

CRIME SCENE PHOTOGRAPHY

GUIDE & ACTIVITY



Ontario Police College
Identification Training

Module P-13

Revised:

Douglas S.B. Johnston
Subject Coordinator

Graeme B. George
Course Coordinator

These materials are subject to the copyright of the Queen's Printer for Ontario. They cannot be used or reproduced in any form or manner without the prior written consent of the Ontario Crown. Any inquiries for use or reproduction should be addressed to the Director of the Ontario Police College. Any violation of this copyright will be rigorously pursued.

INTRODUCTION

RATIONALE

Forensic Identification Officers photograph crime scenes and the appearance of physical evidence found within. The photographs provide a visual record of evidence and, when presented in a logical sequence, can aid in story-telling. They may be used as investigational aids and, if accepted as evidence, may be used by police officers and other witnesses as visual supplements to testimony in court.

PREREQUISITES

- See Course Map

WHAT THIS MODULE CONTAINS

- **GUIDE** - this booklet, a resource guide
- **ACTIVITIES** - the booklet of practice activities
- **ACTIVITY CHECK-OFF SHEET** - a progress report
- **CRITERION TEST** - a test instrument

HOW TO WORK THROUGH THIS MODULE

- read the objective to discover what you will attain for your efforts
- gather the resources listed in this guide
- examine the Criterion Test to learn how you will provide evidence of attaining the objective
- start reading this guide and follow written instructions

The material in the Guide and the Activities booklets, although integral parts of this training package, are by no means adequate by themselves to ensure success. Study the resource material. The resources have been carefully selected for their relevancy to the objective.

THINGS YOU WILL NEED

- tripod
- 35mm camera kit with 60mm and 28mm lens
- unexposed 135 film
- shutter release cable
- air brush and lens cleaning tissue
- electronic flash

CRIME SCENE PHOTOGRAPHY



OBJECTIVE:

Given the necessary photographic materiel and photographic subjects, at the end of the session the student will be able to photograph crime scenes in natural and artificial light to the extent that the student will be able to: illustrate orientation of the subject within its environs from witnesses' angles of view, record detail in the main area of interest and present photographs in a logical sequence; as evaluated by the facilitator.

KEY CONCEPTS:

- overall, medium distance and close-up photographs
- scale
- daylight
- existing light
- fill-in flash
- flash off-camera
- painting with light
- perimeter of crime scene
- cardinal points
- aperture-priority
- depth-of-field
- 1:2 and 1:1 reproduction ratios
- fingerprints, footwear and tire impressions
- bounce card

RESOURCES

Video:

Book: *Glossary of Photographic Terms*

CRIME SCENE PHOTOGRAPHY



Photographing Crime Scenes

- Do not disturb the scene. Secure it.
- Discuss the occurrence with investigators and witnesses who may be at the scene with a view to determining what evidence may be expected to be found and what photographs need to be taken.
- Take preliminary notes and make sketches.
- Generally, photographs consist of an overview or location view. This view shows the subject in relation to its surroundings, e.g., a house and its location relative to the street and houses on either side. The mid-range or medium view is a closer approach to an area of interest visible in the overview and may also show orientation, e.g., an entire window including tool marks along its lower right side, and the close-up comprises the area of interest in the previous view at very close range to record detail, in this case, in the tool marks themselves. For every close-up there should be a mid-range view.
- Photograph the crime scene as you find it. If you learn that something had been moved prior to your arrival, do not attempt to replace it in the original position. Photograph it where it is and make notes concerning its relocation. Do not introduce anything to the scene without good reason. If something like a scale needs to be shown, take *before* and *after* shots to eliminate question about what the scale may be hiding from view.

Transient Evidence

- Consider photographing, first, evidence that is transient, vulnerable to weather conditions, e.g., footwear and tire impressions and areas that may need immediate access by others.

Overviews (Location)

- Determine the perimeter of the crime scene, a bank, a house, a bus, a park or, whatever. Other considerations may be the path of contamination, course of approach

and flight taken by the perpetrator. This may be within a building or may extend for some distance outdoors.

- Photograph these areas showing their relationship to their surroundings. Depending on your knowledge of the circumstances, this may mean photographing from several angles such as the cardinal points (east, west, north, south).
- Generally, aperture-priority mode is preferred in automatic operation to control depth-of-field.
- Daylight scenes can be photographed with existing light, bearing in mind that brightly illuminated scenes often contain harsh shadows.
- In the case of shadows, it may be possible to use fill-in flash if the flash-to-subject distance is within the capabilities of the flash unit. Otherwise, if the areas in shadow hold some importance, take additional photographs from shorter distances with exposure based on the illumination in those areas.
- At night, shorter distances can be exposed by single flash off-camera. Large interior and exterior scenes can be illuminated effectively by painting with light. Existing light exposure, although not likely to be balanced for daylight film, may be possible with the camera tripod-mounted. Showing the lighting that existed at the time may be of value to the investigation.
- Photograph rooms from the four corners with the camera level and aimed at the opposite corner. This will prevent converging lines of doors and windows. If necessary use a wide-angle lens.

Medium and Close-up Views

- These may consist of, among others, points of entry/exit, assault victims and two and three dimensional impressions of fingers, footwear, tires and tools. Medium distance views are close enough for some detail which may not be obvious in the overviews. For example, fingerprints and tool marks on a window in the overview photograph of a house may not be apparent but in the medium view, their orientation on the window is revealed. In the close-up, the ridge detail of the fingerprint and detail of the tool mark should be suitable for comparison.
- Certainly, in actual size or half-size close-ups, electronic flash is the preferred illumination source. If the exposure sensor for flash exposure is TTL, located at the film plane inside the camera, dedicated flash units will provide a reliable exposure of subjects of average brightness.

- Darker subjects may require one to two stops more exposure while brighter subjects may require a stop less.
- If the exposure sensor is on the flash unit, you will not get useable auto-exposures at these distances. Tests at 1:2 and 1:1 reproduction ratios will need to be carried out in manual mode with the film speed you normally use and a constant flash-to-subject distance and angle. Test results will enable you to choose an aperture setting for each reproduction ratio and subject brightness that is a reliable exposure.
- In addition to fingerprints, impressions of other objects may be valuable evidence, especially, where their condition may yield their type, size and manufacturer, if not an individualization
- Because of the restrictions of film size, footwear and tire impressions cannot be adequately photographed at ratios of 1:1 or 1:2 with a 35mm camera. Instead, mount the camera on the bottom of the centre column of a tripod and make the camera back parallel with the impression. Fill the frame with the foot wear impression. Take on photograph without a scale and one with a scale at the side of the impression. Without disturbing the integrity of the impression position a scale at the same depth as the impression or lowest part of it and arrange for it to be visible in the photograph. Lighting should produce short shadows and these should be lightened with the aid of a bounce card.
- Similar procedure is used to photograph tire impressions. Fill the width of the viewfinder with the width of the track. Several photographs with and without the scale need to be taken along the length of the track equivalent to one continuous revolution of the tire as a minimum, where possible.

Lists of Suggested Photographs

Break and Enter

- overview
- point of entry/exit
- interior views of each room suspected of having been entered
 - minimum of two views from diagonally opposed corners
 - depending on size and visibility, it may require a photograph from each corner
- areas in which articles were removed/relocated/damaged
- trace evidence (see indent below)
- exhibits to be seized (see indent below)
- other physical evidence (see indent below)
 - show location and orientation
 - if markers/scales used, show with and without implement
 - take close-ups where detail may be important

Fingerprints

- photograph 1:1 or 1:2, all fingerprints suitable for collection before applying lifting tape
- include a scale in the photograph that does not hide the impression
- keep the film plane parallel to the impression surface
- use electronic flash for illumination

Tires, Footwear, Toolmarks and Serial Numbers

- take orientation views
- take close-ups
 - one without a scale and
 - one with scale positioned on the plane of the impression
- aim strong light source at best angle for detail
- substitute light source with electronic flash
- stretch a measuring tape alongside tire impressions for continuity of overlapping photographs
- ensure film plan and subject plane are parallel

ACTIVITY ONE**CRIME SCENE
PHOTOGRAPHY**

The facilitator will provide simulated crime scenes along with a description of events related to the *crimes*. You will draw upon your knowledge of photographic techniques and processes to photographically record the scenes/evidence and produce contact prints and enlargements as directed.

NOTES

NOTES

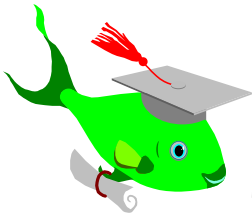
NOTES

ACTIVITY CHECK-OFF SHEET . CRIME SCENE PHOTOGRAPHY

Student: _____



Have course facilitator verify satisfactory completion of each activity.



The above-named has met the objectives of this training module.

Course Facilitator