



INSPIRE - ENGAGE - EDUCATE - EMPLOY
The Next Generation of Explorers

Forward to the Moon:
Inspired NASA Museum Collaborations Build Future Communities

September 23, 2019
Metro Toronto Convention Centre Room 715

PLEASE SIGN IN!!

Session Objectives:



- Understand the benefits to the institution of any size and to the audience of collaborating/participating in a national event.
- Learn from case study of Apollo 11 50th anniversary
- Contribute to early planning for next big NASA events: Mars 2020 and Artemis-1 missions



Some Benefits:



- Community resources can open up:
 - stronger support by internal media departments
 - more attendance for the event
- The connection to an external science organization's event adds legitimacy to the museum as a serious community science resource, and a more compelling experience for visitors.
- It allows idea exchange and community-building with other museums.

Why Stay for this Session?



- We'd like to show you how you how working on a national level with a large organization is achievable and accessible.
- We'll give you “front row seats” to helping plan how Mars 2020 and Artemis, Moon to Mars will be celebrated together. You have the ears of NASA right now.

Agenda



- Opening Comments
- Overview of Apollo 11 50th Anniversary and Resources
- 3-minute presentations from 6 different organizations on their experience (20 minutes)
- Overview of upcoming big NASA mission milestones
- Small group targeted discussions (30 minutes)
- Report-out (10 minutes)
- Evaluation



Oscar Florianus Bluemner; *Moon Radiance*, 1927

NASA's Museum Alliance

Audience: Informal Educators

- Deep dive of resources
- Webinars with NASA experts
- Conversational Forum
- Map of member events

spaceSTEM.nasa.gov

Audience: Anyone

- "Top picks" of resources
- Where to dig deeper
- How to get involved
- Map/calendar of events





Saint Louis Science Center

Apollo Moon Landing: 50th
Anniversary Party



SAINT LOUIS
SCIENCE
CENTER

Community Driven



Leveraging Regional and National Partnerships



Utilizing NASA Resources



ARIZONA
SCIENCE
CENTER



Never stop wondering.
Never stop imagining.™



Apollo 11 inspires Curious Minds!

- 10 Public Events including a visit from Astronaut Mark Kelly
- Celebration of past, present, and future science
- Featured as part of NASA TV broadcast



ARIZONA SCIENCE CENTER
Never stop wondering.
Never stop imagining.

APOLLO 50th
NEXT GIANT LEAP

APOLLO 11 50th ANNIVERSARY CELEBRATION

Arizona Science Center is celebrating one of the greatest human achievements in science – the 50th anniversary of human's first steps on the moon!

EVENT SCHEDULE

Global Rocket Launch Day
Tuesday, July 16

Observe the Moon Night
Tuesday, July 16

50th Anniversary Kick-Off Celebration
Friday, July 19

Science With A Twist: Apollo-Palooza
Friday, July 19

50th Anniversary Celebration
Saturday, July 20

Teen Space Night at CREATE
Saturday, July 27

[Azscience.org/apollo11](https://azscience.org/apollo11)

The Apollo 11 50th Anniversary Celebration is proudly supported by the Richard F. Caris Charitable Trust.

APOLLO 11

one giant leap for mankind

Impact and Benefits

- FUN!
- Serve as hub for science in our community
- Attracted more than 8,000 attendees
- Opportunities for sponsorship
- Direct revenue impact

12



Engaged 12 Corporate and
Community Partners



36% ↑



Capstone events averaged
36% attendance increase
over LY



102% ↑



Capstone events averaged
102% revenue increase
over LY

Total Media Results

- Earned Media Impressions: **more than 106 million!**
- Earned Media Value: **\$400K**



- NASA TV
- LA Times
- The LIST
- Arizona Highways
- Green Living Magazine
- Fox 10
- ABC 15
- NBC 12
- KTAR News
- NPR/KJZZ
- East Valley Tribune
- Social Pulse
- City Sun Times



Democratic US Senate candidate Mark Kelly gives presentation at Arizona Science Center



Democratic U.S. Senate candidate Mark Kelly toured the Arizona Science Center on Saturday and gave presentations in the center planetarium.



Join me for Table Talk:

- Engaging your makerspace
- Engaging Media
- Floor Activities
- Collaborations and Partnerships
- Whatever You want to discuss!

CONTACT INFO:

Sari Custer, Chief Curiosity Officer

Arizona Science Center

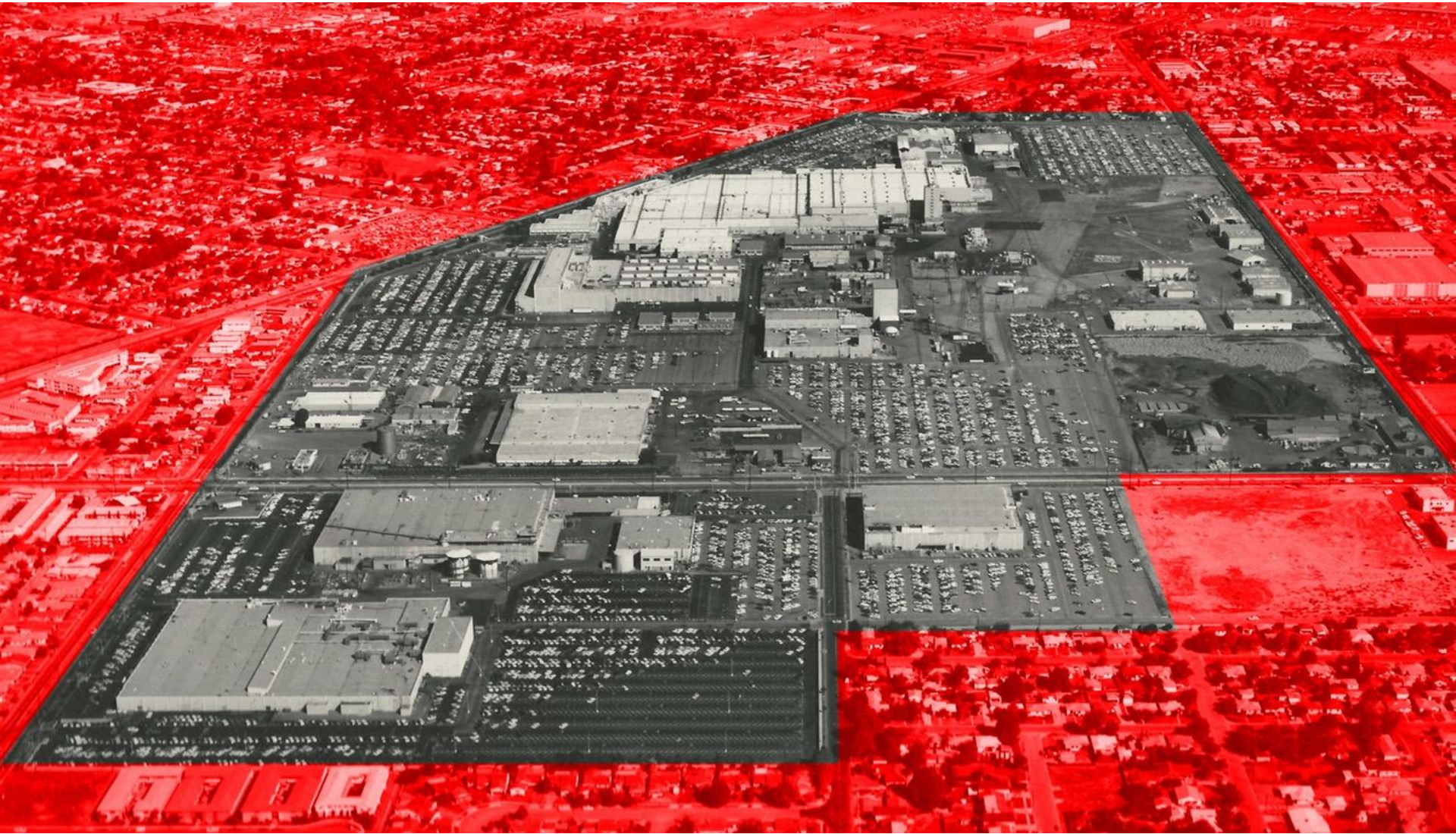
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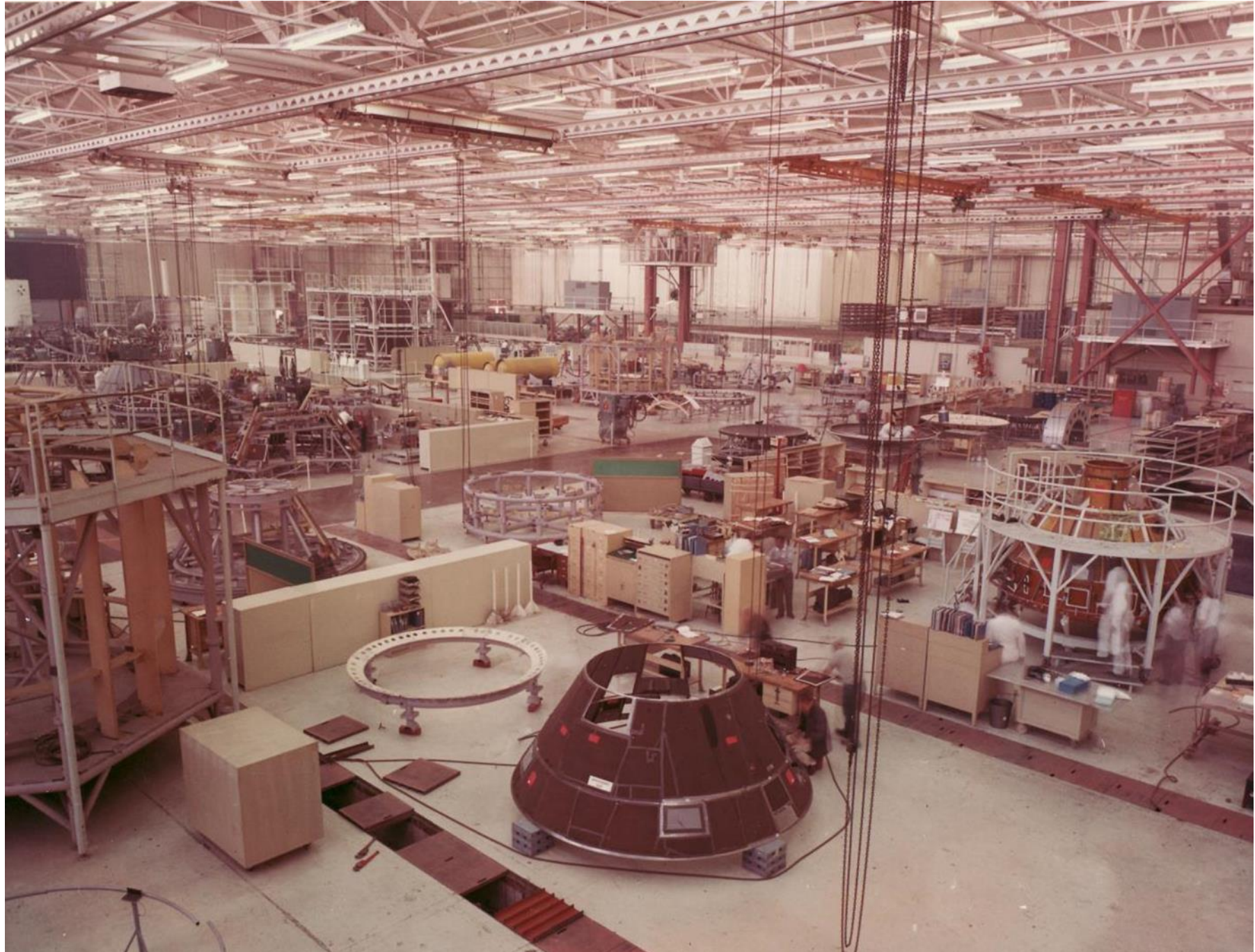
[@SariOnScience](https://www.instagram.com/SariOnScience)



Apollo 11 50th Anniversary







SPACECRAFT 107-APOLLO 11

a NATURAL for the BIG ONE

TO SHIRT
WARNING AREA

APOLLO 11

50th Anniversary

7/16 LAUNCH DAY

7/17 SPACE FLASH!

LIVE PERFORMANCES OF APOLLO STORIES W/ CHALK REP

**7/18 LUNAR PUB
SCIENCE MEETUP**

AN ADULT ONLY EVENT

7/19 NASA DAY

**7/20 BIG MOON LANDING
CELEBRATION!**

FREE ALL DAY EVENT!



COLUMBIA
MEMORIAL
**SPACE
CENTER**

CITY OF DOWNEY

@columbiaspace



Collaborating and Commemorating with NASA

**“ONE GIANT LEAP”
DISCOVERY MUSEUM**

Celebrating Apollo 11 at Discovery Museum

- Bridgeport Symphony, A Season in Space
- Global Rocket Launch Day
- Launch Party
- Giant Leap Day
- Apollo Redux – Apollo era Mission Control Console exhibit
- Apollo 17 Encapsulated Lunar Sample
- Solar System Mini Golf Course
- NISE Activities

Benefits to Discovery Museum

- ◎ Sponsorship Opportunities
 - Connecticut Space Grant, Pitney Bowes Foundation, Two Roads Brewery
- ◎ Partnerships and volunteers
- ◎ Over 700 visitors attending Giant Leap Day
- ◎ Apollo Redux, Cosmosphere, KS

Lessons Learned

⦿ Worked Well

- National attention and coordinated media coverage.
- Lead up events

⦿ For Next Time

- Community forum or working group
- Top down vs. bottom up
- Curated resources
- Brand management





Challenger Center Apollo Anniversary Activities

Denise Kopecky, Vice President, Education





Next Giant Leap

Community Engagement Days

Overview

For Grades 3-9 (but can be adapted for all ages)

The Next Giant Leap takes students through seven phases of a Lunar Exploration: preparing for launch, rocket launching, lunar landing, the Moon phases, lunar geology, lava tube exploration, and programming a lunar rover. Every station contains 1-2 activities for students to complete. They do not need to complete the stations in order and do not need to complete all stations.

Download our **Free** Challenger Rover App (for tablets only). Click the link below or search “Challenger Center” in the app stores.



Lessons & Activities

[Implementation Guide](#)

[Prepare for Launch](#)

[Stomp Rocket](#)

[Lunar Lander](#)

[Moon Phases](#)

[Lunar Geology](#)

[Lava Tube Exploration](#)

[Lunar Rover](#)

Flipped Classroom Resources



Classroom Lessons

[Phases of the Moon](#)

[Eclipses](#)

[Lunar Brochure](#)

The hands-on activities can be easily adapted to an activity on a cart for public engagement or used in outreach programs.

Engaging around the Apollo Anniversary

- Benefits of collaboration with Space STEM Forum:
 - Increased reach
 - Access to others' resources
 - Group planning and coordination
 - Build on existing NASA assets
 - NASA brand recognition



Table Group Discussion

How do you leverage and adapt existing NASA assets to meet the needs of museums and science Centers for either community engagement activities or student outreach?





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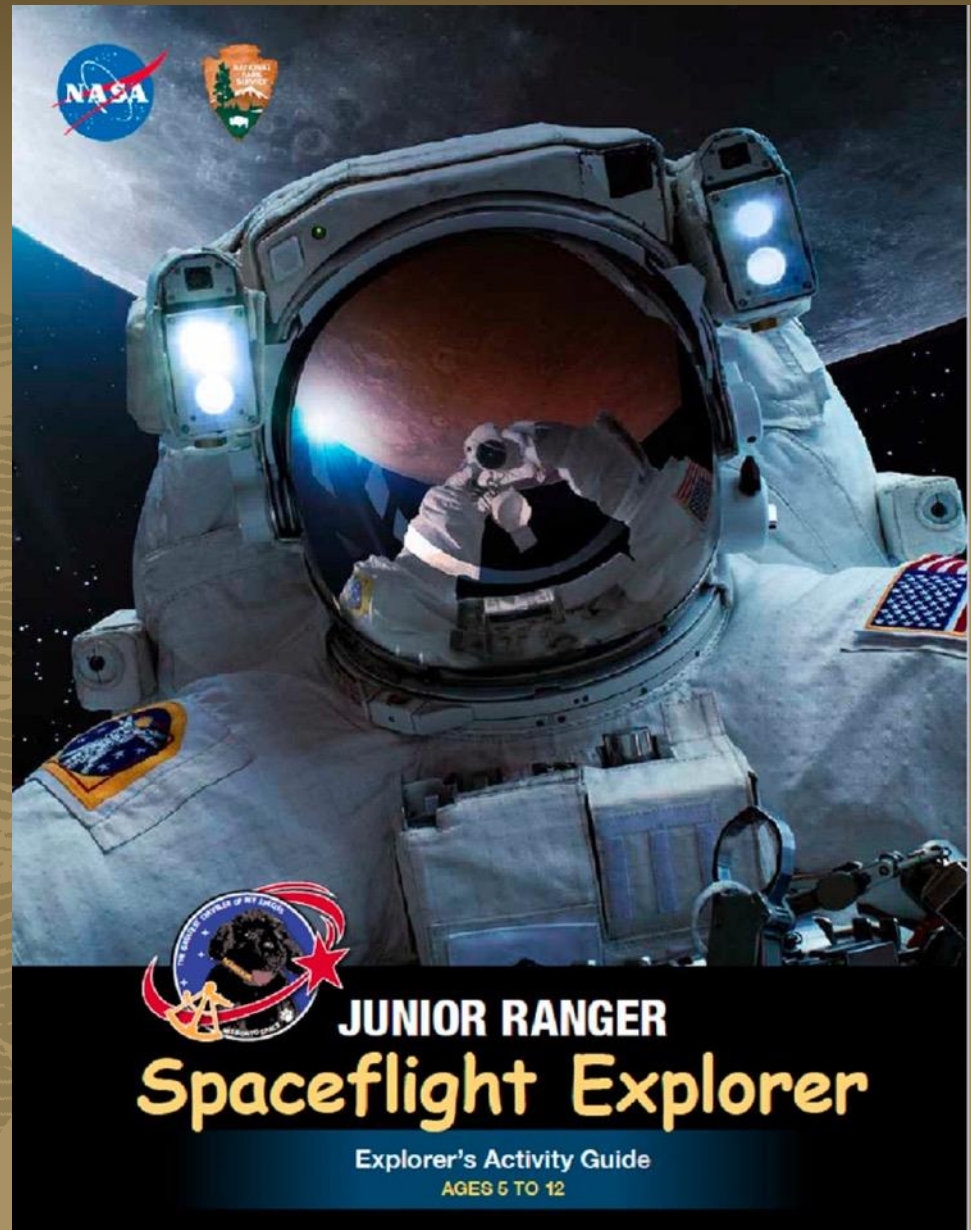


NPS/NASA 2019 Collaborations

Apollo Moon Landing 50th Anniversary Events and
Publications

NPS/NASA Junior Spaceflight Explorer Junior Ranger Book

- Collaborative activity and graphic design completed by both agencies
- Inside cover describes history of Lewis and Clark expedition and human exploration of space. Introduces Seaman, Jr., mascot for the booklet.
- Eight-page booklet targeted for 5-12 year old children
- Activities include STEM puzzles, mapping NPS/NASA sites, matching lunar gateway parts to model, ISS photos of NPS sites, sustainability practices.
- 50,000 copies printed- over 15,000 already distributed to kids.



EXPERIENCE YOUR AMERICA

NPS Apollo 50th Anniversary Events

- Special events held July 18-21 weekend at more than 10 NPS sites across the country.
- Events included special appearances by astronauts, Junior Ranger activities, storytimes, presentations by NASA scientists, night sky programs, movie and documentary screenings, rocket launches, historical programs on space race and lunar landings, and book signings.
- Connections made between NPS and NASA collaborations for astronaut training, geological scientific studies, historical connections between NPS sites and aviation/spaceflight/NASA interactions.

Craters of the Moon Event



Lunar Rover at Craters of the Moon

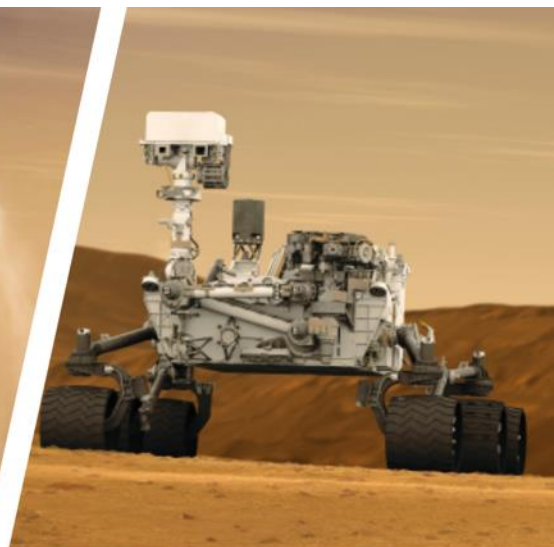


EXPERIENCE YOUR AMERICA

NPS/NASA Web presence

- Space STEM site
- Lewis and Clark Trail Seaman, Jr. blog
- NPS history of aviation/spaceflight
- Night Skies
- Junior Ranger
- NASA science in NPS units



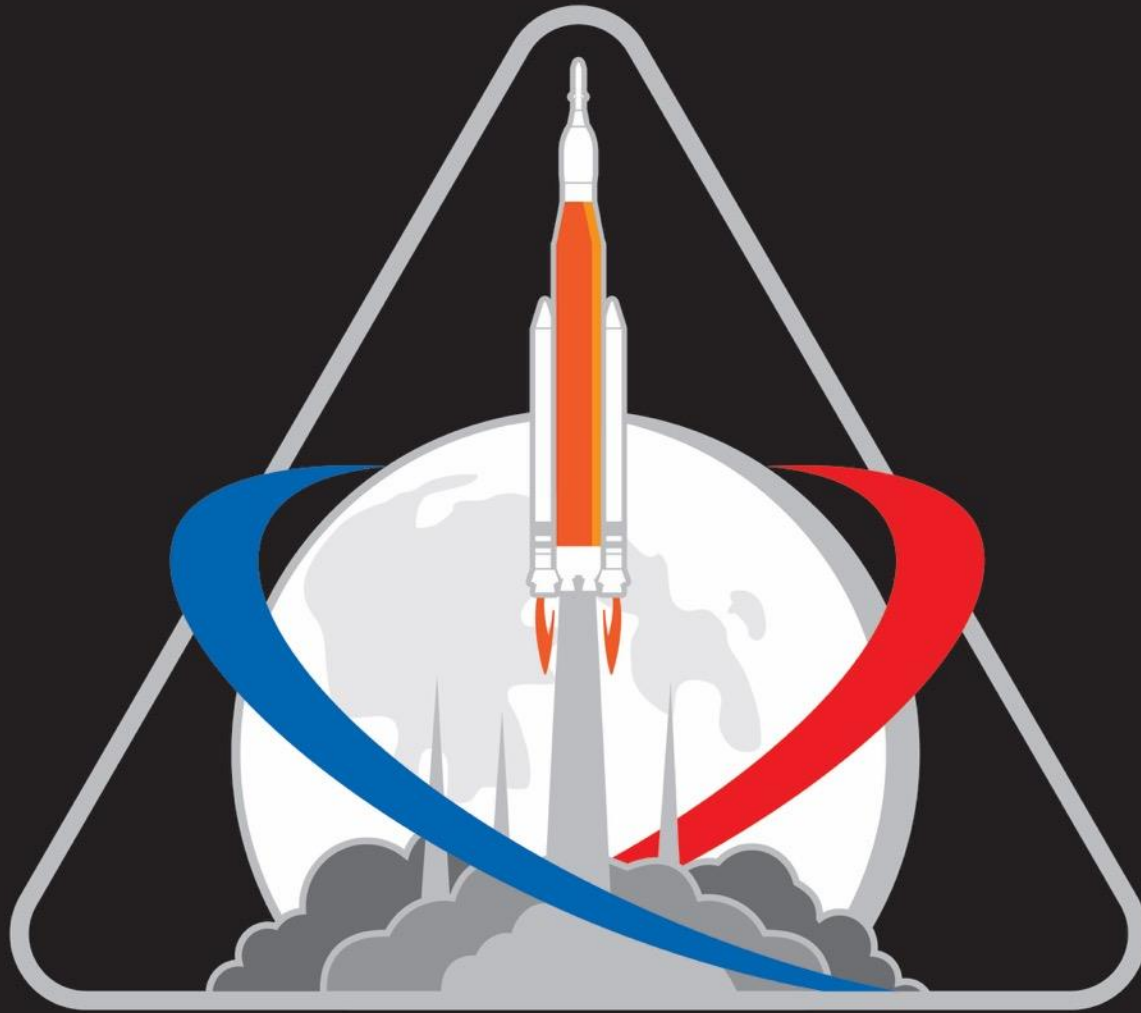


Launch:

July 17 - August 5, 2020

Landing:

February 18, 2021



ARTEMIS I

Breakout Time



- Camps and k-12 visits Carlson
- Engaging makerspaces and media Custer
- Events to engage local community/partners Dickow
- Suites of activities using NASA assets Kopecky/Rosenblum