

AV EUROPE

News digests: Developments in Europe & RoW 4

Emerging markets: Russia 11

Show previews: IBC & PLASA 2011 15, 21

How to: Loudspeakers 27

Buyer's Guide: Control systems 33

Kennedy: Life after the shuttle

PAGE 8



Life after Atlantis



Exploration Space: Guests are transported to the Moon, Mars or into low-Earth orbit

Clive Couldwell travels to Florida to see how Kennedy Space Center's Visitor Complex is inspiring a new generation of enthusiasts.

As NASA retires its space shuttle programme after 30 years' service, the US space organisation is now planning how it can engage the space scientists and explorers of the future.

"It's about inspiring a new generation to become a part of the space programme and help solve the problems and the challenges of human space flight," says BRC Imagination Arts', Matthew Solari.

Over the last 20 years, the US design house - for whom Solari acts as its director of cultural project development - has worked on NASA's biggest AV projects, such as the Apollo/Saturn V Center (a breathtaking reveal of the Saturn V rocket that powered NASA's Apollo missions) and the Shuttle Launch Experience (the sights, sounds, and G-forces of a real Space Shuttle launch).

BRC's latest project - a collaboration with the Kennedy Space Center Visitor Complex and Delaware North Co. Parks & Resorts, the Visitor Complex's commercial partner - is a Mission Status Centre for the space programme of record for taking humans back to the Moon and then Mars.

An Electrosonic team designed, integrated, programmed and installed the exhibit's AV system, including projection, audio, video and show control. Dataton's display systems feed the content

to the exhibit's projectors and monitors.

"Watchout is the latest addition to the Space Center that guides people through the progression of space exploration without swamping them with too much detail," says Solari.

AV elements

The 10,000 sq ft 'Exploration Space' combines live theatre, interactive exhibits and new media components. Filled with light, colour, sound and energy, its gallery features large-scale digital projections, dimensional exhibits and interactive experiences that invite visitors to be a part of the future of space exploration. A virtual world transports guests instantly to Mars or the Moon, as vivid action takes place all around them.

Visitors are invited to become space travellers and test their skills at docking a vehicle - ISS Rendezvous - with the International Space Station, and use their Lunar Lander to arrive smoothly on the surface of the Moon while discovering the dangers that lurk in space.

A giant 12ft x 8ft portal looks out on to a 224 x 168in rear-projection screen that displays enormous images of future destinations like the Moon, Mars and nebulas for the introductory exhibit: 'Your Destination'. A Christie DS+6K-M projector displays the Moon and Mars images, providing the

impression you're viewing them from deep space.

Alongside the portal is a 46in LCD monitor with audio attached that details possible missions during the voyage. Both the portal and the monitor audio and video content are sourced from Extron mpeg2 HD video players.

A 65in flat-screen LCD display entitled 'On The Shoulders Of Giants' showcases the next generation of spacecraft. Five large 12ft x 15ft trapezoidal exhibit screens immerse the guests in the future of space travel. Six more screens of various shapes and sizes, including a 14ft wide, 16:9 screen, a 12ft diameter screen and four trapezoidal screens, support the main show 'Explorers Wanted' - a 12-minute dynamic presentation where a NASA 'Communicator' walks guests through new missions, new discoveries and the immense challenges of space exploration.

"During the show, visitors sit on bench seats, surrounded by digital imagery, as the Communicator inspires the audience to become part of a NASA mission and the future of space exploration," says Solari.

The exhibit and show is run by a Medialon Manager control system with content served by ten Watchout players feeding nine projectors and one monitor. Electrosonic ensured that seven of the projectors could display content on to the nine trapezoidal screens without images bleeding on to the wall. The company also created a customised user interface for the Watchout master PC controller so that KSC staff can add updated content to the

pre-programmed show to keep it fresh and relevant – a key customer requirement.

Adds Solari: “The fact that all the screens are odd shapes and sizes makes the show very visually striking. The result is an immersive AV experience that educates as well as tells a thrilling story of potential, not just of the future of space exploration, but also of each individual visitor.”

Certainly creating this smooth interface among the equipment and onstage presenters was Dataton’s primary challenge. Says the Swedish developer and manufacturer’s chief software developer, Mike Fahl: “Orchestrating action across multiple screens is hard to achieve, but with Watchout you can manage individual screens as one big image canvas.”

As visitors prepare to exit the attraction they are invited to ‘Stay Connected’ at sign-up stations in four interactive kiosks. Their images are captured by webcams and composited inside astronaut helmets in shots showing them performing various space-related activities. Visitors get to see their astronaut selves on 24in monitors in portrait mode and can email the fun shots back home, or to friends.

The designer’s view

The exhibits show space developments in process. “We want visitors to see that it’s all about young people figuring out some of the greatest challenges space travel faces, so we pose many questions rather than answers as we invite them to be a part of the solution,” says Solari, whose team worked for a year with the engineers and scientists at KSC to distil some basic scientific concepts into purely visual terms: Where are we going? How are we going to get there? How long is it going to take? What are the dangers of living and working in space? The new space suits: How are these going to be developed?

“This thought process is continuing. The Visitor Centre has to adapt to a life without high profile launches and the space shuttle. But they have to attract people with new stories they now want to tell there,” adds Solari.

Being able to update the Dataton-driven element



Houston: Explaining first space shuttle flight

of the show was therefore an important part of the brief. Content and how it’s displayed needs to be refreshed regularly.

Ironically, NASA has done its job so well that it has succeeded in making low Earth orbit travel seem routine.

Its challenge now is to keep a new, younger generation of the public engaged as the organisation enters its next development phase.

“NASA wants to present its commercial future but also represent properly its noble past. The work we do together is to be able to use those stories of the past to inspire the future,” concludes Solari.

Houston

Meanwhile at NASA’s Johnson Space Center in Houston, software and interactive systems company FusionPage Interactive has been working with MultiTouch to design and install a multi-touch wall - comprised of four 46in MultiTouch Cell displays.

The wall shows high-resolution photos and videos of the space shuttle, which multiple users

can manipulate simultaneously. This is just the first phase of the exhibit, which will eventually include the full space shuttle, space station, and Apollo mission histories.

“The rich archive of high-resolution material - even analog high-definition video - over the past thirty years provides us with a tremendous resource for an exhibit that delivers, literally, a hands-on interaction with space history,” says Paul Spana, Space Center Houston’s exhibit director.”

NASA helped pioneer high-resolution imaging, as we know it today. For FusionPage founders Don and Ron Kerr, the exhibit marks a personal reflection. The brothers served with NASA and have contributed to various projects since. ■

CONTACTS

www.brcweb.com

www.electrosonic.com

www.dataton.se



(L-R): Docking; early crew capsule



15ft projection surfaces show space dangers