



---

The Space Congress® Proceedings

2019 (46th) Light the Fire

---

Jun 6th, 11:00 AM

## Inspiring Minds Through a Memorable Space Experience

Therrin Protze

*DNC Space Congress® Chair; Chief Operating Officer, DNC Parks & Resorts at KSC, Inc.*

Follow this and additional works at: <https://commons.erau.edu/space-congress-proceedings>

---

### Scholarly Commons Citation

Protze, Therrin, "Inspiring Minds Through a Memorable Space Experience" (2019). *The Space Congress® Proceedings*. 7.

<https://commons.erau.edu/space-congress-proceedings/proceedings-2019-46th/presentations/7>

This Event is brought to you for free and open access by the Conferences at Scholarly Commons. It has been accepted for inclusion in The Space Congress® Proceedings by an authorized administrator of Scholarly Commons. For more information, please contact [commons@erau.edu](mailto:commons@erau.edu).

**EMBRY-RIDDLE**  
Aeronautical University™  
SCHOLARLY COMMONS

# Inspiring Minds Through a Memorable Space Experience

Therrin Protze  
Kennedy Space  
Center Visitor  
Complex





# Piezoelectric Pathway What a Hit!





**Kennedy**  
**Space**  
**Center**<sup>SM</sup>  
VISITOR COMPLEX





## **Use:** PZ Energy Harvesting

Transforming ambient, environmental vibration or kinetic energy into usable electrical energy.



**Kennedy**  
**Space**  
**Center**  
VISITOR COMPLEX

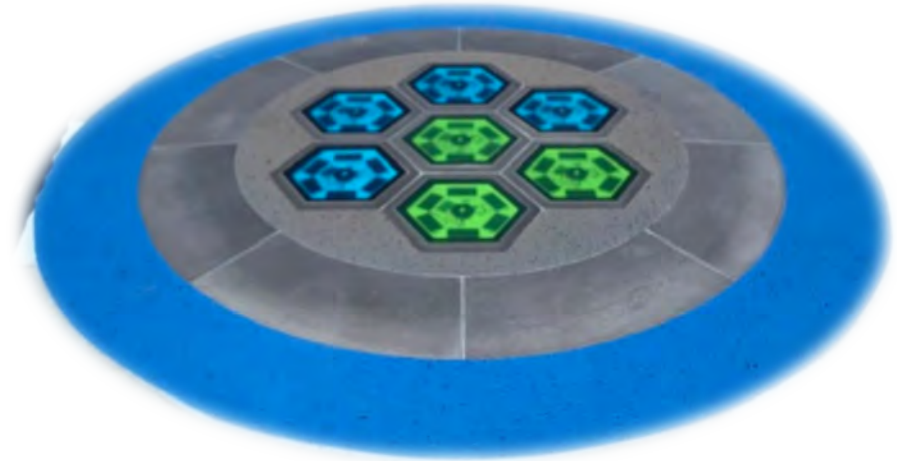
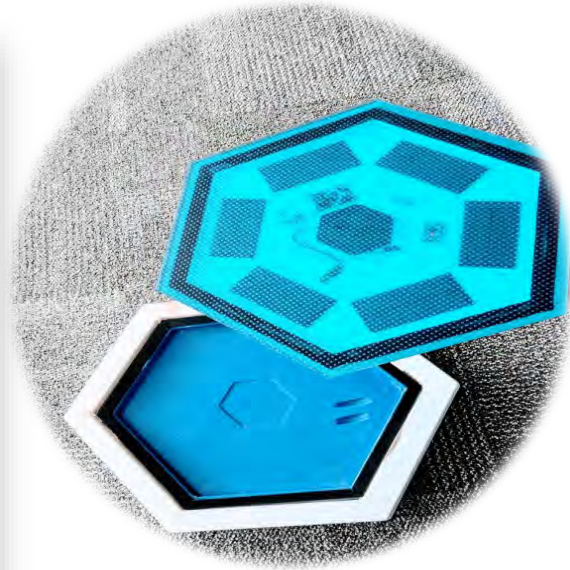
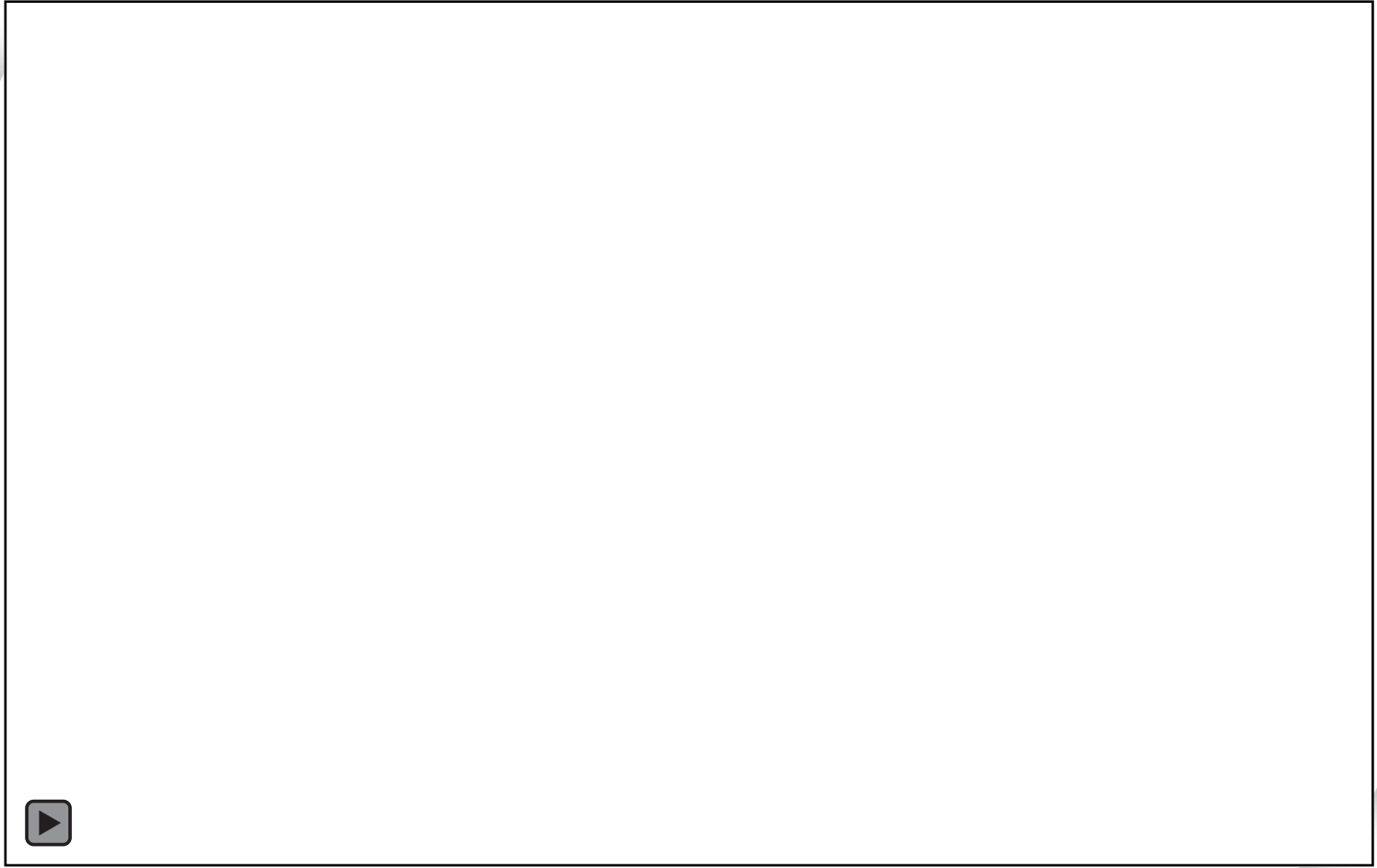




**Kennedy**  
**Space**  
**Center**  
VISITOR COMPLEX

3 Years in the Making





**Kennedy**  
**Space**  
**Center**<sup>SM</sup>  
VISITOR COMPLEX

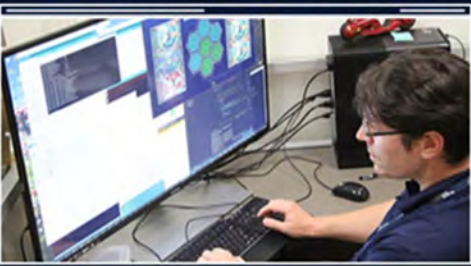
Student Project





STEP

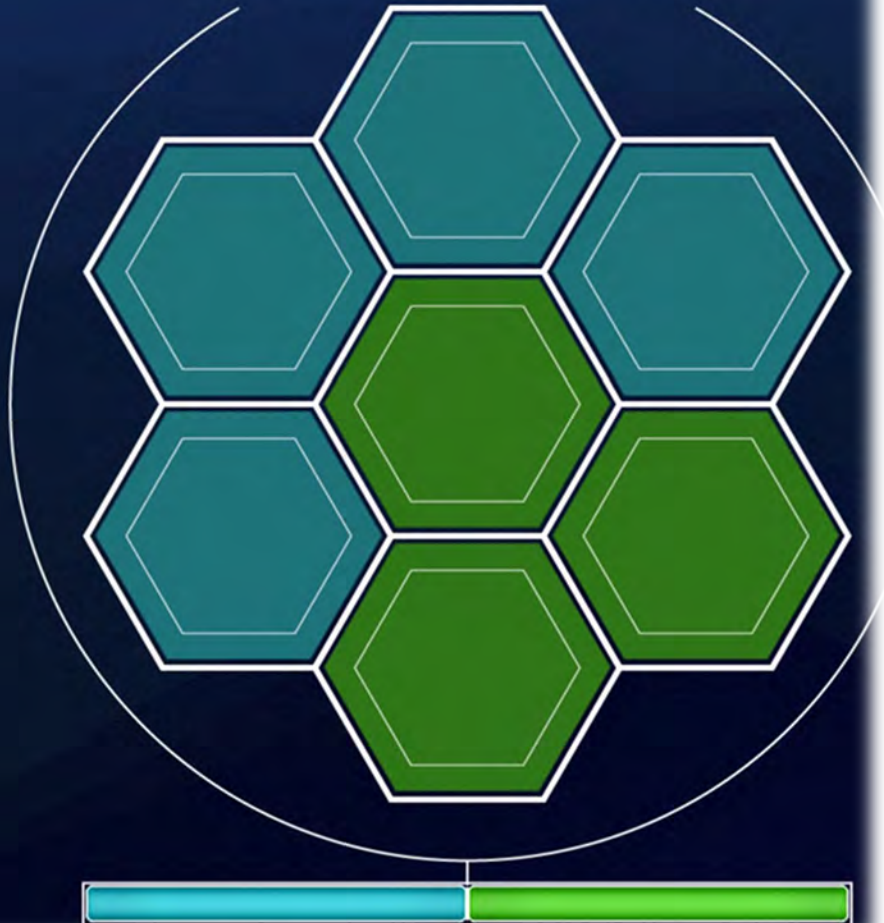
POWER



Georgia Tech Research Institute

000 662 381

LAUNCHING LATE 2018



Kennedy Space Center VISITOR COMPLEX

GTECH Student Program





**Kennedy**  
**Space**  
**Center**  
VISITOR COMPLEX

Daily Virtual Launches Powered by the Guests

# NASA NOW Flight FlowN!





**Moon Express**

**Atlas V  
Starliner**

**LSP**

**Dream  
Chaser**

**CST-100  
Pressure  
Vessel**

**EFT-1**

**Dragon**

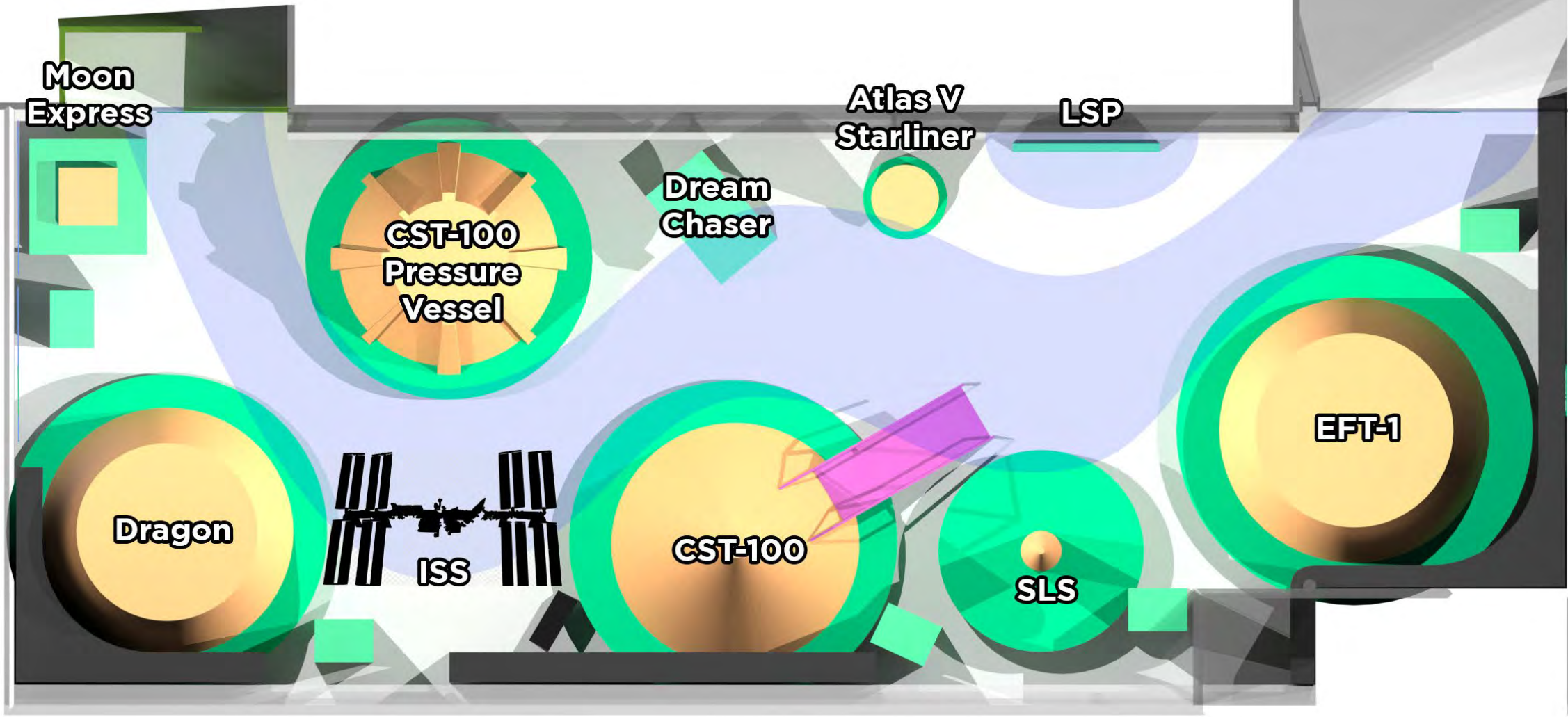


**ISS**

**CST-100**



**SLS**



# Fantastic, Not Fantasy!

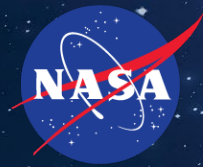


**Kennedy**  
**Space**  
**Center**  
VISITOR COMPLEX

**NASA NOW**



# Summer of Mars Launch & the Rover Tour



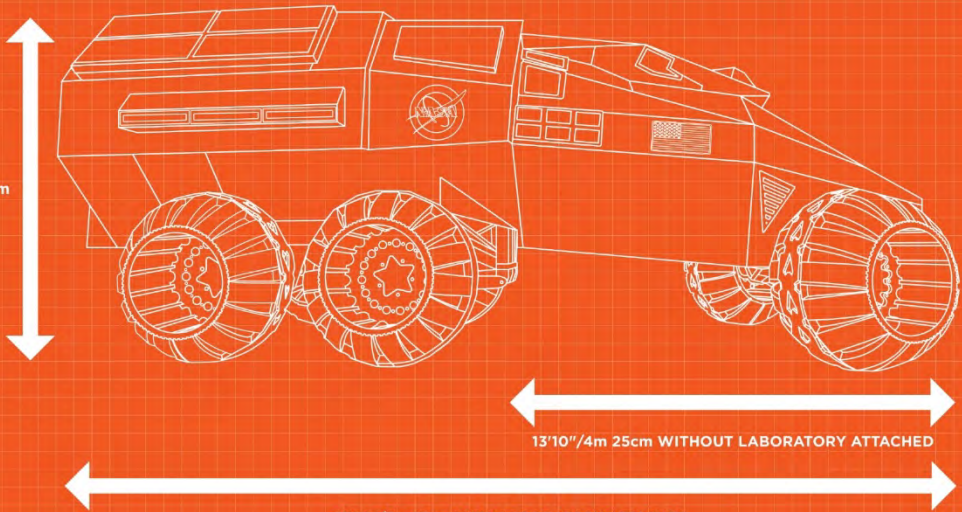


The Mars rover concept vehicle, built by a local contractor, with input from NASA-engineer science and astronauts.

*It was designed as a traveling exhibit to inspire the public about space exploration and interplanetary travel.*

# MARS ROVER CONCEPT VEHICLE FACTS

Meet the newest prototype electric vehicle designed for traversing the demanding landscape of Mars. Designed under the consultation of NASA experts, the next generation of space explorers could be traveling and working in this high-tech mobile laboratory. The rover also features a detachable laboratory for stationary experiments.



**SEATS 4**  
(INCLUDING THE DRIVER)

**WHEELS**  
HEIGHT: 50"/127cm  
WIDTH: 36"/91.5cm

**SPEED**  
CRUISE: 2-4MPH/3.2-6.4KPH  
MAX: 5-6MPH/8-10KPH

**WEIGHT**  
5,500 POUNDS/2.5 METRIC TONS

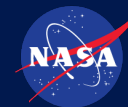
10'6"/3m 15cm TALL

13'10"/4m 25cm WITHOUT LABORATORY ATTACHED

23'10"/7m 25cm WITH LABORATORY ATTACHED

NASA Kennedy Space Center VISITOR COMPLEX

# Mars Rover Concept Vehicle



*The Summer of Mars Rover Tour visited five cities on the East Coast at key market stops with publicity events and appearances along the way.*

The rover traveled over **3,500 miles** generating **277,548 driving impressions** and reached **20,397 people directly** at event sites.



**Summer of Mars Rover Tour**

**SUMMER OF  
MARS**





Lego Concept Vehicle



**Inspiring Concepts**



STOP 1:



# The Battery Atlanta at SunTrust Park Atlanta, Ga.

July 14-17, 2017

Event site impressions: 6,000

Event site contacts: 4,500

*"We drove 7 hours to Atlanta just to see you guys because my son is a huge fan and couldn't wait to see the Mars Rover."*

**AJC**

**AP**

The Weather Channel

## Summer of Mars Rover Tour

SUMMER OF  
**MARS**



STOP 2:

## National Air & Space Museum Washington, D.C.

July 21-23, 2017

Event site impressions: 49,000

Event site contacts: 4,625

*"We are actually going to Orlando next month,  
sounds like we should set a whole  
day aside for KSCVC! Thanks for all the tips!"*

The Washington Post

BuzzFeed



# Summer of Mars Rover Tour

SUMMER OF  
MARS



STOP 3:

# Liberty Science Center Jersey City, N.J.

July 29-30, 2017

Driving impressions: 139,986,328

*"I saw this in the paper and made  
sure to visit today!"*



Summer of Mars Rover Tour

SUMMER OF  
MARS

# STOP 4:



# Intrepid Sea, Air & Space Museum New York, N.Y.

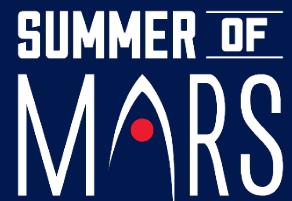
August 2-6, 2017

Event site impressions: 9,000  
Event site contacts: 7,772

Fox & Friends national morning show appearance



# Summer of Mars Rover Tour





STOP 5:

# North Point Mall Alpharetta, Ga.

August 12, 2017

Event site impressions: 3,000

Event site contacts: 1,500

*"All of our kids are named after  
astronauts, we had to come see  
this!"*



Summer of Mars Rover Tour

SUMMER OF  
MARS



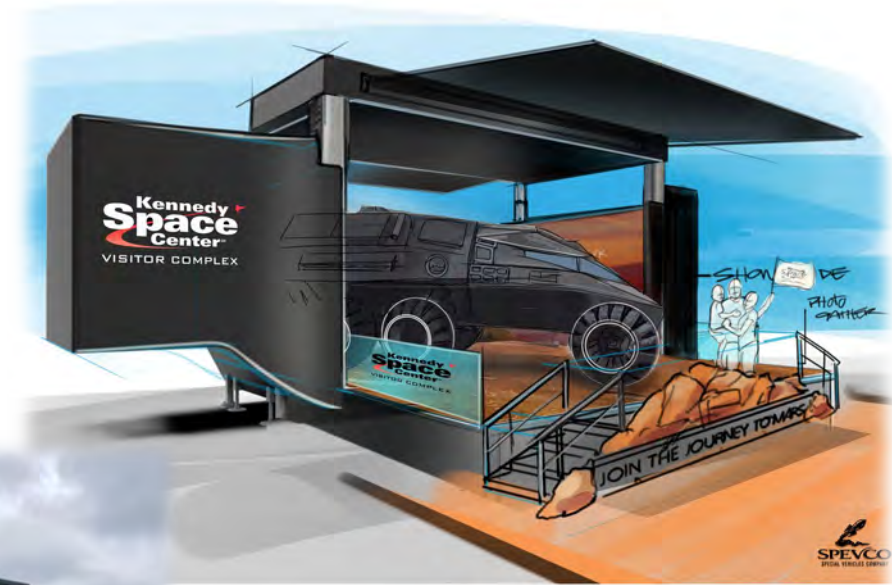
# Colbert Show





# Next Stop

- All new and upgraded trailer with rover enhancements arriving at KSCVC end of June.
- Appearance on Colbert airing in September
- Superbowl appearances



## Upgraded MRVN

Next Stop was....



Live at the Super Bowl in 2019



# Results

Total reach=  
**1.91 billion**

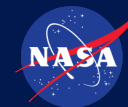
Total publicity value=  
**\$2.3 million**



# Summer of Mars Promotion

SUMMER OF  
MARS

# Education







# Astronaut Training Experience





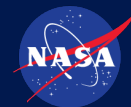
**Peek at the Content**



Completely new  
education programs  
with the addition of  
Astronaut Training  
Experience and Mars  
Base 1



Education Programs



The all new *Astronaut Training Experience* (ATX) provides an opportunity for visitors to train like an astronaut preparing for a mission to Mars.

Promotes teamwork, communication and collaboration skills with four different hands-on experiences.



# Astronaut Training Experience



*Mars Base 1* provides guests with a chance to travel, live and work on Mars while performing base operations along with real science and engineering challenges.

Activities include: Operations Lab, Botany Lab and Engineering Lab



Mars Base 1



# Spacewalk Training Stage:

*Microgravity Simulator*

**Length of Training Stage:** 30 minutes

**Audience:** Individuals or groups ages 10 and older



# Mars Exploration Simulators Training Stage:

*Land and Drive Simulator and Walk on Mars Virtual Reality*

**Length of Training Stage:** 45 minutes

**Audience:** Individuals or groups ages 10 and older



# Training Stages



**Kennedy  
Space  
Center**  
VISITOR COMPLEX



A micro-site full report generated at the end of the session identifying tracked performance, STEM-related activities and inspirational recruiting

Video logging stations to create a memorable experience



- ATX Summary Report
- Launch Mission Scorecard
- Microgravity Scorecard
- Walk On Mars Scorecard
- Lander Rover Scorecard

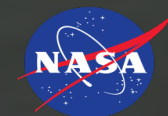


- MB1 Summary Report
- Operations Scorecard
- Plant Lab Scorecard
- Engineering Lab Scorecard



- Video Logs

THE JOURNEY STARTS HERE



Thank you. Questions?

Kennedy  
**Space**  
Center<sup>SM</sup>  
VISITOR COMPLEX