## **CASE STUDY**



"

The space shuttle is a national treasure and protecting it from fire is critical.

Tony Budrovich, Senior Vice President of Operations for the California Science Center Foundation

# California Science Center Los Angeles, CA

**ABOUT** In 2012, the California Science Center (CSC) was awarded the honor of permanently housing the newly retired Space Shuttle Endeavour. CSC constructed a temporary pavilion to make this national treasure available to the general public right away while its permanent home was being built. This temporary pavilion was constructed of sheet metal and was large enough to house the Endeavour with approximately 10-20 feet of clearance from each wing tip. The future permanent building for the shuttle would dramatically expand the footprint and impact of the CSC by adding 200,000 square feet of space for exhibits, events and educational programs. This expansion was set to complete by 2022.

A NOTIFIER system was already in place for the existing CSC buildings. It would need to be scaled up drastically to accommodate the 2.4 million visitors the new permanent exhibits would attract.

**CHALLENGE** The core challenge was how to protect priceless and large-scale treasures now, yet have a fire system in place that could expand to cover additional large-scale exhibition structures down the road. The new fire system had to be robust, scalable, and capable of mitigating fire and safety hazards efficiently to keep millions of visitors and staff safe.

**SOLUTION** The solution was clear - leverage the existing NOTIFIER NFS2-3030 fire alarm control panel in the main building's security office - expand the Digital Voice Command (DVC) capabilities, update the graphic annunciator, and install additional sensors and strobes to the new buildings. With a robust expansion and comprehensive reprogramming, this system would:

- Provide immediate coverage of the space shuttle's temporary pavilion
- Leverage NOTIFIER's ability to drastically scale as large sites expand
- Offer "zoned" digital voice command for targeted emergency response and evacuations
- > Keep national treasures and millions of visitors and staff safe
- > Provide superior service from best-in-class local distributors





### Expansion from the Core of a Robust System

SC partnered with Cosco Fire Protection, an authorized NOTIFIER Engineered Systems Distributor (ESD), to design and install a fire system expansion capable of keeping the invaluable Endeavour safe. The existing NFS2-3030 fire control panel, located in the main building's security office, was designated as the museum's safety hub. As NOTIFIER's largest fire alarm control panel, the intelligent NFS2-3030 supports over 3,000 intelligent devices with up to 10 Signaling Line Circuits (SLCs). It offers built-in modularity for flexible system designs, which proved key for the temporary pavilion expansion and future planned expansions. The graphic annunciator provides a visual layout of events, enabling 24-hour guard. Facilities personnel can easily zero-in on the activated device, and quickly initiate appropriate life saving protocols during an event.

"We already had a NOTIFIER NFS2-3030 fire panel in the main California Science Center building located very close to the temporary pavilion, so it made sense to add equipment to the pavilion and pull it backwards into the main building," said Tony Budrovich, senior vice president of operations for the California Science Center Foundation. "It made sense – it kept a level of uniformity throughout the buildings – one system," added Oswaldo Mercado from the engineering firm, Arup.

### The Right Message with Zoned Voice Commands

The main building featured NOTIFIER's Digital Voice Command (DVC), which was leveraged. The DVC is NOTIFIER's most powerful emergency communication system, designed to communicate one- or two-way emergency messages to individuals and groups. They are easily programmable to deliver 8 unique and simultaneous messages from each station. In addition, a microphone on the DVC panel can be used to address occupants in realtime. Tying in and programming new speaker strobes in the pavilion to the DVC allows authorized personnel to broadcast announcements throughout both facilities, or to an individual area. Cosco simply reprogrammed the DVC to include specific notifications needed for the temporary pavilion. This "zoned" approach allows the system to deliver the right message to the right people at the right time, expediting evacuation and minimizing mass confusion.

#### Enhanced Situational Awareness at Minimal Cost

To save on materials and labor, the expanded system parts were added to the existing system. Updates to the graphic annunicator, located in the main building's entryway were implemented, so the new construction would be included as part of the DVC's visual layout of events. Detailed messages about each event are sent from the NOTIFIER system to the graphic annunciator, as well as the existing LCD annunciator located in the guard station. Additional annunciators, strobes, sensors and relatable equipment were installed throughout the pavilion's steel walls using copper wire run through conduit.

"We modified the annunciators to include the new building, and were able to save on space and conduit by doing so," said Clint Jass, senior sales engineer for Cosco Fire Protection.

By choosing to leverage the existing NOTIFIER system, Cosco provided a robust, highly scalable fire and emergency communication solution that will easily expand to protect the eventual permanent home of the space shuttle, the Samuel Oschin Air and Space Center.

#### NOTIFIER

12 Clintonville Road Northford CT 06472 203.484.7161 www.notifier.com

©2018 NOTIFIER by Honeywell International Inc. All rights reserved. Unauthorized use of this document is strictly prohibited.

NF\_CS\_CAScience | Rev 01 | 2018-11-16

