

# LEGION FIELD

CASE STUDY: recreation

BIAMP®

## THE GOLDILOCKS ZONE: ALABAMA'S LEGION FIELD GETS A NEW SOUND SYSTEM THAT MAKES ITS AUDIO JUST RIGHT

*"Centralized control makes the whole system so much easier to manage and troubleshoot should any problems arise. It's now just a very powerful and very streamlined system."*

—BRENT ADAMS,  
SYSTEMS SPECIALIST,  
SOUND ADVICE

INTEGRATOR



LEGION FIELD, BIRMINGHAM, ALABAMA

### CHALLENGE

Birmingham, Alabama's legendary Legion Field is a massive stadium that seats more than 70,000 fans and hosts numerous sporting events. As the home field of the UAB Blazers football team and a host during the 1996 Olympics in Atlanta, the stadium's legacy was growing—while its audio system remained stuck in the past. Stadium management and city officials knew fans were oftentimes straining to hear announcements or completely drowned in uneven sound.

### SOLUTION

Working with the stadium's existing system, the team at Professional Sound Advice integrated a digital, networked solution that transports signals around the stadium. The streamlined and economical solution eliminated even the stadium's worst problem areas—while saving the city of Birmingham money.

### CONCLUSIONS

Legion Field in Birmingham, Alabama, is nicknamed "the football capital of the south" for a reason. Constructed in 1926, this massive stadium seats more than 70,000 fans, is currently home field for the University of Alabama at Birmingham (UAB) Blazers football team, and hosts the Magic City Classic, the BBVA Compass Bowl, and many other events. In the wake of the destruction brought on by the tornadoes of April 2011, the stadium was the primary staging site for the Alabama National Guard relief efforts. It also hosted the 1996 Olympic Soccer contests and was the home of the famous Iron Bowl for nearly fifty years.

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## CONCLUSIONS continued

But the legendary stadium's sound system wasn't functioning up to par for this sports statehouse. Years of heat and humidity had taken their toll on the stadium's antiquated sound system, which consisted of several large format horn clusters and woofer cabinets in two towers located to the left and right of the scoreboard in the South end zone stands—750 feet away from the North end zone stands. Not surprisingly, one of the main problems needing to be addressed was poor sound quality in the North end zone area, as well as the lack of a network-friendly, digitized back end for transporting signals around the stadium.



Brent Adams and Noah White of Professional Sound Advice developed a solution that would live up to the stadium's legendary status. Working with some minor upgrades from recent years, the team at Professional Sound Advice updated and streamlined the speaker system and integrated a new back-end processing design that would ensure flexibility and control. The team chose an AudiaFLEX unit by Biamp Systems, as well as AudiaEXPI, EXPO, EXPI-4, and EXPI/O-2 units to provide connectivity to and from the field, media vehicles under the West stands, radio booths, skyboxes, and the control booth. With the AudiaFLEX in place, all of the inputs and outputs are connected via CobraNet® and monitored by a PC located in the control room, replacing miles of analog cabling with approximately 3.2 km (or 2 miles) of fiber optic cabling. This is important because sound quality deteriorates as more space is covered with analog cabling: by replacing it with fiber optic cabling, Adams and White were able to ensure clear and even sound coverage throughout the entire stadium, as well as the added perk of being able to monitor the system from further away.

The team was also able to save the City of Birmingham money by using just four speakers to provide clear, even audio to the 75,000 square-foot space. "After doing some EASE models, we were shocked and amazed to learn less really was more here," Adams recalls. By reusing some stop-gap equipment installed a few years ago, the team saved the city roughly \$50,000. "This project cost about \$150,000," Adams says. "There are facilities roughly the same size, which have sound systems that cost three-quarters of a million dollars and have comparable performance. Thanks to Biamp, Tannoy, and Lab.gruppen, we were able to design a nice system for not a lot of money."

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Adams and White consulted with Richard Hembree of Griffith Sales, Inc., who first visited the stadium during the 1985-86 football season as a tuba player in the Georgia Tech band during the All American Bowl. Thanks to the skilled team at Professional Sound Advice, Hembree says, there is now remarkably even coverage throughout the stadium and the problematic sound issues in the North end zone are a thing of the past. In fact, "neighbors of Legion Field from blocks away can enjoy the sounds of the stadium, he says. "There have even been noise complaints from neighbors as far eight blocks away!"

The centralized control of the new design makes the system easy to manage and troubleshoot should any problems arise, says Adams. "The power of the Biamp processor also enabled us to decimate the number of devices that handled mixing, processing, and other audio functions. We can even check up on the system remotely. It's now just a very powerful and very streamlined system."

Upon completion of the new design, officials from the City of Birmingham were invited to come tour the facility. Given the problematic history of the North end zone, the delegation requested to tour that area first. As the group enjoyed the remarkably clear and even delivery of music and announcements, Mark Henderson, the Deputy Director of Communications for the City of Birmingham, smiled and said, "We are now in the Goldilocks zone—just right."●