

Managing Fire Alarm Panel Programs

Notes taken from a discussion by those attending the RMAFAA September 16, 2008 member association meeting. This document is not intended to be used as a standard or guideline and may not represent the views of RMAFAA, AFAA or its members. This document is merely a compilation of notes taken from the discussion.

Common Problems and Solutions:

1. **Problem: The Program is saved to more than one computer.** Often times the program is saved on more than one technician laptop. The program is updated by one technician and then another technician comes out and makes the next change using a previously saved program. Changes are lost and the system doesn't operate properly usually due to missing devices and actions.
 - a. **Solution:**
 - i. Have the program saved to a central location each day, not on the technician's computer.
 - ii. Have all programs backed up once a week at a remote location.
 - iii. Have a procedure in place managing programs at a central location to make sure that each change is saved and the latest program and revisions are given to the technician each time they go to the job site.
2. **Problem: Programming changes are not being tested.** Often times testing is done or not done properly after programming changes are made. Without testing the system may not function properly.
 - a. **Solution:**
 - i. Test all changes 100% and 10% of existing devices and at least one device or function per circuit. Refer to NFPA 72 for specific requirements.
 - ii. Use and follow NFPA 72 certificate of completion for each change.
3. **Problem: Poor programming methods.** Programs are written incorrectly, aren't saved properly, and or are not written to follow the proper code. This can lead to functions or actions that may fail to operate or operate correctly.
 - a. **Solution:**
 - i. Each company should have a method by which they manage and implement programming of fire alarm panels.
 - ii. Employees should be trained on the company's method of managing programming.
 - iii. Have and update the sequence of operations, drawings and program file.
 - iv. Keep a log of the programming changes on the job site.

- v. Date and label the program.
 - vi. Be consistent in your methods.
4. **Problem: Program and programming responsibility.** If multiple technicians or more than one company is making program changes the methods suggested here are unlikely to be applied leaving the system at risk of all of the problems discussed.
- a. **Solution:**
 - i. The owner is ultimately responsible and should be advised of the risk and liability associated with this ownership.
 - ii. The owner should have one company responsible for programming.
 - iii. If the owner chooses to change companies the change should be well documented and risk and liability associated with the change should be listed.
 - iv. Copies of the program left onsite with the owner should be delivered with documentation covering the risks and liabilities associated with making programming changes.
5. **Problem: Improper or lack of training.** Without training it will be difficult to prevent the problems outlined in this discussion.
- a. **Solution:**
 - i. Employees should be trained on the company's procedures and policies regarding programming.
 - ii. Employees should be trained by the manufacture and be certified to program the panel they are working on.
 - iii. Employees should be trained to know and understand the fire alarm code NFPA 72 and other codes, standards and local AHJ requirements associated with the system they are programming.