

A NEW *INTERACTIVE* EXHIBIT!



APOLLO

50TH ANNIVERSARY EDITION

BE ASTRONAUT

Designed in collaboration with NASA



Join NASA in celebrating the history
and future of lunar exploration.



A NASA Space Act Agreement Partner Company



EUREKA EXHIBITS

is honored to have been chosen by NASA to provide a special edition of our groundbreaking Be the Astronaut exhibit as part of the official celebration of the 50th Anniversary of the Apollo Space Program.

A celebration that will honor the triumphs and challenges of the program - from the monumental efforts that led to the First Landing of Apollo 11 through the breathless whirlwind of Apollo 13 on through the mounting scientific achievements of the following landings to the triumph of international cooperation displayed in the Apollo-Soyuz Test Project that set the stage for international cooperation in space.

BtA-50 not only includes a special version of the blockbuster exhibit that drew record crowds at Space Center Houston, the San Diego Air & Space Museum and more but spectacular new additions that Bring the wonder and adventure of space down to earth for your visitors to enjoy.



In Be the Astronaut: 50th Anniversary of Apollo visitors will not only explore the history of lunar exploration - they will get to try their hands at a possible future moon mission as well!

Eureka Exhibits



SATURN V MOTION THEATER

A spectacular full-motion ride experience suitable for the whole family. Visitors will strap themselves in and be treated to an educational and exciting ride-film that takes them from the Earth to the Moon! Available in regular and deluxe sizes.



FULL-MOTION LUNAR LANDER

Take controls of a realistic Apollo lunar module and prepare for final descent and landing! Not a ride-film but a *fully interactive simulator* built using NASA data, visitors will step into the boots of Neil Armstrong as they pilot the *Eagle* down to *Tranquility Base*! The simulator cabin moves - rises and drops, tilts and jolts - creating the most realistic lunar landing experience that you can have while still in earth's gravitational field!



APOLLO LUNAR ROVER MOTION SIMULATOR

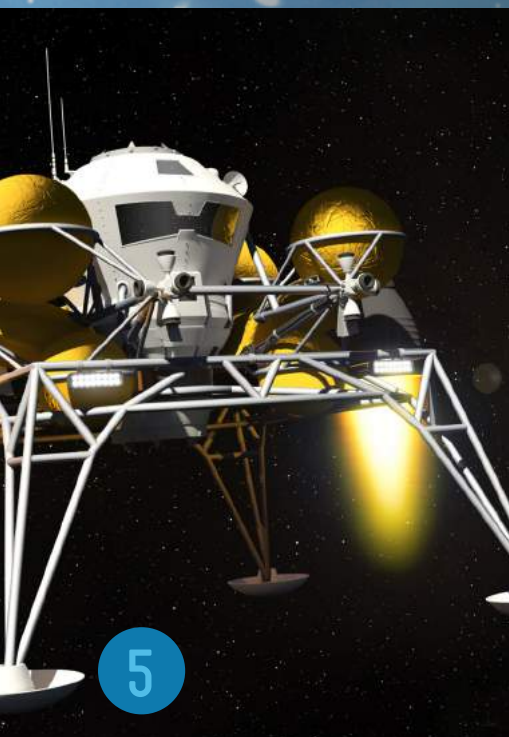
Hop aboard an Apollo Lunar Rover and drive it across a lunar terrain re-created using NASA Lunar Reconnaissance Orbiter data! Experience an adventure that takes visitors across the Moon's surface to the locations of the discoveries made during the missions of Apollo 15, 16 and 17 as the realistic Lunar Rover Cabinet tilts, dips and rises in concert with the on-screen action!



MISSION BRIEF



- * LEARN STEM SUBJECTS THAT HELP YOU EXPLORE SPACE.
- * BLAST OFF SEATED IN YOUR VERY OWN SPACE CAPSULE.
- * MEET A REAL ROBOT.
- * FOLLOW IN THE FOOTSTEPS OF THE APOLLO ASTRONAUTS.
- * DRIVE A ROVER INTO THE DARKNESS OF A LUNAR CRATER.
- * TAKE CONTROL OF A LUNAR LANDER.
- * EXPLORE THE PAST, AND FUTURE, OF LUNAR EXPLORATION.
- * SEE ACTUAL SPACESUITS.



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WHAT IS BE THE ASTRONAUT?

Be the Astronaut is a world-class exhibit experience that teaches STEM based content via a fusion of physical exhibitry and state-of-the-art video game technology. Designed with NASA to ensure accuracy and integrity, the exhibit teaches visitors about the concepts, challenges, and excitement of spaceflight, through the use of touch-screen stations, artifacts, and interactive simulator pods built to look like space capsules.

Visitors will have their own crew of virtual content experts throughout every stage of the exhibit. These digital characters will help visitors learn what's needed to fly a spaceship, pilot a lander, and drive a surface rover — then will be there as visitors climb in the simulators to actually perform these feats, in a thrilling narrative adventure that spans the solar system.

In each space capsule, a massive monitor serves as the 'windshield,' giving visitors a first-person view of their adventures. Touch-screens and an industrial-quality joystick put visitors in command. During missions, the entire cockpit comes alive with animated lighting effects, game visuals, and .adventure that takes visitors from the Earth to the Moon.

The exhibit's modular design allows host exhibit staff to quickly and easily install any of our standard configurations, and affords endless possibilities to customize the exhibit for a perfect fit — in a single large hall or across multiple exhibit areas

BE THE ASTRONAUT'S GOAL IS TO INSPIRE WHILE IT EDUCATES,
AND TO CREATE A NEW KIND OF VISITOR EXPERIENCE.

I love this approach. It is fresh and better at inspiring a new generation to look boldly to the future and to humanity's destiny to become a multi-planet species, both for survival and fulfillment.

- DR. STEVEN P. SANDFORD,

Member of the Be the Astronaut Advisory Panel and
Director of the Space Technology and Exploration Group, NASA.

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VISITORS will meet the crew, a cast of characters there to help them on their adventure. These virtual characters provide feedback and guidance as visitors move through the exhibit. Each character is there to put a human face on a specific educational goal of Be the Astronaut's STEM-based content.



THE SCIENTIST

is an expert in astronomy and geology. He has an informed approach and a sense of wonder about the cosmos and humans' place in it.



THE DOCTOR

is an expert in biology and the effects of space on the human body. Her motto is, "Space is a dangerous place. My job is to keep you healthy and alive."



THE NAVIGATOR

is an expert in mathematics and physics. At each 'NAV' station, she helps visitors understand and interactively experiment with the scientific principles behind spaceflight.



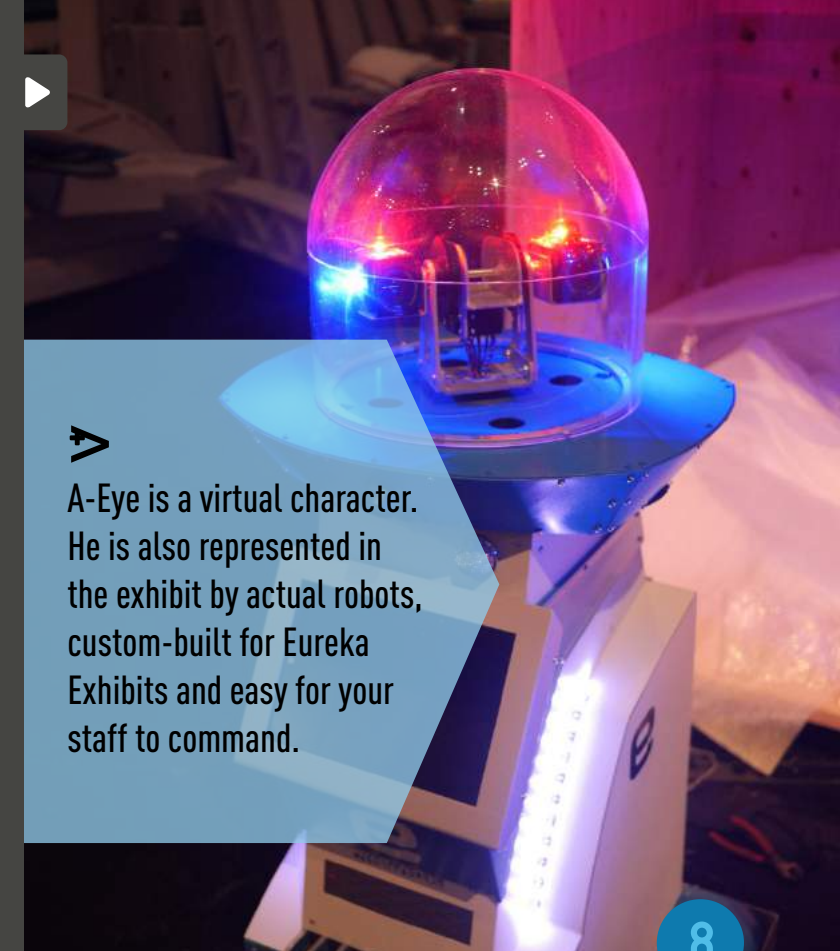
AND A-EYE

A-EYE is the exhibit's 'Artificial Intelligence Program.' This electronic copilot guides visitors from station to station, through the exhibit, and is there to provide instructions and tips, both on-screen and through vocal performance. A-Eye's goal is to ensure that all visitors — from expert gamers to absolute novices — have a fun and frustration-free educational experience that adjusts dynamically to their needs.



THE ENGINEER

is an expert in technology and engineering, present at each 'SCI' station. He is optimistic, with a can-do attitude and a sense of wonder about human ingenuity. To his mind, engineering is the application of technology to solve a problem.



A-Eye is a virtual character. He is also represented in the exhibit by actual robots, custom-built for Eureka Exhibits and easy for your staff to command.



ICONS OF POPULAR CULTURE

The world has become accustomed to the idea that science fiction has spurred advances in real science and motivated scientists, engineers and astronauts to pursue their chosen field but to many young people (and some not so young) the fact that the Apollo era is what made properties like *Star Trek*, *Lost in Space* and *2001: A Space Odyssey* appear in the first place has been forgotten.

This section will feature full-sized replicas of pop-culture icons that owe their very existence to Project Apollo - such as *Captain Kirk's* command chair from the *USS Enterprise*, the *Robinson Family's* faithful robot from *Lost in Space*, the enigmatic *HAL-9000* from *2001* and more will be available to serve as nostalgic touchstones, and exciting photo opportunities for visitors - along with interpretive displays that explain the Apollo-related influences and help set the social context of the era.



FOOTPRINTS ON THE MOON VIDEO ACTIVITY

Visitors will not only follow in the footsteps of the Apollo Astronauts - they'll get to make their own iconic footprints in the lunar soil. . . virtually! Using floor projection technology and machine vision, visitors can walk across a simulated lunar surface and create their own iconic footprints, perfect for photos or selfies.



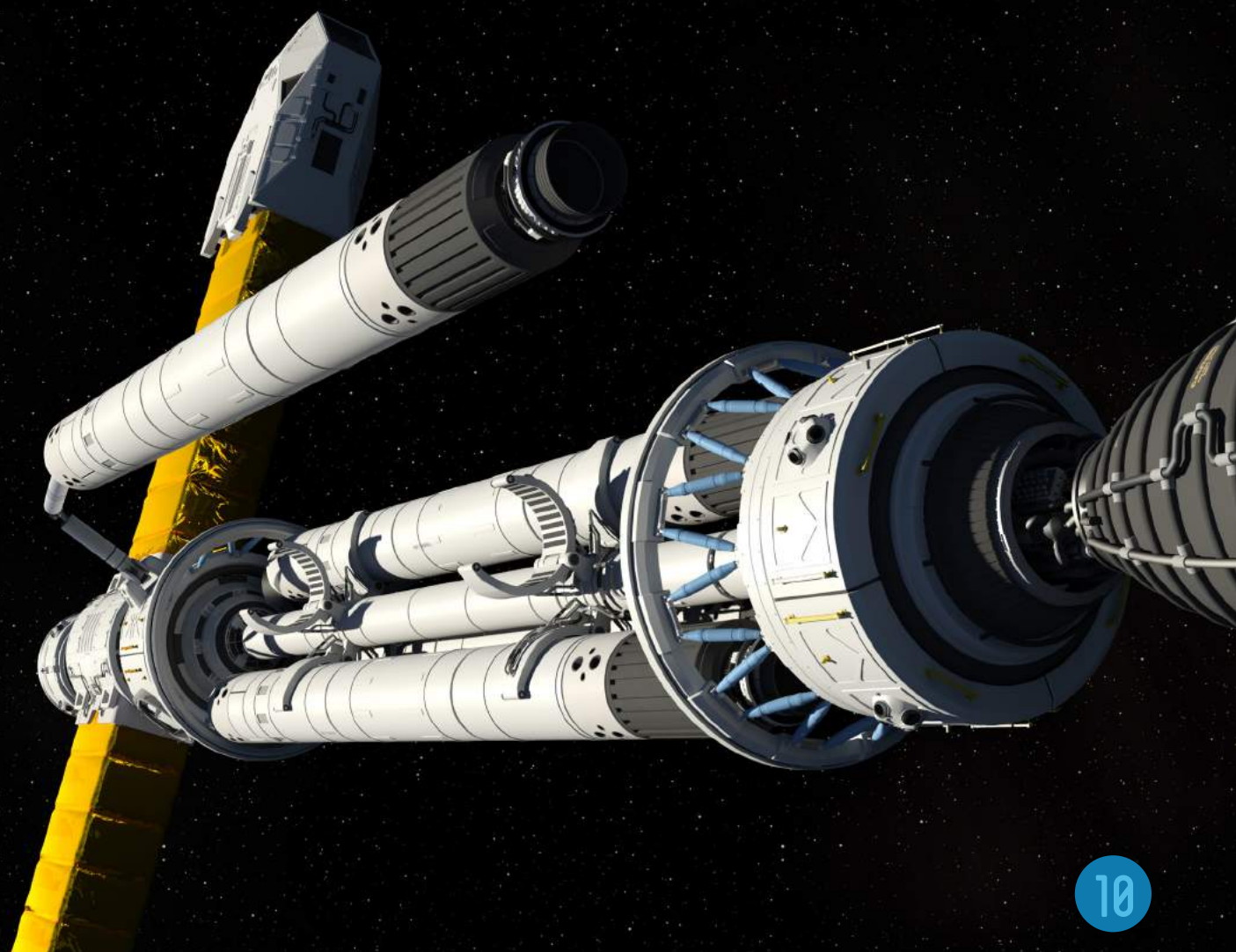
HOST RESOURCES

Eureka Exhibits strives to provide all our clients with a complete package of media and support resources. Hosts have access to a website containing a wide range of assets. These include everything from photos, promotional videos, and sample advertising concepts, to content videos, staff manuals, and educator guides.

Eureka can provide easy setup and teardown instructions and on-site assistance, as needed. During the run of the exhibit, Eureka will provide 24-hour technical support.

The unique modular nature of Be the Astronaut is customizable to all exhibit halls — large and small — and allows for the integration of host-created content and signage.

STAFF - WEARABLE SPACE SUITS AND TELEPRESENCE ROBOTS ARE AVAILABLE FOR PROMOTIONAL EVENTS ON OR OFF MUSEUM GROUNDS.



MISSIONS TO THE MOON

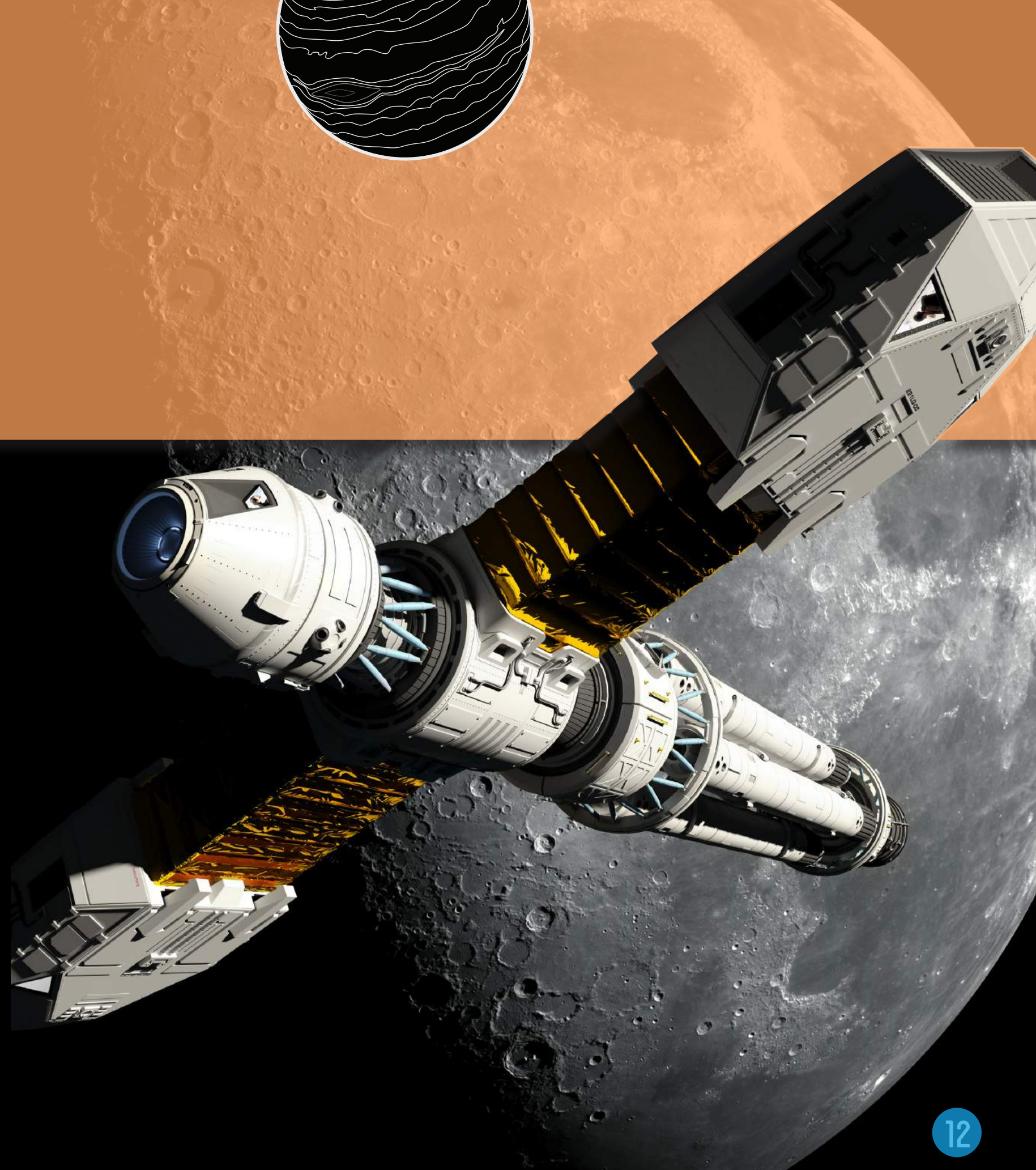
VISITORS to the Apollo 50th Anniversary Edition of Be the Astronaut will explore not only the history of lunar exploration but its future as well! They won't simply visit a fanciful approximation of the Moon, they will experience spectacular scientific re-creations, built directly from NASA space probe data, that transform your exhibit hall into massive dioramas - miles across - that visitors can explore in a variety of historic and futuristic spacecraft.

EARTH - Rocket up into space and view the **Earth** from orbit.

TRANSLUNAR GULF - Pilot your spacecraft from the Earth to the Moon and **enter lunar orbit**.

LUNAR DESCENT - Take control of a lunar lander and pilot your craft from **orbit** all the way through to **landing**.

LUNAR SURFACE - Drive a rover across **actual lunar terrain**, a 1:1 simulation derived from the laser altimeter data from the Lunar Reconnaissance Orbiter.



FUTURE MISSIONS: THE SPACECRAFT

These space vehicles are scientifically plausible and are designed to be fun and educational. Each vehicle or activity embodies a particular element necessary for human spaceflight – such as propulsion, life support, resources storage, energy, and navigation.

All spacecraft in Be the Astronaut were designed with assistance and oversight from NASA's Johnson Space Center and Langley Research Facility.

THE INTERPLANETARY SPACESHIP

Take flight and experience deep space as you pilot between worlds. This spaceship becomes your transport to education and adventure.

1-COMMAND MODULE matches the physical shape of the exhibit's simulator cockpits. This is where the pilots fly the craft.

2-HABITATION MODULES form the primary living and working quarters for the crew. They contain everything from laboratories to sleeping quarters, hydroponics bays to bathrooms.

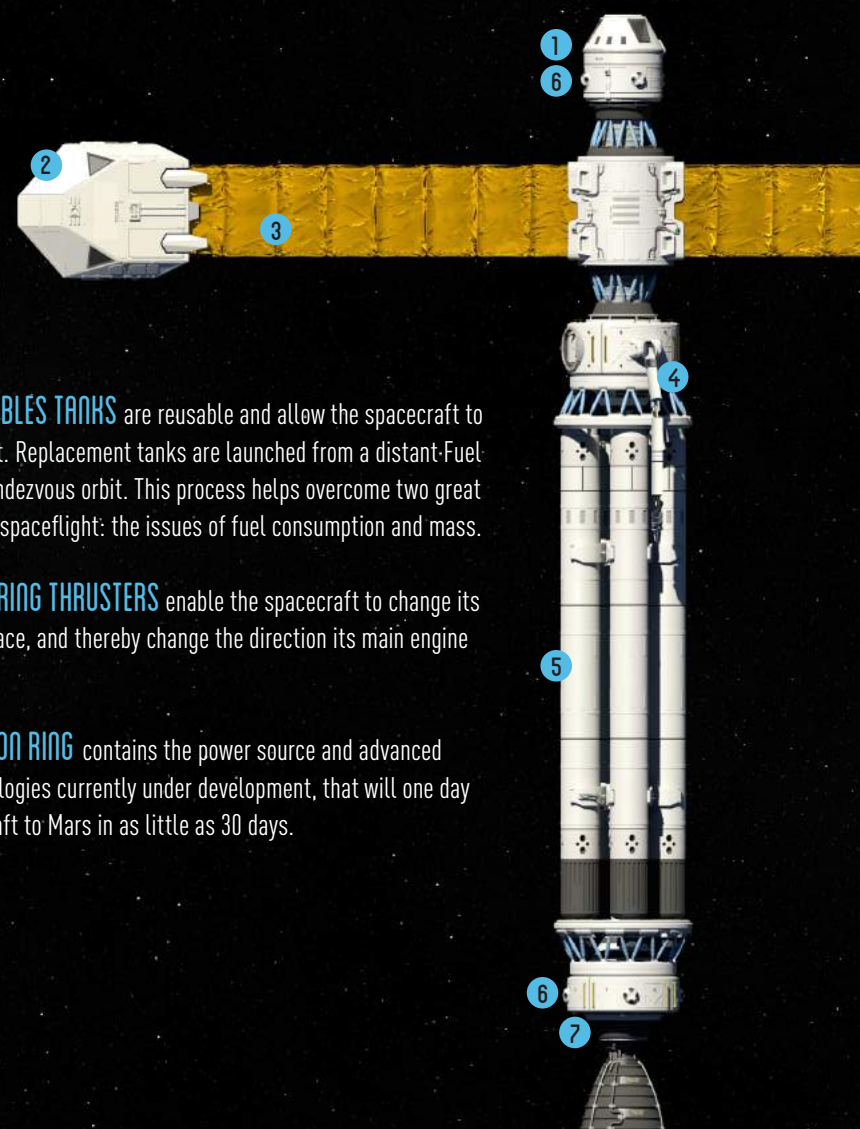
3-CENTRIFUGE ARMS spin to create artificial gravity. They can be retracted during tricky maneuvers or dangerous solar storms to protect the crew from risk or from exposure to radiation.

4-ROBOT MANIPULATOR ARM is used to grapple needed fuel tanks and berth them into fuel cradles, much like the International Space Station uses its robot arm to grapple re-supply capsules.

5-CONSUMABLES TANKS are reusable and allow the spacecraft to refuel in flight. Replacement tanks are launched from a distant-Fuel Depot on a rendezvous orbit. This process helps overcome two great challenges in spaceflight: the issues of fuel consumption and mass.

6-MANEUVERING THRUSTERS enable the spacecraft to change its attitude in space, and thereby change the direction its main engine will fire.

7-PROPULSION RING contains the power source and advanced rocket technologies currently under development, that will one day send spacecraft to Mars in as little as 30 days.



THE LANDER

THE LANDER

Descend to the surface of three different worlds, each built from NASA laser altimeter data. These missions demonstrate not only the challenges of spaceflight but also the principles of Newtonian physics.

1-CONSUMABLE TANKS are refueled in orbit and on the surface, allowing the vehicle to save weight by carrying just enough fuel for one ascent or one descent.

2-TWIN ENGINES based on advanced concepts from NASA are positioned high on the craft to reduce dust dispersion upon landing and to allow rovers to dock with the underside airlock.

3-MANEUVERING THRUSTERS enable the spacecraft to change its attitude in space, and thereby change the direction its twin engines will fire.

4-LANDING LEGS return to orbit with the rest of the vehicle, rather than being jettisoned like those of the Apollo Lunar Module, making this lander entirely reusable.



THE ROVER

Drive on 1:1 scientific re-creations of the Moon, Mars, and an asteroid — in a next-generation rover, created with the help of scientists who designed NASA's Curiosity Mars rover.

1-AIRLOCKS allow astronauts to enter the vehicle from a lander or a surface base, without need for spacesuits.

2-PRESSURIZED CREW CABIN shelters astronauts from the extremes of heat, cold, and radiation present on the surfaces of other worlds.

3-WHEELS AND SUSPENSION based on NASA's next-generation rover designs have full articulation and are driven by electric motors.



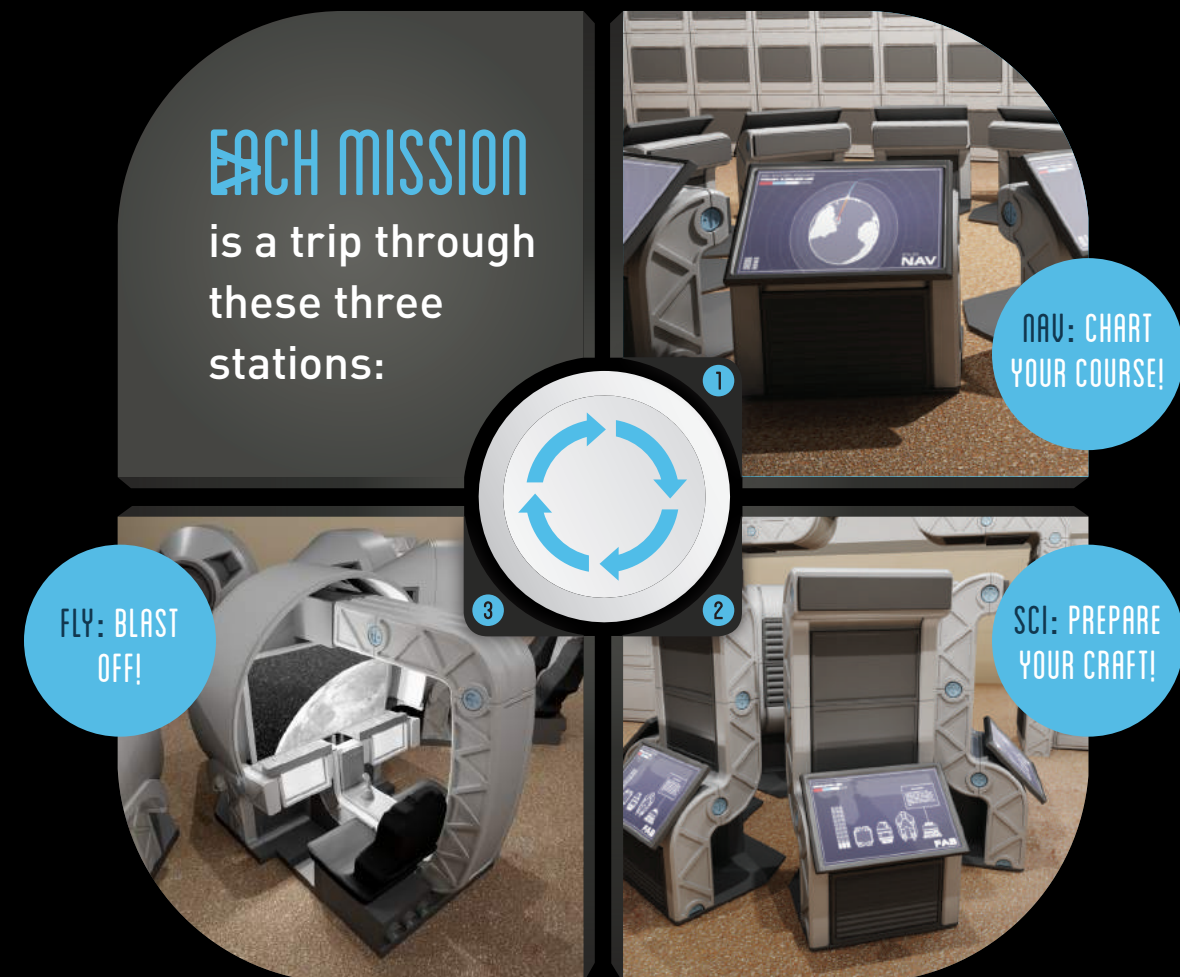
AERIAL VIEW
OF A SAMPLE BE THE
ASTRONAUT
INSTALLATION

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BE THE ASTRONAUT is designed to create flow across the museum floor. Each mission — like the launch into Earth orbit or the landing on Mars — is one cycle through three visually distinct station-types: the NAV module, the SCI module, then the FLY module.



VISITORS must complete the first two stations before they can climb in the third station — the simulator — to fly the mission. When visitors complete one cycle, they start on the next.

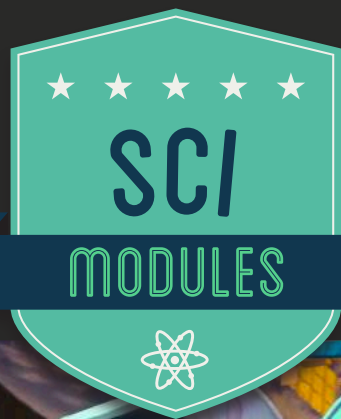
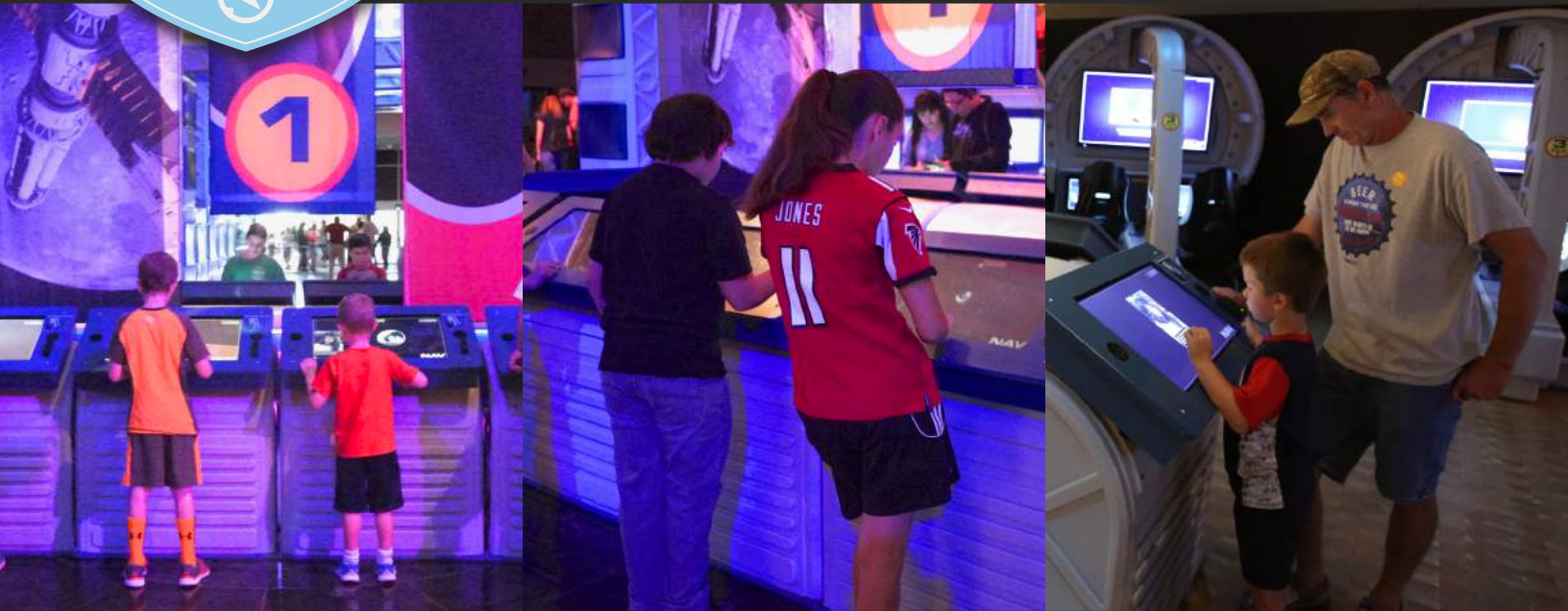
It will take multiple cycles to complete the storyline and experience all available missions in the exhibit, but a sense of achievement is imparted after each cycle.

A magnetic 'Astronaut ID' card tracks visitors' progress, allowing them to proceed through the exhibit's adventure at their own pace — and even over multiple visits.

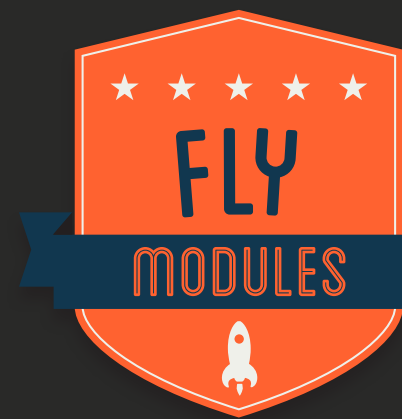




NAV is short for Celestial Navigation. At this touch-screen station, visitors use 2D gameplay to learn basic principles of physics (e.g., energy and motion) and concepts about the workings of the universe on a macro scale.



SCI is short for Science & Technology. At this touch-screen station, visitors use a drag-and-drop interface to learn in greater depth about the science and technology needed to keep humans alive and healthy in space.



FLY is the spectacular capstone to each mission. It highlights the feats of math and engineering that enable humans to travel into space. Seated before a massive monitor, touch-screens, and an industrial-quality joystick, visitors fly the spacecraft they outfitted along the flight path they designed.

The entire cockpit comes alive with game visuals and sounds that make visitors believe they ARE astronauts. The exhibit employs multiple copies of each station-type. Quantities are determined by the size of the particular installation.



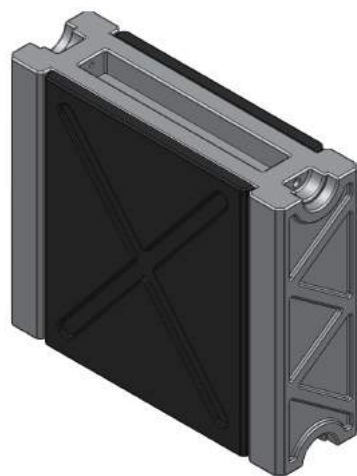
MODULAR DESIGN

IT'S LIKE LEGO FOR MUSEUM EXHIBITS

THESE ARE YOUR BUILDING BLOCKS:



J FORM COMPONENT



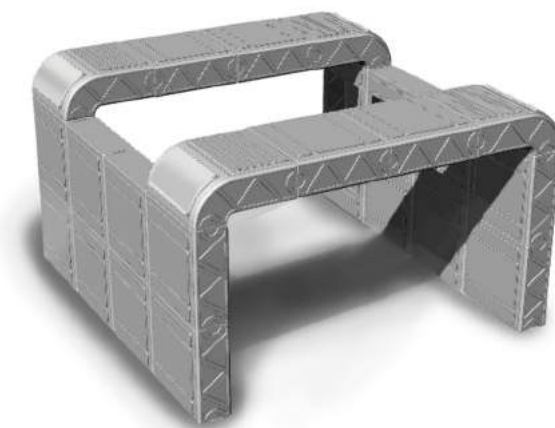
I FORM COMPONENT

BE THE ASTRONAUT is scalable to meet your space and budget needs. Eureka Exhibit's unique modular building system allows you to construct one of our pre-designed floorplans — or to create one of your own.

The modular parts fit together easily, and are lightweight and durable. With them, you can build a myriad of exciting structures.

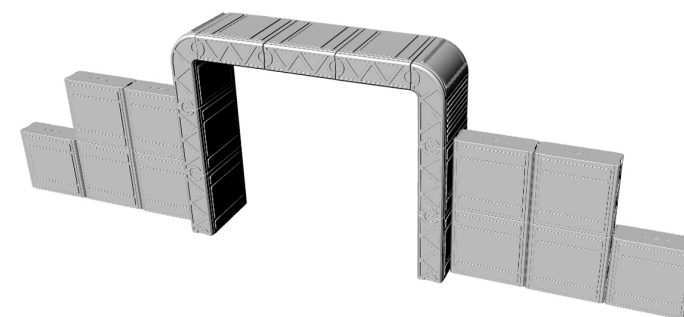
Configure the exhibit with different shapes and theatrical elements to fully transform your exhibit hall into the glowing technological hub of tomorrow's era of spaceflight!

These theatrical partitions, stations, mazes, and archways are only some of the structures that can be built. They are made exclusively with J and I form modular components.



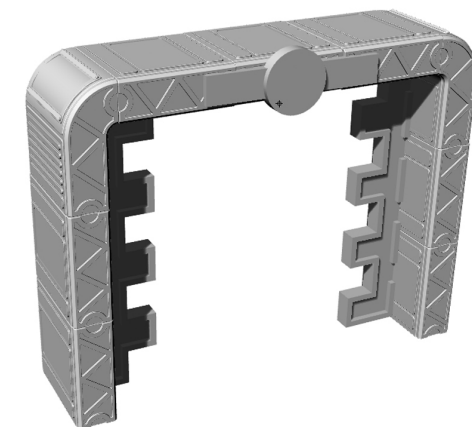
* TUNNEL

Components: 20 I forms + 4 J forms



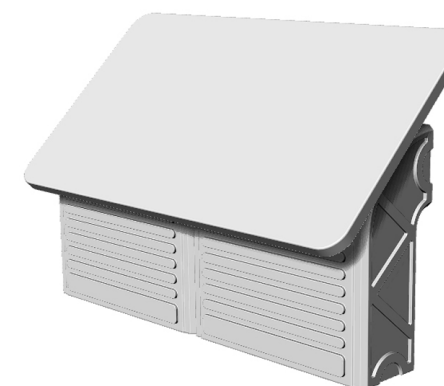
* GATE 1 WITH THEATRICAL PARTITIONS

Components: 17 I forms + 2 J forms



* AIRLOCK GATE

Components: 7 I forms + 2 J forms



* DISPLAY KIOSK

Components:
1 3D printed moonscape + 2 J forms

ADDITIONAL EXHIBIT ELEMENTS

TRADITIONAL physical exhibitry — including space suits, artifacts, memorabilia, signage, and telepresence robots — provides an engaging experience for young children, the technology inexperienced, beginning gamers, and expert video game jockeys alike.

Depending on configuration, additional elements will include the following:



SPACE SUITS

Full-size space suits provide an exciting educational experience and wonderful photo opportunities.

- Apollo A7LB lunar space suit replica, made with real 24k gold visor and actual 'Beta' cloth — just like the originals.
- NASA Mark VII Moon-Mars suit replica.
- Soviet Cosmonaut high-altitude pressure suit.
- Chinese Taikonaut training pressure helmet.

TELEPRESENCE ROBOTS

Real robots controlled by your staff provide exciting visitor interaction and photo opportunities. They can also help with technical assistance, guest lectures, and museum marketing.

- Safe and easy to use.
- Turn-key operation.
- Outfitted with edge and obstacle detection systems.
- No special training to pilot them.

ARTIFACTS

Actual artifacts from the history of space exploration provide invaluable touchstones for visitors.

- Artifacts on loan from NASA TBD.
- Apollo Space Race memorabilia, including flown items, signed artwork, and flight medallions.
- Soviet space program memorabilia including space hardware and medals.
- A re-production of Voyager's 'The Sounds of Earth' golden record.

TOYS

The youngest and oldest visitors will be delighted by a display of historic toys that illustrate the different stages of a space mission, from launch to landing.

- Early toys from the turn of the 20th century.
- Tin toys from the 1950s.
- Space Race-infused toys from the 1960s.
- Electronic toys from the 1970s, 80s, 90s, and beyond.

ILLUMINATED SIGNS

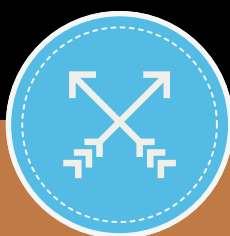
Signage provides depth and detail, about our solar system and how to keep humans healthy in space.

- The rocky inner planets and the outer gas giants.
- The asteroids and their potential value to the human exploration of space.
- The hazards of radiation.
- The topography of the Moon, realized in 3D panels.

FAQ

Q: WHO IS THE INTENDED AUDIENCE AND WHAT WILL THEY LEARN?

A: The primary intended audience for Be the Astronaut is K-8 and their caregivers. This first-of-its-kind exhibit, combining traditional exhibit elements with sophisticated computer simulation, has been developed with the advice and oversight of our distinguished panel of advisors. It was built from the ground up to teach the core principles of space exploration, via an interactive personal learning experience.



Q: WILL THIS EXHIBIT FIT OUR HALL?

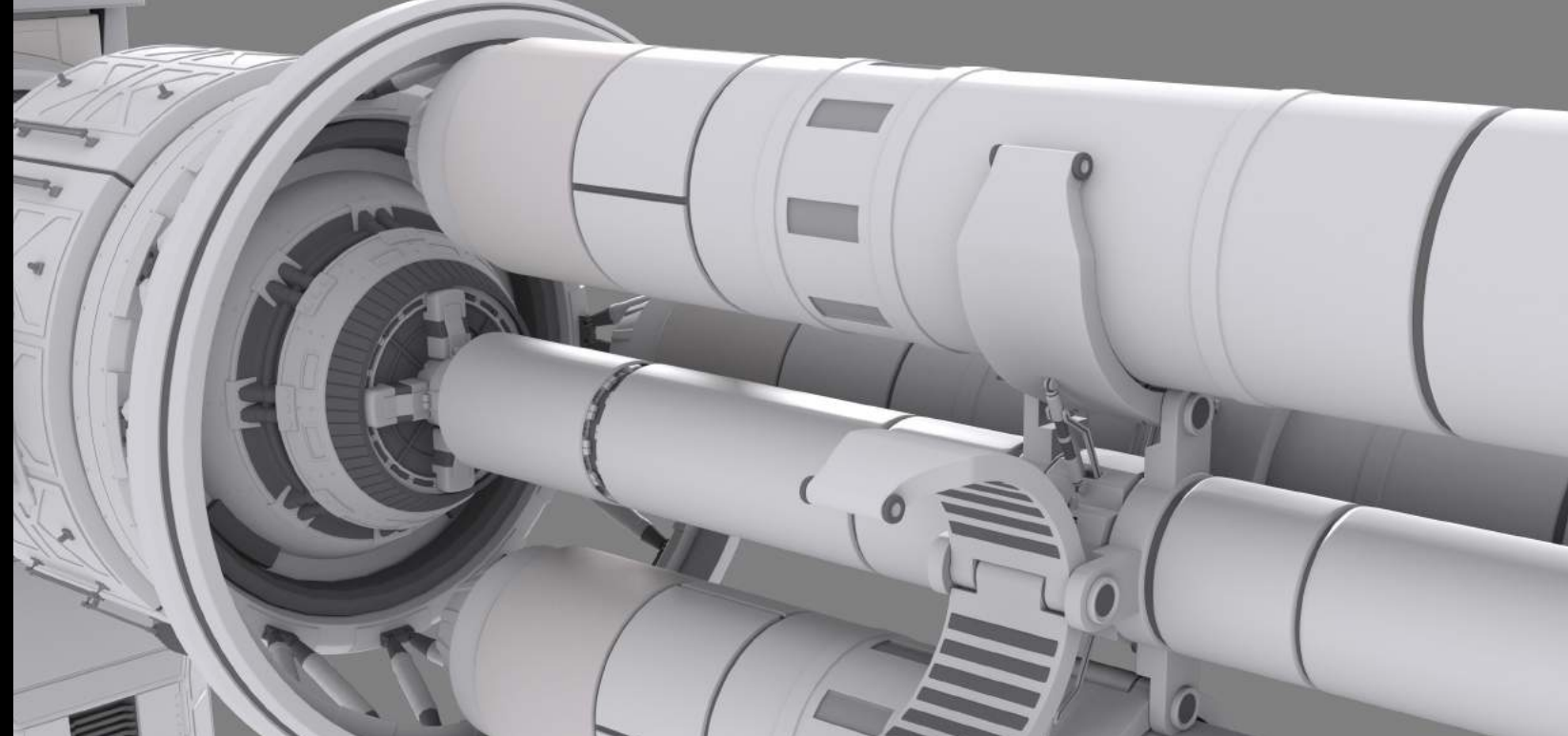
A: Be the Astronaut is scalable to meet your space and budget needs. Eureka's unique modular building system allows you to construct one of our pre-designed floorplans — or to create one of your own. The parts fit together easily, and are lightweight and durable.

Q: WON'T VISITORS JUST GO STRAIGHT TO THE SIMULATOR FLY STATION?

A: They can't. To increase flow across the museum floor, the exhibit is designed as a cycle. Visitors will complete a NAV station then a SCI station before the magnetic card that tracks their progress will allow them to visit a FLY station. It is the capstone of each cycle.

Q: WILL THE ROBOTS BE DIFFICULT TO USE OR TAX OUR STAFF?

A: Our telepresence robots are safe and easy to use. Edge and obstacle detection systems prevent them from bumping into anyone or anything. No special training is needed to pilot them — even the newest volunteer should be able to control one with ease. Several of our advisors have agreed to do guest lectures for host museums via Be the Astronaut telepresence robots. This unique and exciting system will allow for a variety of experts in the field to give presentations at your museum for little or no cost. Eureka Exhibits can even use the robots to assist you in any maintenance and troubleshooting that may arise.



Q: CAN I GET THE SIMULATION TO PLAY AT HOME

A: Be the Astronaut is designed for the museum environment — to give museums a new weapon to compete with the myriad of entertainment options available to modern families and children. The simulations run on custom designed computer rigs. The greatest interactive space experience ever made is not from Hollywood and not on XboxOne, WiiU, or Playstation4 — it's at your museum.

Q: WILL THIS EXHIBIT TAX OUR MAINTENANCE OR EXHIBITS STAFF?

A: No. Be the Astronaut is designed to be a completely turn-key experience. Aside from powering down the stations at the end of the day, all of the exhibit elements will function automatically. Updates, as in the case of new scientific discoveries added to the simulation, are performed automatically and without the need for museum staff involvement. In the unlikely event of failure, back-up computer cores for the FLY space capsule and other interactive stations will be provided and can be swapped with the defective unit in approximately 10-15 minutes.

Q: WILL THERE BE QUEUING ISSUES?

A: No. Each of the stations (NAV, SCI, FLY) is fully interactive and engaging. With 40+ simultaneous users of interactive elements and many more users of traditional exhibits, signs, and artifacts, the exhibit will entertain even the largest of crowds.



EUREKA EXHIBITS holds scientific integrity at the highest level. Be the Astronaut has been developed with the ongoing collaboration of our distinguished advisory panel. We sought advisors within related fields who care about humanity's future in space and who would like to help inspire visitors.

DR. STEVEN P. SANDFORD

Director of the Space Technology & Exploration Group, NASA-Langley

DANIEL D. MAZANEK

Senior Space Systems Engineer, NASA-Langley Research Center

DR. CHARLES BEHRE

Chief Engineer & Lead Scientist, Excelis-ITT, GPS Navigation & Satellite systems

DAVID S. PORTREE

Science Journalist, WIRED Magazine

HARDY SPIRE

Senior Producer CNN

ALICIA DWYER CIANCIOLO

Aerospace Engineer, NASA-Langley Research Center. Member of the Entry, Descent and Landing Team - Mars Curiosity Rover

DR. JOHN HUTCHINSON

Director of the Structure & Motion Lab, University of London

KATHLEEN KELLY

Managing Director, Digital Delivery, Ogilvy & Mather

JOSH KESSLER

Project Manager, COSI-Columbus

DR. JAMES HEAD

Professor of Geological Sciences, Brown University. Co-investigator on NASA Messenger Mission to Mercury, NASA Moon Mineralogy Mission, & ESA Mars Express spacecraft.

MR. PAUL SPANA,

Exhibits Manager, Space Center Houston

JIM HULL

Manager, Exhibits and Artifacts Office of Communications NASA Headquarters

MAUREEN RYAN O'BRIEN

Manager, Strategic Alliances Office of Communications NASA Headquarters

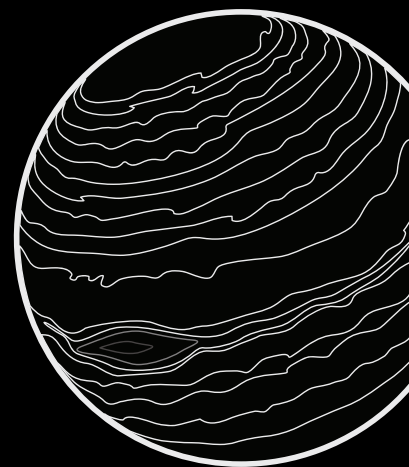
JULIAN MORRIS

Executive Director International Center for Law and Economics

The exhibit designers have wisely been extremely serious about two critical issues in science education: portraying scientific evidence accurately, and taking advantage of the opportunity to address where that evidence remains ambiguous. I wish more exhibits were this fun and honest.

- DR. JOHN HUTCHINSON,

Director, Structure & Motion Lab, University of London



APOLLO ANNIVERSARIES

The Apollo Program was more than just the First Landing and was comprised of many years of effort over multiple space missions and earth-based efforts therefore the Official NASA Anniversary celebrations will last for multiple years and highlight the following anniversaries - and more!

MISSION	CREW	LAUNCH DATE
Apollo 7	Schirra, Eisele, Cunningham	October 11, 1968
Apollo 8	Borman, Lovell, Anders	December 21, 1968
Apollo 9	McDivitt, Scott, Schweickart	March 3, 1969
Apollo 10	Crew: Stafford, Young, Cernan	May 18, 1969
Apollo 11	Armstrong, Aldrin, Collins	July 16, 1969
Apollo 12	Conrad, Gordon, Bean	November 14, 1969
Apollo 13	Lovell, Swigert, Haise	April 11, 1970
Apollo 14	Shepard, Roosa, Mitchell	January 31, 1971
Apollo 15	Scott, Worden, Irwin	July 26, 1971
Apollo 16	Young, Mattingly, Duke	April 16, 1972
Apollo 17	Cernan, Evans, Schmitt	December 7, 1972
Skylab 1	Uncrewed	May 14, 1973
Skylab 2	Conrad, Weitz, Kerwin	May 25, 1973
Skylab 3	Bean, Lousma, Garriott	July 28, 1973
Skylab 4	Carr, Pogue, Gibson	November 16, 1973
Apollo-Soyuz Test Project	Stafford, Brand, Slayton	July 15, 1975

BE THE ASTRONAUT:

Solar System Edition experiencing record-breaking crowds of over 10,000 visitors in a single day at Space Center Houston.

LEARN MORE ABOUT OUR PREVIOUS EXHIBIT AT
EUREKAEXHIBITS.COM

For more information, please contact us at
(908) 644-3477 or info@eurekaexhibits.com.

