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Public Safety False Alarm Reduction Professionals

# False Alarm Reduction Program for YOUR Alarm Company

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# False Alarm Reduction Program for YOUR Alarm Company

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# False Alarm Reduction Program for YOUR Alarm Company

Chapter 1

## **Overview**

Successful False Alarm Reduction Programs take time and effort. The key is to find the appropriate amount of resources to effectively manage the problem.

The purpose of this manual is to assist you to start a successful false alarm reduction program in YOUR alarm company.







# False Alarm Reduction Program for YOUR Alarm Company

Chapter 2

## **Learn About False Alarms**

In order to create, implement or refine a false alarm prevention program it is helpful to be aware of the causes, impact of false alarms.

#### Major Causes of False Alarms

 User Error - Everything from failing to properly secure the doors/windows before setting the alarm to forgetting the passcode to disarm the system or trying to "beat the clock" when exiting can activate an alarm. Cooking the popcorn too long will create enough smoke to trip any smoke alarm.



• Lack of User Training - One of the main reasons for user error is lack of good, comprehensive training on how to



use the system, what to do if the system activates and how to cancel a false alarm, should one occur. Alarm users must constantly be reeducated on the proper use of their alarm systems and this responsibility falls directly on the alarm company. Also, a plan of attack must be

developed to train new employees and visitors.

• Improper Design - An alarm system must be designed with the alarm user's lifestyle/business environment in mind. If there are pets that have free run or even limited run of the alarm user's home, did the salesperson sell, and did the technician install, interior motion detectors? Did you assume that cats can only jump so high? If so, it is a false alarm waiting to happen.



only jump so night? II

• Lack of Maintenance - Lack of maintenance covers both alarm system maintenance, as well as physical site maintenance. If you move into a new house and after six months to a year you notice that your doors start to stick, or your windows no longer open and shut as they should, it is probably due to settlement that has occurred. This should be repaired immediately, as it may cause false alarms. If windows and doors are not tight in their frames, the contacts may become separated or out of alignment, which can signal an alarm activation. Also, alarm systems should be inspected on an annual basis by a licensed or certified alarm technician to ensure the system and all components of the system are operating properly.

• **Wear and Tear** - Just like any electronic component, alarm systems wear out and must be serviced on a regular basis. Would you expect to never change the oil in your car and not eventually have engine trouble? The same thing holds true with alarm systems and alarm users must properly maintain their systems to ensure proper operation. Detectors need to be cleaned.





• Extreme Weather - Extreme weather causes a huge number of false alarms, and for the most part, it should not. An alarm system should not activate just because there is a thunderstorm (unless the panel receives a direct hit by lightning) or because it happens to be a windy day. Yet, we all have stories about how we tracked a thunderstorm by where alarms were going off. If at all possible, do not excuse false alarms due to weather. Alarm systems should be designed and installed, and alarm users should maintain their facilities appropriately, so

that false alarms do not occur during most weather events.

**Power Failure** - Power failures, as well as surges, occur on a fairly frequent basis. They should not, however, be the cause of a false alarm. If the power goes out for any reason, the alarm system's battery backup should kick in and avoid a false alarm. Most backup batteries last for a minimum of four hours and some



jurisdictions even have a time frame built into their ordinance mandating how long the backup battery must last.



• **Unsecured Pets** - A family pet moving throughout the home may be large enough to activate a motion sensor. Special sensors are available to adapt to some pets. Problems occur with new pets or as pets grow over time.

Objects Inside An Alarm Location - Hanging or moving signs or decorations will
activate motion detectors, especially when heating or air conditioning systems
come on or gusts of wind are strong enough to move them.



FARA has created numerous false alarm bulletins designed for alarm users, which outline various causes of false alarms and how to avoid them. These bulletins are available on-line at <a href="https://www.faraonline.org">www.faraonline.org</a>.

#### Major Impacts of False Alarms

The biggest problem with home and business security systems is the number and frequency of false alarms. There are costs associated with false alarms for several categories.

#### Costs to Public Safety



- Billions of dollars in wasted resources and wasted manpower and time False alarms cost police, fire and EMS billions of dollars every year in wasted time, manpower and money driving our cars and trucks all over our jurisdictions responding to non-crimes, non-fires, non-emergencies.
- Complacency False alarms cause officer safety issues. Responding to the same location over and over again and not finding any criminal activity lends itself to officer complacency, where they may not be prepared for the "real thing" when it happens. This is when officers, and others, can get hurt or worse.
- Not available for actual calls Officers who respond to false alarms are not available for community outreach or response to real crimes, medical emergencies or fires.

#### Costs to Alarm Industry

- Staff at central stations to answer calls Increased level of activity, whether they are false alarms or not, means more staff at the central stations to answer the calls.
- **Technicians to respond to troubleshoot** Capable, trained alarm technicians are required to visit their alarm sites to troubleshoot the cause of the false alarm.
- Customer service staff to deal with alarm users Customer service staff to handle questions and problems with the alarm user and to re-educate them on the proper use of their alarm systems is required.
- **Increased training costs -** There may be increased training costs for alarm companies to educate their employees on how to deal with false alarms.
- **Time -** Trying to determine the cause of false alarms, educating the customer and fixing problems can take a significant amount of time time that is now not available to sell new systems, sign up new customers and grow the company.
- **Fines -** Finally, many jurisdictions assess fees or fines for excessive false alarms. Those fees or fines can either be passed on to your company by the alarm user or may even be assessed directly to you by the authority having jurisdiction.





#### Costs to Alarm Users

- Imposition of fees/fines Alarms users are faced with paying false alarm response fees/fines imposed by local jurisdictions, which may range from \$25 to as much as \$4000 per false alarm.
- Maintenance costs Maintenance agreements or higher maintenance costs are required to troubleshoot and repair any equipment false alarm related problems.
- Monitoring fees Monitoring fees may increase based on the volume of calls their central station has to handle.
- Time and Aggravation Users have to deal with the time and aggravation involved in understanding why they had false alarms and to correct the problem. This could mean time away from work to wait for service technicians, as well as listening to their neighbors complain about how their alarm went off again.



#### Costs to Public at Large

The public at large also bears costs associated with false alarms, when they themselves may not even have an alarm system.

- Officers not available when you need them If officers are responding to what turns out to be a false alarm, they may not be available to respond to real criminal activity, which puts citizens at greater risk.
- Subsidizing those with alarm systems The huge costs to public safety to respond to false alarms can be borne by the entire community through higher taxes, etc.



- **Increased risk of car crashes** When officers do respond to alarm signals with lights and sirens, which some still do, there is an increased risk to the general public on the highways.
- **Annoyance factor** There is the annoyance factor having to listen to your neighbor's alarm siren going off all hours of the day and night.



# False Alarm Reduction Program for YOUR Alarm Company

Chapter 3

## **Define YOUR Problem**

Before any meaningful discussions on false alarm reduction can take place, an alarm company must be able to define its false alarm problem. You can't regulate what you can't count.

Monitoring automation systems at your central station have report features that can be customized to provide specific data on false alarms. Discuss with your vendor or administrator the types of reports you need to help quantify your false alarm problem.

Here is what you should look for in your statistics:



- How many total false alarms
- How many users have one or more false alarms
- Examine false alarms by
  - System type- Burg, Fire, Medical, Robbery, Holdup, Emergency or Panic
  - Signal type- alarm, supervisory, trouble, opening, closing Note: only valid alarms should result
    in a public safety dispatch request
  - Hardwire or Wireless
  - Fixed or mobile location
  - Do It Yourself or Professional Installation
  - Residential, Commercial or Government
  - Type of Device- Motion, Contact, Smoke Detector, etc.
  - Verification Method Video, Audio, 2nd Call to User
  - New or old system
  - Type of User- Age, Disability, Multiuser, Big Box, Bank, Retail
  - Time of day
    - At opening or closing time
    - At night
    - During the day
    - On weekends or holidays

These statistics, shown in graphs, pie charts, etc., can be an effective, graphic display of the scope of your company's false alarm problem and will be the basis for all of your false alarm reduction efforts.

#### Know Your Alarm Dispatch Rate

When comparing statistics with other companies, it is necessary to accept a basic concept. Comparing the alarm problem from company to company based only on the number of responses over a given period of time will provide inaccurate results.

The Alarm Dispatch Rate is determined by dividing the total number of alarm sites by the total number of alarm responses.

#### For example:

Total False Alarm Dispatches to All Sites	10,173
Divided By: Total Alarm Sites	15,221
Alarm Dispatch Rate for All Alarm Sites	.66

The alarm dispatch rate gives a more accurate picture of how many false alarm dispatches are occurring per site per a specific time period being measured. It also more accurately reflects changes in alarm activity over time whether it is up or down. The alarm dispatch rate is one that can be evenly compared between companies, provided false alarms are calculated in the same manner, regardless of the size of the companies or the number of alarm systems installed in each.

When you determine the total number of alarm dispatches in is ok to exclude actual alarms and cancelled alarms.

It is also useful to compare Alarm Dispatch Rates for different types of alarm sites. Commercial sites will probably have different rates than Residential Sites.



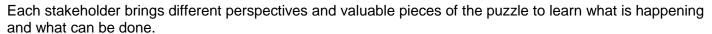
# False Alarm Reduction Program for YOUR Alarm Company

## Chapter 4

# **Identify & Empower Stakeholders**

To solve the problem you need to involve all who have information:

- Sales
- Install
- Service
- Monitoring
- **Customer Service**
- Management



Management needs to empower all the stakeholders to make decisions and commit resources to attack the problem.



# False Alarm Reduction Program for YOUR Alarm Company

Chapter 5

# **Develop YOUR Program**

#### **Set Timelines**



Don't set yourself up to fail! Give yourself approximately 18 months to develop your false alarm ordinance and get it through your legislature, hire staff, develop policies and procedures for your unit, create registration/permit forms and other mailings, and design/purchase false alarm tracking and billing software. Even using the information and materials contained in this manual, it will still take a significant amount of time to implement your program. Be up front with everyone about the effort involved and time commitments needed to ensure success, especially with the elected officials, who may want a "quick fix." Once your program is up and running, the "fix" will be in place, but it takes time to get to this point.



#### **Define Your Objectives**

You should address the following issues when you set your goals:

- Commit to a specific lower dispatch rate
- Target specific number of problem users
- Decide on a time frame to reach goals (for example one month, 3 months, etc.)



Strateg'

plan or met

achieve a goal or

organizational act

#### Select Your Strategies

It is apparent that there are as many different approaches to the problem.

The following strategies have been used successfully throughout North America for reducing false alarms.

Combine the tactics to come up with an appropriate plan for your company.

#### Evaluate equipment, technologies & procedures:

Check to see if your false alarm rate increases or decreases if you change equipment or adopt a new policy. Review your response for each type of signal you might receive and clarify when public safety should be involved. Review the FARA/NESA Guide to Alarm Equipment for more information.

#### Proper Design

The design of an alarm system is key to an alarm user being comfortable with using it. It must fit the environment in which it is being installed. Both the alarm seller and the installer must know about any environmental issues that may cause false alarms and must ensure that the system will not false due to these concerns. Pets, children, and domestic help, as well as the general weather conditions of the area, are all pieces to the puzzle that must be taken into account when designing an alarm system.



Always design an alarm system taking into account the way your residential customer lives or your business customer works.

#### Use Quality Equipment and Proper Installation



Quality equipment will go a long way towards reducing the likelihood of false alarms. The quality of equipment has improved greatly over the years, and may no longer be a main cause of false alarms. However, it is a factor with older systems that are still in use. Quality equipment does not necessarily mean the most expensive either. It is also important that alarm equipment be installed properly and according to manufacturer's specifications.

Don't skimp on equipment to save a few dollars. What you save now may cost you later.

#### Install a False Alarm Resistant System

You can have the best equipment in the world, but it will cause false alarms if is not installed properly.

- Disable all one plus duress features.
- Program swinger shutdown so that it will not transmit more than one (1) alarm signal from the same zone until manually restored at the premises.
- Delay at least fifteen seconds before initiating dialing for an intrusion alarm signal.
- Program an adequate delay time on entry/exit doors (delay of 45 seconds or more is recommended).
- Enable a cancel code that can be entered by the customer to cancel accidental alarms.
- Check that police, fire and medical panic buttons on the keypad cause a siren or speaker to sound.
- Check that the arming station(s) emit sound to inform occupants when an entry/exit door sensor has been opened or when the entry/exit time has been initiated.
- Install standby/backup power and test it to make sure it is adequate.



- Determine if the alarm user has telephone features such as call waiting, DSL or VoIP and take appropriate steps to allow proper control panel dialing and monitoring center verification. (Such as \*70 for call waiting, etc.)
- Make sure the control panel is properly grounded per the manufacturer's specifications.
- Check that all door and window contacts are properly installed and tested. Use wide gap contacts where needed.
- Check that all glass breakage sensors are properly installed and tested. Consider pets, on-site noises and the general environment.
- Check that all motion type detectors are properly selected, installed and tested. Consider pets, sunlight, other heat sources and harsh environments.
- Verify that devices are labeled correctly at the site and at the monitoring station.
- Follow the manufacturer's installation instructions.

#### Installation/Manufacturing Standards

#### State Law

Many states regulate companies that sell, install, service and or monitor alarm systems. State laws vary but many require background checks and/or minimum experience or training for employees. Regulations also often require companies to deal ethically with customers and comply with local laws. Violation of your local ordinance may be grounds for disciplinary action against the alarm company. Contact your state licensing agency for information.

#### SIA Control Panel Standard CP-01

This ANSI approved standard details recommended design features for security system control panels and their associated arming and disarming devices to reduce the incidence of false alarms. Control panels built and tested to this standard by Underwriters Laboratory (UL), or other nationally recognized testing organizations, will be marked to state: "Design evaluated in accordance with SIA CP-01 Control Panel Standard Features for False Alarm Reduction".



The standard was developed to address problems identified in a survey of the causes for false alarms.

- Exit Errors It attempts to avoid alarms around exits by extending the time users have to exit, giving the
  user audible feedback that the time is about to expire, automatically restarting the time if a user reenters right after exiting and reporting a recent closing instead of an alarm when an alarm is set off near
  the exit time. The system also automatically bypasses the interior motion sensors if the user fails to
  exit after turning on the alarm.
- Entry Errors It attempts to avoid alarms around entries by extending the time users have to deactivate the alarm after entry, giving the user audible feedback that the time is about to expire and sending a cancel signal if the alarm is deactivated within 5 minutes of an alarm.
- Power failure The standard allows the system to adjust after power failures by not sending any alarm signals for 60 seconds after the power is restored.
- Multiple signals for a problem device are avoided by not allowing a second signal from a zone until the system is disarmed and armed again.
- Disarming the system is simplified by requiring that entering the code disarm the system.

The FARA Model Ordinance requires that newly installed systems comply with the CP-01 standard. The IACP adopted a resolution recommending CP-01 requirements be included in local ordinances. While the impact of the standard has not been verified by a study or survey, the consensus among industry and public safety professionals is that it will have a positive impact.

UL 827, Edition 8, Standard for Central Station Alarm Services

Alarm Verification and Notification Procedure (CSAA CS-V-01) ANSI Standard

Both the UL and ANSI standards detail recommended call procedures and other electronic means to verify alarm signals before requesting public safety dispatch. They are a source of information for you to use to

determine if alarm companies are taking appropriate steps to verify alarms before making a dispatch request. UL 827 includes requirements for multiple call verification to reduce false alarms.

#### NFPA 731, Standard for the Installation of Electronic Premises Security Systems

This standard lays out reasonable requirements, including equipment standards, needed requirements for back-up power, minimum training for design and installation personnel, and procedures for conducting and documenting user training. These requirements can be adopted by individual alarm users, alarm companies, state governments and/or local jurisdictions to improve the overall quality of systems and help to reduce false alarms.

#### Use The Right Equipment.

- For example:
  - Dual Technology motion sensors have proven to be more false alarm resistant than single motion sensor devices
  - The difference in cost between a regular contact and a wide gap contact is nominal compared to false alarms
  - Use panels that conform to the SIA CP-01 Control Panel Standard. Do not override the default settings designed to prevent false alarms
  - Only use dual activation panic buttons and holdup alarms
  - Use a heat detector instead of a smoke detector in dusty, dirty or wet areas

#### Locate Your Equipment Correctly- Consider the Environment

- Remember that the environment includes situations that are unique to daily operations by the user, not just weather related environment issues.
- Focus video verification detection equipment so that it does not "see" beyond the alarm site or pick up authorized activity.
- Install glass break detection equipment that is appropriate for the acoustic environment where the
  device is to be installed.
- Adjust glass break sensitivity using the manufacturer specified testing equipment, not a set of keys or screwdriver handle to hit the face of the glass break detector.
- In outdoor applications, be sure to use equipment designed by the manufacturer for outdoor operation.
- Do not install sensors in areas that are outside of the alarm user's control, i.e. multi-tenant or shared areas.
- Avoid placing sensors in areas that are not limited to authorized users or any area where the public can enter an area and activate the alarm.
- Review the FARA/NESA Guide to Alarm Equipment for more information.

#### Do Power Calculations

- Overloading an alarm panel can lead to false alarms:
  - Supervise ALL system power supplies for AC power loss and low battery condition at the alarm site and the central station
  - When sensors lose power after power failures
  - By increasing the sensitivity of sensors when they get less power than they need

#### Make Sure the User Knows When They Have an Alarm

- Check to make sure the alarm can be heard throughout the alarm site
- Install additional keypads with audible annunciation close to all regular points of entry and exit.
- Install an audible device to make a noise heard inside and outside the alarm site when a keyfob is used to arm or disarm the system.
- Make a noise heard inside and outside the alarm site when a system is automatically armed or disarmed.

#### **Educate All Alarm Users**

Effective initial training of all alarm users within the location on the proper operation of the system could be the single most important factor in false alarm prevention.

It is essential that all users of the alarm system be present when the training on an alarm system occurs. It is important that an alarm industry representative conduct this training, as it is unfair to expect your new alarm system customer to



train others on a system with which he/she may not be well acquainted. The alarm system trainer should provide plenty of time for instruction in layman's terms and allow the users to play with the system while the trainer is there. The more comfortable the alarm users are with their system, the less likely they will be to cause false alarms. On-going training for alarm users on what causes false alarms and how to avoid them is a must.

Review how your alarm users are trained. Oftentimes, we hear customers comment that they did not receive any training on their alarm system. Sometimes a customer is given "alarm system pointers" and then handed a video to watch. Others receive no training at all or are handed an intimidating operating manual. Incomplete training often leads to preventable false alarms.

#### Customer education should be comprehensive and include:

- Training on how all components of the alarm system work
- Causes of false alarms and how to prevent them
- Continuing customer education to keep false alarm awareness at the forefront
- How to reduce unnecessary alarm signals and public safety response
- How to cancel a false alarm
- Make the alarm user aware of the applicable alarm ordinance, permit/registration requirements and any fines or fees that may be imposed.
- Relay how critical it is to assure that all users of the system (such as residents, employees, guests, cleaning people, and repair people) are trained on the proper use of the system.
- Explain the value of a 7-day no dispatch period for intrusion alarms, excluding panic, duress and holdup signals.

#### Avoid Entry Exit Errors

Entry/exit errors are the leading cause of false alarms, so we recommend that all training include the following:

- Emphasize how much time customers have to set the alarm and exit a location
- Ensure customers know how much time they have to enter a location and disarm the alarm system
- Utilize the "tell-show-do" training perspective to help identify special entry/exit delay time requirements
- Ensure that they know what door(s) is to be used for exit and entry as well as where all the other system components are installed
- Adjust system during training to eliminate customer errors
- Ensure that your customers understand the difference between knowing their numeric entry/exit code (a sequence of numbers used to arm or disarm the alarm) and having a password (a code word used to identify the customer as an authorized user)
- Spend the extra time going over how to cancel a false alarm response
- Explain how answering machines or call waiting will affect a cancellation verification

#### Thoroughly Explain the System

- Train the alarm user in the proper operation of the system.
- Provide the alarm user with an operating sheet and/or video summarizing the proper use of the system, as well as a copy of the security system's operating manual.
- Show residential alarm users how to bypass motion detectors while leaving other sensors on.
- Show the alarm user how to test the system, including the communication link with the monitoring center
- If a duress or panic feature is enabled, explain when it is appropriate to use it.

- Tell the alarm user what the entry and exit times are.
- Give the user the alarm company phone number to request repair service or to ask questions about the alarm system.
- Show the alarm user how to cancel an accidental alarm activation.
- Review the system cancellation code and code word.
- Explain that indoor pets can cause false alarms. If additional indoor pets are acquired, the alarm
  company should be notified so that system updates can be made to accommodate the change if
  necessary.
- Show the alarm user where the main control panel and transformer are located.
- Review how the alarm company will communicate with the user in the event of various alarm signals.
- Advise the alarm user to inform their alarm company of any phone number revisions and to maintain a
  current contact list. The alarm user should also report any changes to their telephone service such as
  VoIP, DSL, call waiting or a fax line.
- Stress the need to advise the alarm company of any remodeling projects that may occur such as painting, moving walls, doors or windows.
- Explain that certain building defects such as loose fitting doors or windows, rodents, inadequate power, and roof leaks, can cause false alarms.
- Provide the alarm user with written false alarm prevention techniques and explain that it is their responsibility to prevent false alarms.

#### Stress Impact

Teach your customers that a false alarm has the same seriousness as dialing 9-1-1 and hanging up. Most people will not call 9-1-1 if they don't have an emergency situation. Tripping an alarm activation, which solicits a public safety response, has the same negative connotation as calling 9-1-1.

#### Leave a Packet

Customers may not be very knowledgeable about alarm systems in general and will look to you for advice and guidance on everything from what to install to how to use the equipment properly. Leaving a packet of written material for the customer at the time of sale and/or installation will assist in reinforcing the information and training they have received. This packet should contain, but is not limited to, the following:

- Detailed information on your company and the services you offer
- What happens when the alarm activates give a step by step procedure so the customer is aware of all the steps that will be followed prior to and including requesting public safety response
- Proper procedures for canceling a false alarm dispatch request (including a statement that most public safety agencies will not cancel a request for dispatch by anyone other than the party who made the original request - i.e., the alarm monitoring company)
- Completed and signed contract
- Warranty information
- How to reach the alarm dealer and the monitoring center for assistance
- Installer False Alarm Prevention Program checklist
- Customer False Alarm Prevention Program checklist

#### Do Ongoing Training

- Create materials newsletters, videos, and websites to retrain or remind users about system features.
- Create bill stuffers that contain alarm prevention tips
- Provide on-site re-education for customers that experience a large number of false alarms attributed to user error
- Let users know that you are available to train new users.
- If you sell to the owner and not the renter- develop a plan to train each new renter.
- FARA has developed a user web site www.alarmuser.org that can be used to train users.

#### **Use Checklists**

Utilize customer and installer checklists so that you don't forget to share important information with the customer. Checklists have great value including:

- Reduce the chances of forgetting something important
- Easier for the layperson to understand
- Helps ensure that tasks have been completed

The FARA Model Ordinance requires an alarm installation company employee to review the Customer False Alarm Prevention Checklist or an equivalent checklist approved by the alarm administrator with the alarm user after completion of each installation of an alarm system. This checklist, which can be found in the Appendix, runs through important items that a representative of an alarm company should review with each alarm user.

The FARA Model Ordinance requires that an alarm user have a licensed alarm installation company inspect the alarm system after two (2) false alarms in a one (1) year period. After four (4) false alarms within a one (1) year period, the alarm user must have a licensed alarm installation company modify the alarm system to be more false alarm resistant and provide additional user training as appropriate. The Installer False Alarm Prevention Program Checklist, which can be found in the appendix, reviews items the installer should be sure to check before the installation or inspection is completed.

The National Fire Protection Association - NFPA 731 Standard for the Installation of Electronic Premises Security Systems (2011 Edition) requires an Electronic Premises Security Record of Completion form to be completed by the installer of the system. The three page checklist runs through visual and functional tests of all the system equipment.

#### Waiting or Acclimation Period



Some jurisdictions have enacted "acclimation", "waiting" or "soak" periods in their ordinances.

An acclimation period is a specific period of time after an alarm system has been installed where the alarm monitoring company does not request public safety dispatch when an alarm activates. Following an acclimation period allows new alarm users to make mistakes (i.e. become comfortable with using their system) without burdening public safety or incurring false alarm fees.

The acclimation period can be for any period of time deemed reasonable. The most common acclimation periods are between 5 - 10 days.

An acclimation period may be required unless a waiver is granted by the public safety agency because of demonstrated imminent danger to people or property. Either the alarm user or the alarm company may file a request for waiver. Emergency situations such as spousal abuse, recent burglary or robbery, or other traumatic situations may also be considered when determining whether or not to grant a waiver. Alarm users, who find themselves in these types of situations, are more motivated to learn how to properly operate their alarm systems and may be less prone to causing false alarms.

#### Enhanced Call Verification (ECV)

With single call verification, the alarm company calls the alarm site after the burglar alarm is received but before public safety dispatch is requested. If the user answers, indicates an error, and verifies his/her identity, no dispatch is requested.

Enhanced Call Verification requires that an additional call be made to another responsible party or owner at a different telephone number when the first call does not succeed. Often the second call is placed to a cell



phone number and is normally made in cases where there is a busy signal, no answer to the first call, or an answering machine is reached. This method has proven extremely effective in reducing false alarm dispatch requests.

The ANSI/CSAA CS-V-01-2016 Alarm Confirmation, Verification and Notification Procedures outlines steps you should take before requesting a public safety dispatch.

Single or Enhanced call verification may be required by local ordinance.

In the case of duress/hold-up alarm activations, either no verification is required, or verification is required only after public safety has been dispatched.

#### Other Monitoring Center Verification

In addition to enhanced or single call verification, there are several other methods an alarm company can attempt prior to requesting public safety dispatch to determine if there is a real need for response, including:

- Two Way Voice- Use of a two-way voice communications system to listen in or converse with users at the alarm site.
- Video Verification- Use of a remotely monitored video camera to observe the alarm site.



Some ordinances may allow these methods as alternatives to enhanced or single call verification.

In the case of duress/hold-up alarm activations, either no verification is required, or verification is required only after public safety has been dispatched.

#### **Use Cross Zoning**

Cross Zoning is a feature utilized within control panels that requires two different zones to be tripped within a specified time period (usually 30 seconds) before the alarm system panel produces a valid single alarm signal. This feature is used to deal with specific or unusual conditions within a limited protected area. A common application is to require a perimeter zone (door or window) to active along with an interior zone (Motion Detector).

#### **Cancel Dispatch Requests**

A simple way to verify that it is actually the alarm company requesting the cancellation and not an alarm user under duress is to provide the alarm company dispatcher with a code number/name when taking the call for dispatch. The code number/name could be the public safety call-taker/dispatcher's identification number or the internal incident number associated with each call, which would be entered on the call when the alarm company requested the dispatch. When alarm company personnel call back to cancel the dispatch, they simply provide the 9-1-1 center personnel



with the previously provided code number. The code number would change with each request for dispatch, and, therefore, no concern about questionable cancellation would exist. Public safety can be certain that if the cancellation code is given, that the alarm company has determined the alarm activation to be false.

#### Follow-up on Every False Alarm



The alarm company should follow up with their alarm user any time the user has a false alarm. A simple call to find out the cause provides an opportunity for re-education and discussion of the seriousness of false alarms to all concerned. This also gives you a chance for service calls to deal with faulty equipment. When needed inspect the site, replace equipment, retrain, stop dispatching, switch to private response or cancel the contract.

Companies that have a policy in place to contact every customer, who has a false alarm, have a significantly lower false alarm rate. It also gives your company an opportunity to determine the cause of the false alarm so it can be remedied quickly through service or training to avoid further related dispatches.

Find out what your company's false alarm rate is from your monitoring company before you begin your call back program. One small company using this practice cut their customers' false alarms from 1,000 to 50 per year and a large company reduced police dispatches from 20,000 to 10,000.

Be proactive in your approach to false alarm reduction. Show your local public safety agencies that you care by implementing this type of policy and then stick to it! Special efforts should be made to reach your worst customers. Eventually, those customers and public safety will thank you for it.

#### Inspect the Alarm Site

- Check for changes at the site that could cause and alarm:
  - Verify how zones are labeled at the central station and that any special instructions are still appropriate
  - Verify that all equipment is still located properly and operates correctly
  - Locate the main and auxiliary power sources for all devices and verify that they are operating correctly
  - New construction
  - New wall coverings
  - New flooring
  - New furniture or displays
  - New heating or air conditioning
  - New ceiling fans
  - Dirt or bugs on or around sensors
  - New pets
  - Loose doors or windows
  - Balloons, banners, signs, and rotating holiday decorations



#### Consider Private Response



Some alarm users may generate so many fines, may desire to avoid fines or may prefer faster or need a more specific type of response. These users are candidates for private response by a private security company. Private response could also be a temporary solution while events at the site occur.

#### Regular Maintenance

Both the alarm system and the physical site need regular maintenance. Doors and windows need to be checked. Also, alarm systems should be inspected annually by a licensed or certified alarm technician to ensure the system and all components of the system, especially the batteries, are operating properly.



#### Do Not Accept Storm Alarms:



- Power surges and lightning strikes should not cause false alarms! False alarms caused by lightning strikes are controllable through the proper grounding and use of surge suppressors.
- All alarm equipment that is properly installed and maintained should never be activated by "routine" weather conditions.
- Weather conditions that damage the alarm site or the alarm equipment are the only exception.

#### Limit Requests for Public Safety Dispatches

- Do not dispatch public safety on Power fail, Communication fail, Trouble or Tamper events.
- Do not dispatch public safety on scheduled supervisory signals such as early open / late to open, early to close, late or fail to close, un-expected open or open by unauthorized user with valid PIN code.
- Do not dispatch public safety on environmental supervision such as freezer temp, moisture detection, pump fail, overheat, low temp, etc.



#### Staff Education



An important component of any false alarm reduction program is education on proper system use and installation and the reduction of false alarms.

Educate your staff on the impact of false alarms, your commitment to reduce them and what they can do to help address false alarms. Use company meetings, memos and emails to get the word out. Keep your technicians up to date on all of the equipment that you use.

Many national, state and local associations offer technical training. Utilizing these courses to educate employees on alarm installation and design is a professional investment that will give you a bounteous return for your dollars.

Training of both sales and installation personnel on false alarm prevention should include information on:

- Definition of a false alarm
- The magnitude of the problem for the industry, for public safety and for the consumer
- The effect of false alarms on all parties involved
- Main causes of false alarms
- The effect environment and customer life-/business-style have on equipment type, location and programming
- How an installer should inform the consumer at the time of installation that a specific piece of equipment should be changed or relocated due to the propensity for false alarms
- The solutions for reducing false alarms

In addition, make it a company policy to have your employees regularly attend training classes to earn Continuing Education Credits. On-going training of employees gives you an opportunity to reinforce the professionalism of your staff and to keep them updated on the latest and greatest in equipment, business practices and false alarm reduction.

#### Communication

Alarm users should review their call list with their alarm company at least once a year, and notify them of any changes when they happen.





# False Alarm Reduction Program for YOUR Agency

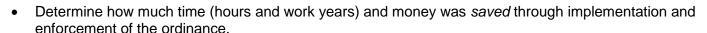
Chapter 6

# **Monitor YOUR Progress**

It is important to measure the impact of your efforts. You can do this by getting daily alarm activity reports. It will be helpful to break down your data by the same categories listed in the Define Your Problem section.

#### Evaluate the Effectiveness of YOUR Program

- Compare the police dispatch rate before and after your ordinance was adopted or changed.
- Review the number of appeals.
- Consider the amount of staff time devoted to implementing the program.
- Consider a random survey for alarm users, public safety officers and alarm companies.
- Consult with command staff, elected officials and 911 center personnel to determine their satisfaction with the program.
- Look at the level of enforcement that is being done. Are all provisions enforced to the fullest? Will greater enforcement have a positive impact on reductions?



- Determine how much time (hours and work years) and money was spent on response to false alarms.
- How much revenue was generated, billed and collected?
- Are statistics kept separately for residential and commercial alarm users? Do statistics indicate that more resources should be spent on one group over another?
- How many alarm users have one or more false alarm from year to year? Are they the same users or different ones? Are there more users each year with fewer false alarms or more?
- Perform statistical analysis on the number of alarm users, false alarms, and actual events.



As you evaluate, review and analyze policies and procedures, the real benefit comes from developing and implementing new and/or revised procedures to correct deficiencies or to make the program more effective.



- Ask unit staff for suggestions.
- Review policies and procedures that have succeeded in other jurisdictions.
- Evaluate whether or not these policies and procedures have a chance to succeed in your jurisdiction.
- Consider if available technology might make your program more effective.
- Evaluate community awareness of your program.
- Examine newly adopted policies and procedures to see if they have been effective.
- Review related department programs, including community or public relations and crime or fire
  prevention programs and community policing initiatives, to see if they can be used to make your
  program more effective.
- Continually look at your program, identify areas that need improvement and implement initiatives to deal with these areas.

#### Use the Data to Succeed

A statistical analysis of your program allows you to apply resources, determine problematic areas, determine trends, and provide the basis for new initiatives.

Examine segments of available data to determine trends. For example compare police dispatch rates for commercial and residential alarm users. Or, look at the number of permits in service areas to see if one area is more compliant than another. Look at data on causes of false alarms to see if trends are present. Calculate the time of day and days of the week when most false alarms occur. Are any false alarms seasonal; i.e., holidays, summer, Easter break? Why?

## **Conclusion**

Implementing a successful false alarm reduction program will not be easy. However, the rewards are remarkable and certainly make the pain worth it in the end.

Remember, FARA is available to help you all along the way. If you get frustrated, just contact us and we will help any way we can.

#### **For More Information Contact:**

For more information on this topic or other matters related to alarm management, please contact FARA.

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