CUSTOMER SUCCESS STORY

WILLIAM J. CLINTON PRESIDENTIAL CENTER AND LIBRARY PROTECTED BY **VESDA**

About End User

Cantilevered over the Arkansas River to symbolize a "bridge to the 21st century," Bill Clinton's presidential library contains historical documents and memorabilia that will grow more valuable with time.

The $165 million William Jefferson Clinton Presidential Center and Library, in Little Rock, Arkansas, opened its doors to the public in November 2004. Exhibits about President Clinton's two terms in office include a replica of the Oval Office and interactive exhibits, but one thing visitors will not see is a high-tech smoke detection system that protects the library's most important archives.

The Challenge

The highly sensitive but inconspicuous VESDA VLS aspirating smoke detection system was chosen for the library's three records rooms, which are accessible to researchers by permission only. The rooms' vault-like walls are designed to hold off an outside fire for four hours.

The VESDA equipment is designed to detect an inside fire at the earliest (incipient) stage before smoke is visible to human eyes. Display panels in the building's security office and at two information desks would give guards the earliest possible warning—early enough for them to find and control a potential fire source before smoke damaged the contents of the library or flames set off the sprinkler system. The hundreds of gallons of water released by the sprinklers would extinguish a fire but could ruin the documents.

PROJECT:
Library and Museum

END USER/LOCATION:
Little Rock, Arkansas, USA

INDUSTRY:
Archives

SOLUTION:
VESDA VLS

"VESDA was the obvious choice as soon as I saw the plans, but I had to prove it would work. It all came together, and once again I am pleased with the high level of quality and professionalism that VESDA delivers."

Scott Lacey
Fire Protection Engineer
Cromwell Architects Engineers

When his employer, Cromwell Architects Engineers, was awarded the engineering contract for the Clinton Center, Fire Protection Engineer Scott Lacey specified the VESDA VLS. "I had previously used VESDA systems for a number of different facilities and was very satisfied with their performance. At one large computer data facility, a VESDA system alerted the maintenance staff to a problem and they found the source on the other side of the building — a capacitor on one of their emergency generators was going bad. They found it before a fire broke out or any fire suppression systems were activated."

Compatible with standard fire alarm panels, every VESDA system can be programmed at installation to achieve the desired sensitivity, without nuisance alarms.

According to Xtralis, "Two independent VESDA VLS detectors cover the rooms, which are divided into eight zones. The detectors actively and continuously monitor the air, looking for any presence of smoke. High-efficiency aspirators draw air from 68 sampling points to the detectors via a network of VESDA fire-resistant CPVC piping (UL 1887 listed for use in Plenum-rated areas). The pipes are painted white to match the color of the concrete waffle-style ceiling."

The Solution

While highly sensitive, the VESDA detectors have several built-in features to virtually eliminate nuisance alarms that plague other methods of detection. AutoLearn™ and Referencing functionality built into the detectors prevents nuisance alarms by automatically adjusting the background levels to allow for changing ambient air conditions and external pollution.

VESDA systems are also easy to maintain, saving the library time and money. Detectors can be serviced at an accessible level, eliminating the need to reach the ceiling and thus eliminating the need to erect scaffolding.

The Outcome

To make sure the VLS system was appropriate for the Clinton Center, Lacey used ASPIRE™, computer modeling software for evaluating VESDA pipe system layouts. By entering parameters such as pipe length, air temperature, and aspirator pressure, ASPIRE can predict the performance of a proposed pipe network.

"I ended up calling VESDA tech support numerous times," Lacey recalls, "just to run things by them and verify that I was doing the calculations properly. They were as cooperative as they could be. To me, VESDA was the obvious choice as soon as I saw the plans, but I had to prove it would work. It all came together, and once again I am pleased with the high level of quality and professionalism that VESDA delivers."

Doc. No. 11483_04
August 2020