COPS
COMMUNITY ORIENTED POLICING SERVICES
U.S. DEPARTMENT OF JUSTICE

Problem-Oriented Guides for Police Series
No. 5

False Burglar Alarms

by
Rana Sampson

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About the Guide Series

The *Problem-Oriented Guides for Police* summarize knowledge about how police can reduce the harm caused by specific crime and disorder problems. They are guides to prevention and to improving the overall response to incidents, not to investigating offenses or handling specific incidents. The guides are written for police–of whatever rank or assignment–who must address the specific problem the guides cover. The guides will be most useful to officers who

- Understand basic problem-oriented policing principles and methods. The guides are not primers in problem-oriented policing. They deal only briefly with the initial decision to focus on a particular problem, methods to analyze the problem, and means to assess the results of a problem-oriented policing project. They are designed to help police decide how best to analyze and address a problem they have already identified. (An assessment guide has been produced as a companion to this series and the COPS Office has also published an introductory guide to problem analysis. For those who want to learn more about the principles and methods of problem-oriented policing, the assessment and analysis guides, along with other recommended readings, are listed at the back of this guide.)

- Can look at a problem in depth. Depending on the complexity of the problem, you should be prepared to spend perhaps weeks, or even months, analyzing and responding to it. Carefully studying a problem before responding helps you design the right strategy, one that is most likely to work in your community. You should not blindly adopt the responses others have used; you must decide whether they are appropriate to your local situation. What is true in one place may not be true elsewhere; what works in one place may not work everywhere.

- Are willing to consider new ways of doing police business. The guides describe responses that other police departments have used or that researchers have tested. While not all of these responses will be appropriate to your particular problem, they should help give a broader view of the kinds of things you could do. You may think you cannot implement some of these responses in your jurisdiction, but perhaps you can. In many places, when police have discovered a more effective response, they have succeeded in having laws and policies changed, improving the response to the problem.

- Understand the value and the limits of research knowledge. For some types of problems, a lot of useful research is available to the police; for other problems, little is available. Accordingly, some guides in this series summarize existing research whereas other guides illustrate the need for more research on that particular problem. Regardless, research has not provided definitive answers to all the questions you might have about the problem. The research may help get you started in designing your own responses, but it cannot tell you exactly what to do. This will depend greatly on the particular nature of your local problem. In the interest of keeping the guides readable, not every piece of relevant research has been cited, nor has every point been attributed to its sources. To have done so would have overwhelmed and distracted the reader. The references listed at the end of each guide are those drawn on most heavily; they are not a complete bibliography of research on the subject.

- Are willing to work with other community agencies to find effective solutions to the problem. The police alone cannot implement many of the responses discussed in the guides. They must frequently implement them in partnership with other responsible private and public entities. An effective problem-solver must know how to forge genuine

partnerships with others and be prepared to invest considerable effort in making these partnerships work.

These guides have drawn on research findings and police practices in the United States, the United Kingdom, Canada, Australia, New Zealand, the Netherlands, and Scandinavia. Even though laws, customs and police practices vary from country to country, it is apparent that the police everywhere experience common problems. In a world that is becoming increasingly interconnected, it is important that police be aware of research and successful practices beyond the borders of their own countries.

The COPS Office and the authors encourage you to provide feedback on this guide and to report on your own agency's experiences dealing with a similar problem. Your agency may have effectively addressed a problem using responses not considered in these guides and your experiences and knowledge could benefit others. This information will be used to update the guides. If you wish to provide feedback and share your experiences it should be sent via e-mail to **cops_pubs@usdoj.gov.**

Acknowledgments

The *Problem-Oriented Guides for Police* series is very much a collaborative effort. While each guide has a primary author, other project team members, COPS Office staff and anonymous peer reviewers contributed to each guide by proposing text, recommending research and offering suggestions on matters of format and style.

The principal project team developing the guide series comprised Herman Goldstein, professor emeritus, University of Wisconsin Law School; Ronald V. Clarke, professor of criminal justice, Rutgers University; John E. Eck, associate professor of criminal justice, University of Cincinnati; Michael S. Scott, police consultant, Savannah, Ga.; Rana Sampson, police consultant, San Diego; and Deborah Lamm Weisel, director of police research, North Carolina State University.

Karin Schmerler, Rita Varano and Nancy Leach oversaw the project for the COPS Office. Megan Tate Murphy coordinated the peer reviews for the COPS Office. Suzanne Fregly edited the guides. Research for the guides was conducted at the Criminal Justice Library at Rutgers University under the direction of Phyllis Schultze by Gisela Bichler-Robertson, Rob Guerette and Laura Wyckoff.

The project team also wishes to acknowledge the members of the San Diego, National City and Savannah police departments who provided feedback on the guides' format and style in the early stages of the project, as well as the line police officers, police executives and researchers who peer reviewed each guide.

Contents

The Problem of False Burglar Alarms

In the United States in 1998, police responded to approximately 38 million alarm activations, at an estimated annual cost of $1.5 billion.[1] Most of the activations were burglar alarms.[†] This guide examines current police responses and presents alternative strategies to address the false alarm dilemma. Purchasers of an alarm system expect a police response if the alarm is activated, even though they bought the system from a private alarm company with no link to a police department. The vast majority of alarm calls–between 94 and 98 percent–are false (higher in some jurisdictions).[††] In other words, *reliability* of alarms, which can be measured using these false rates, is generally between 2 and 6 percent. Nationwide, false alarms account for 10 to 25 percent of all calls to police.[2] In the United States alone, "solving the problem of false alarms would by itself relieve 35,000 officers from providing an essentially private service."[3]

The guide begins by reviewing factors that increase the risks of false burglar alarms. It then identifies a series of questions that might assist you in analyzing your local problem of false burglar alarms. Finally, it reviews responses to the problem and what is known about these from evaluative research and police practice.

During the 1990s, consolidation within the alarm industry began changing the way companies delivered services. Larger companies purchased smaller ones, and a number of alarm monitoring companies moved, sometimes out of state, to achieve economies of scale. For example, a company in Texas might monitor the alarms of tens of thousands of customers in Utah or other distant states.[†††] If an alarm goes off, the

[†] Based on a review of police data from several cities, burglar alarms may account for as much as 90 percent of the alarm workload.

[††] False alarms may also generate calls for service from neighbors concerning noise.

[†††] The mergers also mean that alarm systems originally installed and serviced by one company may now be serviced by another. Many politicians fearful of alienating their local security industry often initially support police response to all alarms. However, the monitoring companies they are supporting may not be local at all.

† A few companies still respond as part of their contract with customers, but this is rare.

†† Estimates of the number of new alarms installed differ (see Blackstone, Hakim and Spiegel 2000a; Hakim and Blackstone 1997; Spivey and Cobb 1997).

monitoring company calls the owner. If no one responds or the person who answers gives the wrong prearranged code, the monitoring company calls the police, expecting them to respond.†

Estimates show between 18 and 21 million security alarm systems in the United States, and 15 million of these are monitored. The industry adds roughly 1.5 million new systems each year.†† Sixty percent of those are in residences, the rest on commercial and institutional premises.[4] Alarm industry statistics indicate that the average security system costs more than $1,600, with a $24 monthly monitoring fee. One out of every seven U.S. businesses and one out of every nine U.S. residences have alarms.[5] The recent trend of wiring new residential construction with alarm capacity has the potential for significantly increasing the number of alarm calls in the coming decade. Consequently, even those police agencies with recently enacted false alarm policies and ordinances should revisit their approach; otherwise, they might find their workload further consumed with false alarm calls.

Related Problems

The false burglar alarm problem exhibits some similarities to the related problems listed below. This guide does not specifically address the following problems because each requires its own analysis and response:

• false 911 calls,
• 911 hang-ups,
• false fire alarms,
• false vehicle alarms,
• false robbery alarms, and
• noise complaints about audible alarms.

The Causes of False Burglar Alarms

Research suggests that false burglar alarms result from three main causes:

- faulty or inappropriately selected equipment,
- poor installation, and
- user error (forgetful or unknowledgeable homeowners or roaming pets).[†]

Research tells us that false burglar alarms are not evenly distributed. Some alarm systems experience no false alarms, and others, many. One study suggests that 20 percent of alarm systems trigger 80 percent of false alarms.[6] As a result, officers responding to false alarms are often spending time away from locations where crime and disorder *are* occurring.

> Every year, Chicago police respond to more than 300,000 burglar alarms, 98 percent of them false, which translates to the equivalent of 195 full-time police officers.[7]

For the purposes of this guide, it is assumed that the alarm industry has the responsibility to improve the quality of its equipment, more accurately install devices and increase user knowledge of its product, all of which reduce false calls. This guide focuses on police policy remedies to devise a more appropriate response and stimulate the alarm industry to further improve the overall reliability of its products.

The Effectiveness of Burglar Alarms

Urban areas have higher residential burglary rates than suburban and rural areas. In 1999, the burglary rate for urban areas was 46.2 per 1,000 households, compared with 27.1 for

[†] The alarm industry suggests user error accounts for the largest portion of false calls, poor installation is on the decline, and faulty equipment is less of a problem given recent technological advances.

suburban and 32.6 for rural households. Residential burglaries tend to concentrate in and around low-income areas, victimizing low-income households.† In 1999, households with annual incomes of $14,999 or less had two to three times the rate of burglary as those with incomes above $50,000, and burglary victimization rates were highest for households with incomes of less than $7,500.[8]

The U.S. burglary rate declined substantially from 1982 through the late 1990s. During the same time, the number of premises with alarms rose, but there is no evidence that there is a tie between the two. During the 1990s, when alarm ownership experienced a steep rise, other types of crime declined just as sharply as burglary. This suggests that reasons other than an increase in alarms fueled the burglary decline.

Burglary remains one of the most frequent crimes, with a national clearance rate averaging below 15 percent.[9] Clearly, a central issue regarding police response to alarms is whether alarms help police catch burglars or prevent burglary. If alarms are highly reliable, the public benefits from police catching burglars, taking them out of circulation and reducing the risk of burglary for everyone in the community. However, if alarms are unreliable, then automatic police response becomes a personal service to the alarm owner, providing no benefits to the public at large. Under these circumstances, privatizing response or requiring a fee for service may be more appropriate.

The available research does not provide overwhelming support for alarms' value in catching burglars. In a Charlotte, N.C., study, researchers found that police were slightly more likely to catch burglars in the act on premises *without* alarms than on those *with* alarms.[10] As for the benefit to alarm

owners, the few studies available are not definitive. They cover only a few suburban jurisdictions (Hakim and Buck 1991; Hakim 1995) or involve interviews with only small samples of burglars (Wright and Decker 1994; Cromwell, Olson and Avary 1991).[†]

> In Salt Lake City, of the thousands of alarm calls responded to during 1999, only 23–or three-tenths of 1 percent–turned out to result from crimes.[11]

Hakim and Buck (1991) conducted studies in three suburban Pennsylvania areas and found that residences with alarms had a 1.4 percent chance of burglary, while those without had a 2.3 percent chance.[††] However, it is important to note that suburban alarm effectiveness may vary from urban or rural alarm effectiveness.[†††] As for businesses, in the same three areas, Hakim and Buck found that those with alarms had a 4.2 percent chance of burglary, while those without had an 18.2 percent chance. Businesses in those areas appear to benefit most from alarms, although the overall risk of burglary to businesses, even those *with* an alarm, is higher than the risk to residences *without* an alarm, suggesting that businesses in those areas may need more than alarms to reduce their risk of burglary.

As for security devices, only one study has been conducted to determine which is most effective at deterring burglary, and that study was of suburban areas. In reviewing data from Hakim and Buck's study, Hakim and Blackstone found that alarms are more effective than other security devices. For residences, they found that additional security precautions such as dead bolts, exterior lights, a dog, and a car in the driveway further decrease burglary risk. There is no comparable research for urban or rural areas, so it is unclear

[†] In interviews with small samples of active residential burglars in different jurisdictions, Cromwell, Olson and Avary, and then Wright and Decker, found that occupancy and surveillability (whether the burglars could be seen) were two of the most important deterrents. While most of the burglars said they would avoid residences with alarms, they also said they would avoid homes with dogs and those with yard signs indicating alarms.

[††] They conducted an additional study in Greenwich, Conn., one of the wealthiest U.S. cities, and found that "an alarm appears to be most effective when household income is above $150,000 and home value is above $601,000" (Hakim 1995; Hakim and Blackstone 1997).

[†††] Further, suburban Pennsylvania and Connecticut alarm effectiveness may not be the same as suburban Florida, Ohio or California alarm effectiveness.

which specific security precautions–window bars, strong locks, sturdy doors, alarms, alarm signs in the yard, security lights, or dogs–most deter burglars in those areas. It may be that security measures that are less expensive than alarms are as effective in deterring burglars in those areas.[†]

Bob Morris

Proper installation of alarm systems is essential to prevent false alarms.

The Costs of False Burglar Alarms

Each false alarm requires approximately 20 minutes of police time, usually for two officers. This costs the public as much as $1.5 billion per year in police time.

In 1997, Fort Worth, Texas, police spent $1.5 million responding to false burglar alarms.[12]

In the vast majority of jurisdictions, the cost of responding to false alarms is not recouped through fines. Jurisdictions that try to recoup costs generally omit the lost-opportunity costs, potentially a significant part of the equation.[††] Typical costs include:
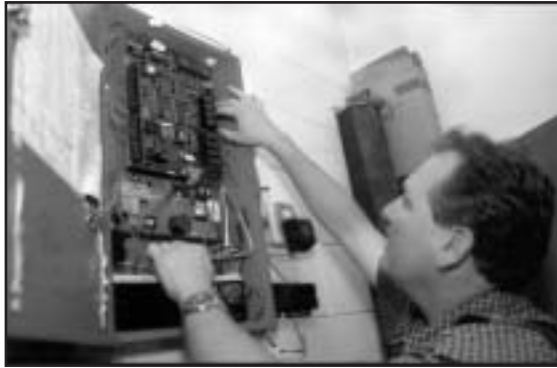
[†] Britain's Home Office researched residential burglary vulnerability from its 1997 national victimization data. A review of security devices, including dead bolts, burglar alarms, security lights, window locks, and window bars or grilles, *suggests* they reduce the risk of burglary, although they do not completely prevent victimization. Analysis of the value of one type of security measure vs. another was not done. An earlier Home Office study of a public housing area experiencing numerous repeat burglaries showed significant reductions in burglaries through use of a series of prevention measures that did not include alarms (Forrester, Chatterton and Pease 1988).

[††] Lost-opportunity costs might include time that police could have spent conducting problem-solving of documented crime and disorder, reducing repeat calls at crime hot spots, and engaging the community in public safety concerns. These all compete with time spent on chronic false alarm response.

• personnel costs of police call-takers and dispatchers;
• personnel, equipment and training costs of responding officers, along with those of any backup personnel;
• personnel costs associated with analyzing false alarms;
• software, hardware, office space, and equipment costs for false alarm management;
• administrative and staff costs of notifications, permitting, billing, and education programs;
• costs of developing, printing and distributing publications to educate the public and alarm companies about false alarms;
• lost-opportunity costs, since police are unavailable to work on actual crime problems; and
• costs associated with call displacement, because other 911 calls take longer to respond to.[†]

[†] It should be noted that it is unclear how many non-alarm calls to police are actually false.

As an inducement to buy an alarm, a number of companies offer "free monitoring services" for the first few months. Many insurance companies offer discounts–as much as 20 percent off property insurance–to commercial owners of monitored alarms, slightly less to residential owners.[13] In addition, many police departments offer several "free" false alarms before imposing any fine, even though the cost to respond is significant right from the start. These practices (free monitoring services by alarm companies and discounts from insurers) call into question the appropriateness of the current trend in U.S. policing of offering 3 or 4 "free" false alarms within a calendar year because the result is an alarm owner has no incentive upfront to prevent false alarms.

Certain burglary prevention measures have costs only to the owner. Lights, locks, and bars installed by a property owner (if within fire code) are cost-free to the rest of the community. The individual purchaser bears these costs. On the other

hand, alarm systems are not cost-free to the community especially if up to 98 percent of alarms are false but still require time and resources of a police response.

In Los Angeles in 1998, police received 3,000 alarm calls *per week*, with a yearly average false alarm rate of approximately 97 percent, representing the equivalent of 41 officers working 24 hours a day, 365 days a year.[14]

So, while alarm systems may have some benefit for alarm owners as part of an overall security package, the question remains whether non-alarm owners in the community should shoulder a share of the cost.

In addition, another cost of burglar alarms is the noise endured by neighbors when audible alarms sound, which then fuels noise complaint calls to the police. Some callers seek to alert the police that a neighboring alarm has rung. Others merely desire that the police stop the noise. In many jurisdictions, legislators have passed time restrictions for audible alarms, limiting them to 15 or 20 minutes and prohibiting extra sounding cycles.[†]

[†] In New South Wales, Australia, the Environmental Protection Authority prohibits the sale of building-intruder alarms produced after September 1997 that sound for more than five minutes or that can automatically reset and sound again, since police and insurance groups have reported that most burglaries are over within five minutes. See www.epa.nsw.gov.au/download/risnoise.pdf .

Bob Morris

User errors account for a high percentage of false burglar alarms.

Understanding Your Local Problem

Asking the Right Questions

The information provided above is only a generalized description of false alarms. The first step to address your community's false alarm problem requires an analysis. You must combine the basic facts with a more specific understanding of your community's problem. Careful analysis will help you design a more effective response strategy. This analysis should, at a minimum, answer the following questions:

• What percentage of your department's call-for-service workload involves responding to alarms?
• What percentage of the department's alarm calls are false?
• What percentage of the department's alarm calls are burglar alarms, and what percentage of those are false?
• What percentage of the department's noise calls relate to alarms,[†] and what is the call-taking cost for these?
• What is the department's true cost of responding to alarms (see "The Costs of False Alarms" above)?
• How many residential and commercial alarm systems are there in your jurisdiction, and what is the anticipated rate of growth for alarm installation?
• At what rate do police catch burglars at alarm calls in your jurisdiction?
• What are the false alarm rates for businesses, residences and governmental, public or semipublic premises (such as schools, city labs, museums, city storage yards, etc.) for your jurisdiction?[††]
• Are there any identifiable patterns for commercial alarm calls, such as at opening and closing times or during the holidays? (This indicates that alarm companies must educate specific groups of alarm owners.)

[†] Do not include vehicle alarms, as they are a different alarm problem requiring separate analysis.

[††] For example, 87 percent of Seattle's alarm activations are for the following: commercial, 44 percent; residential, 38 percent; banks, 2 percent; vehicle alarms, 2 percent; schools, 0.54 percent; Varda police temporary alarms, 0.33 percent; and mobile personal alarms, 0.02 percent.

- Are there any identifiable patterns for residential alarm calls, such as percent of alarm calls that are cancelled by the owner (or alarm company) within 15 minutes of the initial activation? This would indicate alarm company responsibility for educating owners about proper alarm operation.
- Do some alarm companies have higher false alarm rates than others?
- What does a review of websites for alarm companies in your area suggest about the accuracy of their claims when trying to gain new customers?
- What does a review of alarm company policies and contracts suggest about alarm companies' obligations to owners of alarms?
- Has your department identified jurisdictions that have successfully reduced their total number of false alarms, not just their rates (see "Responses to the Problem of False Burglar Alarms" below, for examples)?
- Has the department interviewed alarm company personnel to determine their perspectives on the false alarm problem and their openness to new solutions?
- Has the department interviewed groups of property owners (with and without alarms) to determine their perspectives on the false alarm problem and their openness to new solutions?
- Has the department met with police union or police association leaders to determine their perspectives on the false alarm problem, and their openness to new solutions?

Measuring Your Effectiveness

Measurement allows you to determine to what degree your efforts have succeeded, and suggests how you might modify your responses if they are not producing the intended results.

You should take measures of the false alarm problem *before* implementing responses, to determine how serious the problem is, and *after* implementing them, to determine whether they have been effective. For more detailed guidance on measuring effectiveness, see the companion guide to this series, *Assessing Responses to Problems: An Introductory Guide for Police Problem-Solvers*. The following are potentially useful measures of the effectiveness of responses to false alarms:

• number of alarm calls;
• percentage of the police department's call load devoted to false alarms;
• percentage of uncommitted time for officers to engage in problem-solving concerning actual crime and disorder problems;
• personnel hours devoted to handling false alarm calls;
• costs of handling false alarm calls;
• false alarm rates for various types of premises–commercial, residential, governmental (such as schools, city labs, museums, city storage yards, etc.);
• temporal patterns of false alarm calls, such as at opening and closing times or during the holiday seasons;
• false alarm rates of alarm companies; and
• the rate at which police catch burglars at alarm calls. If false calls are minimized, burglar apprehension rates should rise.

Responses to the Problem of False Burglar Alarms

Your analysis of your local problem should give you a better understanding of the factors contributing to it. Once you have analyzed your local problem and established a baseline for measuring effectiveness, you should consider possible responses to address the problem.

The following response strategies provide a foundation of ideas for addressing your particular problem. These strategies are drawn from a variety of research studies and police reports. Several of these strategies may apply to your community's problem. It is critical that you tailor responses to local circumstances, and that you can justify each response based on reliable analysis. In most cases, an effective strategy will involve implementing several different responses. Law enforcement responses alone are seldom effective in reducing or solving the problem. Do not limit yourself to considering what police can do: give careful consideration to who else in your community shares responsibility for the problem and can help police better respond to it.

Best Responses

1. Requiring alarm companies to visually verify alarm legitimacy before calling the police. Under this approach, alarm companies must *visually verify* the legitimacy of alarms (except holdup, duress and panic alarms) at the scene or by camera before calling the police. This approach, often referred to as "verified response" or "limited response," can significantly reduce false alarm calls, allowing police to focus on true break-ins, actual attempts and holdup, duress and panic alarms. Under this approach, only holdup, duress and panic alarms require permits, whereas burglar alarms do not, reducing the administrative costs associated with a police-

staffed false alarm program. The Salt Lake City Council adopted a limited-response ordinance in 2000,† and the Las Vegas Metro Police Department adopted this approach in 1992, changing departmental policy to require alarm company visual verification before dispatch. Dispatches on burglary alarms dropped from over 100,000 per year (before 1992) to less than 10,000 a year (in 2000), a 90 percent reduction, despite population growth from 678,190 in 1991 to over 1 million in 2000. In addition, Las Vegas burglary rates declined by 8 percent for the three years following the change in policy.[15] In Salt Lake City, after enactment of the ordinance, the first few months showed an 88 percent reduction in the number of alarm calls. Alarm companies charge an extra $5 per month for response to alarms. Several other cities have adopted verified response, as well. It requires an investment in educating political leaders, the public and interested parties (alarm companies, police unions, the media) about the costs and benefits of a modified response;†† it also requires alarm companies' availability for initial response to alarms.

2. Charging a fee for service for all false holdup, duress and panic alarms. A fee for service is charged for that portion of the alarm call load for which a "verified response" is impractical. Under this approach, there is no cost-shifting to police for false holdup, duress or panic alarms, so the approach discourages false calls. Salt Lake City has adopted a similar fining approach. However, it is recommended that each department conduct a separate analysis of holdup, duress and panic alarms.

3. Responding to holdup, duress and panic alarms only if they come from a stationary building. This approach is intended to stem the burgeoning use of mobile personal alarms and should be used in addition to the strategies

discussed above.[†] New technology has prompted entrepreneurs to market mobile alarms: some handheld, some worn on clothing. If police response is promised as part of these advances, there is the potential for dramatically increased false alarms. To reduce this potential, police agencies can adopt policies providing for police response only when an alarm originates from a building. Salt Lake City's ordinance includes a section to address this,[††] but again, a separate analysis of this problem is recommended.[†††]

Responses With Limited Effectiveness

4. Establishing a fee for service for all false alarm calls. A fee for service would cover all costs associated with responding to false alarms. These include lost-opportunity costs for officers responding to false alarms rather than proactively working on reducing crime and disorder problems.[††††] A fee for service differs from a fine in that it is not punitive; it is meant only to recover costs. It is unclear whether a fee for service reduces false alarms, though it does reimburse the city for providing a police response to a call that is almost always false. Any policy would need to incorporate follow-up action against nonpayers.

5. Establishing an ordinance with escalating fines for false alarms. Many police agencies rely on a local alarm ordinance to guide policy and establish false alarm fines. Some ordinances provide for fixed fines, others include escalating fines against repeat abusers, and a few apply a cost-recovery system. Typically, fines are allocated to the general fund and not to the police budget. Invariably, alarm owners are not fined until they have several false alarms (usually three or four). A fine system often includes a requirement for an alarm permit. Alarm permits help police departments to track and fine alarm abusers and to notify the most chronic abusers

[†] Those panic devices police provide to victims of ongoing crimes, such as domestic violence and stalking, may be exempted.

[††] The IACP noted in their report, "Response to Mobile Security Alarm Devices": "[M]obile security devices (MSDs) are rapidly being adopted by manufacturers of high-end automobiles. It is only a matter of time before the feature is offered broadly through all levels of new car sales. The U.S. Postal Service is contemplating the installation of such mobile distress alarms in 85,000 of its vehicles."

[†††] Also, an Internet search by the author revealed other examples of mobile security companies that offer police response as part of their product lines. In January 2001, there were 42 Internet stories on the "Techno-Bra." Sensors in the bra send out a panic alarm to police via global positioning satellite technology when there is a sudden change in pulse rate. The "Techno-Bra" is expected in stores in the coming year and will cost under $70. The U.K. ACPO adopted, as part of its national policy, the requirement that portable personal alarms contain technology to pinpoint the exact location of the person attacked (www.acpo.police.uk/news/2000/q4/93security.html).

[††††] Calculating lost-opportunity costs might be less difficult for departments engaged in problem-oriented policing. Line officers in these departments proactively address specific crime and disorder problems, such as open-garage burglaries in a four-block area or repeat burglary victimization in one neighborhood. It is the proactive time spent on specific crime and disorder problems that is lost (or lessened) when false alarm calls go unchecked.

of no further police response. This approach has had some impact in reducing false alarms, but it is administratively costly and requires the dispatch of officers (except in the most chronic cases). Some residents resent police fines for services, as they mistakenly believe their taxes cover them. As a result, some jurisdictions have found it difficult to collect fines; collection rates can be as low as 60 percent without significant follow-up.

6. Accepting dispatch cancellations. Some police agencies will cancel a dispatch if an alarm company calls to cancel. The alarm company cancellation is usually based on telephone, not visual, verification. This approach can decrease the number of calls officers must respond to, but does nothing to decrease the number of incoming calls to dispatchers. In fact, it increases them because cancellation calls must be fielded and dispatched.

7. Alerting alarm companies about false alarm abusers. Some police agencies contact alarm companies with the names of customers who are false alarm abusers. This practice can reduce false alarms if alarm companies work with alarm owners to remedy the abuse. This approach depends on the alarm company's willingness to follow up with its customers, and its capacity to bring abusers into line. It works best if both the alarm companies and the abusers are charged for costs. Alerting alarm companies requires police administrative staffing and police response to all alarm calls, and it may necessitate additional police resources as the number of alarm systems in buildings and elsewhere rises.

8. Publishing alarm companies' false alarm rates on websites or elsewhere. Police can calculate and publish the false alarm rates of individual alarm companies to help potential buyers make informed decisions. This could prompt companies with higher false alarm rates to improve their practices.

9. Holding false alarm classes. Some police agencies hold false alarm classes for abusers, usually with some success. This approach requires police administrative staffing. However, representatives from alarm companies, the group most knowledgeable about reducing false alarm calls, often do not attend.

10. Lowering the call priority of alarms. Avoiding the political issues involved in disagreeing with the alarm industry or in battling with city or county legislators, some police agencies have simply lowered the call priority for alarms (other than holdup, duress and panic alarms). This does not reduce the number of false alarms, but it does reduce the number of alarm calls competing for high-priority dispatch.

Response Not Recommended

11. Responding "priority one" to alarm calls. A number of police agencies still respond to alarm calls with their highest priority, often referred to as "priority one." The research does not support this level of response due to the high rate of false alarms. In addition, this approach does nothing to address the underlying causes of false alarms.

Appendix: Summary of Responses to False Burglar Alarms

The table below summarizes the responses to false burglar alarms, the mechanism by which they are intended to work, the conditions under which they ought to work best, and some factors you should consider before implementing a particular response. It is critical that you tailor responses to local circumstances, and that you can justify each response based on reliable analysis. In most cases, an effective strategy will involve implementing several different responses. Law enforcement responses alone are seldom effective in reducing or solving the problem.

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
Best Responses					
1.	13	Requiring alarm companies to visually verify alarm legitimacy before calling the police	The alarm company responds to the scene of an alarm and calls the police only if a crime or attempted crime has occurred. If the alarm company is in visual contact with the alarm site, such as through CCTV, and can verify a crime or an attempt, police will respond	…holdup, panic and duress alarms are exempted; alarm companies are prohibited from routinely including duress alarms in most alarm systems; and combined with responses 2 and 3	Requires educating the public, police union and media to enable police leaders to establish departmental policy, or to encourage local (and sometimes state) legislators to enact ordinances
2.	14	Charging a fee for service for all false holdup, duress and panic alarms	Used in combination with response 1, keeps these types of alarm calls from becoming unmanageable	…the alarm industry is prohibited from classifying ordinary burglar alarms as "duress" alarms; and combined with responses 1 and 3	Requires permits for holdup, duress and panic alarms, as well as false alarm reduction management to monitor trends in such calls

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
3.	14	Responding to holdup, duress and panic alarms only if they come from a stationary building	For an example, see the Salt Lake City ordinance at www.slcgov.com/ police. Exception may be made for panic alarms police give to high-risk domestic violence and stalking victims	…publicized so that mobile-alarm manufacturers know the police will not respond	Requires outreach to mobile-alarm manufacturers
Responses With Limited Effectiveness					
4.	15	Establishing a fee for service for all false alarm calls	The city calculates the true cost of false alarm response, including the lost-opportunity costs for police	…the political climate is more supportive of fees for service than "verified response"	Involves billing and follow-up with customers who fail to pay; may involve taking legal action against nonpayers
5.	15	Establishing an ordinance with escalating fines for false alarms	Requires permits for alarm owners and escalating fines for false alarms	…the community has an extremely low number of false alarms, and officers have sufficient free time so that responding to false alarm calls does not impede their ability to work on actual crime problems	Is often only a stopgap measure–police agencies should expect the number of alarm calls to rise in the coming decade; involves billing and follow-up with customers who fail to pay; may involve taking legal action against non-payees

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
6.	16	Accepting dispatch cancellations	The alarm company verifies (usually by telephone) that the alarm was false, and then calls the police, who cancel their response	…established by ordinance, and alarm companies follow through	Increases the number of incoming calls dispatchers must handle
7.	16	Alerting alarm companies about false alarm abusers	Police sort records of false alarm abusers by company, and notify the companies	…accompanied by sanctions for noncompliance; alarm companies, along with individual alarm owners, are charged for costs	Requires police staff time to sort records, and alarm company cooperation in dealing with alarm owners
8.	17	Publishing alarm companies' false-alarm rates on websites or elsewhere	Police post alarm companies' false alarm rates on department websites or elsewhere	…police alert alarm companies that they are going to do so, and give them time to reduce their false alarm rates before publication	Requires accurate and regular updating, perhaps quarterly. In the United Kingdom, an inspectorate monitors companies' false-alarm rates. For those companies unwilling to reduce high rates, the police do not respond to alarms without evidence of a crime in progress[16]
9.	17	Holding false-alarm classes	Police hold classes for alarm abusers and offer a free alarm call to those who attend	…police have the time and resources to do so	Police who lead the classes must develop expertise in typical alarm systems and their false-trigger patterns. The Phoenix Police Department co-teaches such classes with members of the alarm industry

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
10.	17	Lowering the call priority of alarms	Police code alarm calls as "low priority" for dispatch purposes	…police have sufficient resources to respond to alarm calls, and local legislators are unwilling to address the problem in any other way	Does not address the underlying causes of false alarms. The U.K. Association of Chief Police Officers suggests a delayed, lower-priority response following two false alarm calls in a rolling 12-month period
Response Not Recommended					
11.	17	Responding "priority one" to alarm calls	Police treat alarm calls as actual emergencies, despite extensive research findings to the contrary	…the community has few crime problems, and police have sufficient resources to do so	Assumes police desire full responsibility for false alarms or the community and legislature are unwilling to accept extensive research concerning the frequency of false alarms

Endnotes

[1]   Blackstone, Hakim and Spiegel (2000a).
[2]   International Association of Chiefs of Police (n.d.).
      www.theiacp.org/pubinfo/pubs/pslc/pslc5.toc.html
[3]   Blackstone, Hakim and Spiegel (2000a).
[4]   Blackstone, Hakim and Spiegel (2000a).
[5]   Hakim and Blackstone (1997).
[6]   International Association of Chiefs of Police (n.d.).
      www.theiacp.org/pubinfo/pubs/pslc/pslc5.toc.html
[7]   Chicago Police Department (2000)
      www.ci.chi.il.us/CommunityPolicing/Contact/FalseBurglar
      Alarms.html
[8]   Rennison (2000).
[9]   FBI Uniform Crime Reports, 1999.
[10] LeBeau and Vincent (1998).
[11] *The Salt Lake Tribune* (March 15, 2000). "Crying Wolf."
      Opinion piece, A12.
[12] ci.fort-worth.tx.us/ (city manager's web page, news dated
      August 24, 1998.
[13] Buck, Hakim, and Gaffney (1993).
[14] *The Christian Science Monitor* (Feb. 24, 1998).
      www.csmonitor.com/durable/1998/02/24/us/us.3.html
[15] Las Vegas Police Department data (January 2001).
[16]   www.acpo.police.uk/news/2000/q4/93security.html

References

Blackstone, E., S. Hakim and U. Spiegel (2000a). "The Schizophrenian Good: The Case of Police Response to Alarms." Unpublished paper, Oct. 24.

——— (2000b). "Response to Alarms: A New Type of Club Good." Unpublished paper, March 28.

Buck, A., S. Hakim and M. Gaffney (1993). "The Residential Security System/Homeowner's Insurance Discount Connection." *Security Dealer* (April).

Cromwell, P., J. Olson and D. Avary (1991). *Breaking and Entering: An Ethnographic Analysis of Burglary. Studies in Crime, Law and Justice*, Vol. 8. Newbury Park, Calif.: Sage Publications.

Englander, D. (1998). "Las Vegas Police Gambles on No-Response Policy and Wins. *Security Sales* (Dec.) p.p. 50-52, 54, 75.

False Alarm Reduction Association (n.d.). www.faraonline.org

Fieldsend, T. (1994). *Intruder Alarms–The Way Forward? Policy and Resource Implications for the Police Service*. Police Research Award Scheme. London: Home Office.

Forrester, D., M. Chatterton and K. Pease (1988). T*he Kirkholt Burglary Prevention Project*, Rochdale. Crime Prevention Unit, Paper 13. London: Home Office.

Hakim, S. (1995). "Securing Suburban Homes: The Greenwich Case." Philadelphia: Department of Economics, Temple University.

Hakim, S., and A. Buck (1991). "Residential Security: The Hakim-Buck Study on Suburban Alarm Effectiveness." Philadelphia: Department of Economics, Temple University.

Hakim, S., and E. Blackstone (1997). *Securing Home and Business: A Guide to the Electronic Security Industry.* Boston: Butterworth-Heinemann.

Hakim, S., M. Gaffney, G. Rengert, and J. Shachmurove (1995). "Costs and Benefits of Alarms to the Community: Burglary Patterns and Security Measures in Tredyffrin Township, Pennsylvania." *Security Journal* 6:197-204.

Hakim, S., G. Rengert and Y. Shachmurove (1995). "Burglar and Fire Alarms: Costs and Benefits to the Locality. *American Journal of Economics and Sociology* 54(2):145-161.

Hakim, S., and Y. Shachmurove (1996). "Social Cost-Benefit Analysis of Commercial and Residential Burglar and Fire Alarms." *Journal of Policy Modeling* 18(1):49-67.

International Association of Chiefs of Police (n.d.). "False Alarm Perspectives." www.theiacp.org/pubinfo/pubs/pslc/pslc5.toc.htm

———— (n.d.). "Response to Mobile Security Alarm Devices." www.theiacp.org/pubinfo/pubs/pslc/pslc8.introduction.htm

———— (1999). "Model States Report: A Cooperative Effort by IACP-PSLC/SACOP and the Alarm Industry." Alarm Industry Research & Educational Foundation, http://www.adialarm.com/msr1999/001.htm

LeBeau, J., and K. Vincent (1998). "Mapping It Out: Repeat-Address Burglar Alarms and Burglaries." In D. Weisburd and T. McEwen (eds.), *Crime Prevention Studies: Crime Mapping and Crime Prevention*, Vol. 8. New York: Criminal Justice Press.

Leech, P. (1985). "An Investigation Into Intruder Alarm Calls." *The Police Chief* 52(5):70-71.

Litton, R., and K. Pease (1984). "Crimes and Claims: The Case of Burglary Insurance". In R. Clarke and T. Hope (eds.), *Coping With Burglary.* Boston: Kluwer-Nijhoff.

Lovell, R. (1985). "False Alarms: Do We Cope or Control?" In J. Fyfe (ed.), *Police Management Today: Issues and Case Studies.* Washington, D.C.: International City Management Association.

Moslow, J. (1994). "False Alarms: Cause for Alarm." *FBI Law Enforcement Bulletin* 63(11):1-5.

National Burglar & Fire Alarm Association (2000). www.alarm.org and www.alarm.org/falsealarm/Tips/Dealer_Tips/dealer_tips.html

Partington, G. (1999). "Alarm Industry Group Helps Law Enforcement Manage False Alarms." *Access Control & Security Systems Integration* (May).

Rennison, C. (2000). *Criminal Victimization 1999: Changes 1998-1999 with Trends 1993-1999. National Crime Victimization Survey.* Washington, D.C.: U.S. Department of Justice.

Sostek, A. (1998). "Alarm Aggravation." *Governing Magazine* (October):34.

Southerland, R. (2000). "Dispatch to Nowhere." *Access Control & Security Systems Integration* (February).

——— (1999). "Putting a Stop to False Alarms." *Access Control & Security Systems Integration* (September).

Spivey, K., and R. Cobb (1997). "Public Safety/Private Sector Working To Solve the Problem." *The Police Chief* 64(6):44-52.

Virginia Board of Commerce (1993). *Report of the Board of Commerce on the Need for Regulation of Electronic Security Businesses*. House document no. 3. Richmond, Va.: Virginia Board of Commerce.

Wright, R., and S. Decker (1994). *Burglars on the Job: Street Life and Residential Break-Ins*. Boston: Northeastern University Press.

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Rana Sampson is a national problem-oriented policing consultant and the former director of public safety for the University of San Diego. She was previously a White House Fellow; National Institute of Justice Fellow; senior researcher and trainer at the Police Executive Research Forum; attorney; and patrol officer, undercover narcotics officer and patrol sergeant with the New York City Police Department, where she was awarded several commendations of merit and won the National Improvement of Justice Award. She is the coauthor (with Michael Scott) of *Tackling Crime and Other Public-Safety Problems: Case Studies in Problem-Solving*, which documents high-quality crime control efforts from around the United States, Canada and Europe. She is a judge for the Herman Goldstein Award for Excellence in Problem-Oriented Policing, a former judge for the police Fulbright awards, and a commissioner with California's Commission on Peace Officer Standards and Training. Sampson holds a law degree from Harvard and a bachelor's degree from Barnard College, Columbia University.

Recommended Readings

• ***A Police Guide to Surveying Citizens and Their Environments***, Bureau of Justice Assistance, 1993. This guide offers a practical introduction for police practitioners to two types of surveys that police find useful: surveying public opinion and surveying the physical environment. It provides guidance on whether and how to conduct cost-effective surveys.

• ***Assessing Responses to Problems: An Introductory Guide for Police Problem-Solvers***, by John E. Eck (U.S. Department of Justice, Office of Community Oriented Policing Services, 2001). This guide is a companion to the *Problem-Oriented Guides for Police* series. It provides basic guidance to measuring and assessing problem-oriented policing efforts. Available at www.cops.usdoj.gov.

• ***Conducting Community Surveys***, by Deborah Weisel (Bureau of Justice Statistics and Office of Community Oriented Policing Services, 1999). This guide, along with accompanying computer software, provides practical, basic pointers for police in conducting community surveys. The document is also available at www.ojp.usdoj.gov/bjs.

• ***Crime Prevention Studies***, edited by Ronald V. Clarke (Criminal Justice Press, 1993, et seq.). This is a series of volumes of applied and theoretical research on reducing opportunities for crime. Many chapters are evaluations of initiatives to reduce specific crime and disorder problems.

• ***Excellence in Problem-Oriented Policing: The 1999 Herman Goldstein Award Winners.*** This document produced by the National Institute of Justice in collaboration with the Office of Community Oriented Policing Services and the Police Executive Research Forum provides detailed reports of the best submissions to the annual award program that recognizes exemplary problem-oriented responses to various community problems. A similar publication is available for the award winners from subsequent years. The documents are also available at www.ojp.usdoj.gov/nij.

• ***Not Rocket Science? Problem-Solving and Crime Reduction***, by Tim Read and Nick Tilley (Home Office Crime Reduction Research Series, 2000). Identifies and describes the factors that make problem-solving effective or ineffective as it is being practiced in police forces in England and Wales.

• ***Opportunity Makes the Thief: Practical Theory for Crime Prevention***, by Marcus Felson and Ronald V. Clarke (Home Office Police Research Series, Paper No. 98, 1998). Explains how crime theories such as routine activity theory, rational choice theory and crime pattern theory have practical implications for the police in their efforts to prevent crime.

• ***Problem-Oriented Policing***, by Herman Goldstein (McGraw-Hill, 1990, and Temple University Press, 1990). Explains the principles and methods of problem-oriented policing, provides examples of it in practice, and discusses how a police agency can implement the concept.

- ***Problem-Oriented Policing: Reflections on the First 20 Years***, by Michael S. Scott (U.S. Department of Justice, Office of Community Oriented Policing Services, 2000). Describes how the most critical elements of Herman Goldstein's problem-oriented policing model have developed in practice over its 20-year history, and proposes future directions for problem-oriented policing. The report is also available at www.cops.usdoj.gov.

- ***Problem-Solving: Problem-Oriented Policing in Newport News***, by John E. Eck and William Spelman (Police Executive Research Forum, 1987). Explains the rationale behind problem-oriented policing and the problem-solving process, and provides examples of effective problem-solving in one agency.

- ***Problem-Solving Tips: A Guide to Reducing Crime and Disorder Through Problem-Solving Partnerships,*** by Karin Schmerler, Matt Perkins, Scott Phillips, Tammy Rinehart and Meg Townsend (U.S. Department of Justice, Office of Community Oriented Policing Services, 1998) (also available at www.cops.usdoj.gov). Provides a brief introduction to problem-solving, basic information on the SARA model and detailed suggestions about the problem-solving process.

- ***Situational Crime Prevention: Successful Case Studies***, Second Edition, edited by Ronald V. Clarke (Harrow and Heston, 1997). Explains the principles and methods of situational crime prevention, and presents over 20 case studies of effective crime prevention initiatives.

- ***Tackling Crime and Other Public-Safety Problems: Case Studies in Problem-Solving***, by Rana Sampson and Michael S. Scott (U.S. Department of Justice, Office of Community Oriented Policing Services, 2000) (also available at www.cops.usdoj.gov). Presents case studies of effective police problem-solving on 18 types of crime and disorder problems.

- ***Using Analysis for Problem-Solving: A Guidebook for Law Enforcement***, by Timothy S. Bynum (U.S. Department of Justice, Office of Community Oriented Policing Services, 2001) (also available at www.cops.usdoj.gov). Provides an introduction for police to analyzing problems within the context of problem-oriented policing.

- ***Using Research: A Primer for Law Enforcement Managers***, Second Edition, by John E. Eck and Nancy G. LaVigne (Police Executive Research Forum, 1994). Explains many of the basics of research as it applies to police management and problem-solving.

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Problem-Oriented Guides for Police series (available at www.cops.usdoj.gov):

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- **Community Policing, Community Justice, and Restorative Justice: Exploring the Links for the Delivery of a Balanced Approach to Public Safety.** Caroline G. Nicholl. 1999.
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- **Problem-Solving Tips: A Guide to Reducing Crime and Disorder Through Problem-Solving Partnerships.** Karin Schmerler, Matt Perkins, Scott Phillips, Tammy Rinehart and Meg Townsend. 1998.

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e05021556   Created Date: June 17, 2002

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