

# M.M. Roberts Stadium



## Challenge

Faced with crowd outbursts, fan disturbances, and other serious security threats, M.M. Roberts Stadium needed a surveillance solution to boost patron safety, reduce operational costs, and ensure an enjoyable spectator experience.

Market: Stadium  
Location: USA

## Solution

Security professionals manage the Avigilon high-definition surveillance system using the Avigilon Control Center Enterprise network video management software (NVMS) with High-Definition Stream Management™ (HDSM). M.M. Roberts Stadium installed Avigilon HD 16 MP cameras at the 20, 50-yard lines on each stadium sideline and Avigilon HD Dome 5 MP cameras to monitor entrances at the North and South end zones. Avigilon Network Video Recorders store 90 days of continuous surveillance footage.

## Benefits

Using an Avigilon analog video encoder, the team was able to achieve a 100 percent performance improvement in the University's legacy system. M.M. Roberts Stadium has also been able to lower HR costs by reducing the number of staff during games from 70 to 45. Requiring half as many cameras as an analog system, M.M. Roberts Stadium saved significantly on installation costs.

- 100% performance increase
- 35% reduction in personnel
- Reduced installation costs

## Featured Products



ACC Software



5 MP HD Dome Camera



16 MP HD Camera



Network Video Recorder



## University of Southern Mississippi Protects Football Fans at M.M. Roberts Stadium with Avigilon High-Definition Surveillance System

In just 100 years, the University of Southern Mississippi, located in Hattiesburg, Mississippi, has grown from a small teachers' college into a premier research university with a national reputation for excellence in both academics and athletics. With a diverse student body of 17,000 students, a proud history, and an eye to the future, Southern Miss has a reputation for creating unique programs to address key societal needs, including the innovative National Center for Spectator Sports Safety and Security (NCS4), the nation's leading research organization dedicated to studying techniques to mitigate the security risks inherent with large spectator sports venues. Lead by an advisory board made up of professional leagues such as the NFL, NCAA, MLB, and the USA Olympic Committee, the NCS4 selected Avigilon as a founding partner in its ongoing effort to enhance stadium and arena security.

As part of the partnership, the NCS4 has deployed the Avigilon high-definition surveillance system at the M.M. Roberts Stadium, a 40,000 capacity outdoor stadium located in the heart of campus and home to the Golden Eagles football team. The Avigilon high-definition surveillance system is used as a validation and identification tool to manage issues onsite and is instrumental in ensuring a safe and enjoyable spectator experience.



### Avigilon Fills in Resource Gap

“The Avigilon high-definition surveillance system almost acts like additional staff, providing greater coverage with fewer personnel on the ground.”

Faced with security risks ranging from crowd outbursts to fan disturbances and even more serious threats to patron safety, M.M. Roberts Stadium needed a surveillance system that would monitor the facility's most populated areas. With a basic design that includes an upper and lower deck, luxury suites, press box, and field house, the Stadium attracts a large crowd on game days, but is faced with limited security staff and resources due to budgetary constraints. “The Avigilon high-definition surveillance system almost acts like additional staff, providing greater coverage with fewer personnel on the ground,” explained Southern Miss Chief of Police Robert Hopkins. “The result: a more effective and efficient way to monitor the stands.”



## Avigilon in Play

Chief Hopkins and the NCS4 manage the Avigilon high-definition surveillance system using Avigilon Control Center Enterprise network video management software (NVMS) with High-Definition Stream Management (HDSM), which was built from the ground up to manage high-definition surveillance video. The Stadium installed Avigilon HD 16 MP cameras at the 20, 50, and 20 yard lines on each stadium sideline and Avigilon HD Dome 5 MP cameras to monitor entrances at the North and South end zones, where there is a lot of activity. The security team monitors the Avigilon high-definition surveillance system onsite from the command post on game days and from the NCS4 lab, which is beside the Stadium, on non-event days. The system runs 24/7 and is used in forensic mode to monitor activity when other events, such as intramural sports, commencement ceremonies, and high school football games are being held. Two Avigilon Network Video Recorders store 90 days of continuous surveillance footage. “We have successfully installed the Avigilon high-definition surveillance system to deliver the highest percentage of coverage possible,” noted Chief Hopkins.

“Avigilon delivers exceptional image clarity, along with powerful zooming capabilities.”

## Clearing Up Complaints

According to Chief Hopkins, the Avigilon high-definition surveillance system offers many advanced features that the University’s legacy analog-based surveillance system does not. “Avigilon delivers exceptional image clarity, along with powerful zooming capabilities,” said Chief Hopkins. During home games, Chief Hopkins uses the Avigilon high-definition surveillance system in conjunction with the University’s text messaging system, which allows patrons to text complaints to the command post regarding disturbances ranging from drinking, horseplay, smoking, or blocking. “Often, we can better describe the situation from the footage than the complainants do in their text message.”

With the primary goal to monitor patrons and vehicles, the Avigilon high-definition surveillance system also boasts superior facial and license plate recognition capabilities. “We have been able to achieve positive identification, even at night, since deploying the Avigilon high-definition surveillance system.” If the Stadium is in a lock-down situation, security personnel can rely on the Avigilon high-definition surveillance system to capture clear images of license plates and vehicle registration numbers to permit or deny access to specific vehicles, further enhancing overall venue security.





## Usability Boosts Performance

Chief Hopkins also noted that Avigilon’s ease of management has dramatically improved the system’s overall performance. “Once you learn how to use the system — a much easier process than with our legacy system — all you have to do is click the mouse to zoom and review for excellent forensic results,” commented Chief Hopkins. “Overall, Avigilon’s usability is much better than our analog system.”

Steve Miller, director of Systems Integration at the NCS4 and Chief Hopkins have also been very pleased with Avigilon’s continued support. “Avigilon has taken an active role in being our partner,” said Miller. “They did not just drop off some cameras and leave. In fact, their support in our efforts has been fantastic.”

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## Avigilon Encoders Enhance Quality

NCS4 recently trialed an Avigilon analog video encoder at the M.M. Roberts Stadium and was extremely impressed with the results. “When we tied the legacy system to the Avigilon high-definition surveillance system using an encoder, we saw a 100 percent improvement in performance,” said Miller. In fact, the Center plans to install Avigilon analog video encoders to enhance the legacy system at some of its other athletic facilities. “This could be the first step in transitioning over to the Avigilon high-definition surveillance system in other parts of the campus.”

## Evacuation Prevention

In one situation, Chief Hopkins was able to prevent a costly and time-consuming evacuation due to a suspicious looking backpack that was left on the sidelines. “After reviewing the relevant footage in about 45 seconds, we were able to ascertain that the backpack belonged to one of our cheerleaders,” said Chief Hopkins. “The situation was quickly resolved and a major security concern was averted.”

## Showcasing Avigilon

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Proud to show off their impressive results, Southern Miss has happily hosted several organizations including government officials, police departments, NASCAR, NBA, and other university athletic departments during home games. “We have between two and ten visitors at every game to showcase the Avigilon system and demonstrate its advanced capabilities, ease-of-use, and fantastic performance,” stated Chief Hopkins. “The feedback has been really positive.”

## Lowering Costs, Increasing Efficiencies

Used during game days as a tool to assess and validate patron complaints, the Avigilon high-definition surveillance system has not only helped improve the spectator experience, it has also dramatically reduced human resources costs. “Once we receive a complaint, the first step is to review the footage live to assess the situation, saving us from having to unnecessarily dispatch staff to respond if the situation does not warrant it,” explained Chief Hopkins. Financially stretched, the University relies on the Avigilon high-definition surveillance system as a key tool to help effectively and efficiently deliver superior onsite security. “We used to have to employ 65 to 70 staff during football games, but with the Avigilon system handling the initial assessment and validation of events, we never need more than 45 people now.” For Chief Hopkins, the Avigilon high-definition surveillance system has become a strategic tool that addresses both human and physical asset issues at the Stadium.

The University was also able to achieve further cost savings because fewer Avigilon HD cameras were required. “We would have needed twice as many analog-based cameras to achieve the same coverage,” explained Chief Hopkins.

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## Integration for the Future

“Knowing that I have a proven high-definition surveillance platform that I can depend on and like, and that everyone is comfortable using, gives me great peace of mind.”

As part of its ongoing work to advance security practices at professional and collegiate sports venues across North America, the NCS4 is planning to develop an integrated command and control system, of which the Avigilon high-definition surveillance system will play a key role. “The Avigilon high-definition surveillance system will be at the heart of a complete, end-to-end security solution that will integrate access control, text messaging, weather updates, and a mobile information system,” claimed Miller, who hopes to have the integrated solution in place by Fall 2012.

But for now, the Avigilon high-definition surveillance system has been a tremendous help to Southern Miss in its ongoing effort to ensure student safety at the M.M. Roberts Stadium. “Just knowing that I have a proven high-definition surveillance platform that I can depend on and like, and that everyone is comfortable using, gives me great peace of mind and the confidence to bring the system on as part of our integrated solution as we move forward,” concluded Miller.