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Preparing for the Worst, Just in Case

Four years ago, Coastal Carolina University looked to fix the broken call boxes on its campus. With the help of Myrtle Beach Communications and Motorola, not only did the university receive upgraded call boxes, it also installed numerous IP cameras to monitor the entire campus.

- by Ashley Willis

According to American social reformer Whitney M. Young, “It is better to be prepared for an opportunity and not have one than to have an opportunity and not be prepared.” While the majority would agree that a campus tragedy is not exactly an opportunity, the idea that campuses should be prepared for the unforeseen is one that all institutions should embrace, especially when it comes to safety. Officials at Coastal Carolina University (CCU) of Conway, S.C., realized this and began preparing for the unexpected.



CCU only had 10 call boxes on its campus four years ago. With more than 300 acres and 53 main buildings, that number of call boxes simply would not do, especially considering only half of them worked. While a major incident hadn't taken place other than the common student-on-student theft, campus safety officials planned ahead and decided to upgrade.

The police chief at the time contacted Sam Hocutt, sales manager of [Myrtle Beach Communications \(MBC\)](#) of Myrtle Beach, S.C., for assistance. Through MBC, the university was able to work with [Motorola](#) to install new call boxes that were placed throughout the campus. Additionally, CCU police asked Hocutt to help install IP video cameras.

New Call Boxes Enable Faster Response Time

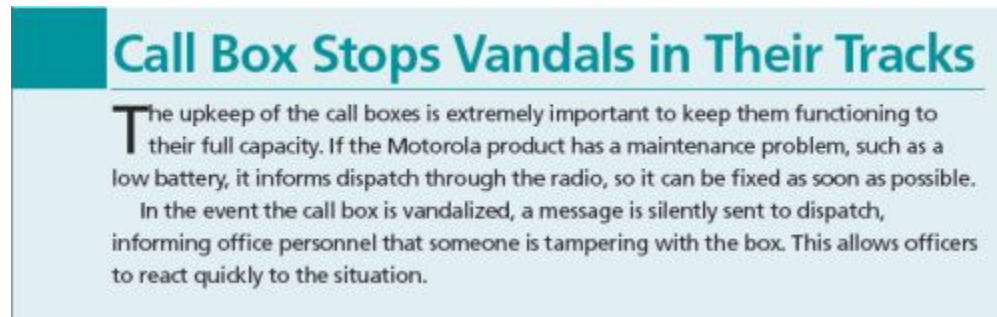
Back in 2004, phone lines were few and far between at the university, and the lack of lines was one reason why the call boxes didn't function properly. Adding lines was not an option because they were too expensive.

Another challenge the university faced was that of power; in certain areas, it was not cost effective to install power. “[The university] wanted a [call box system] that would withstand all the irregularities of power restraints and outages, or if the network or Internet is down,” says Hocutt.

With that in mind, Motorola designed a system that would allow the university to function without the use of phone lines. Removing leased T1 lines, Motorola installed a wireless Ethernet system. Now CCU has more than 80 call boxes distributed across the campus both indoors and outdoors. For indoor applications, CCU used the ACB series, which has a back-up power supply by chance there is a power outage.

The outdoor units, Motorola's a1410 Solar Call Boxes, also have a back-up power supply. The solution operates on a two-way radio system, which allows the university to function on a single system.

The two-way radio system permits all officers to hear if there is a crisis on campus, giving them the opportunity to respond appropriately to the situation. When a student, faculty member or staff member presses the button on the call box, a dispatcher in the public safety department is able to respond to that individual.



Call Box Stops Vandals in Their Tracks

The upkeep of the call boxes is extremely important to keep them functioning to their full capacity. If the Motorola product has a maintenance problem, such as a low battery, it informs dispatch through the radio, so it can be fixed as soon as possible. In the event the call box is vandalized, a message is silently sent to dispatch, informing office personnel that someone is tampering with the box. This allows officers to react quickly to the situation.

As the solution is activated, a message is sent over the airwaves to every officer who has a radio, whether the radio is installed in a vehicle or is

being carried. According to Weisner, "A lot of the time, the officers are already en route to the area when they hear the message. That's good because that officer can hear firsthand whatever the issue may be."

Hocutt agrees and praises the department for its quick response time. "When I first installed the system, I didn't tell dispatch that I was working on the boxes," he explains. "I would hit the button [on accident], and the next thing I knew, I had three officers standing in front of me." During that "practice run," Hocutt says the response time was less than a minute. Additionally, the call boxes reset themselves within five minutes after they have been activated.

Prior to the installation of the new system, campus safety personnel were unaware when an incident took place.

The Next Move: Installing IP Cameras

Once the call boxes were in place, CCU's public safety department decided that placing cameras around the call boxes to monitor what goes on in the area would enhance safety. Previously, the campus only had cameras in two residence halls, where all surveillance was recorded on VHS videocassettes. The old analog cameras made it difficult for campus safety personnel to determine where and when an incident took place. Furthermore, locating a recorded event was a tedious process, and footage could be easily edited and manipulated.

Thus, officials asked Hocutt what could be done to fix the problem. For this, Hocutt requested help from Motorola to replace the old model with a new IP video system. Hocutt installed the Motorola Canopy® platform technology and [Panasonic's](#) iPro Series video recorders.

With Canopy, areas of the university that did not have network infrastructure were supplied network capabilities through point-to-point and point-to-multipoint technology. Through the point-to-point Canopy Series, CCU is able to backhaul video data to guardhouses that do not have network infrastructure. This allows security personnel to transmit IP data to the dispatch center. Additionally, point-to-multipoint technology allows the public safety department to view footage that is streamed between multiple locations.

Now, with digital recording, there is less room for error. When dispatchers view the footage, they can determine what time an incident occurred and zero in on those particular images, rather than sift through hours and hours of VHS tape. From that, officials can download the information on a CD, making it easier to distribute the information to safety personnel.

Clear Images Help Troubleshoot Problems

Nearly 200 IP cameras are distributed throughout the campus, including newly constructed buildings. Initially, the cameras were set up on the outside near all the common areas, such as the student centers, call boxes, parking lots and traffic intersections.

Having the cameras near the traffic intersections proved to be effective. As dispatchers viewed areas with high traffic congestion, they were able to send officers out to clear up the blockage. Additionally, dispatchers are able to view accidents and determine how the incident occurred.

Cameras are also installed in the art gallery, dormitories, the front door at the police station, hallways and classroom buildings. Some cameras, both inside and outside, are pan/tilt/zoom (PTZ). Fixed cameras are positioned behind the dormitories to keep track of unauthorized visitors. However, it must be noted that cameras placed throughout the dorms are located in common areas and not in individual rooms, so they do not invade a student's privacy.

Both Weisner and Hocutt say the outdoor PTZ cameras work great at night. Also, officials at the university couldn't be happier with the image quality. "We've had incidents where people have reported that someone ran into his/her car and left the scene of the accident," explains Weisner. "We'll go back and pull the footage and get a good description [of the person] or a partial tag. Then we investigate it and clearly find out the identity of the person who left the scene."



Once the call boxes are activated, Coastal Carolina University students, faculty or staff are able to directly communicate with dispatch in the public safety department. Additionally, the call boxes are set up on a two-way radio system, allowing officers to hear the emergency being reported firsthand.

Using A Local Company Resolves Maintenance Issues

Working with a local company to help design and maintain the solution is beneficial.

CCU understood this. Before the institution worked with Motorola and MBC, if there was a problem with cameras or any solution, it took two weeks for the product to be fixed. However, now that CCU works with MBC, issues with the products can be resolved within 24 hours.

Safety personnel should also make sure there is a maintenance protocol within the department. At CCU, officers conduct a weekly check to see if the call boxes are functioning. Furthermore, dispatchers check each camera to make sure they are recording. Officers then complete maintenance slips if the utilities need to be fixed. “There’s no use having a million dollar system if you’re not maintaining it,” says Weisner.

campus AT A GLANCE

Campus: Near popular Myrtle Beach, S.C., Coastal Carolina University (CCU) of Conway S.C., is comprised of 53 main buildings on 307 acres. The university, which was established in the 1950s, enrolls nearly 8,000 students.

Problem: With only half of their call boxes functioning due to the lack of power and phone lines, CCU officials wanted to implement a new system with a functioning solution for the safety and security of all constituents on campus.

Solution: Working with Myrtle Beach Communications of Myrtle Beach, S.C., the campus worked installed 80 Motorola call boxes and 200 IP video cameras to monitor common areas on campus.

Results: Call boxes work clearly and broadcast over a two-way radio system. Response times to those in need have improved. Additionally, the new IP camera system, using the Motorola Canopy® system, is able to stream video from multiple points on campus to the dispatch center for full coverage.
