



## THE NATURE OF THE COMPETITION

### Goal of the Solar Car Challenge

The Solar Car Challenge is designed to help motivate students in Science, Engineering, Technology, and Alternative Energy. The Solar Car Challenge Education Program teaches high school students how to plan, design, engineer, build, and safely drive a roadworthy solar car.

### Event Objective

Teams experience the fun of the Solar Car Challenge by driving 700 miles across the *Great State of Texas*. Car breakdowns, weather conditions, road construction, and team experience limit the number of miles a team can drive each day. The team driving the most miles accumulated over the five days of driving will be declared the winner.

### Solar Car Categories

The purpose of the Solar Car Challenge is to provide a level playing-field for high school solar car teams. Newer teams generally enter the *Classic Division* which requires participants to use less expensive conventional motors, lead acid batteries, and less efficient solar cells. Older teams enter the *Advanced Division* based on their use of more expensive technologies, advanced aerodynamic bodies, and exotic batteries. The *Electric-Solar Powered Division* seeks to bring reality to solar car racing by incorporating a stationary solar array, and a two-passenger vehicle capable of urban driving. The new *Cruiser Division* is a four-passenger vehicle with solar arrays imbedded in the "skin" of the solar car.

### Admission into the Race

Teams seeking admission to the event must register their vehicle and demonstrate that their solar car complies with all the rules during a qualifying process known as "Scrutineering." In cross-country races, teams are licensed in Texas as *experimental vehicles*, and carry liability insurance.

### Safety & Supervision

Each car must have a roll cage, "crush zones," safety harness, horn, communications, turn signals, and a fire extinguisher. Chase vehicles and trailers are available for support in the event of a breakdown on the road. All aspects of the Solar Car Challenge Rules are closely monitored.

### The Solar Car Challenge Education Program

The Solar Car Challenge is the product of the Foundation's Solar Education Program. The Solar Car Challenge Foundation provides a high school solar car education program including workshops, curriculum materials, mentoring, and on-site visits. More than 85,000 students in 39 states have been challenged by this education program. The Solar Car Challenge is recognized by the IRS as a 501(c)(3) non-profit education foundation. For more information: <http://www.solarcarchallenge.org>