About Us

The Innovators Educational Foundation (IEF) is a volunteer-run 501(c)3 non-profit organization that organizes solar car raycing in North America. IEF currently hosts the Formula Sun Grand Prix (FSGP) track event and the American Solar Challenge (ASC) cross-country event, which occur in alternating years.

ASC 2014

IEF has announced that the next cross-country American Solar Challenge will take place next summer. Registration is now open to solar car teams at educational institutions around the world. Visit our website for more information about the event, how to sign up, and how to become a sponsor.

Sponsor Us

We appreciate your interest in the sport of solar car raycing! Help continue to make these events possible by making product donations, contributing financially, or hosting a stage/checkpoint location. We would be happy to discuss opportunities with you or your company.

Contact Info

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CIRCUIT OF THE AMERICAS™

Formula Sun

American Solar Challenge

INNOVATORS EDUCATIONAL FOUNDATION

FORMULA SUN GRAND PRIX 2013

Thursday June 27 - Saturday June 29

www.AmericanSolarChallenge.org

Formula Sun

Scrutineering | Jun 24-26

Before the solar cars are allowed on the track at COTA, they must first pass a series of detailed scrutineering inspections. Teams must demonstrate that the vehicles match the design reports they submitted and fully comply with the rayce regulations. Inspectors asses everything from the battery system and electronics to the structural integrity of the frame and suspension. The size of the solar array and vehicle dimensions are also validated. Finally, cars must pass vehicle dynamics tests.

FSGP Rayce | Jun 27-29

Formula Sun Grand Prix 2013 consists of three 8 hour raycing days. The objective for teams is to complete the most laps around the 3.4 mile circuit in this time. The solar cars are allowed to start the race with a charged battery but after that, all the energy must come exclusively from the solar array. Before arriving at the event, teams put in countless hours working on designing and building their cars to be as fast and efficient as possible. Once on the track, teams also have to worry about continually changing weather conditions and making quick pit stops to change tires and perform any needed maintenance or repairs.

Awards Ceremony | Jun 29

At 7:00PM after the rayce is over, awards will be presented to the winning teams.

About the Teams

The Formula Sun Grand Prix and American Solar Challenge competitions organized by the Innovators Educational Foundation are open to solar car teams from around the world. Many of the teams have been building vehicles since the 1990 GM Sunrayce, where North American solar car raycing got its start.

Solar car teams typically spend two years designing, building, and testing their vehicles. Key considerations include aerodynamics, energy efficiency, and reliability. In addition to producing the cars, teams act as small businesses, attracting sponsors, participating in public outreach, and managing their project plan. It is a team effort that requires expertise in a broad range of fields.

2013 Formula Sun

CAT

MathWorks

THE UNIVERSITY OF TEXAS AT AUSTIN
Cockrell School of Engineering

CIRCUIT OF THE AMERICAS

University of Texas at Austin
TexSun | #8

Weight: 170kg
L x W x H: 5.00m x 1.75m x 1.40m
Array: 1346W SunPower Mono-Si
Pack: 4.0kWh LiFePO4
Motor: 7.5kW NGM SCM150
Chassis: Tempered Al Space Frame
Wheels: Three 14″ NGM Style Rims

Iowa State University
Hyperion | #9

Weight: 220kg
L x W x H: 4.97m x 1.72m x 1.14m
Array: 1200W SunPower Mono-Si
Pack: 3.5kWh Li-Ion
Motor: 7.5kW NGM SCM150
Chassis: 6061-T6 Al Space Frame
Wheels: Three 14″ 7050 Al Billet Rims

Northwestern University
SC6 | #11

Weight: 295kg
L x W x H: 4.75m x 1.54m x 0.91m
Array: 1337W SunPower Mono-Si
Pack: 4.4kWh Li-Ion
Motor: 7.5kW NGM SCM150
Chassis: Carbon Fiber Monocoque
Wheels: Three 16″ GH Craft Carbon Rims

Principia College
RA7S | #32

Weight: 160kg
L x W x H: 5.00m x 1.60m x 1.00m
Array: 1000W SunPower Mono-Si
Pack: 4.0kWh Li-Po
Motor: 7.5kW NGM SCM150
Chassis: Al Space Frame
Wheels: Three 14″ Al Rims

Missouri S&T
Solar Miner VIII | #42

Weight: 320kg
L x W x H: N/A
Array: 730W SunPower Mono-Si
Pack: Li-Po
Motor: 7.5kW NGM SCM150
Chassis: 4130 Steel Space Frame
Wheels: Three 14″ Rims

Georgia Tech
The Endeavor | #49

Weight: 272kg
L x W x H: 4.80m x 1.80m x 1.22m
Array: 1000W Suniva Mono-Si
Pack: 2.9kWh LiFePO4
Motor: 7.5kW NGM SCM150
Chassis: 4130 Steel Space Frame
Wheels: Three 14″ NGM Al Rims

Illinois State University
Mercury IV | #17

Weight: 204kg
L x W x H: 4.52m x 1.70m x 1.10m
Array: 900W SunPower Mono-Si
Pack: 3.8kWh NiMH
Motor: 8.2kW PowerTec AC Motor
Chassis: 4130 Steel Space Frame
Wheels: Three 14″ NGM Style Rims

Western Michigan University
Sunseeker | #20

Weight: 270kg
L x W x H: 5.00m x 1.60m x 1.10m
Array: 1100W SunPower Mono-Si
Pack: 4.4kWh Li-Po
Motor: Dual 1.6kW CSIRO
Chassis: Carbon/Composite Monocoque
Wheels: Three 14″ GH Craft Carbon Rims

University of Waterloo
Midnight Sun X | #24

Weight: 213kg
L x W x H: 5.50m x 1.80m x 1.25m
Array: 1200W SunPower Mono-Si
Pack: 3.2kWh Li-Po
Motor: 7.5kW NGM SCM150
Chassis: Al Space Frame
Wheels: Three 14″ NGM Rims

SIUE
Black Nova | #57

Weight: 192kg
L x W x H: N/A
Array: 766W ML Solar Poly-Si
Pack: 4.0kWh Li-Po
Motor: 7.5kW NGM SCM150
Chassis: Tempered Al Space Frame
Wheels: Three 14″ Rims

Oregon State University
Phoenix | #256

Weight: 220kg
L x W x H: 4.97m x 1.79m x 0.96m
Array: 1200W SunPower Mono-Si
Pack: 3.94kWh LiFePO4
Motor: 7.5kW NGM SCM150
Chassis: Titanium Space Frame
Wheels: Three 14″ Custom Rims

University of New Mexico
Lobo del Sol | #505

Weight: 300kg
L x W x H: 5.00m x 1.80m x 1.20m
Array: 1200W Schott Si
Pack: 0.9kWh Li-Po
Motor: Vectrix
Chassis: Al Space Frame
Wheels: Three 14″ Rims