



George Mason University

A Fire Protection System for the Present and the Future

Located in Virginia, George Mason University provides a suburban campus environment for its more than 28,000 students, many of whom benefit from the opportunity to research, intern, and work within Washington, D.C.'s business and government communities.

The Challenge

With over 160 buildings on more than 800 acres, the university is comprised of three separate campuses in Arlington, Fairfax and Manassas. As is the case in all college and university environments, the high concentration of active students with diverse lifestyles presents a continuous challenge to the campus fire safety officials and staff. In addition to heavily enforced fire safety regulations, an extensive array of heat and smoke detectors, sprinklers, and other fire protection devices protect all buildings and facilities and are monitored at a central dispatch station within the GMU Police Department on the Fairfax campus.

Keltron LS 7000 advantages:

- Fast, accurate response
- Remote programming
- Cost savings
- Future expansion

Although much of GMU's diverse fire protection equipment functioned satisfactorily, over the years, the constant expansion and renovation of campus buildings and facilities produced a cumbersome system that was difficult to use and did not transmit standardized information to the dispatcher. It was time to upgrade to a better system with newer technology.

The Solution

GMU's safety office spent more than two years researching the fire protection market for an appropriate solution to upgrade and enhance their alarm monitoring system. "We were particularly interested in facilitating communications to ensure the fastest possible response to alarms" said Fred Wharton, director of fire safety programs at GMU.

Steve Bryson, lead fire alarm technician at GMU, developed a bid specification to include the following features:

- Connect existing fire alarm control panels on three campuses to a central receiving station at the GMU Police Department using the campus PBX phone line system
- Conform to UL guidelines and requirements
- Receive information from diverse fire alarm control panels
- Provide comprehensive information to the dispatcher
- Transmit event information to an offsite printer
- Enable remote location programming via the GMU LAN
- Provide history to generate standard format reports
- Provide easy-to-use graphic user interface and audio
- Provide a pathway for upgrades and future expansion

GMU is a public institution, relying on state funding and tuition to pay expenses. Since cost is always an essential factor in procuring new equipment, the GMU safety team decided to implement system upgrades

systematically. "This required the new system to interface with a smorgasbord of existing fire alarm control panels and digital dialers and to accept signals using the existing infrastructure" said Bryson, who is responsible for all GMU's alarms.

In July of 2004, GMU accepted a proposal from Actcom Security Solutions of Virginia Beach, Virginia, a company specializing in emerging technologies for mission critical environments. The proposed system, a Keltron LS 7000 life safety event management system in combination with the Keltron DMP703 receiver, was chosen because it fulfilled the GMU specifications and offered capabilities for the future enhancements that GMU requires. "We looked at a number of solutions from different companies and none except Keltron's met all of our requirements" said Bryson.

The Advantages

Cost savings - GMU's buildings currently use fire alarm control panels from eight different manufacturers in a range of ages. To replace all their panels with new equipment would be extremely costly. The Keltron system accepts signals from all of GMU's existing panels, saving capital expense and installation time and fees.

Remote programming and maintenance - The GMU dispatch office is located in the crowded, busy 911 center. The Keltron LS 7000 connects to a PC with a flat panel screen and a keyboard and mouse, helping to simplify the center's operation. By connecting securely to the campus LAN, the Keltron LS 7000 enables Bryson to program and maintain the system from a remote location without disrupting the activity in the dispatch center.

Fast, accurate response - Speed of response is a critical factor in campus fire protection. The Keltron LS 7000 enables the system programmer to provide the dispatcher with highly accurate information about the alarm such as exact address and maps to locate the alarm device, contact information and dispatch instructions. The programmer can customize sounds and graphics to distinguish the most critical events from the less critical ones.

Future expansion - Ethernet infrastructure supports the communications at most college campuses and there is a continued trend towards integrating all building systems within the campus LANs and VPNs. The Keltron LS 7000 provides a pathway for upgrades and future expansion, highly important to an institution that expects to educate over 37,000 students within the next five years.



Keltron develops and manufactures universally-compatible, UL listed life safety event management systems for the municipal and proprietary markets. Solutions include Ethernet signaling systems, active network radio systems, distributed multiplex systems, digital communicator/receiver systems, and direct wire systems. This document is not intended for installation or maintenance purposes. All specifications are subject to changes without notice. For more information visit www.keltrincorp.com or contact us at 781-894-8710.



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