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One of two executive-style board rooms located just outside the main convention center that can be rented/used by convention goers.

GROWING NEEDS, EXPANDING SYSTEMS

Wisconsin Dells' Kalahari Resort and Convention Center more than doubles meeting space capacity and expands AV and security capabilities.

BY DAWN ALLCOT

It's a water park! It's a hotel! It's a convention center! When it first opened in the year 2000, the Kalahari Resort and Convention Center boasted the largest indoor water park in the Wisconsin Dells, along with an African-themed hotel, shops and restaurants. [See *Sound & Communications'* report about the original installation in our February 2001 issue.] Even today, the park includes some of the best water rides in an area that, since the 1990s, has become well known for its water parks, each one bigger, wetter and more exciting than the last. The Kalahari Resort's ambience—made complete by an audio system that plays African-themed music—gives it a unique edge over its competitors in the area.

In Phase II of the construction project, which took place just a few months later, a convention center was added to the resort, with 18,000 square feet of meeting space. The original convention center consisted of eight separate rooms split by dividable walls, allowing the rooms to be organized in any configuration, including as one large room capable of holding 1300 people.

A lot has changed in four years, but the Kalahari Resort remains a top year-round attraction for families on vacation as well as for businesspeople. In the past several years, its appeal to businesspeople has grown. The resort recently expanded its convention center and meeting space to 55,000

Freelance journalist Dawn Allcot covers the AV and music industries.

square feet, more than double the original size allocated for convention guest services. This brings the total facility size to 125,000 square feet.

One Contractor

Fearing's Electronic Services is the audiovisual and security contractor that won the bid to complete the design and installation for the resort's original opening four years ago and has fulfilled the Kalahari's audiovisual and security demands on an ongoing basis since then. The Portage WI-based company, located just 15 minutes away from the Dells, was called on again to expand the audiovisual and security systems to meet the resort's growing needs.

Kevin Shanley, director of convention services, noted the benefits of having one contractor take care of the installation, maintenance and upgrades of the resort's AV and security systems. "The service is impeccable at Fearing's," Shanley said. "Any time, day or night I can call [them] and get situations resolved."

Fearing's has provided systems for a number of resorts in the area. Fearing's president, Doug Fearing, prides himself on the level of service he can deliver to his customers. "We are located about 15 minutes away, and always have trucks running from the Dells. We can deliver service like no one else can," he said. "We do all of their AV, TV and security, and have techs onsite at Kalahari one or two days a week."

When Fearing installed the new systems in the Kalahari's new convention space, he was working under a tight deadline. "We had a time frame of about two months. We started in March and had to be done in May," he said. To meet the time crunch, Fearing's brought in extra staff. "We expanded our staff by about four people, two of whom we kept afterwards, because our business has grown so much." Along with the temporary help, the regular Fearing's crew put in long hours, especially toward the end of the project. "The last two weeks, after we were done with all the cabling, we were averaging 55



This new convention area in the Kalahari facility features a system that automatically provides the logic for distinguishing which rooms are combined and routes the audio sources accordingly.

to 60 hours a week, working Saturdays, whatever it took to get the job done," Fearing said.

Fearing's familiarity with the systems helped the task go smoothly, even under the time constraints. Because the client requested uniformity between the existing systems and the new equipment, one of the goals was to specify similar gear in the new space while still providing state-of-the-art technology that would keep the Kalahari Resort and Convention Center ahead of the curve.

Multiple Configurations

The new space was designed with the goal of hosting large trade shows, as well as simply being able to accommodate higher numbers of convention guests. Construction of 18 new rooms included eight large rooms with moveable walls that could be combined into one room. Two additional suites of four rooms each are also combinable through Intelix MARC room combine systems. Finally, two high-end board-

rooms were added to give convention guests even more meeting room options.

Shanley was happy with the initial systems, and wanted the new installation to be similar in form and function to the existing equipment. "We really came out of the gate three years ago with a lot of good stuff," he said. "One of the important things was integrating our existing system with the new system. We needed to be able to host large functions and have an audiovisual presentation going on in one room and be able to broadcast it to all of the other satellite rooms that we needed to."

In the initial installation, this was accomplished through an Intelix MARC16L8L system. For the expansion project, Fearing went back to the same system. "It's been rock solid since it was installed," he said. "We wanted to continue using it."

In the new space, one MARC 24L16L serving the eight convention rooms and a hallway, one MARC24L8L

servicing four rooms and one MARC2418L serving another four combinable rooms, allow the user to control mic and line levels separately in each room. The system also offers an option of background music through the MusicChoice subscription service. Background music is routed across 10 different audio zones. Audio and video signals can be routed throughout the entire combination of rooms or to any variation of rooms. The systems allow the installer to customize the programming for the facility. "You're not taking



The Crestron touchpanel is interfaced with the Intelix MARC room combine system, allowing facility users to control audio source selection and volume.

boiler-plate configurations," Fearing said. "You can write custom software to fit your client's needs."

Additionally, Fearing said, "The system integrates well with the Crestron controller."

For years, according to Fearing, most convention centers used separate wall-plate controllers to operate sound, lighting and video. In 2001, Fearing aimed to simplify the control process at the Kalahari resort. "The Crestron cleans up the walls. Instead of separate panels for lighting, audio and video control, it puts it all on one small touchpanel." The system offers the ease of use that Kalahari's technical staff wants to offer its clients.

The Crestron system was installed in the new space as well. Each room uses an LC-1000 3.8-inch screen with a grayscale touchpanel and 10 push buttons.

As simple as the system is at the front end for the user, "the back end's gotta have the teeth to do more involved shows with multiple audio and multiple video signals coming and going at the same time," Shanley said. The combination of the MARC room combine systems and the Crestron controllers makes this possible.

Technology Upgrades

Although most of the AV specified was the same as in the original installation, some upgrades were made due to technology improvements. The new systems offer the clients at the Kalahari an unprecedented ease of use. "We have, in the new center, the ability to send any signal—both audio and video—from any point in the convention center to any other point in the convention center," Shanley said.

Fearing explained: "One big thing we did differently was that we ran VGA cabling via Cat5." In the previous installation, RGBHV cabling was used. The VGA across Cat5 allows the user to set up different configurations with any computer system, including laptops, and then route it through the existing floor boxes.

Shanley commented, "It was amazing the difference that a few years can make in what we wanted to accomplish."

Circle 124 on Reader Response Card

Equipment

Convention Center Room 1-4

- 3 Ademco 950W-GY wide-gap surface-mount door contacts
- 4 Crestron LC-1000 3.8" screens, grayscale touchpanel w/10 push buttons
- 2 Crown CTs 4200 4-channel power amps
- 4 Da-Lite 84349LC 150" Advantage Electrol diagonal tab tensioned screens
- 1 Da-Lite 84351L Advantage 200" Electrol diagonal tab tensioned screen
- 1 Intelix MARC248L MARC 24-input/8-output audio room combine system
- 1 Intelix Comet 8 room station interface
- 16 JBL Control 26C 6½" 2-way vented ceiling speakers
Pro-Co wall plates, connectors
- 2 Sabine 3102S 2-channel DSP processors
- 4 Shure SCM268 4 mic/1aux ½-rack mini mixers
Windy 18/4 w/shield 18 ga 4-conductor shielded cable

Convention Center Room 5-9

- 5 Ademco 950W-GY wide-gap surface-mount door contacts
- 5 Crestron LC-1000 3.8" screen, grayscale touchpanels w/10 push buttons
- 1 Crown CTs 4200 4-channel power amp
- 5 Da-Lite 84349LC Advantage 150" Electrol diagonal tab tensioned screens
- 1 Da-Lite 84351L Advantage 200" Electrol diagonal tab tensioned screen
- 1 Intelix MARC248L MARC 24-input/8-output audio room combine system
- 1 Intelix Comet 8 room station interface w/remote power supply
- 20 JBL Control 26C 6½" 2-way vented ceiling speakers
- 1 Lowell L277-77 77"/44RU 27" deep gangable rack
Pro-Co connectors, wall plates
- 1 Middle Atlantic PD-1415C vertical rack-mount power strip
- 1 Sabine 3101S single-channel DSP processor
- 2 Sabine 3102S 2-channel DSP processors
- 5 Shure SCM268 4 mic/1 aux ½ rack mini mixers
Windy 18/4 w/shield 18 ga 4 conductor shielded cable

Main Convention Center AV

- 20 Ademco 950W-GY wide-gap surface-mount door contacts
- Allen Tel cable management open-end D-rings
- 36 AudioPlex custom wall plates
- 1 Blonder Tongue ACA-30-75R 30db/750MHz RF broadband distribution amp
- 2 Buhl-639MCZ500 long-throw projector lenses
- 6 Comprehensive 3' 15-pin VGA to 5 BNC male adapter cables
- 8 Crestron BB-1000L rough-in brackets for CT/LC1000 touchscreen
- 1 Crestron C2ENET-1 single-port Ethernet card
- 1 Crestron CNPWS-75 auxiliary power supply
- 1 Crestron CNRFGWA 1-way remote RF receiver
- 3 Crestron CNXRY-8 8-relay expansion cards
- 8 Crestron LC-1000 3.8" screen, grayscale touchpanels
- 1 Crestron PRO2 pro dual bus control system
- 1 Crestron ST-1700C 1-way wireless color touchpanel
- 1 Crestron ST-COM RS232 expansion module
- 4 Crown CTs 4200 4-channel power amps
- 4 Da-Lite 40636C Senior Electrol 13.6"x18' screens w/78" black drop
- 4 Da-Lite 40973 single-motor low-voltage controls
- 1 HRS Technologies HRS8C4MSR5 8x4 RGBHV switcher
- 10 Hubbell 18" ladder racks
- 1 Intelix MARC248L MARC 24-input/8-output audio room combine system



- 2 Intelix Comet 8 room station interfaces
 - 1 Knox Video upgrade of Chameleon Switcher from 32 in x 16 out
Leviton plates, accessories
 - 2 Lowell L277-77 Rack 77"/44RU 27" deep gangable racks
Lowell side panels, accessories
 - 4 Magenta Research VGA to Cat5 video transmitters
 - 4 Magenta Research VGA to Cat5 video receivers
 - 8 Magenta Research power supplies
 - 13 Middle Atlantic EB1 1RU rack space
 - 4 Middle Atlantic EB6 6RU rack space
Middle Atlantic accessories
 - 5 NSC 12-way splitters
 - 2 Panasonic PT-L6510U LCD projectors
 - 2 Panasonic PT-L780U 3200 lumen XGA projectors
 - 2 Peerless PJC-163 ceiling mounts
Pro-Co NC3FX XLR male, female solder type connectors
 - 35 Quam C10x/70W 8" 70V speakers w/torsion spring/standard support bridges
 - 4 Sabine ADF4000-U Power-Q DSP processors
 - 1 Shure 527B CB-style paging mic
 - 8 Shure SCM268 4 mic/1aux ½-rack mini mixers
 - 32 SoundTube AC-HK-10 10' hanging cable kits
 - 2 SoundTube AC-HK-8 sound bute 8' hanging speaker supports
 - 32 SoundTube HP8-T64 8" high-power open-ceiling speakers
 - 2 TV-One AVT-3800 ImageMAX Plus video scalers
Windy 18/4 w/shield 18 ga 4 conductor shielded cable
- ### Convention Center Board Room
- 4 Altinex PNP402C custom Pop 'N Plug tabletop interconnect boxes
 - 8 Bose 16 Model 16 70V ceiling speakers w/tile bridges
Comprehensive cables, adapters
 - 2 Crestron CNRFGWA 1-way remote RF receivers
 - 2 Crestron CT-1000 3.8" monochrome touchscreens
 - 2 Crestron MP2E integrated control systems w/power supply and E-control
 - 2 Crestron ST-1700C 1-way wireless touchpanels
 - 2 Da-Lite 84347L Advantage Electrol 100" diagonal tab tension screens
 - 2 HRS Technologies 4 in x 1 output VGA auto switchers w/1RU kits
 - 2 Panasonic PAN-PV-D4744 BLK DVD/VCR combination
 - 2 Peerless chrome trim rings
 - 2 TOA BG-130 30W PA amps w/rackmount brackets
Windy 18/4 w/shield 18 ga 4 conductor shielded cable
 - 2 Xantech 282-00 IR emitters

Edited from information supplied by Fearing's Electronic Systems.



The Kalahari convention facility.

Many of the changes involve improvements in the quality of the equipment because of the level of technology currently available. An Altinex PNP402C Pop N' Plug Table Top Interconnect Box, for instance, in each of the boardrooms, is a fully integrated system that allows the end user to press a button in the center of the table; this exposes a box into which the user can plug in any required inputs.

Perhaps the most drastic changes were in the IT system. "When we first opened up, we had analog phone lines coming in for internet access," Shanley said. "Within the first six months of opening the convention center, we added a dedicated T1 line for data in the convention center, and here we are three years later, not only with the dedicated T1 line, but we've added Wi-Fi. We're a hotspot throughout all the common areas of the resort and throughout the convention center. It's great addition, which allows our clients to set up networks on the fly, from anywhere, without having to deal with locating a data port and activating a data port."

Audio Challenges

Convention center rooms 1 through 9 rely on JBL Control 26C ceiling speakers mounted above the drop ceiling. These worked well in the original installation, and fulfilled the client's needs in the new space, as well.

Fearing's Electronic Systems

Just as many of its clients in the Wisconsin Dells area, Fearing's Electronic Systems is growing rapidly. Founded in June 1997 by owner Doug Fearing and his wife, Lois, the company moved into a 3500-square-foot facility in Portage in 1999.

Fearing's was named the Columbia County Small Business of the Year in 2003. The company specializes in commercial and residential audio, video and security systems, and has serviced many of the hotels and resorts in the Wisconsin Dells area. Its client list includes Dutex-Ohmeda, Covance Labs, Pedro's Mexican Restaurants and Gerber Industries.

When the Kalahari Resort made plans to open a second location in Sandusky, resort management called on Fearing's as a consultant on the project. Fearing's is also currently working with the Columbia City Highway Department, several sports bars, chain restaurants and residential homes. Additionally, Fearing said, "We are completing a huge volume of security work."

However, the larger, eight-room space required a different audio solution. The area was designed for large trade shows, banquets, dinners. Overall, the space had to be extremely flexible in both its design and its AV systems. "In that room, we do everything from hosting large trade shows that have huge exhibits and need the space, to boat shows and wedding receptions," Shanley said. The room features high ceilings with exposed trusses, rather than the drop ceilings that were installed in the other rooms. In addition, the type of events held in this room, by their nature, create a high level of ambient noise.

For this portion of the installation, Fearing selected 32 SoundTube HP81-T64 8-inch high-power open-ceiling speakers, which are specifically designed for open truss ceilings. "These provide the power capabilities that we need for the space," Fearing said. "Our goal was to be able to get audio levels to reach 95 to 100db at the floor level."

Customer Service

In addition to the integrated systems, the Kalahari Resort also has a wide array of rental audiovisual gear available to its guests, along with a trained technical staff that is accustomed to providing whatever level of service the customer requires. "From the simplest tasks, just plugging in a DVD player or setting up a Power-



The two primary areas of eight dividable suites in the new convention center.



The speakers in the main convention center were selected because they were designed specifically for open-truss ceilings. There are 32 speakers in this area.

Point presentation, our in-house audiovisual techs will work with the clients to give them a comfort level to be able to do what they need to do," Shanley said. "If they don't have that comfort level or they just don't want to do it, our audiovisual technicians will run the show for them."

The systems Fearing's installed makes it easy for Kalahari to provide that level of customer service to their clients. "We gave Doug [Fearing] an outline of what we wanted to accomplish and how easy we wanted it to be for them. That was really it." Fearing added that the learning curve on the new equipment is minimal.

Security and More

In addition to providing topnotch customer service to its clientele, the Kalahari Resort strives to offer a high level of comfort and security to its guests. When it first opened in 2000, the water park and hotel utilized 16 surveillance cameras for security and employee management. For the most part, the cameras were not monitored continuously, but could be checked as needed by hotel staff.

With the expansion project, however,

the resort's security systems were expanded. Phil Wenzel, a retired state trooper, was brought on as director of Security Services, and 10 uniformed employees were hired. "We now have 24/7 coverage, 365 days a year," Wenzel told *Sound & Communications*.

Security capabilities were enhanced dramatically. "What we now have onboard is a total of 240 cameras around the complex," Wenzel said. Sony cameras were placed in all public-access areas, including hallways, lobbies, restaurants and the meeting rooms. Ten separate 21-inch monitors at the head-end of the system show 16 frames on each screen, varying frames every six seconds. "We can have 32 cameras on one screen," Wenzel explained.

The cameras are used in the event of theft, to locate lost children, for employee management, and for the overall security of the staff and guests. In addition, the outdoor pan/tilt/zoom cameras also serve a unique function: weather monitoring. "We can tilt these cameras in various locations around the resort toward the skylines and monitor any severe weather that's coming in," Wenzel said.

In the future, Wenzel plans to combine the resort's Wi-Fi capabilities with the extensive surveillance system to provide additional security. The Kalahari resort will use webcams to connect the security system with the local police department. "If we have a problem here at the resort and we call the local police department, they'll be able to see the problem we have on the screen before they even get here," Wenzel said.

Biggest in the Dells

Whether the Kalahari Resort is offering a day of fun or a variety of business services, management knows it is providing guests with quality systems that allow them to achieve their goals. Both Wenzel and Shanley reported that they are happy with the new systems. "I am not an audiovisual expert," Shanley said, "but I like the fact that I don't have to be, and I can still provide the level of service that we do to our clients. It makes it very easy for our clients to put on the production, meeting or event that they want to, and it gives us the confidence of knowing that we have the biggest and the best that's out there." ■