

## **2021 HRSD BALLOON CAR SHOWCASE**

The purpose of HRSD's Balloon Car Challenge is to spread the word about engineering, engage with the community, and have fun.

Engineers apply science and math to understand how things work, to solve problems and to create practical uses for scientific discoveries. We all share the planet earth and must use the earth's limited resources efficiently and sustainably. In the case of HRSD, we apply engineering principles to protect public health and our local waters by conveying and treating the used water from our region's homes and businesses. HRSD relies on civil, mechanical, electrical, chemical, process, and computer engineers to do this; we are looking for the next generation of engineers to help ensure that future generations inherit clean water and have the resources necessary to keep it clean.

### **The Task:**

You are an engineer that must design, construct, demonstrate and market a car powered by a balloon.

### **Questions to Consider:**

One important skill of engineers is the ability to ask good questions; good questions lead to the development of good solutions.

- How is your balloon car sustainable?
- How did you balance form (looks) and function (performance)?
- What environment will the balloon car be operated in?
- What performance parameters are important?
- How will the car be marketed?

This challenge is designed to put individuals in the shoes of engineers. Sometimes the best engineering ideas do not get implemented; implementation often takes a great design and a great sell of that design. One important skill of engineers is the ability to ask good questions; good questions lead to the development of good solutions.

### **Showcase:**

All videos submitted will be put on HRSD's YouTube page and shared via HRSD's Facebook page for public viewing.

### **Submittals:**

- 1) **Video** clip showing your **BALLOON CAR IN ACTION**
- 2) **Video** or voice over of your **CAR COMMERCIAL** (narrative of why your car is good/why you designed the car the way you did)  
*For help developing your commercial please look to "Questions to Consider"*

All submittals shall be **uploaded by March 12, 2021:**

STEP 1: Please e-mail a completed 2021 HRSD Balloon Car Challenge Form to [jdano@hrsd.com](mailto:jdano@hrsd.com)

STEP 2: Upload your submittal using the link that will be sent to your e-mail

# 2021 HRSD Balloon Car Showcase Form

## Media Release (Intellectual Property Release Agreement)

*Participants must complete and submit the application form and Media Release (Intellectual Property Release Agreement) and photo/video no later than Thursday, March 11, 2021 in digital form to [jdano@hrsd.com](mailto:jdano@hrsd.com). For entrants under 18, parents must sign the Media Release (Intellectual Property Release Agreement) for their child to enter the contest.*

Contestant Name: \_\_\_\_\_

Contestant Email Address (Required – will use for DropBox link): \_\_\_\_\_

If child under 18 years of age: School: \_\_\_\_\_ Grade: \_\_\_\_\_ Age: \_\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_

Parent/Guardian Phone Number: \_\_\_\_\_ Parent/Guardian Email: \_\_\_\_\_

### Photo/Video Property Release Agreement

*WHEREAS, New Rights Holder wishes to acquire such right, title and interest in and said Work. Now, therefore, in consideration of the promises and covenants contained herein, as well as other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged), the Parties do hereby agree as follows: Release: Creator hereby releases, and New Rights Holder does accept, the absolute and unconditional right to reproduce, prepare derivative works, distribute, perform, and/or display the Work, as applicable. Creator does not hold any remaining rights in and to the Work, and the unconditional ability to use and exploit the Work belongs exclusively to New Rights Hold. Representations: Creator hereby represents and warrants that Creator is the exclusive holder of any rights in and to the work, and that no other individual or entity may claim any rights, title, an/or interest in and to said work. Creator additionally warrants that Creator has all necessary rights required to grant New Rights Holder unconditional and unlimited use of the work.*

I agree to the terms and conditions of the agreement and understand the guidelines of the contest:

Contestant Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Parent Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Release Form Deadline: Thursday, March 11, 2021**

Sent to [jdano@hrsd.com](mailto:jdano@hrsd.com)