

Chapter 5

Crime Scene: Against Property

Overview

Photographs are not only valuable in documenting property crime scenes, but are very effective for showing the elements of crimes. Photographs can show the *res gestae* (the full story of the crime), the *corpus delicti* (the body of the crime), and the *modus operandi* (the method of the crime). Photographs that illustrate these points can be extremely valuable for the investigation and later when presenting the case in court.

Note: Each crime scene has unique characteristics. The type of photographs needed for complete documentation will be determined at the scene by the investigators familiar with the crime. While this chapter includes suggestions for some of the common types of photographs taken at certain scenes, they should not be considered comprehensive lists of all the photographs needed in every case.

When you arrive at the scene, be sure to have the lead investigator give you a walk through of the scene to point out evidence and other aspects of the crime scene that should be photographed.

Residential and Commercial Burglary Scenes

Photographs of burglary scenes will normally be taken with color film. However, some types of evidence should be photographed with black-and-white film. Black-and-white film has more contrast and can bring out more detail in some types of evidence. Examples of evidence that should be photographed close-up with black-and-white film include fingerprints, tool marks, and footwear impressions.

The series of photographs taken at residential or commercial burglary scenes should begin with photographs of the exterior areas of the building. Many crime scene photographers will go to the nearest intersection and photograph the street signs to identify the name of the street on which the building is located. A photograph of the street number on the building will help to further identify its exact location. If the building has an identifying sign, such as a business name, it should also appear in a photograph. It may be useful to take a few photographs that show the general

location of the building. This may be accomplished in a residential burglary by photographing the residence from a distance so the houses on either side of the residence are also in view. Consider photographing the vehicles parked on the street. There have been cases where the suspect's vehicle was abandoned when the suspect fled the scene. If an escape route can be identified, a series of photographs should be taken to illustrate how the suspect escaped from the scene.

Any evidence discovered outside the building should be photographed. This would include tire impressions on driveways, footwear impressions in flowerbeds, pry marks on window screens, stolen property or burglary tools dropped or abandoned by the suspect, etc.

Next, if the point of entry into the building can be located, photograph the point of entry with mid-range and close-up views from both the exterior and interior of the building.



Photographs illustrate the elements of the crime. In this case, a suspect broke the glass and pulled the

The following illustrations demonstrate how a series of photographs can be taken to clearly show how the suspects entered an office building during a burglary.



A series of photographs of this commercial burglary includes a view of the front of the office building.



The next photograph takes us around the side of the office building to an attached warehouse.



A mid-range photograph is taken to show the area of the point of entry into the warehouse.



Point of entry into warehouse, exterior view.



Point of entry into warehouse, interior view.



This view shows the point of entry into the warehouse in the foreground, and the point of entry from the warehouse into the office building in the background.



Burglary tools left by suspects outside the final point of entry.

Interior photographs are taken next. Each room of the residence or commercial building that appears to have been disturbed should be photographed. For each room or area begin with a view of the entrance. Photograph the room or area, as it appears when you first step inside. Take overview photographs from each corner of the room to show the layout of the room. A wide-angle lens is usually used for interior overview photographs. In large rooms you may need to take additional photographs from other locations for complete coverage.



TOP LEFT: Point of entry into the office building.

TOP RIGHT: Point of entry viewed from the inside the office building.

LEFT: Photograph of the area around the point of entry in the office building.

These overview photographs, along with mid-range photographs, should also show things disturbed by the suspect (e.g., moved furniture) as well as the positions of any potential items of evidence. If the overview photographs do not show the location of a specific item of evidence, take a mid-range photograph or an additional overview photograph from another angle to show the location of the evidence. Continue with photographs of other rooms connected with the crime scene.

Photograph the evidence that is discovered inside the building. Photograph damage to locks, doors and safes. Tool marks and trace evidence such as burned matches,



This photograph shows the area where a computer was removed and damage to the desk (the computer had been locked to the desk).

cigarette butts and bloodstain should also be photographed. Fingerprints and dusty footwear prints on floors can be photographed before they are collected.

Sometimes a suspect may flee before completing the burglary. Photograph burglary tools left behind by the suspect or victim's property stacked at a door.

Robbery Scenes

Robbery scenes, including home invasion robberies, should be thoroughly documented with photographs. The location of the scene should be photographed. If the crime occurred outdoors, the area should be photographed with a series of photographs by beginning from the outside of the scene and working in toward the location of the robbery.

If the robbery occurred indoors, the exterior of the building should be photographed and then the interior. The room, or rooms, in which the crime occurred, should be photographed with overview photographs from each corner of the room to show the layout of the room. A wide-angle lens is usually used for interior overview photographs. In large rooms you may need to take additional photographs from other locations for complete coverage. These overview photographs, along with mid-range photographs, should also show things disturbed by the suspect (e.g., knocked over furniture) as well as the positions of any potential items of evidence. If the overview photographs do not show the location of a specific item of evidence, take a mid-range photograph or an additional overview photograph from another angle to show the location of the evidence. Continue with photographs of other rooms connected with the crime scene.

Evidence should be photographed with mid-range photographs to show the location of the evidence in the scene and with close-up photographs to show the detail of the evidence. Evidence might include robbery notes, fingerprints, dusty footwear impressions, and duct tape or rope to bind victims.

With robbery scenes you will usually have a victim or witnesses that can describe the actions taken by the suspect. Photograph anything that helps to illustrate what

happened during the crime. Photograph the suspect's approach and escape routes. Consider taking photographs that illustrate the view victims and witnesses had during the incident. You can place the camera at a subject's viewing position and, using a 35mm lens, demonstrate what the subject could have seen.

If the robbery occurred in an area protected with video surveillance, the surveillance video tape should be taken into evidence.

If victims or witnesses have been injured in the robbery, be sure to photograph their injuries. Chapter four includes information on photographing injuries.

Arson and Fire Scenes

Buildings

Arson and fire scenes present challenges not encountered at most other scenes. These challenges include avoiding personal injury while working in damaged structures, protecting camera equipment from water damage, providing adequate lighting for photography, and identifying what needs to be photographed.

Color film should be used for fire and arson photography. Color film is necessary to show subtle color variations between objects and smoke stains.

If possible, photographs should be taken during a structure fire. These photographs can show the presence or absence of steam or smoke and the color of flame. The color of smoke can help identify what material may have burned and the presence of an accelerant. The color of flame can indicate the type of materials burning and the temperature (intensity) of the fire.



If possible, photographs should be taken during a structure fire to show the progression of the fire, and color of smoke and flame.

Photographs should be taken of parked vehicles in the area and bystanders watching the fire. It is not uncommon for an arsonist to return to the area to watch the fire burn.

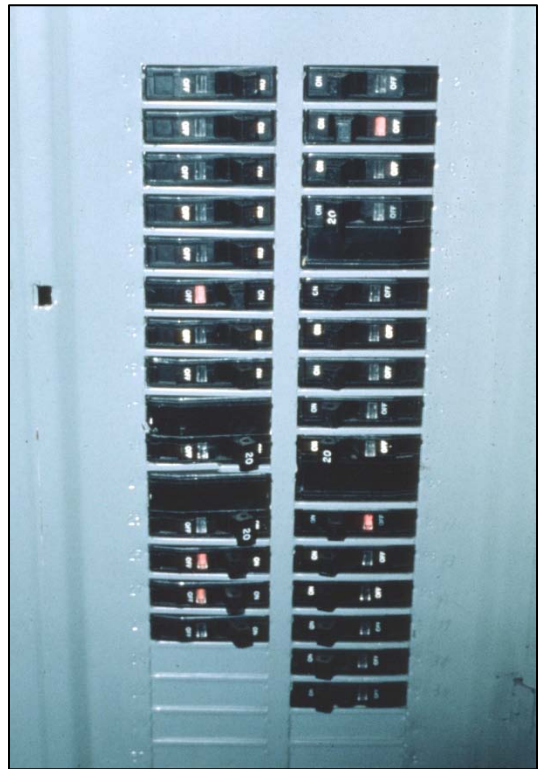
Once the fire has been extinguished an investigation can begin. Photography of the scene should be done as soon as possible to document the condition of the structure

and the presence and appearance of evidence before the scene is disturbed or altered. However, safety should be considered before beginning photography, especially inside the structure. Burned structures may be in danger of collapse and materials or chemicals inside the building may pose a health hazard. Be certain the building is safe before you enter the building. You should wear protective equipment, including head protection, when inside the building. Camera equipment should be protected from dripping water. Some arson photographers will cover their camera with plastic while others will have an assistant hold an umbrella to protect their equipment.

Photography should begin with photographs of the exterior of the structure. Photograph all sides of the structure. These photographs should show the extent of the exterior damage and the locations of doors and windows. Photograph smoke, heat and burn patterns on exterior window frames, doors, walls and the roof. Photograph circuit breaker boxes (fuse boxes) to show the position of the switches.



Photograph the exterior of the building to show the extent of fire damage and locations of doors and windows.



Photograph circuit breaker boxes to show the positions of the breaker switches.

Photograph gas meters and chimneys. Photograph any evidence located outside the scene including footwear and tire impressions, empty gasoline cans, and forced entry to the structure.

Consider taking aerial photographs of the scene. If an aircraft is not available you may be able to take photographs from the top of a nearby building or the top of the extended ladder on the fire department's ladder truck. These views will show fire damage that cannot be seen from the sides of the building.

The interior of the building will be photographed next. One significant challenge in photographing fire damage inside buildings is lighting. The camera records reflected light, but since the charred walls in a fire scene tend to absorb instead of reflect light, photographs are often underexposed. This is a significant problem because underexposed photographs will not record the subtle detail of burn patterns. To compensate for the probable underexposure, you should bracket exposures up to two f-stops more exposure. For example, if you would normally use an $f/8$ for a flash photograph, take three photographs, one each at $f/8$, $f/5.6$ and $f/4$. Another lighting issue involves lighting coverage—especially in large rooms. When using one electronic flash on the camera you will often have photographs with bright foregrounds and dark backgrounds. To increase lighting coverage you should consider using painting with light or multiple flash techniques. (These techniques are discussed in chapter 2.)



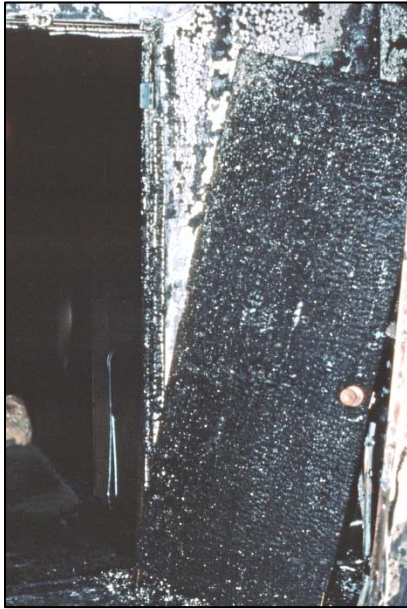
ABOVE: Accurate exposure is necessary to record the subtle detail of burn patterns.



RIGHT: Fire scene photographs are often underexposed since charred walls tend to absorb, instead of reflect, light.

Photograph the interior of the building in a logical sequence. Consider photographing from areas of least damage to areas of most damage. When doing so, photograph all rooms and areas inside building. As you photograph the interior of the structure be sure to take overview photographs of each room to show the furniture and other contents of the room. If all the televisions, electronics, and computers are missing from the inside of an upscale home, the fire could have been set by the owner for insurance purposes or by burglars to conceal a crime.

As you move through the scene, photograph walls, ceilings, doorways and both sides of interior doors to show the direction of the spread of the fire. It is also important to photograph burn patterns within the scene. If you have not received training in arson investigation, it will be helpful to have an arson investigator direct you in what to photograph. Orientation in burn pattern photographs is critical. Placing arrows in



ABOVE: Burn patterns often show the direction of the spread of the fire.

LEFT: Burn patterns at doorways indicate the spread of fire between rooms.



ABOVE: "V" patterns can indicate the origin of the fire.

LEFT: Floors should be photographed to show the presence of accelerants.

photographs to indicate north and showing camera locations on sketches can be helpful when documenting burn patterns.

Furnaces should be photographed to show their condition and location relative to the origin of the fire. Electrical outlets, electrical extension cords and appliances

should be examined and photographed if they could be related to the origin of the fire. Interior fire detection and suppression devices, such as smoke detectors, fire extinguishers and fire sprinkler systems, should be photographed.

Floors should be photographed to show the presence of accelerants. Any evidence of an incendiary device must be photographed. The area of the fire origin should be photographed thoroughly, before any excavation, showing the floor, ceiling, and nearby walls.

During the investigation the fire scene debris will be searched for evidence. This excavation process is carried out like an archeological dig—one level at a time. Any evidence found during this excavation process must be photographed.

Fire victims must be photographed. If a body is found in the structure it should be photographed in a manner similar to a homicide. Surviving victims should also be photographed to show the extent of their injuries. (Homicide and injury photography is discussed in chapter 4.)

Vehicles

Vehicle fires should be photographed at the fire scene whenever possible. The area surrounding the vehicle should also be examined for evidence. Photograph any evidence located near the vehicle including footwear and tire impressions, and empty gasoline cans. If the vehicle has been taken to a wrecking yard, then the original scene should be examined for evidence and photographed.



Vehicle arson photographs include exterior views of the vehicle.

Documentation of a burned vehicle should begin with photographs of all four sides of the vehicle. Next photograph all four sides of the vehicle with the hood, trunk and all doors standing open. Door hinges and window glass must be photographed to show the position of doors and windows at the time of the fire. Photograph the engine compartment, trunk, and passenger compartment. Be sure to include photographs of electrical wiring or anything else that may have been the origin of the fire. Photograph evidence of forced entry or vehicle theft.



These three photographs clearly indicate that the origin of the fire was the front passenger seat. Note the broken windshield, heat damaged roof and "V" pattern on the interior of the passenger door. The interior view of the vehicle shows a burn pattern on the door which indicates the fire origin.

Explosion Scenes

Explosion scenes can be either the result of a criminal act or an accident. Before approaching an explosion scene, be certain the area is safe. Undetonated explosives may be present. In the case of criminal acts, suspects have been known to plant secondary devices designed to explode when police or fire personnel are at the scene. A meticulous search by a bomb squad should be conducted before a crime scene investigation begins. If the explosion involves a structure, do not enter the structure until you are sure the structure is safe and will not collapse.

The explosion scene must be thoroughly photographed. The scene area should be photographed with a series of photographs by beginning from the outside of the scene and working in toward the origin of the explosion. The origin is usually the area with most damage and will sometimes include a crater. Photograph any evidence associated with the explosion including pieces of clock mechanisms, wire and pipe.



Exterior view shows the broken windows in the college campus dormitory room where the explosion occurred.

The following photographs were taken at an explosion crime scene. A college student was constructing a homemade explosive device in his dormitory room. As the student mixed explosive materials in a small trash can, the materials exploded.



Interior view of room where the explosion occurred.



Broken window glass inside the scene.



This view of the point of origin also shows the materials used to construct the explosive device.



This photograph shows a finger blown off the suspect's hand during the explosion.

Summary

One goal in documenting a scene is to tell the story of what occurred through photography. Each crime scene has unique characteristics. With a little experience the crime scene photographer will learn what photographs should be taken at various scenes.

