high-altitude balloon through a commercial flight provider, which offers exposure to Earth's atmosphere and views of our planet. A panel of judges will review the submitted experiment ideas and select 60 winning teams who will be awarded the opportunity to build and launch their proposed experiment.





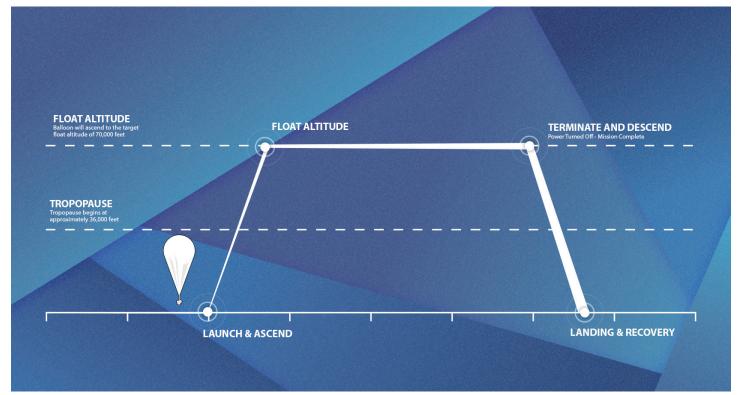


Scan the QR Code or visit www.FutureEngineers.org/NASATechRise

NASA TechRise 2022-2023 FLIGHT OVERVIEW



FLIGHT PROFILE



EXPERIMENT FLIGHT BOX

Maximum Size: 4 in x 4 in x 8 in (10.16cm x 10.16cm x 20.32 cm)

Total Maximum Weight: 2.2 pounds (1 kilogram)



EXAMPLE FLIGHT PROFILE DETAILS

Initialize Pre-Launch Ascend	Flight experiments will be powered on and readied for flight. Target launch time is early morning. Experiments will ascend through the troposphere into the stratosphere. During ascent, experiments will be operational and can collect data.
Operable at Float Altitude	After about 1 hour of ascent, the experiments will float at the target altitude of 70,000 feet for at least 4 hours.
Terminate and Descend	After 4-6 hours at float altitude, power will be shut off to the experiments. the balloon will be released, a parachute will be deployed, and the experiments descend.
Landing & Recovery	Experiments land, the location is tracked, and the flight crew recovers the experiments to return to students.

PHOTOS





Photo Credit: NASA

Photo Credit: Raven Aerostar