

Aerospace Industries Association – 2004 Team America Rocketry Challenge

The Team America Rocketry Challenge is the world's largest model rocket design and launch contest and is aimed at encouraging high school and middle school students to pursue technical degrees and careers in the aerospace industry. The competition provides student teams with a realistic experience in designing a flying aerospace vehicle that meets a specified set of mission and performance requirements. The challenge for 2004 was to build and fly a two stage model rocket with a payload of two raw Grade A large eggs to an altitude of exactly 1,250 feet. The rocket had to use a commercially-made model rocket engine and weigh less than 3.3 pounds. The team whose rocket came closest to 1,250 feet (as measured by an onboard electronic altimeter) while functioning safely and returning the two eggs uncracked, was named the winner.

Teams consisted of a minimum of three, and a maximum of 15 students, all from the same public or private accredited middle or high school, with a supervising teacher approved by that school's principal. Teams could also include home-school students, at the discretion of the sponsoring schools. Six-hundred and nine teams, with a total of about 7000 high school students, entered the contest, and all 50 states were represented. Based on qualifying flights completed at local levels, the top 100 teams, representing 33 states, were invited to attend the final fly-off on May 22, 2004, at Great Meadow in The Plains, Virginia.

Three ninth graders from Penn Manor, Lancaster, Penn., claimed the honor of first place. The team achieved a perfect score when their custom-built rocket soared to exactly 1,250 feet. Team members Cam Aument, Benjamin Raush, and Bob O'Connor, shared a prize pool of \$60,000 in savings bonds and cash. The only national rocket competition for middle and high school teams, the 2004 Team America Rocketry Challenge was sponsored by AIA and the National Association of Rocketry, in partnership with the NASA and 20 AIA member companies. NASA has contributed additional prizes, including a chance for students to build an advanced rocket and the opportunity for teachers to attend an advanced NASA rocketry workshop, meet with NASA engineers, and tour the Marshall Space Flight Center.

Guests at the finals included U.S. Senator Mike Enzi from Wyoming; NASA engineer and author Homer Hickam, the original "rocket boy" who inspired the movie "October Sky;" David King, director of the Marshall Space Flight Center; Craig Steidle, NASA associate administrator for the Moon/Mars program; Adena Loston, NASA associate administrator for education; and Patricia Grace Smith, FAA associate administrator for commercial space transportation. In addition, NASA astronauts Jay Apt and Charlie Walker attended the event.

AIA created the contest in 2003 as a one-time event to mark the 100th anniversary of flight, but overwhelming interest turned it into an annual event. The goal is to promote aerospace to students to attract more young people to careers in the industry. Nearly 30,000 students have participated in the rocket contest since its inception.