



# Making the grade: Mission critical radios give university police the dependable communications needed for a safer campus



“Our primary objective is the security of the residents and property of Arizona State University. We have a very positive impression of the new radio system. We have interoperability with other agencies, virtually 100% coverage, an emergency button and a clear consistent digital signal.”

- Corporal Larry Fuchtmann, special events coordinator, Arizona State University Police Department

## **Situation: A growing university in a dangerous world**

“ASU has four campuses. There are currently 65,000 students and there are plans to expand to 90 or 95,000 students in the next 10 to 15 years,” says Karon Zimpfer, program manager, Arizona State University Police Department.

The university was changing, but the radio system that helped to protect it was not keeping pace. “We had a VHF conventional system originally designed for one campus. It had components that were 20-25 years old,” Zimpfer recalls. “We lost communications with agents, our officers in the field, and with other campuses very frequently.”

## **Solution: A new radio network**

“Our department started looking at replacing the old system about five years ago,” says Zimpfer. “We were looking for greater reliability and greater coverage in the buildings. It was also apparent that we needed greater interoperability with the surrounding agencies. The turning point was Virginia Tech. Literally the day after, we were given direction by the university administration to make this project happen.”

## **Result: Radios officers can rely on in any situation**

“Our system now is a police system used for our single agency,” Zimpfer says, “but in the future we plan to migrate the system to other university users including residence hall staff, facilities maintenance, and public services.”

The new system delivers the capabilities ASU demanded. “The features that appeal most to ASU are reliability, interoperability with other agencies, the emergency button that officers can now access, and encryption to protect our broadcasts,” Zimpfer says.

## **Four campuses**

- Tempe
- Mesa Polytechnic
- West Campus (Phoenix)
- Downtown Phoenix

## **Student Population**

- 65,000 and growing

## **Solution**

- ASTRO® 25 trunked system-four channels
- One conventional digital site on South Mountain covering approximately 10 square miles
- Five MCC7500 dispatch consoles
- 200 portable radios
- 40 vehicular radios
- 10 motorcycle radios

### **“I didn’t have to rely on phone contact”**

Radio interoperability was a big concern for Corporal Larry Fuchtman. “In the past, we didn’t really have a means of communication with other agencies. Now, we don’t have to worry about those weaknesses,” he says. “We had the Insight Bowl game played at Sun Devil Stadium. I was able to go to a Tempe traffic channel to talk to their traffic sergeant about our post game plan as things changed. I didn’t have to rely on phone contact, and the information was immediately shared with others across the radio system.”

### **Better coverage on and between campuses**

“We have virtually 100 percent coverage across all the campuses and from campus to campus,” says Fuchtman. “In the past, we had dead spots. If you’d go from Tempe to Mesa Polytechnic, there would be significant gaps in that drive where you had no communication. As a police officer it would be hard to take action with that lack of coverage.”

### **Digital clarity**

ASU’s new radio system is all-digital. “In the past, you’d get partial transmission and broken up conversations,” says Fuchtman. “Now, with the digital signal, it’s all or nothing. You know when you have a signal for communication.”

Digital signals allow encryption to prevent unauthorized people from intercepting or interfering with transmissions. “In our old system, we did have unauthorized users occasionally jump onto our frequency and cause problems during emergency responses. That’s no longer a concern,” says Zimpfer.

### **A button that says: “I need help right now”**

The new radios have an emergency button. “When I press that button,” says Fuchtman, “an immediate tone goes out. Because the radios are identified by the persons who use them, people immediately know who pushed the button. In the past we would have to key up the radio, transmit a radio code and our call sign so people knew exactly what was happening. Now it’s as simple as pressing the button on the radio.”

### **More channels for more flexible communications**

“On our old system we had our choice of two channels, a primary and a backup,” says Zimpfer. “One campus had only one channel, so when that channel went down we lost communications with that campus.”

“In the new system, we have 16 talk groups our field users can access. We have a primary channel we can access across the campuses. We have secondary channels for each campus, and then each campus also has a third local station. We have special event channels and special tactical channels.”

### **“Responsive to our needs”**

Creative Communications, a Motorola channel partner, started working with ASU several years before the new system was deployed. “They came in and did a complete needs analysis and assessment of our old system,” says Zimpfer. “They gave us a plan, and we stuck to that plan for replacing the components that needed replacing, upgrading cabling, and doing a lot of the maintenance that had been neglected for many years.”

### **Close cooperation between Creative Communications and Motorola**

“Creative and Motorola did a fantastic job getting us through the implementation in such a short timeframe,” says Zimpfer. “It was important to have both Motorola and Creative Communications working together. Other public safety agencies in this area have been just amazed that we were able to accomplish this implementation in a short period of time.”

**“A significant feature enhancement is interoperability with other agencies. In the case of a high profile situation happening in the field, we could immediately switch channels and be able to communicate with each other.”**

— Corporal Larry Fuchtman



### **Creative Communications**

*Founded in 1987, Creative Communications has become the largest Motorola channel partner and service center in Arizona. It employs 100 people in five offices, providing its customers with state of the art communications equipment, expert service and rentals.*



**MOTOROLA**

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