



# THE AMERICAN ROCKETRY CHALLENGE

## THE WORLD'S LARGEST STUDENT ROCKET CONTEST



The American Rocketry Challenge—now in its 20th year—is the world's largest rocket contest, with nearly 5,000 students nationwide competing annually. The contest provides students in 6th – 12th grades the opportunity to design, build, and launch model rockets and gain hands-on experience solving engineering problems.

Sponsored by the Aerospace Industries Association, the National Association of Rocketry, and more than a dozen aerospace industry partners, including NASA, the Federal Aviation Administration, and the Department of Defense, the challenge is the aerospace industry's flagship program designed to encourage students to study science, technology, engineering and math.

### WHAT WILL MY STUDENTS GAIN FROM PARTICIPATING IN THE CHALLENGE?

- Teamwork
- Leadership Skills
- Hands-on Engineering Experience
- Problem-Solving Skills

### WHAT ARE THE RULES?

Teams are made up of three to 10 students between 6th and 12th grade, a supervisor, and an official Rocketry Challenge mentor.

The rules vary slightly each year to provide a new challenge to competitors. The 2022 rules require teams to design, build, and launch a model rocket with two different body tube diameters and that carries two raw eggs sideways to an altitude of 835 feet, stays airborne for 41 - 44 seconds, and return the rocket to the ground safely with the egg intact.

### WHAT IF I DON'T KNOW MUCH ABOUT ROCKETRY?

The American Rocketry Challenge features a nationwide network of aerospace professionals and rocketry experts from the National Association of Rocketry and the American Institute of Aeronautics and Astronautics who are willing and available to mentor your team. These mentors can help with the organizing, rocket building, and career pathway exploration.

### WHAT ARE THE KEY DEADLINES?

- **Sept 1** – Registration Opens
- **Dec 1** – Registration Closes
- **Apr 4** – Qualification Flight Scores Due
- **Apr 8** – Finalists Announced
- **May 14** – National Finals

### WHAT HAPPENS WHEN WE WIN?

After official qualification flights are submitted, the top 100 teams are invited to attend the National Finals in Washington, D.C.

Teams competing at the Final Fly-Off look to capture their share of over \$100,000 in cash prizes. There are also special awards for activities throughout the day.

The team that places first at the National Finals wins an all-expenses-paid trip to represent the United States in the International Rocketry Challenge, hosted at the Paris Air Show in Paris, France in June 2021. The United States Rocketry Team competes against the winning teams from Japan, the United Kingdom, and France.

Contact us at [RocketContest@aia-aerospace.org](mailto:RocketContest@aia-aerospace.org) or 703-358-1000.

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