



Florida State University State-of-the-Art Campus Fire Protection



Founded in 1851, Florida State University is one of the largest and oldest institutions of higher learning in the State University System of Florida. The University's Department of Environmental Health and Safety promotes a safe and healthy environment for all members of the University community including over 38,000 students.

Away from home for the first time in their lives, many college students are unaware of the fire hazard that burning candles, electrical overloads, cooking, smoking and other dangerous behaviors can cause their dorms and other campus residences. It is the challenge of the University's Fire Safety group to maintain an effective program of campus fire safety student awareness and to deploy high performance, reliable fire protection systems that ensure the fastest possible response to any life safety incident.

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Tom Jacobson
Director of EHS

The Campus Life Safety Challenge

As part of the Environmental Health and Safety Department's mission, the Fire Safety group is committed to protecting the University community from personal injury, death, and property loss as a result of fire. In addition to promoting fire safety as part of residential, classroom, laboratory and work environments across the campuses, the Fire Safety group continuously maintains, monitors and upgrades all fire protection equipment throughout the campuses. Their goal is to constantly achieve 100% uptime - nothing less.

With hundreds of buildings ranging in age from over 100 years old to the six that are currently under construction, Tom Jacobson, Florida State University's director of Environmental Health and Safety, constantly challenges his Fire Safety group to research the industry and find optimal technologies that will benefit the FSU's fire protection system and all building systems.

"When faced with fire, even a minor event requires immediate action," said Jacobson "so our systems must be fast and reliable." Weather is another major challenge for any system in the Florida panhandle and the campus system must withstand storms, wind and heat.

Integrating New and Old Systems

The original fire alarm monitoring system at FSU consisted of a non-UL-listed group of individual panels. In the 1990's, the University installed a UL-listed Keltron receiving system that used digital dialers to transmit signals via leased telephone lines to the central dispatching station at the campus Police Department. This system operated well but it cost the university over \$40,000 a year in telephone expenses. Faced with the recurring cost of dual telephone lines for dialers, in 2001 the University purchased a wireless Keltron active network radio system. Installed and maintained by Fire Control Systems, Inc. of Cantonment, Florida, it is UL-listed as a proprietary supervising station fire alarm system.

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Mike Carlton
Sr. Engineering Designer

"Adding wireless capability to the Keltron system eliminated the expensive line charges, proved more dependable than the hard wire infrastructure, and is much faster than the old dialers", said Mike Carlton, senior engineering

technical designer for fire systems at FSU. The Keltron wireless system enhanced overall system integrity by providing more frequent supervision of check-in signals. Like all Keltron systems it is universally-compatible with a wide range of existing fire alarm control panels.

Another benefit to deploying a wireless infrastructure on this fast growing campus is that radios are easy to install and are not impacted by the ongoing construction. The FSU system currently monitors fire alarms, troubles and supervisories for about 115 buildings. Carlton expects to expand to 130 buildings over the next five years.

Continuing Advancement

With an eye towards disaster recovery, FSU's Fire Safety group recently upgraded their Keltron systems to be fully redundant, providing the best protection possible from system failure. Part of that upgrade included the purchase of Keltron's LS 7000 Life Safety Event Management System.

"It does everything we require and then some." said Carlton. "We were able to install the new equipment while the old system was running with virtually no down time."

The Keltron LS 7000 system provides the University with a wide range of enhancements that enable more efficient dispatching and administrative functions. The following features are particularly important to the busy dispatchers who monitor all police, fire and security activities:

- Advanced graphics provide multiple views and speed response time
- Programmable features enable the Fire Safety group to set a wide range of protocols that are specifically designed to fit the University's individual requirements
- High performance - the alarm signal to the dispatch station in the Police Department occurs in seconds

Additional features provide the administrative and management teams with a real-time window into all events and responses:

- Via a closed LAN, the workstation in the EHS office enables a remote view of events and provides access to programming and historical reporting far from the busy dispatch station
- The system provides extensive, easily accessible history reporting
- Keltron LS 7000 system architecture provides unlimited capacity for growth

Connecting to Satellite Campuses

Another challenge for FSU's Fire Safety group is to monitor events at the University's satellite campuses, providing insight into their activity and requirements. Overcoming distance is a major challenge that can be met using radio or Ethernet signaling, both of which can interface with FSU's Keltron systems. The Panama City campus is currently monitored at the main dispatch station Keltron receiver via a digital dialer and new options are under consideration.



Future Plans

As Florida State University expands, the campus systems will require integration with the new medical center and with the Ringling campus and its extensive collection of fine art. It is critical to maintain systems that enable the Fire Safety group to oversee the activity on all campuses even though they are not on site. The Keltron LS 7000 system enables future expansion and integration of the University campuses regardless of physical barriers, varying technologies or existing infrastructure.

For more information on Keltron's solutions, call 800-966-6123 or visit our Web site - www.keltroncorp.com.

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.keltroncorp.com or contact us at 781-894-8710.



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