# 2018 SOLAR CAR CHALLENGE OFFICIAL REGISTRATION DOCUMENT

# Part I: Team Information

Team Name:		
Address:	Zip	
Phone:	( )	
Team Sponsor:		
Sponsor Information	Address:	
	Home phone ( ) E-mail:	
Team Captain		
Captain Information	Address:	
	Home phone: ( ) E -mail:	<del></del>
Name of Vehicle:		
Team Members:	(attach a separate sheet)	
School Name School Address:		
	Phone: ( )	

# Part II: Vehicle Information:

Divisio	<u> </u>	Classic   Advanced	Electric-Solar
Dimer	nsions of Vehicle		
	Length m Weight of Vehicle (withou	Width m t driver) kg	Height m
Batter	ies		
	Manufacturer: Model: Number used: Battery dimensions:	Length Width Height	
	Battery weight Battery capacity	pounds per ba Amp-hours pe	
Solar	Cells		
	Manufacturer: Model: Number used: Array dimensions:	Length	
	Efficiency: Overall size of array:	perce	
Brake	S		
	Type 1 Where located:		
	Type 2 Where located:		
Motor			
	Manufacturer: Model: Horsepower:		

#### Part III: Data Sheets:

#### Please attach the following to this application:

- (1) Complete, detailed drawing(s) showing the mechanical structure of the vehicle. This should be drawn with a drafting program such as AutoCAD for clarity and is not limited to one page. This drawing should be at minimum, detailed enough to show crush zones, frame structure, and overall dimensions in three views (front, side, top). A final updated drawing must be submitted upon check in to the event if there has been any design changes since the first drawing was submitted.
- **(2)** A complete, detailed schematic showing the electrical layout of the vehicle. This must include but does not need to be limited to all the wiring for the propulsion, solar, instrument, and battery systems. A final and current schematic must be submitted upon check in to the event.
- (3) A digital team photo, in color, at least 5 X 7 inches in size. The photo must clearly show the solar car and team members. The photo can be e-mailed to the Solar Car Challenge Race Staff.
- (4) Manufacturer's data sheets for the propulsion system batteries, including, but not limited to voltage per battery, capacity per battery, weight of each battery, and proof that the battery type is appropriate to the division entered.
- (5) Manufacturer's data sheets for the solar cells you intend to use, including, but not limited to the size of each solar cell, the efficiency rating, the number of watts per cell, and the list price of each solar cell.
- (6) Manufacturer's data sheets for motors and motor controllers.
- (7) Manufacturer's data sheets for wheels.
- (8) Manufacturer's data sheets for braking systems.

Please note that these diagrams and plans do not have to be your final work product. We understand that a solar car is always a "work in progress." We will need final electronic schematics, mechanical drawings, and manufactures data sheets at the time of your arrival at scrutineering. It is highly recommended that teams keep a copy of all submitted documents on hand during the race. For more information about data sheets please see rule 3.6.

# **Part IV: Team Information**

Team Member names MUST be typed!		
	Team Member names MUST b	

### Part V: Timeliness

To avoid penalties, please be sure that your Official Registration Document and \$1,500 filing fee are filed (postmarked) no later than March 1, 2018. An additional \$500 late fee is due for any registration documents received after March 1, 2018.