

# Investigative Uses for Alarm systems

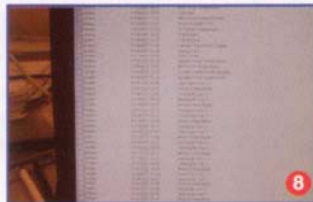
By Fred Herrera, CFI

Many of the homes and businesses that we encounter are equipped with various alarm systems. Some monitor for intrusion and motion only, while others also monitor for smoke or heat. Some systems are very basic; others are very complex. Not only do the alarm systems vary from basic to complex, the monitoring service can be simple or comprehensive. Depending on the service that the customer pays for, even a very complex alarm system may only be monitored for the minimum activities. This Southern California case study will demonstrate how an alarm system can be used by the municipal and private investigators in the course of a fire investigation.

A fire occurred in a commercial business on September 15, 2002 in La Mesa, California (Photo #1). Reportedly, the business was closed and the alarm system was armed approximately thirty minutes before the discovery of the fire, this provided by the manager who reportedly armed the system.

The fire was quickly extinguished and was obviously incendiary. Fire Investigators Bob Scott and Dave Burk of the La Mesa Fire Department and Officer Mike Pierce of the La Mesa Police Department conducted the municipal investigation. There were numerous two foot wide burn patterns extending on the carpet along the base of display racks of merchandise (Photo #2). The odor of gasoline was present in the business. Canine handler Mike Merriken of San Diego's Metro Arson Strike Team was requested and his partner Kona made numerous alerts throughout the business. Laboratory testing confirmed the presence of gasoline in multiple areas of origin.

Coincidentally, the manager who was last in the business, approximately thirty minutes prior to the discovery of the fire, lived in the apartment complex next



door. There were discrepancies between his statements, witness observations, and physical evidence on the scene that caused the manager to be a suspect for starting the fire. A significant factor was the removal of an estimated \$1,500 cash, which was kept in a place known only to the owner of the business and the manager. A person unfamiliar with the business would not have known where the money was hidden. The business had not been ransacked in an effort to find hidden valuables; the money was simply not in the hiding place. The exact amount of cash in the hiding place was unknown because one of the fires had been targeted at the computer that held the accounting software, located in the cashier's area.

Although the manager reported that the alarm system was armed, it was inconsistent with the alarm company report indicating that there was no alarm signal received at the monitoring facility. Other than an alarm trouble signal that was most likely the result of exposure to the ensuing fire, no other information was available from the alarm company; the system did not monitor openings and closings. Because of this, it was not confirmed whether the system was actually armed as reported by the manager.

Further, if the system was armed at the time reported by the manager, then subsequently reentered, another party with access to the business and the alarm code may have been responsible. At that point in time, though, the manager appeared to be the one with the best motive, means and opportunity to start the fire, but the evidence was very circumstantial. Investigators Scott and Burk and Officer Pierce were working diligently to establish the elements of the case.

A comprehensive investigation, including numerous interviews, mapping the scene and reported response route of the suspect, and computer research was underway. The fire damaged computer had been impounded and efforts were underway to recover the financial data from the hard drive. Local business owner and area gas stations were contacted, revealing useful witness information.

Remembering a prior CCAI seminar presentation by Vince Nigro of Vital Services on alarm systems (January 2002), which indicated that some alarm systems have an internal event memory, telephone conversations about the alarm system took place between me, representing the insurance carrier, Mike Pierce, Bob Scott and Dave Burk. Officer Pierce had also attended the seminar presentation and was prepared to pursue the possibility of recovering information from the alarm panel. Mr. Nigro was contacted; he researched the DSC 1555 alarm panel and confirmed that there was an internal memory chip inside of the panel itself. The alarm panel was in a utility closet behind the cashier's area, was undamaged and was collected

with the written consent of the business owner. This allowed investigators the ability to retrieve information on the alarm system that was not available from the alarm company.

The process of retrieving the information could have been accomplished in one of two ways; the panel could be sent to the manufacturer, who could download the event memory, or the panel could be sent to the installer, if the installer had the software to perform the download. Also, if the installer was to download the information, the master codes from the business owner had to be known.

In this case, the installer of the system, who was also the monitoring company, had the required software and had kept the master codes used in the system installation. The software was loaded onto a laptop computer. The computer was linked to the alarm panel and the information held by the memory was downloaded using an alarm keypad (Photo #3, #4, & #5). The downloaded memory showed a consistent pattern of opening and closing every day, at roughly the same times for 26 days prior to the fire. The only deviance from this pattern was on the evening of the fire, when the alarm system was not armed (Photo #6). The reason that the alarm company did not receive an alert during the fire or when the fire department forcibly entered the business was because the alarm was not set, contrary to the account of the manager.

The manager was presented with this information and he decided to refer the law enforcement investigators to his attorney. A very thorough municipal investigation was underway and more circumstantial evidence was being collected. Subsequent information revealed that the manager had scheduled an impromptu trip out of the country.

Sufficient probable cause was established and the manager was arrested. The case was prosecuted by Deputy District Attorney John Philpott. During the preliminary hearing, the La Mesa Police and Fire Department investigators Mike Pierce and Dave Burk presented a very thorough case against the manager, including the alarm company information that discredited his testimony. The case was bound over for trial and the manager subsequently pled guilty to starting the fire.

Due a team effort by the fire and police investigators, the private investigator, the alarm company and an alarm expert who presented at the CCAI seminar, the case was made stronger and the guilty party was convicted.