



## **THE AMERICAN ROCKETRY CHALLENGE** **\$100,000 in Annual Prizes for Students & Schools**

- This event is an annual nation-wide rocketry-based aerospace design and flying challenge competition for student teams of 6<sup>th</sup>-12<sup>th</sup> graders.
- It is conducted each year starting in September, leading to a competitive face-to-face fly-off on May 15<sup>th</sup> among the top 100 teams from across the USA. The prizes are \$100,000 in cash split among the top 10 teams plus a free trip to the Paris Air Show in France for 1<sup>st</sup> place. The fly-off is held at The Plains, VA, near Washington, DC.
- It is sponsored by the Aerospace Industries Association (AIA) on behalf of America's aerospace industry, and by the non-profit National Association of Rocketry (NAR).

### **PURPOSE**

The purpose of the Challenge in 2021 is to teach students aerospace engineering by having them design and build a safe and stable model rocket that lifts a fragile payload of one raw egg to an exact altitude of 800 feet and has a flight duration of 40 to 43 seconds, at the end of which it returns this payload to earth safely and undamaged with a parachute recovery system. This is the same challenge as TARC 2020 since that event did not complete due to the pandemic.

- Models must be made of non-metal materials such as balsa, paper and plastic, must weigh no more than 650 grams at liftoff and be at least 650 millimeters long, and must use commercially-made, NAR safety-certified model rocket motors in power class "F" and below. These are widely available in local hobby stores and online.
- Altitudes are determined by a small, accurate commercially-made electronic barometric altimeter carried within the rocket, and read after the flight.

### **ELIGIBILITY & ENTRY**

- Entry is open to groups of 3 to 10 students (6th - 12th grade) who must enter as a team sponsored by a public or private school, home school association, or non-profit youth group.
- Visit the event website <[www.rocketcontest.org](http://www.rocketcontest.org)> to register. Entry opens on September 1 and closes December 1. Teams from TARC 2020 are automatically registered already. Visit the NAR website <[www.nar.org](http://www.nar.org)> for information about America's largest sport rocketry organization and check out the "Educational Resources" web page while you are there.