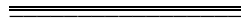
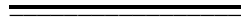


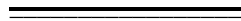
**The Bill Blackwood
Law Enforcement Management Institute of Texas**



False Alarms: A Drain on Law Enforcement Resources



**An Administrative Research Paper
Submitted in Partial Fulfillment
Required for Graduation from the
Leadership Command College**



**By
Darrell K. Sanders**

**Bexar County Sheriff's Office
San Antonio, TX
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ABSTRACT

The purpose of burglar alarms is to prevent burglary or theft. They also serve to alert police to and to help police apprehend burglars. Burglar alarm calls are a substantial number dispatched calls that police must respond to. There is also a considerable depletion on police resources when responding to alarm calls. The resources include the person who takes the call (call-taker), the dispatcher who sends the officer, the responding cover officer(s), and the costs for documentation, data entry, record keeping, etc. Unrealized costs also include computers and dispatch equipment as well as the vehicles and equipment used by officers to respond to the call. These costs and resource expenditures make the problem of false alarms significant to contemporary law enforcement managers.

This research will evaluate the problem of false alarms and demonstrate a multi-step solution to the problem of false alarms, which will release police resources for more critical calls and reduce the costs associated with false alarms. The method of inquiry used by the researcher included a review of articles, Internet sites, periodicals, journals, and a survey distributed to 35 survey participants.

The researcher discovered that more than 98% of burglar alarm calls are false alarms. False burglar alarms are generally due to human error, malfunction, or weather related problems. Many cities and counties already have methods in place to regulate and license burglar alarms in the form of permits issued to the owners. By making the owners responsible, law enforcement agencies reduce the time spent answering false alarm calls. Other agencies respond to alarms as a community service. Discussion will include the law enforcement perspective of false alarms and the history, role, and solutions to false alarms.

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INTRODUCTION

The issue to be examined considers whether false alarm calls to emergency services represent a significant number of the total alarm calls and whether there is a viable solution to control them. Alarm calls (burglary, robbery, medical, and fire) are an important aspect of law enforcement services. They account for a large percentage of emergency services time and resources. Of those calls, the false alarm rate for burglar alarms is an extremely high percentage. More than 98% of burglar alarm calls are false alarms (Sampson, 2007).

The relevance of false alarms is significant to contemporary law enforcement and other emergency services managers. There is a significant drain on police resources when responding to false alarms. The resources include the calltakers who answer the phone, the dispatcher who sends the officer, the responding cover officer(s), and the costs for documentation, data entry, record keeping, etc. Physical costs include computers and dispatch equipment as well as the vehicles and equipment used by officers to respond to the call. The purpose of this research is to investigate and examine the history of false burglar alarms as they relate to law enforcement response only, and to determine the role of the responding emergency service personnel, especially law enforcement when responding to false alarms.

The research question to be examined focuses on whether a genuine problem exists for law enforcement and which solutions can be offered to reduce the false alarm rate and the cost to law enforcement agencies. The intended method of inquiry includes a review of published articles, Internet sites, periodicals, journals, a survey distributed to 35 survey participants, and personal interviews. The intended outcome

of the research should demonstrate a problem for law enforcement in the form of expended resources and assets, which could be diverted to solving more timely needs. The field of law enforcement will benefit from this research by successfully demonstrating a genuine need exists to reduce the false burglar alarm rate.

REVIEW OF LITERATURE

In 1916, Mark Twain published a short story called "The McWilliamses and the Burglar Alarm." It is a story of a family that installed a new residential burglar alarm in order to "keep up with the Joneses." At one point, Mr. McWilliams had so many false alarms that he disconnected the system and put it out of service. In a few short days, a burglar broke in, dismantled the alarm system, and stole the entire alarm system (Twain, 2008),

On October 8, 2002, The International Association of Chiefs Police (IACP) adopted a resolution urging alarm companies to verify an alarm before dispatching police or law enforcement services. The IACP showed that for cities and agencies that adopted an enhanced call verification system into ordinances and policies, requests for law enforcement services could be reduced by 50% (Mowrey & Rice, 2004).

A false alarm is any alarm that requires fire or law enforcement response even when no evidence of a fire or crime is present. A false alarm may be caused by weather, faulty equipment, or human error. Research indicated that false burglar alarms result from several causes, including improper installation, human error such as incorrect codes, leaving a door or window open, pets in the house, bad weather (lightning or thunderstorms), inadequate employee training (commercial alarms), and faulty or poorly maintained equipment (Collins, 1989; Mowrey & Rice, 2004; Sampson,

2007). According to Wikipedia (2009), the term "false alarm" is actually misleading, and is regularly replaced by the term "nuisance alarm," indicating that the alarm activation is inconvenient or annoying. Nuisance or not, false alarms cost taxpayers billions of dollars annually. According to Sampson (2007), in 2002, law enforcement responded to approximately 36 million alarm activations, which is an estimated annual cost of \$1.8 billion.

When an alarm is activated, alarm companies have various procedures to deal with the activation. Usually the alarm company monitoring station, which may be hundreds of miles away at a central location, calls the residence or business to verify an activation. If someone answers and gives the correct response to a set of prearranged questions, there is no law enforcement response and the call ends. If the person has no PIN (personal identification number), code, or gives the wrong answers, the alarm company calls local law enforcement and officers respond. In some cases, the alarm company dispatches its own security officer to verify the activation first. If the security officer finds evidence of a crime, police are summoned. Law enforcement agencies that have ordinances in place need to enforce compliance to obtain the maximum benefit of reduced calls for service.

Sampson (2007) stated that "Commercial properties tend to have even higher false alarm rates than residential properties because more people tend to share responsibility for activating and deactivating the alarm systems, and the systems tend to be more complex" (p. 2). He went on to state that "The rate of false alarms for commercial alarm users may be as much as three times higher than the rate of false alarms among residential alarm users" (Sampson, 2007, p. 2). Many law

enforcement agencies require two or more officers to respond to a burglar alarm call as a matter of officer safety. As a result, the number of officers remaining on the streets can be seriously reduced, especially in a small agency. Officers often feel that they “waste a lot of time and manpower dealing with false burglar alarms because it takes two officers away from “*real*” crime” (R. V. Lujan, personal communication, October 4, 2008).

In 2007, Seattle police officers were dispatched to 14,119 alarm calls (see Figure 1). Only 332 (2.4%) of these were valid alarms where there was physical evidence of a crime. Seattle spent 1.2 million dollars responding to false alarms (Seattle Police Department, n.d.)

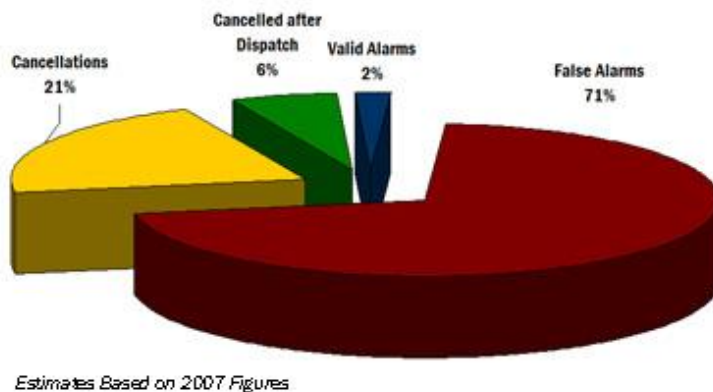


Figure 1. Percentages of Alarm calls from Seattle Police Department (Seattle Police Department, n.d.)

The problem is so serious there is even a group called The False Alarm Reduction Association. It is an association primarily of persons employed by government and public safety agencies working in false alarm reduction units. There

is also false alarm software called FARS (False Alarm Reduction System). It is false alarm billing and management software designed for local governments. It manages false alarm billing and collections and assists in the administration of local alarm ordinances.

According to the Texas Local Government Code, there are two locations where burglar alarm regulation can be found. Section 214.194 allows for a permit fee not to exceed \$50 per year. All fees and penalties must be used to administer the alarm permit program. On the other hand, county ordinances in Section 233.094 are regulated by the sheriff, "who may authorize the county auditor to assess and collect fees for the issuance or renewal of a permit in reasonable amounts set by the Commissioners Court" that must be deposited into the general fund of the county (Texas Local Government Code, Section 233.094, para. 1). In other words, a sheriff and county have much more freedom to regulate and assess alarm permits than municipalities.

Just because alarm regulation is in place, there does not seem to be a correlation between alarm permits and declining burglary rates. According to Sampson (2007), "the U.S. burglary rate has declined steadily and substantially since the early 1980s. During the same time, the number of households and businesses with alarms rose, but there is no evidence of a link between the two" (p. 5). Other crimes also decreased, which indicated that other factors may have been at work besides burglar alarms.

METHODOLOGY

The research question to be examined considers whether police resources are used excessively to respond to burglar alarms and robbery alarms which turn out to be false alarms. Alarm calls (burglary, robbery, and fire) are an important facet of law enforcement services. They account for a significant percentage of emergency services' time, equipment, and resources. Of those alarm calls dispatched, nearly all alarms are false alarms, and the false alarm rate is at an extremely high percentage. This will discuss the law enforcement perspective of false alarms and the history, role, and solutions to false alarms. The researcher hypothesizes the drain of police resources is widespread and costly. Suburban sprawl, with new home development, ensures the problem will escalate. Many cities and counties already have methods in place to reduce the time spent answering false alarm calls. Other agencies respond to alarms as a community service.

There will be a methodology to the research on the subject. There are no known books published on this topic, but there are several journal publications. Other research will be conducted through internet websites, and surveys of Texas cities and counties. The instrument that will be used to measure the researcher's findings regarding the subject of false burglary and robbery alarms consists of a survey taken from other law enforcement agencies and a short questionnaire.

The size of the survey will consist of seven questions, distributed to 35 survey participants from Texas law enforcement agencies. The response rate to the survey instrument resulted in 13 law enforcement agencies that replied with statistical information. Two replies were from University Police Departments who cannot enact

ordinances. The information obtained from the survey will be examined by comparative analysis, using a spreadsheet matrix that will contrast each jurisdiction and their false alarm rates with the others. Once complete, the findings should confirm a high percentage of burglar alarm calls as false alarms. It is anticipated that the time and resources dedicated to responding to false alarms will be excessive in most jurisdictions. There are several viable solutions available. These will also be discussed.

FINDINGS

Table 1. Cost analysis for false alarms in a single law enforcement agency (Bexar County Sheriff's Office, 2004)

	2001	2002	2003	2004*
All calls for service	104,694	97,570	97,091	33,061
Alarm calls	12,220	12,112	11,517	3,370
Percentage/alarms	11.7%	12.4%	11.9%	10%
<i>percent of all calls that were alarm calls</i>				
False alarms @98%	12,100	11,993	11,404	3,337
<i>rate of alarm calls that are false</i>				
Patrol hours spent /call	6,050	5,997	5,702	1,668
<i>based on avg time of 30 minutes per alarm call per officer</i>				
Cost for patrol	\$328,999	\$326,091	\$310,072	\$90,730
<i>Patrol hours multiplied by patrol hourly rate</i>				
Dispatch time spent/call	2,218	2,199	2,091	612
<i>based on 10 minutes to receive, type, and dispatch a call</i>				
Cost for Dispatch	\$37,132	\$36,804	\$34,996	\$10,240
Annual Cost	\$366,131	\$362,895	\$345,068	\$100,971
				<i>* YTD 04-28-04</i>
Total cost since 2001	\$1,175,064			
Cost per alarm	\$30.26	\$30.26	\$30.26	\$30.26
<i>cost per alarm =annual cost / # of false alarms</i>				

Table 1 illustrates one responding law enforcement agency's attempt to deal with the rising problem of false alarms. During a three year period, over one million

dollars were spent answering false alarm calls. These figures only include law enforcement responses to false alarms and do not include fire alarms (Bexar County Sheriff's Office, 2004).

Thirty-five agencies in Texas were sent a survey of seven questions in 2007.

Of those, only 15 agencies responded. All responses were anonymous. Of the

departments surveyed, 15% were county agencies. The remaining agencies were

Deleted: departments

municipal police departments. Twenty- three percent of the departments had

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populations of less than 5,000, 31% had population between 5,000 and 10,000, and

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31% had populations between 10,000 and 100,000. Only, 15% of agencies that

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responded had populations of over 100,000. When respondents were questioned

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about whether their city had an alarm ordinance, 62% responded that they did have an

alarm ordinance. Forty-six percent of the departments had fewer than 50,000 calls for

service during the year, and the other 54% had more than 50,000 calls for dispatch.

The detailed results of the survey are displayed in Table 2.

Table 2. Survey results

<u>Agency</u>	<u>Type</u>	<u>Population</u>	<u>Alarm Ordinance?</u>	<u>Calls/yr</u>	<u>Alarm calls/yr</u>	<u>% of False Alarms</u>
1	City	<5000	no	7,200	291	98%
2	City	<5000	no	4,500	205	96%
3	City	<5000	yes	2,200	152	96%
4	City	5k-10k	no	58,869	3,344	80%
5	County	5k-10k	yes	61,613	4,113	93%
6	City	5k-10k	yes	104,000	14,000	98%
7	City	5k-10k	yes	14,928	98	99%
8	City	10k-100k	no	43,460	2,874	99%
9	City	10k-100k	yes	45,950	2,993	97%
10	City	10k-100k	yes	140,742	9,194	99%
11	City	10k-100k	yes	156,253	10,642	98%
12	City	>100k	yes	194,246	13,382	97%
13	County	>100k	no	97,091	11,517	98%
Average rate of false alarms						96%

With one exception, the average analysis of alarms indicated more than 96% of all alarm calls were false. One agency reported an 80% rate of false alarms. It was from a small to medium sized agency with a population of 10,000 to 100,000 people, and no alarm ordinances or permits were indicated.

DISCUSSION/CONCLUSIONS

The researcher has concluded the rate of false burglar and robbery alarms is consistent throughout most law enforcement agencies. The problem or issue examined by the researcher considered whether or not false alarms are a burden to law enforcement and taxpayers. The question to be asked is whether taxpayers should be forced to pay for the malfunctions of privately owned equipment. The purpose of this research was to determine conclusively that this statement is true or false. The research question that was examined focused on law enforcement response to burglar alarms and whether officers' time could be better spent on other,

more significant calls, or patrolling, looking for “real” crimes. False alarm calls take up the valuable time of two or more officers required to respond. Their time could be better spent on other serious police matters.

The researcher hypothesized that false alarms do, in fact, drain law enforcement resources and taxpayer dollars. The researcher concluded from the findings that a protocol should be established by law enforcement agencies that will issue permits, verify alarms, or perform a limited response to false alarms. The findings of the research supported the hypothesis. The reason why the findings supported the hypothesis is that the data showed that when alarms are regulated, calls for false alarms decreased.

Limitations that might have hindered this study resulted because many law enforcement agencies do not track false alarms and the resulting expenses associated with false alarms. The study of false alarms is relevant to contemporary law enforcement because taxpayer dollars are at stake. Cities and counties are cutting services so that critical calls are answered more efficiently.

Law enforcement and citizen/taxpayers stand to benefit from the results of this research. There are virtually no books on this topic and very little literature on the subject. The alarm industry has made significant gains in the reducing false alarms according to Collins (1989). As false alarm calls decrease, law enforcement agencies will realize a savings in expenditures and more calls will be answered in a timely manner without having to deal with “nuisance alarms.”

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APPENDIX

Survey regarding false burglar alarms and creation of alarm permit ordinances

False burglar alarms drain law enforcement resources. This survey is to determine whether the creation of a burglar alarm ordinance will reduce the number of calls for false alarms by requiring alarm holders to purchase a permit to own an alarm and to maintain their alarms to prevent false alarms.

This survey is only applicable to city or county governments that can pass and enact ordinances. If you check "other" below please stop and return the survey. Please return to Darrell K. Sanders.

Type of Agency City County Other

Population serviced <5000 5k-10k 10k-100k more than 100k

Please contact your agency for accurate results

Number of calls dispatched per year _____.

Number of burglar alarm calls during same period_____.

What percentage of alarm calls were false _____?

Please complete the section that applies to your city or county.

If your agency does NOT have an alarm ordinance, do you believe an ordinance that controls alarms and sanctions false alarms will benefit your agency by reducing the number of false alarms?

_____.

If your agency has an alarm ordinance and issues alarm permits, have calls for false alarms been reduced?

_____.