

Fire Scene Documentation

Fire Marshal Inservice Training
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FIRE SCENE DOCUMENTATION

WHY DO WE DOCUMENT?

- Document the scene in order to recall observations at a later date.
- Document conditions of the scene.
- Compile factual data which will support opinions and conclusions.

FIRE SCENE DOCUMENTATION

Compilation of factual data from a thorough & accurate documentation of the scene is critical.

This is where the investigative opinions and conclusions will be developed and supported.

QUESTIONS

- Date and Time of the Incident/Investigation
- Location of the Incident
- Description of Fire Scene
- Exterior to Interior
- Least to Most
- Room of Origin
- Area of Origin
- Potential Ignition Sources

FIRE SCENE DOCUMENTATION

Common methods for documenting the scene include:

- Written Notes
- Photographs
- Video
- Sketch Maps

NOTE TAKING

Written notes should document:

- Activities at the scene
- Observations you made at the scene
- Anyone you encounter at the scene
(Witnesses/Occupants/First in Firefighters, etc.)

NOTE TAKING

Written Notes Help to:

- Write your report
- Answer questions about the incident and how the investigation was conducted
- Recall the case and prepare for testimony

NOTE TAKING

- Witnesses
 - Name**
 - Date of Birth**
 - Address**
 - Phone Number**
 - Information they provide**
- Structure Description
- Scene Examination

NOTE TAKING

Written Field Notes

- Save or Destroy?**
- Retain?**
- Where?**
- How Long?**

PHOTOGRAPHS

Why Photograph?

To document the fire scene and provide a TRUE and ACCURATE representation of the scene that will allow investigators to recall and communicate their observations at a later date.

PHOTOGRAPHS

- Still photographs are the most effective and reliable method to document a scene
- Still photographs can be brought into the court room and shown to the jury as evidence and documentation of the condition and exact location of evidence

PHOTOGRAPHS

- **A picture is worth 1000 words**
- **Visual images can portray the scene better than words**
- **Patterns and items overlooked at the scene may become more evident in photographs**
- **Photographs can substantiate reports**

PHOTOGRAPHS

WHAT TO PHOTOGRAPH

Overall Scene View from Various Angles to identify:

- Suspicious Vehicles
- Onlookers or Spectators

In larger fires that may draw a crowd of onlookers or spectators, take photographs of the crowd to later identify persons who may have knowledge of the fire

PHOTOGRAPHS

WHEN TO PHOTOGRAPH

The fire scene should be photographed **PRIOR TO, DURING and AFTER** the scene examination

PHOTOGRAPHS

How Many Photos Should We Take?

- As many photographs as are necessary to adequately document the scene
- More are better than less...Remember, once you leave the scene you may never be able to go back.

PHOTOGRAPHS

Take photographs **DURING or AS SOON AS POSSIBLE** after the fire.

Important because the scene may become altered, disturbed or destroyed:

1. Building in danger of collapse/demolition
2. Conditions may create an environmental hazard that will hinder the investigation
3. Evidence/Fire Debris should be documented in layers as it is discovered (Archaeological Dig Theory)

FIRE SCENE DOCUMENTATION

- The fire in progress
- Fire suppression activities
- The crowd
- Fire Suppression Photographs
- All angles & corners of exterior
- Structural damage
- All exterior walls - regardless of burn damage



1009 hours



1010 hours



1014 hours











SCENE DOCUMENTATION

- ➔ Aerial Views
- ➔ Witness Viewpoint
- ➔ Utilities
- ➔ Evidence
- ➔ Burn Patterns

AERIAL VIEWS



WITNESS VIEWPOINT

A photograph taken from the same vantage point as a witness who observed the fire to support or refute their credibility

PHOTO LOG

- **A Detailed Photo Log should be recorded at the scene while taking the photographs to include:**
 - **Description of each photo**
 - **Compass Direction to orient photo**

EXTERIOR PHOTOGRAPHS

Photograph the EXTERIOR of the structure first

A minimum of 8 Exterior Shots from various angles

- All 4 Sides
- All 4 Corners

EXTERIOR PHOTOGRAPHS

Start at front of structure and move in a clockwise or counterclockwise direction and work back to the starting point

Move in the same direction each and every time

EXTERIOR PHOTOGRAPHS

Fire Damage to Exterior

- Burn Patterns/Damage/Lack of Damage
- Last exterior Photograph should be point of entry

Take a "Title Shot"



- Incident Number
- Date/Time
- Location
- Photographer
- Orientation of Structure (Compass Direction)

EXTERIOR PHOTOGRAPHS

- Real Estate View



- Street Signs
- Mailboxes
- Numeric Identifiers

EXTERIOR PHOTOGRAPHS

Photograph utilities on the exterior of the structure

- Overhead Electric Service Drops
- Electric Service Meters
- Gas Meters
- Propane/Gas Tanks

EXTERIOR PHOTOGRAPHS

Photograph any physical evidence that may be located on the exterior of the structure

- Graffiti or Tagging
- Broken Glass from Doors or Windows
- Burn or Pour Patterns
- Evidence of Incendiary Devices

EXTERIOR PHOTOGRAPHS

Photograph surrounding areas that may represent remote evidence or explain prolonged / hindered fire suppression activities

- Limited Scene Access
- Exposure Damage

EXTERIOR PHOTOGRAPHS

The Conditions of Doors and Windows should be documented

- Open / Closed
- Locked / Unlocked
 - Locking/Latching Mechanisms
- Intact / Broken
- Forced Entry / Pre-Existing Damage

EXTERIOR PHOTOGRAPHS

Debris located outside the Building

- Fire Debris from inside the building that was removed during overhaul
- Glass from windows and doors
(Pick it up and examine it)

EXTERIOR PHOTOGRAPHS

GLASS



EXTERIOR PHOTOGRAPHS

- **Physical Evidence**
 - Containers
 - Ignition Sources
 - Incendiary Devices
 - Footprints
 - Tire Tread Impressions

EXTERIOR PHOTOGRAPHS

Physical Evidence

Any other physical evidence that may have been left by a suspect or anyone who was at the fire scene

EXTERIOR PHOTOGRAPHS

• **Utilities (Electric)**

- Transformers
- Poles
- Service Entrances
- Meters
- Exterior Panels/Switches
- Telephone/Cable Services

EXTERIOR PHOTOGRAPHS

• **Utilities**

- Gas
- Meters/Tanks
- Oil Fill Pipes
- Water Service
 - Garden Hoses

EXTERIOR PHOTOGRAPHS

Outbuildings

-Proximity to the structure

-Exposure Damage

-Contents of the outbuilding

EXTERIOR PHOTOGRAPHS

- Trash Receptacles

Contents of:

-Trash Cans

-Dumpsters



EXTERIOR PHOTOGRAPHS

Vehicles

-Parked near the structure

-License Plates

-Interior Contents

-Damage

INTERIOR PHOTOGRAPHS

**INTERIOR Photographs should begin
in the area of LEAST damage
and proceed to areas of
MOST damage,
ending in the Area of Origin**

INTERIOR PHOTOGRAPHS

**Interior Photographs should be taken
after the fire suppression activities
have concluded, prior to any major
overhaul or a layered scene
examination begins**

INTERIOR PHOTOGRAPHS

REMEMBER...

**Photograph 6 sides of a room
to include the walls, floor
and ceiling and 2 sides of each door**

INTERIOR PHOTOGRAPHS

Photographs should be taken throughout the entire structure to document:

- The condition of the structure after fire suppression
- The remaining contents and their condition
- Undamaged Areas
- Smoke and Burn Patterns to show the progression of the fire
- Area of Origin

INTERIOR PHOTOGRAPHS

In an undamaged room, it is only necessary to document that the room did not receive smoke, fire or water damage.

2 photographs may be sufficient

INTERIOR PHOTOGRAPHS

Photographs should be taken:

- Prior to the removal of debris and furnishings
- During the layered removal of debris
- After debris has been cleared the floor is exposed / washed down
- After the room has been reconstructed with remaining furnishings

INTERIOR PHOTOGRAPHS

SEQUENTIAL PHOTOGRAPHS

When an Area of Origin is identified, photographs should be taken in sequential order, first from a distance and then increasing closer until possible ignition sources are identified and documented with a close-up photograph

INTERIOR PHOTOGRAPHS

Possible Ignition Sources that are identified in the Area of Origin that have been considered and ELIMINATED should be documented with photographs

INTERIOR PHOTOGRAPHS

Close-up photographs of suspected ignition sources should be taken

- From various angles
- With and Without a Scale

INTERIOR PHOTOGRAPHS

Photograph Utilities and Appliances

- Circuit Breaker Panel
- Heating System / Positions of Switches
- Water Heater
- Electrical Appliances / Outlets

INTERIOR PHOTOGRAPHS

Photograph Fire Protection Systems

- Smoke Detectors
- Alarm Systems
- Sprinkler Systems
- Fire Extinguishers

**Documenting
Evidence Collection**

When potential evidence is identified and seized, several SEQUENTIAL photographs should be taken to document:

- The item in its original position found
- The item with a scale
- The item with an evidence number
- The item after packaged as evidence with the cap lid open and tools and















VICTIM PHOTOGRAPHS

Deceased or Injured Victims

- Location Found
- Both Sides of body
- Facial Area (Mouth and Nasal Areas)
- Hands
- Protected Areas
- Body Outlines
- Clothing



PHOTOGRAPHY CAUTIONS

Avoid photographing people inside the actual fire scene

- Other Investigators
- Fire Personnel
- Police Personnel
- Occupants
- Witnesses

PHOTOGRAPHY CAUTIONS

Avoid photographing items that do not belong in the scene and that were not there at the time of the fire

- Fire Suppression Equipment
- Investigation Tools

PHOTO REPORT

Upon return of the photographs, a detailed photograph report should be completed and submitted with the actual photographs:

- Photographer
- Date / Time / Location Photos Taken
- Camera Used
- Refer to Photograph Numbers
- Describe the Photograph in Detail

VIDEO

VIDEO CAN BE VERY USEFUL. HOWEVER, VIDEO SHOULD ALWAYS BE USED IN CONJUNCTION WITH STILL PHOTOGRAPHY

- Video documentation should not replace still photography because it is considered:

– Less Objective

– Less Reliable

VIDEO CAUTION

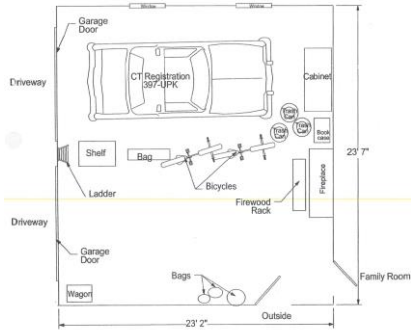
- Clear the scene prior to videotaping
 - Eliminate all background noise and other people talking.
 - Someone may say something that should not be said.
- Mark CD (Case #, Address, Name, Date)
- Prevent over-recording (Use CD-R)
- Videotape process similar to that of photography (Exterior to Interior, Least to Most)

SKETCH MAPS

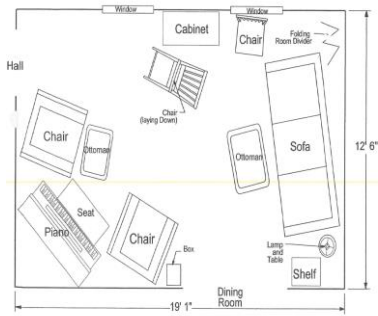
The most common sketch of a fire scene used by a fire investigator is a top view/projection plan

BIRD'S EYE VIEW

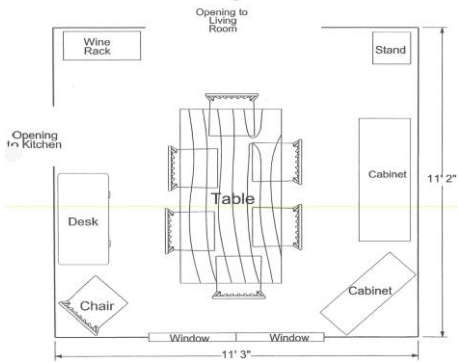
Garage

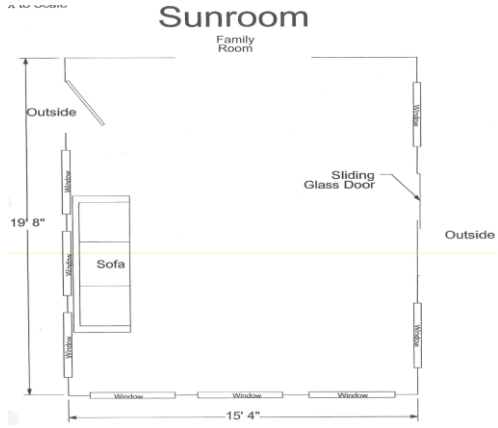


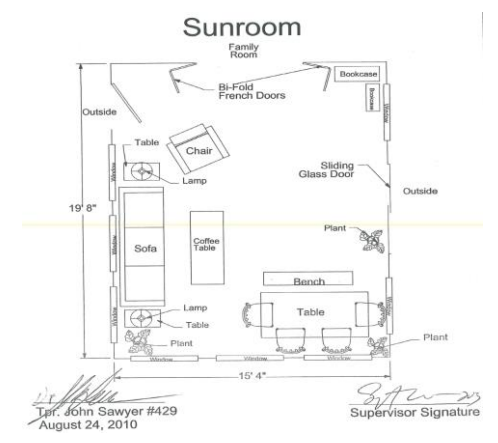
Living Room



Dining Room







John Sawyer
 Det. John Sawyer #429
 August 24, 2010

John Sawyer
 Supervisor Signature