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'CREATING A LOVELY MOMENT' TECHNOLOGY AUGMENTS WORSHIP AT BOCA RATON CHURCH.



GRACE CHURCH 'INSURED' SUCCESS OFFICE BUILDING BECOMES AV-EQUIPPED SANCTUARY.

The building that houses Grace Church.



GRACE CHURCH 'INSURED' SUCCESS

Office building transforms into AV-equipped sanctuary.

BY DAWN ALLCOT

Dino DeRose, president of Apopka FL-based Commercial Systems Group (CSG), an audiovisual, life-safety, security and fire-alarm systems designer and installer, knows as well as any AV integrator that job leads sometimes come from unusual sources. But even DeRose admits, "It's not every day when your insurance broker calls you and says, 'We're starting a new church to be housed in our offices. Is it possible to have an AV system up and running in four to six weeks for our first service?'"

That's how the \$80,000 installation of sound and projection systems at Grace Church in Longwood FL began.

Church's Home

The office building that would be home to the new church is owned by Insurance Office of America (IOA), in a 15-acre center called Longwood Village, which is also the site of the newly renovated, 80,000-square-foot IOA corporate offices, plus several other office buildings, restaurants and other businesses.

CSG was charged with the goal of converting the 6000-square-foot office space, complete with cubicles, desks and office chairs, into a sanctuary capable of welcoming more than 250 worshippers every Sunday.

CSG has worked on several multimil-

lion-dollar projects, but DeRose knows that relationships are what really matter in this—or any—business. "This entire project grew out of the trust relationship our company has built with the Insurance Office of America," DeRose explained. "Trust is an important consideration in the design/build segment of our business. We want all of our customers to know that, through our actions, we demonstrate being a responsible and reliable contractor; this requires more than just pixie dust positioning created by an overzealous marketing department."

The connection between IOA and CSG is quite straightforward: The au-

Dawn Allcot is a freelance writer specializing in the audiovisual and health and fitness industries.

audiovisual contractor is a client of IOA, as well as a future referral partner on IOA's website, which receives 265,000 hits per day. Noting that IOA feels strongly about offering "value-added services" to its clients—including job leads when appropriate—DeRose said, "IOA recommended CSG because they have the confidence we would look out for their interests, both short-term and long-term."

Good Partner

IOA senior vice president Heath Ritenour noted that CSG had been a good partner to the insurance company and, additionally, had successfully completed an installation of security systems for the company in the past.

In a story that illustrates a mere "two degrees of separation," the Senior Pastor and founder of the church, Clark Whitten, has a daughter, Abby, who is married to Heath Ritenour.

Pastor Whitten said that the relationship between the church and IOA and, as a result, the indirect relationship between the church and CSG, helped expedite the project. "We didn't look for bids from a number of companies," he explained. "We just selected CSG based on their reputation, and based on the existing relationship [between IOA and CSG]. Having an existing relationship helped the process, to get it done quickly."

For CSG's part, DeRose said, "We were fortunate to work on a project of this caliber and glad to meet the unique needs of the customer."

Outlining Church Needs

Grace Church, a non-denominational Christian church only three months old at the time of this writing, has a contemporary style of worship, complete with a strong live musical presence and powerful sermons. As a former senior pastor at Calvary Assembly Church in Florida, Pastor Whitten has extensive experience using sophisticated audiovisual systems to help deliver the Message. When it came time to outline his AV needs to sales engineer Daniel Lee of CSG, it was an easy task. "We needed a system that would meet our present



Signage isn't fancy, but it shows the way.

needs and also expand as we grow," Pastor Whitten said. "Pretty early in the process, we needed the capacity for 10 wireless mics. We have a worship band, with electric instrumentation, plus organ, acoustic guitar and such, and spoken word."

Additionally, because the church's sound engineer is a volunteer—Associate Pastor Beth Helton's husband, Dale—the system has to be easy to use. Helton has an IT background, but is not yet well-versed in audiovisual equipment.

Easy to Quantify Needs

Lee said that, because of Whitten's past experience and technical knowledge, it was easy to quantify the requirements of the new church's audiovisual systems. "The terminology was not unknown to Pastor Clark Whitten, so communication was very easy. When we asked him questions, he had the answers right away, and we spoke the same language."

Often, interfacing with clients who may not be technically oriented is a challenge for AV designers and installers, particularly when working with church leadership and management. In this case, however, the greatest challenge, according to both DeRose and Lee, was the time constraints on the project. "We had four to six weeks, including the design of the entire audiovisual system," Lee said.



In the interim, office employees would be working in the space on weekdays. "Our technicians had to balance and equalize the system at 6:30 in the morning, before the office employees started coming in for work," DeRose recalled.

A very impressed Whitten noted, "People thought they wouldn't be able to install everything in the time frame we gave them, but they did it and we're very happy with it."

Four Weeks to Full Service

The CSG team that worked with Lee on the project included project managers Chad Stahley and Chris Wright, Sr.; technicians Chris Wright, Jr., and Robyn Weitknecht; and operations managers Jack Jones and Paul Schonher.

Once the cubicles, desks and chairs were removed from the space, the installers were left with a large rectangular space with 12-foot ceilings and little in the way of acoustical treatment. Of course, the first step was to

select a speaker system that would cover the entire sanctuary, with room to grow or even possibly to be re-located to a new facility in the future.

CSG used EASE modeling to determine optimal speaker location, size and orientation. Four JBL AM4125/95 loudspeakers were used, with two speakers adequately covering the main sanctuary. As the church grows, the second set of speakers can be

used easily as delays.

CSG rotated the horns to minimize room obstruction. QSC RMX5050HD amplifiers, along with a Shure P4800 digital signal processor, were added to the system, allowing for individual speaker adjustment to address future expansion, as well.

“Between the DSP, amp and speakers, we have a nice combination of equipment,” Lee said, “and few prob-



Front and rear views of the sanctuary.



Insurance Office of America

Just like owner Dino DeRose and his employees at CSG, the management staff and owners of the Insurance Office of America (IOA) understand that good business is all about relationships. That's why, when Pastor Clark Whitten was looking for a location to "plant" his non-denominational Christian church, IOA CEO John Ritenour spoke up and said he had space available in his company's complex.

Leasing space to a church, however, is just one small aspect of IOA's multifaceted business. The IOA family of companies includes Public Entities of America, the Village Learning Academy, Web Solutions of America, The Realty Office of America and others.

The company, originally named the Insurance Office of Florida, was founded in 1988 in Apopka FL. In 1997, Ritenour opened a branch in Mount Laurel NJ as well as branches in Palm Beach and Tampa, and changed the company name to the Insurance Office of America.

lem frequencies. We really pushed the equipment to its limits during testing and still had trouble finding frequencies that needed correction.”

The P4800 also controls the Denon CD recorder and the Telex SM2 assisted-listening system, ensuring consistent sound quality.

The Allen & Heath mixer was selected for its versatility and ease of use. “The GL3800 32-channel mixer has features that make it conducive to being a main sanctuary mixer and, down the road, the church can use it as a monitor mixer,” Lee said.

The mixer was easy to configure so sound engineer Helton wouldn’t have much difficulty mixing services. “The mixer has left plus right, and a mono buss that is separate from the main busses,” Lee said. “The mono buss feature played a valuable role. We connected it to the Shure monitor for spoken word and assigned digital feedback reduction to the speech sources only before distribution to the output devices, allowing the preacher to walk around without worrying about feedback if he got too close to the speakers,” Lee explained. “It’s not ex-

Commercial Systems Group/GE Security Strategic Partner

Just like its insurance provider, the Insurance Office of America, Commercial Systems Group strives to offer value-added services to its customers, whether its onsite training—as was the case with Grace Church—or 24-hour technical support. Dino DeRose, CSG’s principal owner and president, believes that good businesses are built through strong interpersonal relationships.

CSG, founded in 1997, is a full-line systems integrator offering design, installation and service for all commercial low-voltage systems, including audiovisual, life safety, fire alarm and security systems. CSG rallies around a customer-service culture of being responsible and reliable. CSG supports and encourages NICET certification for all of its technicians and the company is a member of the National Fire Protection Association (NFPA), National Systems Contractors Association (NSCA) and the American Society for Industrial Security (ASIS). The company is also a GE Security Sound and Communications Strategic Partner.

CSG employs 48 people, from sales engineers to factory-trained technicians, in its Apopka FL office. The company’s clients include the Volusia County Historical Courthouse System and Orange County Public Schools, where CSG installed sophisticated AV systems in the high-school auditorium. The company’s AV installation at the Altamonte Springs Police Department was featured in the January 2006 issue of *Sound & Communications*.

For more information, go to www.comsysgroup.com.



Performing during a service.

actly a conventional way to do things, but it worked very well.”

Meanwhile, musical sources were assigned to the left and right busses, providing stereo imaging in the front of the room. Effects processing, at the request of the client, was included in the form of a Lexicon MX200 unit.

Upfront Work Helped

Lee explained a few of the techniques he and his team used to complete the project in such a short amount of time. “We did as much upfront engineering, in our offices, as possible. We also minimized the amount of devices installed in the field.”

For instance, Lee said, the use of custom snakes from Pro Co Sound allowed him to minimize termination points (only three wall plates required termination onsite) as well as to minimize mixer connections.

The six custom snakes provided input/output box locations at the front and rear of the stage and extension

Equipment

Control

- 1 Allen & Heath GL3800 32-channel mixer
- 2 QSC RMX5050 amplifiers for front and side

Speakers

- 1 Denon DN-T645CD/cassette player
- 1 Denon DN-C550R CD recorder
- 1 Lexicon MX200 effects processor
- 1 Raxxess custom equipment rack
- 1 Shure P4800 digital signal processor
- 4 Shure ULXP handheld, lavalier wireless mic systems
- 1 Sony SLVD560P DVD VCR combo unit w/antenna distribution
- 1 Telex SM2 assisted-listening system

Video

- 2 Da-Lite Cinema Contour 90"x120" wall-mount screens
- 1 FSR CO-2001 Compass video switcher w/distribution amp, computer input plate
- 2 Hitachi CP-X1250 4500 lumen Ceiling Mount Projectors

Distribution

- 4 JBL AM4215/95 speakers
- 4 JBL EON 15 G2 powered monitors
- 6 Pro Co Sound DB1 direct boxes
- 6 Pro Co Sound custom snakes
- 4 Shure Beta 58A mics w/stands

List is edited from information supplied by Commercial Systems Group.



fans to the mixer location from a wall termination box. These snakes address microphone input locations and monitor output locations, and allowed CSG to pre-wire the facility, even before the stage was completely built. The setup provided the church with 20 stage inputs and eight monitor inputs. JBL EON15G2 monitors were added as floor monitors, but can also be used as a portable system at a future location.

Keeping expansion in mind, interface cables were provided to allow the stage box and mixer fan to be used as a fan-to-box snake in a portable application. "We definitely considered the use of the system down the road," Lee said.

Because the building was an office originally, with no space for an enclosed sound booth, control equipment was housed in a Raxxess Config-U-Raxx control cabinet/mixing desk, configured to display the Shure ULXP handheld and lavalier wireless microphone systems and the CD/cassette player, while hiding the rest of the equipment behind closed doors. The

Raxxess modular studio furniture workstation system, with a wood finish, looks just like a piece of furniture, and so fits unobtrusively into the sanctuary.

Video Systems

Like the audio systems, the video system was designed with expansion in mind. CSG selected two Hitachi CP-X1250 4500 lumen ceiling-mount projectors, with Da-Lite Cinema Contour Wall Mount 90"x120" screens, due to the fluorescent lighting in the room. No theatrical lighting was installed for this project.

Finally, an FSR CO-2001 seamless switcher was provided to allow a variety of inputs, including future sources, to be scaled at the highest resolution of the projector. Right now, sources include a PCD for PowerPoint presentations and other graphics applications, and a combination DVD/VCR. "The FSR CO-2001 is a device I've used in the past," Lee said, "and it handles such a variety of inputs that we didn't need to send multiple cables to the sources. It's all addressed at the rack."

'Room to Grow'

The church's first services hosted about 30 worshippers, with CSG present to make sure all the technical aspects ran smoothly. The next week, the turnout was up to 50 and, by early March, the church had nearly reached capacity in the current sanctuary, with 250 worshippers and standing-room only toward the back of the sanctuary.

Fortunately, the church already has plans for expansion within the building. "Using the additional office space and the foyer of the building, we have the capacity for 600 to 700 people," Pastor Whitten said.

IOA CEO John Ritenour, also a member of the church, said that he sees this happening soon. The tenants that had been occupying the space moved out on April 1, and Ritenour is working closely with Pastor Whitten to plan the next phase of expansion. Fortunately, their audiovisual systems were designed with this in mind, and have the capability to grow along with this rapidly expanding church. ■