The use of electronic test forms during inspections isn't anything new, but this practice is certainly gaining wider appeal— so much so that entire municipalities are adopting such systems. Read on to learn Pat Dillon's experience with the benefits and drawbacks of electronic test form systems.

Electronic Test Forms:

Costs, Benefits, and Possibilities

By Pat Dillon, Cintas Fire Protection

Tanks mounted and secured?

Nozzles properly positioned?

Conduit/cabling free from obstruction?

Hood/ductwork free

If you are a fire marshal or a fire protection contractor, you must deal with maintenance and inspection test forms on a daily basis. Fire alarms, fire sprinklers, kitchen suppression, kitchen cleaning, fire pumps…the list is seemingly endless and even includes fire extinguishers. Processing, storing, and manually retrieving forms takes time, money, and physical storage space.

Instead of shuffling paperwork, some companies manage the flow of testing and test forms through a desktop computer, handheld device, or smart phone. Companies who produce test form software have made their products flexible in order to meet different contractor's needs. This

includes duties that take place not only on the front line but those on the back end as well. For example, Mathew Hyde of Onsite Software Inc. says, "Our products can interface with Quick-Books and many other accounting programs."

Electronic Forms and AHJs

It is not only contractor's needs that software companies are addressing; products are also being made available to AHJs (authorities having jurisdiction), leading to a full-on integration of the inspection process between contractor and inspector.

While some fire departments have just begun experimenting with electronic test forms, the technology to manage them has been available for some time and has greatly improved. In some cases software companies have integrated their products with the latest technology trends. Dwight Wills with Building Reports says, "We have had mobile technology since 1999, and now we even have an iPhone app. Android is coming soon."

For the fire marshal, a computer "dashboard" can send notices of upcoming testing to building owners and even include the name of the fire protection contractor that was used the previous year. The notices are sent a month before the test is due. Notices of Violation (NOV) are automatically generated and never lost. The names and current license numbers of both the fire protection company and the service technician are displayed on each test form. Forms reference both local and national codes, and documents of past and present building permits are available, which can ensure accuracy when addressing building compliance. There are no pesky paper test forms to page through or to provide storage for. The building owner or manager can also track progress of the test forms.

Electronic Forms and Contractors

The fire protection contractor benefits from paperless storage systems by eliminating cabinet space, plus the test forms can be stored on disk, USB flash drive, or a backup storage drive. The electronic test forms can be printed in the van or emailed to the customer and to the office. Test forms on the computer can be electronically filed in a way that is best for office staff and technicians to retrieve them. Having the test form from last year at your tech's fingertips is an added benefit in two ways: 1) With small changes, last year's test form can be converted to this year's test form; 2) Problems from one year to the next are easily caught.

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The test forms may look the same in almost every jurisdiction. Many customers and their insurance companies are asking for bar code systems as "proof" that systems are really being tested. Bar codes also provide a way to track fire extinguisher maintenance for future work and budgets. The test forms can be submitted and put into a computer "queue" (a holding area) until you have been paid for the work.

Electronic systems have proven to increase service jobs for the fire protection industry in the jurisdictions that are using it. By automating the process of notifying building owners that they have service due, more work is getting done and therefore fire protection contractors have more business. Assistant Chief LeRoy Mc-Nulty with the City of Lynnwood, Washington, reports "We started in September of 2010 with a little more than 30 percent compliance and now we are around 70 percent of our fire systems tested." There is no doubt that integrated electronic systems can improve compliance while providing a much safer community.

Overcoming Security Concerns

In light of the current events in Japan, security and backup systems are increasingly important. For the fire marshal who is using a server system, multiple locations and guarded storage are offered by some companies. The security of the stored information is a concern even with the Transportation Security Administration (TSA). The information on the contractor's customers, if released to a competitor, could be devastating.

The contractor also must take precautions to protect all computer-stored information. Computer-stored information should be kept at two different sites and constantly updated. A good security system and video surveillance are also highly recommended.

Potential Costs

With tight budgets and staff layoffs, fire departments might worry about the cost of such a large scale change. Most companies offering these types of electronic services provide them to fire departments at no charge. One of the bonuses for fire departments is that electronic systems can help make the most of a limited staff. David Crocker, client representative with Tegris Inc., says "With just one fire department staff person you can control the forms and inspections of up to 3,000 life safety systems."

The cost in most cases is placed upon the fire protection contractor and ultimately their customers. Each electronic form (fire alarm, wet sprinkler, dry sprinkler, fire pump, etc.) may require individual payment when submitted. A licensing fee for annual software use could also be required. Advanced bulk purchase of test forms can defer the costs to some extent; however, the equipment to fill out and submit the forms is also a cost center placed on the fire protection contractor.

Most software companies that provide the electronic forms have a variety of ways to submit them to fire departments. If you decide to use a computer, handheld device, or smart phone, there will probably be a charge to connect in some way to the Internet or to a server. Once a jurisdiction has decided to use electronic forms, you will most likely be required to use their selected provider's software, and paper test forms will no longer be accepted. This is what has happened in Lynnwood and in many other local jurisdictions.

Fire departments and fire protection contractors should have an open conversation about planning for electronic test forms. There are some unavoidable costs up front, but many financial benefits in the long run. Using your state organization to help plan the process in conjunction with AHJs is a good first step. The next step just might lead to a new way of doing business for the fire protection industry. ❖

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