

EXHIBITION DESIGN

Voyage was designed by Vincent Ciulla and his Sarasota-based firm, Vincent Ciulla Design. The exhibition seamlessly blends sculpture and a rich science education experience, and conveys an aesthetic

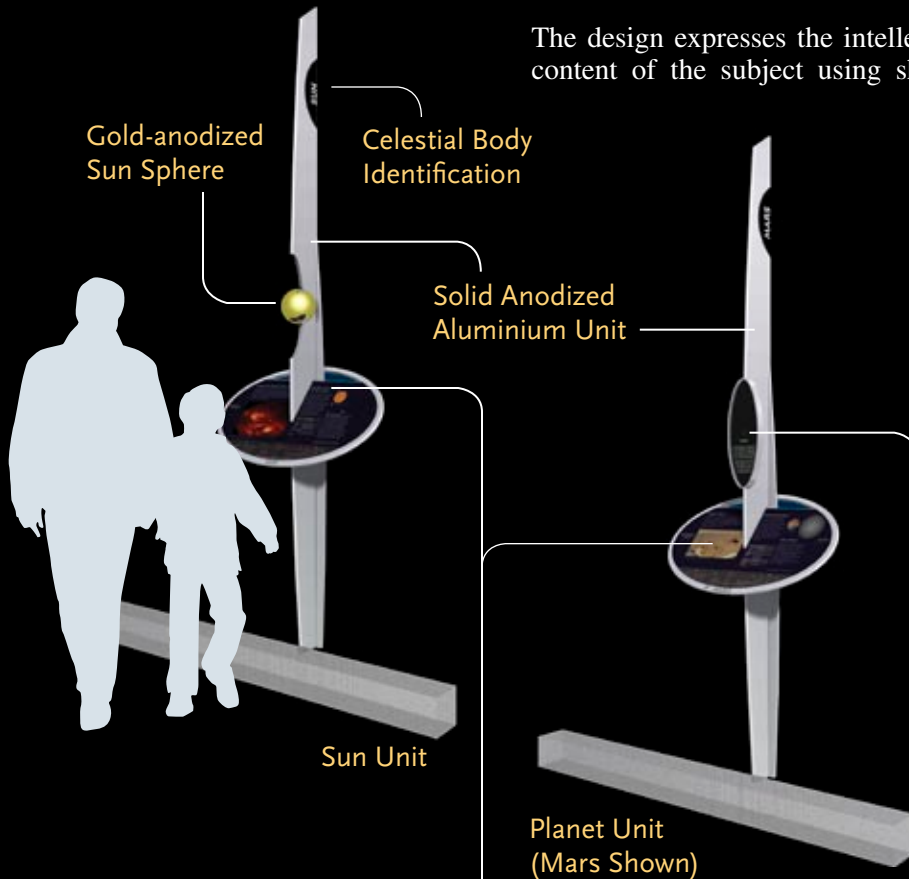
beauty worthy of placement on the National Mall in Washington, DC. It consists of 13 anodized aluminum units for: the Sun, the nine planets, comets/asteroids, a description of the Solar System, and a description of the Solar System as part of the Milky Way galaxy.

The design expresses the intellectual content of the subject using shapes

and elements evocative of space, flight, and exploration. The 8.5-foot tall units for the Sun and nine planets provide the position of these worlds from a distance. From the front, a unit's tall vertical element virtually disappears from view (see back of this sheet), and the visitor is presented with the 3-dimensional model world laser-sculpted in crystal, together with a full color porcelain enamel storyboard meant to transport the visitor to that world.

The exhibition is accessible to the visitor with physical impairment, and contains tactile elements for the visitor who has a visual impairment.

The only difference between the exhibition on the National Mall and a replica available to a community is that the 13 units are constructed of solid anodized aluminum rather than stainless steel, cutting the exhibition cost in half using equally durable material.



3-D Model Worlds in Crystal

Planets and their moons are laser-sculpted in 3-dimensions inside solid crystal block, with a hardened (tempered) glass front face. Planetary ring systems, planetary flattening, and moons are accurately represented and oriented in space.

MARS

This tiny sphere is the planet Mars at one 10-billionth actual size. Mars' 2 moons are too small to be seen at this scale. You are walking through a scale model of our solar system. The real solar system is 10 billion times larger. Look at the map on the lower panel to see where you are.

Porcelain Enamel Storyboards

High resolution, full color imagery and text presented in porcelain enamel. Porcelain enamel is a high durability material available for outdoor, permanent display of color imagery, and is used extensively in parks across the nation.

Voyage to Mars
It seems almost Earth-like here, like a desolate spot in a desert. But the air is far thinner than atop Earth's highest mountains and mostly carbon dioxide. In summer near the Martian equator, the temperature typically reaches 60°F (17°C). But at night it falls to a chilling -130°F (-90°C).

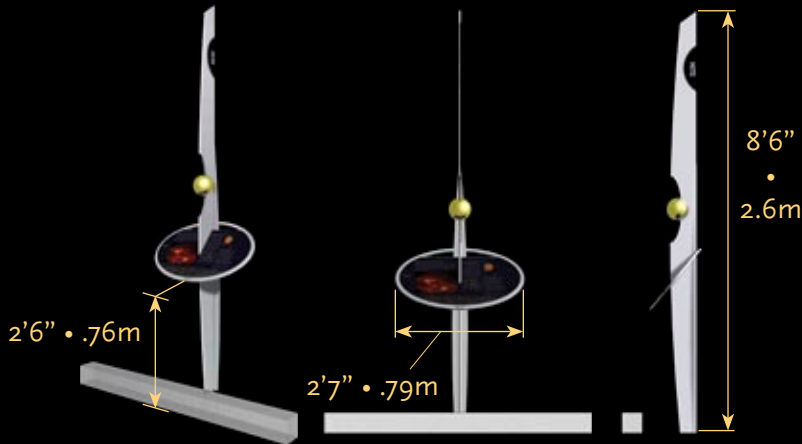
Earth Invades Mars!
In 1997 the Mars Pathfinder lander touched down on this ancient Martian flood plain called Archa Vallis (see image at left). Its robotic rover Sojourner studied the rocky surface. Many more robotic spacecraft will journey to Mars to study it, some to search for signs of life. One day, will humans follow?

Life on Mars?
Long ago Mars was likely warm and wet, but its channels, tributaries and flood plains are now dry. On Earth, water is a key ingredient for life, so perhaps life once existed on Mars as well. Deep in the Martian soil, shielded from the Sun's harmful rays, life may still exist.

WALK THE SCALE MODEL SOLAR SYSTEM

| | |
|-------------------|-----------------------------------|
| DISTANCE TO SUN | 142,800,000 km (87,992,484 miles) |
| DIAMETER | 4,217 km (2,619 miles) |
| MASS | 0.107 Earth |
| ROTATION PERIOD | 24.6 hours |
| TIME TO ORBIT SUN | 687 Earth days |

13 Voyage Exhibition Units: Perspective, Front and Side Views



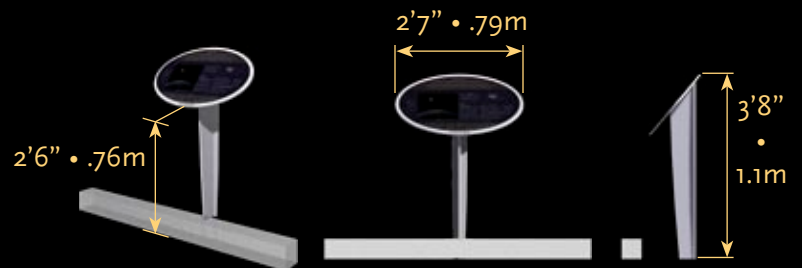
Sun Unit



Planet Unit A (7 total): for Mercury, Venus, Earth, Mars, Uranus, Neptune, and Pluto.



Planet Unit B (2 total): for Jupiter and Saturn.



Short Unit (3 total): two for exhibition entry, and one for comets/asteroids.

To become a *Voyage Community*, contact Stacy Hamel, Director, Voyage Exhibition Replication, National Center for Earth and Space Science Education at: 703-508-2898, shamel@usra.edu or visit www.voyagesolarsystem.org.

Development and installation of the exhibition in Washington, DC, was a joint project of Challenger Center for Space Science Education, the Smithsonian Institution, and NASA. Replication and installation of the *Voyage* exhibition at sites nationally and internationally is a program of the National Center for Earth and Space Science Education (NCESSE; www.ncesse.usra.edu), Universities Space Research Association. *Voyage* was designed by Vincent Ciulla Design (www.ciulladesign.com).



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We believe that to continue the legacy of scientific exploration, every generation must be inspired to learn what we know about our world and the Universe, and how we have come to know it.

We also believe that it takes a community to educate a child... and that it takes a network of communities to reach a generation.