



THE SECURITY FORUM

Connecting you to technology, opportunities, and people in the Security Industry

Article Reprint - originally appeared in **The Security Forum**, April 2014

Active Threats & Integrated Security Solutions

Does your electronic security prioritize people as your greatest asset?

By: The Setronics Technology Group

When there is a threat onsite, will your electronic security sound the alarm, enlist responders and offer ongoing support to preserving life?

The most serious threat your security system may confront is a scenario such as “Active Shooter” where the threat of violence is immediate. Current thinking is not to ‘shelter in place’, but instead move to evacuate quickly and in some cases even counter the threat. Very few midsize complexes have onsite personnel or enough in numbers to directly coordinate a response or even



counter such threats. Is it possible - within the budget constraints of a moderately sized complex such as a small school - to have both the conventional security features which protect property and rapid responses for the preservation of life?

In order to permit a rapid response in the best interests of both staff and others the electronic security system, once triggered, should automate as many of the tasks of notification

and deterrence. This enables all those onsite to either evacuate without delay or even to some extent counter the threat as possible. Such automation is often possible even if there is existing conventional electronic security in place. When this is the case, carefully considered enhancements can greatly improve protection against such a threat. And even if there is no prior infrastructure an effective installation from the ground up supporting such features can be had at reasonable cost. This is only the case however if procurement is preceded by a site analysis and specification with the objective being to deliver the functions discussed below.

What are the threat scenario response functions of a well designed system? A well integrated system could initiate and generate the sequence described in the inset once a threat is identified as below:

key elements (min:sec)

- 1) **Active shooter event starts (0:00)**
- 2) **Staff determines there is a threat and triggers alarm by 2 button press of a wireless pendant from anywhere on site.**
- 3) **Onsite Notification, Lockdown (0:15 – 0:45)**
 - a. Taped warning message across PA or emergency warning system
 - b. Onsite CCTV goes to preconfigured event mode
- 4) **Offsite Notification (0:45 – 1:45)**
 - a. Remote monitoring center receives signal and contacts emergency responders
 - b. Onsite video is accessed by monitoring center which relays information to authorities
 - c. Onsite video is accessible by police via mobile clients (preconfigured)
- 5) **Onsite Efforts to Preserve Life Actively Supported (0:15 - conclusion of event)**
 - a. Selected shutdown of secured doors
 - b. Staff can shutdown doors from interior (if available)
 - c. Remote monitoring center observes via CCTV and alerts to activity by voice-down to site across open PA and/or emergency radio



center. The best centers routinely begin to alert emergency responders within a minute of such signals. When all of this notification is preconfigured to occur upon triggering of the response sequence those onsite can follow their training and direction to evacuate, counter or in some cases shelter in place without delay.

Lockdown

At times the provision to shelter is still prudent. Moderately sized complexes typically do not electronically

Triggering The Response

This response sequence is triggered by responsible site personnel. The Center for Effective Collaboration and Practice (CECP) notes in "Early Warning, Timely Response" that an 'effective fool-proof communication system' is key. Perhaps the most cost effective yet high availability solution are the 3rd generation 900 Mhz spread spectrum RF transmitters which have greater penetration in buildings. These can be worn as pendants by key staff so that they are instantly available once the existence of a crisis is determined. The site survey should include confirmation of the effective area these transmitters can operate in.

Notification

If a site already has a Layer 1 and possible Layer 2 emergency communication system conforming to NFPA 72 chapter 24 this should be used for local voice alert when possible. A specific message related to the active threat can be pre-taped and delivered while staff onsite are taking action. PA systems not conforming to this specification can be used but the condition of this equipment is not constantly supervised. Layer 3 electronic response information systems which typically include messaging and email notification should also be triggered if in use. The key exterior notification is the trigger of duress signals to a UL remote monitoring

secure public perimeter doors as well as strategic interior doors due to the cost. When, however, this is done with a modern access control system an immediate preconfigured lockdown of these doors can follow the threat response trigger. The cost to properly implement this per door can also be reduced by the higher performing wireless locks. These are often available from conventional system suppliers who license the technology to include in their offerings. When this method of securing doors is employed the cost - especially internal - can be reduced by 50% or more. However a technology which provides system and local (from inside the door) lockdown should be selected.

Video Monitoring

In moderately sized complexes, surveillance systems primarily document activity for after-the-fact investigation of criminal activity they did not deter. To support proper threat response three features should be added:

- Coverage of public areas the person threatening violence might traverse
- Inclusion or addition of voice-down audio to some cameras and/or external access of any PA or emergency voice communication system
- Video monitoring service from a UL monitoring center who have the training and high availability to provide ongoing guidance to those in harms way of the threat activity as viewed per cameras. They may also work to deter the violent person (s) by reporting that police are already dispatched or imminent. This is transmitted via the voice down capability described above.

What is the typical investment for adding such a threat response capability to a moderately sized building already equipped with most

conventional video, intrusion and perimeter control technology? The typical threshold investment to deliver a significant portion of the above threat response readiness is in the neighborhood of twenty to thirty thousand dollars for a building of twenty to thirty thousand square feet. More robust coverage is, of course, more of an investment. Thus for a fraction of the cost of hired security more can often be done in the first few minutes than a team of several could accomplish.

Once such a system is installed and commissioned it will be for naught unless it is regularly tested and maintained. The solution we describe above is typically not electronically supervised from end to end (as for example a fire alarm emergency communication system is). Therefore a competent designer and integrator will provide a test and maintenance schedule to insure the highest percentage availability of your system when you need it the most.

Active shooters and similar threats of violence are scenarios few enterprises can elect to ignore as part of emergency planning today. A response solution such

as described above can affordably extend conventional technology to protect not only site assets but also the welfare of the people present. While little is certain in such scenarios, adoption of and investment in such a response strategy incorporates proven components to take a reasonable step toward preservation of life. ■

Protecting Assets and People – How to Get There

- Site survey and (re)design
- Moderate investments in system provided by a full service system integrator offering aftermarket service
- Training for those regularly onsite
- Periodic testing and maintenance of system

The Setronics Technology Group is an industry-leading team of Engineers whose combined collective security experience exceeds more than 60 years for regional, national and international clients. The Group has designed thousands of integrated access control and video solutions spanning markets that include retail, healthcare, and education among others.

Active threat scenarios bring new expectations for site electronics security. While you may have an existing system, can it accomplish the above when you need it most?

If you already have some infrastructure in place (ie intrusion alarm, CCTV, access control, even emergency notification) adding active threat response functions may be less than \$25,000.

Whatever your current electronic security situation we can support your needs to protect assets and people as follows:

- Analysis and functional design
- Electronics security system specifications
- Costing and installation
- Continued service for the life of your facility

Contact us for an assessment of your existing security @ 800-640-4550

“Our **commitment** to the **security** of your business
does not end with **implementation**. It begins there.”



setronics

5 Executive Park Drive
Billerica, Massachusetts 01862
978-671-5450
800-640-4550
Fax: 978-671-5448

www.setronics.com