

Space Shuttle Atlantis at Kennedy Space Center Visitor Complex

AV Design Brings Atlantis to Life for One Final Mission

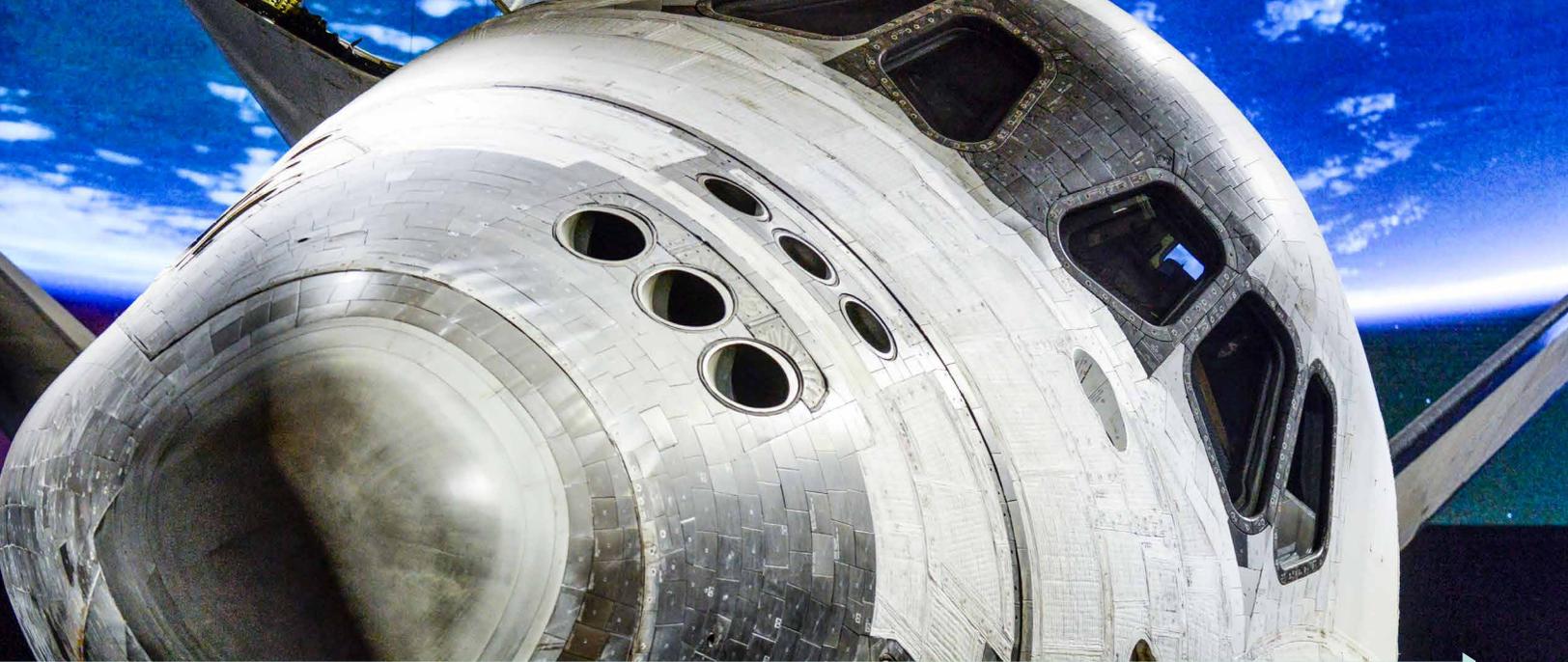
Kennedy Space Center Visitor Complex near Orlando unveiled a space exploration attraction, Space Shuttle AtlantisSM, at what is now the new home of the historic spacecraft. The 90,000-square foot facility includes multimedia presentations that feature more than 60 interactive exhibits and AV simulators that provide a look at the 33 missions of Atlantis. Working with operators Delaware North Companies Parks & Resorts and design firm PGAV Destinations, Electrosonic's Design Consulting team got the Atlantis project off the ground, and Electrosonic ultimately completed the AV integration and installation.

"Throughout the installation process, the design consulting group within Electrosonic remained engaged, representing our interests as architects and exhibit designers and ensuring that the design intent and functionality were maintained and protected throughout the design-and-build process," says Emily



Howard, AIA, project architect at PGAV Destinations. Electrosonic's design features 26 speakers (ceiling and surface-mounted box types) installed at the entry ramp of the attraction. The batching area and the pre-show provide historical context to the upcoming exhibits, the significance of Atlantis and how the Space Shuttle Program paved the way for NASA. In the pre-show, Electrosonic designed a system consisting of four 2560x1600 projectors edge blended in a 2x2 configuration for the main screen's immersive experience. Sixteen 1400x1050 projectors edge blended in groups of four add video content to four arches. The system features video mapping not commonly associated with visitor attractions, and is controlled and synchronized using a show controller.

A 110x20-foot, 8mm LED wall bolted onto a sub frame acts as a backdrop to the orbiter. The 8mm refers to the distance between each LED light on the panel;



LED Wall Displaying the Earth with Atlantis in the Foreground

the lower the number, the crisper the display. During the pre-show, it displays the earth as the Atlantis is revealed. Electrosonic designed a system featuring custom-configured media servers typically found in digital planetariums or high-demand multimedia attractions. Mousetrappe created the content.

The main exhibit space featuring the Atlantis orbiter is supported by interactive and simulation exhibits as well as two additional theaters designed by Electrosonic. The Hubble Close-up Movie Wall uses two projectors to display images from the telescope. The International Space Station Micro Gravity Theater gives a view of astronauts aboard the ISS. It uses a large TransScreen, a translucent membrane, as the projection surface for a pair of 10,000-lumen projectors.

Interactive stations include the Crew Module AR and the Aft Fuselage AR, which consist of multi-axis movable pods with 26-inch touchscreens, small USB-powered line array speakers, webcams and rotary encoders to feed position information to a PC. Electrosonic designed the EVA, or space walk, interactive which features 65-inch LCD screens with 3D depth-sensing systems allowing visitors to trigger media.

Simulators designed by Electrosonic provide visitors even further interactions; Landing the Orbiter simulators comprise nine kiosks fitted with 26-inch displays and Robotic Arm and Docking Station simulators consist of twelve separate kiosks each with four 19-inch displays. Finally, the Beanie Cap Floor

Interactive features an SXGA+ resolution projector, which Electrosonic custom-mounted to throw the image through a 45-degree mirror down to the floor.

