

LORAIN COUNTY FIRE DEPARTMENT

Standard Operating Guidelines

Lorain County Association of Fire Investigators	SOG: 012 Effective Date: 10/04/2012 Supersedes: 05/06/2004 Approved: _____ President, Lorain County Fire Chiefs Association Page 1 of 12
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.10 Purpose

- .11 The purpose of this procedure is to develop a uniform approach and method to tasks and situations that may be encountered by member of the response team.
- .12 The LCAFI's role is to assist and supplement the requesting agency (RA) safety forces and to mobilize additional resources if necessary.
- .13 These procedures are not expected to encompass every situation that may potentially be encountered. Common sense and good judgment may dictate a course of action contrary to these guidelines. When personnel deviate from these guidelines, they must be able to justify and document their actions.

CODE OF ETHICS

Taken from the International Association of Arson Investigators the following provides our membership with guidelines to live and work by:

- I will, as an arson (fire) investigator, regard myself as a member of an important and honorable profession.
- I will conduct both my personal and official life so as to inspire the confidence of the public.
- I will not use my profession and my position of trust for personal advantage or profit.
- I will regard my fellow investigators with the same standards as I hold for myself. I will never betray a confidence nor otherwise jeopardize their investigation.
- I will regard it my duty to know my work thoroughly. It is my further duty to avail myself of every opportunity to learn more about my profession.
- I will avoid alliances with those whose goals are inconsistent with an honest and unbiased investigation.
- I will make no claim to professional qualifications which I do not possess.
- I will share all publicity equally with my fellow investigators, whether such publicity is favorable or unfavorable.
- I will be loyal to my superiors, to my subordinates and to the organization I represent.

- I will bear in mind always that I am a truth seeker not a case maker; that it is more important to protect the innocent than to convict the guilty.

.20 Divisions Affected

All Lorain County Fire, Rescue, EMS, and law enforcement agencies.

.30 Responsibilities

3.1 All officers/supervisors are responsible to comply with and ensure that personnel under their command are adequately trained, fully understand, and comply with this guideline.

3.2 All personnel have the responsibility to learn and follow this guideline.

.40 Team Memberships

The LCAFI shall maintain three levels of membership: Active, Apprentice, and Associate.

1. Active Member

Qualifications for **Active membership** include:

- 1) Applicants must be an active member of a Lorain County fire department or law enforcement agency with a minimum of five (5) years of experience.
- 2) Applicants must have completed the training courses for the Ohio Fire Academy, Fire Investigations 1 or approved equivalent.
- 3) Applicants must submit a copy of a BCII background check dated within last six (6) months.
- 4) Applicants must submit a Statement of Qualifications signed by their department administrator.

New members must serve a one year probationary term with evaluations conducted by a Senior Investigator at 6 months and 1 year. Candidates who complete the one year probationary period with satisfactory evaluations will be granted "Full" team membership and status.

To remain Active, members must attain a total of 24 hours per year, including attending a minimum of four (4) scheduled meetings and any combination of fire investigation training and/or participation in fire investigations annually.

2. Apprentice Member

Qualifications for **Apprentice membership** include:

- 1) Applicants must be an active member of a Lorain County based fire or law enforcement agency with a minimum of three (3) years of experience.
- 2) Applicants must submit a copy of a BCII background check dated within last six (6) months.

- 3) Applicants must submit a Statement of Qualifications signed by their department administrator.

In order to advance to Active membership, candidates selected for Apprentice membership are expected to complete the following:

- a) Applicants are required to complete the training course for the Ohio Fire Academy, Fire Investigations 1 or approved equivalent. (Exceptions to this requirement will be evaluated on a case-by case basis).
- b) Law enforcement members must complete training in basic fire behavior.
- c) Serve a one year probationary term with evaluations conducted by a Senior Investigator at 6 months and 1 year

3. Associate Member

Associate members shall include individuals with special expertise or agency affiliations (County prosecutor's office, SFM FIEB, ATF, retired Association members, etc.) solicited to assist in local investigation efforts.

.50 Training

- .51 The LCAFI will conduct a minimum of eight (8) monthly meetings annually. These meetings will be open to all members of participating departments and organizations. The monthly meetings will consist of case studies, LCAFI business and other training as scheduled.
- .52 Training shall be in accordance with NFPA 1033, *Standard for Professional Qualifications for Fire Investigator*, current edition.

.60 Team Activation and Response

- .61 The Incident Commander of the requesting agency (RA) shall request response of the LCAFI through the Lorain County 911 paging system (322-5888) in accordance with these procedures.
- .62 Upon request for assistance, the IC shall specify:
 - a. Nature of incident
 - b. Name of requesting agency and location of incident.
 - c. Staging area if needed.
 - d. Callback number.
 - e. Number of investigators required. (Prefer a minimum of four per scene.)
 - f. Need for SCBA use.
- .63 Personnel available for response shall confirm with LC 911 and provide an ETA to the fire scene.
- .64 Personnel shall respond with appropriate safety equipment, including: safety shoes/boots, helmet, gloves, eye protection, and vest/ID. SCBA should be provided as noted in the original request.

- .65 Upon arrival at the designated staging area, LCAFI personnel shall report to the IC and provide their identification cards to facilitate scene access.
- .66 Incident Command shall designate a Lead Investigator, preferably from the requesting agency, who shall assume charge of the fire investigation. The Lead Investigator should hold a minimum training in basic fire investigation. If no investigator is available from the requesting agency, this role may be assigned to an LCAFI investigator who is an Active member.
- .67 Recalls of additional or specific personnel shall be the discretion of the Lead Investigator in consultation with the Incident Commander.
- .68 In the event of a major incident where personnel may be required to remain on scene for extended periods of time, additional personnel may be recalled and rotated into the investigation as needed to relieve personnel.
- .69 The Incident Commander, PIO, or designee shall conduct all communications with the media.
- .70 General Safety
 - .71 Scene safety shall be the top priority of LCAFI personnel
 - .72 Incident Command shall act as or provide a Safety Officer.
 - .73 The Lead Investigator, Safety Officer, and Incident Commander shall discuss the following concerns:
 - a. Structural stability to include concentrated loads and collapse potential.
 - b. Status of electric and gas utilities.
 - c. Use of approved safety gear including, but not limited to, turnout gear, eye protection and SCBA.
 - d. CO monitor readings at fire scene.
 - e. Potential of hazardous materials at fire scene.
 - f. Fall hazards.
 - .74 Poorly ventilated areas shall require continuous air monitoring or SCBA usage.
 - .75 If SCBAs are required during the investigation phase, PASS alarms shall be utilized and the 2-in/ 2-out rule shall be followed.
 - .76 Fire scenes involving a potential of scene contamination from hazardous materials shall be cleared by the Incident Commander or Safety Officer in conjunction with hazmat resources prior to investigation.
 - .77 Investigations involving fatalities will require biohazard protection provided by the requesting agency.

.80 Scene Operations and Security

- .81 Incident Command shall assure that the fire scene is secured as early into the incident as practical.
- .82 The degree of scene security shall be dictated by the incident and may involve law enforcement and/or insurance companies as applicable.
- .83 The Lead Investigator, or their designee, shall be responsible to complete or obtain the following documents:
 - a. Consent to Search and Remove Evidence
 - b. Consent to Record Conversation
 - c. Witness Statement forms

.90 Case Management

- .91 NPFA 921 *Guide for Fire and Explosion Investigations* (current edition) shall be followed, as applicable, for all fire scene examinations.
- .92 The Lead Investigator, or designee, shall assign tasks as necessary to conduct a thorough scene examination, including position duties assigned to:
 - 1. Obtain a copy of Consent to Search form or have one signed by owner.
 - 2. Complete a photographic record of the exterior of the structure. This includes, but is not limited to, the roof, exterior doors and windows, all sides of the structure, and property found to be relevant to the investigation.
 - 3. Complete a photographic record of the interior of the structure. Document all interior rooms beginning with the area of least damage to the most, including furnishings, stock levels, condition/adjustment of controls for each utility or appliance, locks and other security measures, etc. Evidence relating to the cause of the fire must be photographically documented.
 - 4. Complete removal of collapsed debris not pertinent to the fire cause.
 - 5. Properly cleanse all tools prior to bringing them into the area of origin. Establish a Evidence Collection area convenient to the origin.
 - 6. Reconstruction (replacement) of all furniture, appliances, or other materials to their pre-fire positions using information from occupants.
 - 7. Analysis of fire flow patterns, damage patterns and related evidence such as shields and shadows, leveling, inverted cone burn patterns etc. Document this evidence with photographs, diagrams and written notes.
 - 8. Individually examine and document each potential accidental ignition source in the area of origin. This should be done regardless if there is gross evidence of arson.
 - 9. Diagram the room of origin showing accurate shape, dimensions, windows, doors and other key features, plus locations of key items and areas of evidence. Record the specific composition of the ceiling, walls, and floor surfaces on the drawing. Measure moveable items of evidence with a tape from fixed locations. Orient all drawings to north.
 - 10. Document and then collect physical evidence using appropriate methods.
 - 11. Call in necessary experts for advice when required.

12. Contact other agencies involved in the investigation prior to releasing the scene to ascertain if they need to re-enter the scene.

.100 Report Format

.101 All LCAFI investigations should be documented using the approved LCAFI report format. Two copies of all documents (including diagrams and photos) will be produced with one copy retained by the Lead Investigator and the other copy retained by LCAFI for a minimum seven years or per statute, whichever is longer.

.102 Copies of LCAFI reports, or any other information concerning an investigation whether past or current, shall not be released without proper authorization from the requesting agency (RA) and/or the Freedom of Information Act requirements, or by legal subpoena.

.103 The Lead Investigator shall insure that all documents are compiled in a timely fashion.

.110 Position Descriptions (Apprentice members may not lead position operations but may assist in most positions under direct supervision of an Active member)

LEAD INVESTIGATOR

Lead Investigator is responsible for the overall conduct of the investigation, including the safety of all personnel. Minimum preferred training level – Fire Investigation 1 or law enforcement.

Duties

1. Select and assemble personnel/equipment.
2. Conduct scene overview.
3. Determine and establish scene integrity, security, and safety.
4. Conduct scene walkthrough with team members investigating Origin and Cause and handling Forensics.
5. Coordinate all personnel and search patterns.
6. Assign Immediate Area Search and Investigative personnel.
7. Assign General Area Search and Investigative personnel.
8. Manage, evaluate, and finalize search and investigative actions.
9. Conduct final scene evaluation conferences.

CAUSE AND ORIGIN INVESTIGATION

Origin and Cause Investigation concentrates on determining the area or areas where the fire started and how the fire was ignited. Elimination of accidental causes and pursuit of evidence of incendiary cause fall within this duty. Minimum training level - Fire Investigation 1

Duties

1. Select and assemble equipment.
2. Accompany Lead Investigator on walkthrough in order to provide a technical evaluation and assessment of fire scene.
3. Establish scene parameters.
4. Identify area of fire origin.
5. Assist the General and Immediate Area Search personnel by providing emerging details about the scene so they can feed it into their interviews.
6. Technically evaluate investigative information and recovered materials.
7. Determine whether incident was incendiary or accidental, including ruling out all accidental causes.
8. Reconstruct the sequence of events and physical evidence.
9. Provide technical briefings.
10. Prepare statement regarding technical determination.

IMMEDIATE AREA INVESTIGATION

The Immediate Area Investigation interviews all witnesses directly related to the scene, including owners, occupants, employees, persons who discovered the fire, first responding fire fighters, passerby rescuers, and others with direct knowledge of the incident.

Duties

1. Select and assemble investigative equipment.
2. Interview local officers, firefighters, and all possible witnesses at scene.
3. Determine the owner of the property, the victim of the fire, and if any persons were injured in the fire.
4. Obtain names of any persons that are normally on the premises, such as employees, security guards, or janitors.
5. Provide the names and location of all persons or groups who should be interviewed to the interviewers. This list will include the injured persons who were taken to a hospital or rescue workers who have departed from the scene.
6. Record descriptions and time of sounds, color of smoke, and any odors noticed by witnesses.
7. Question the witnesses and record facts pertaining to the general activity at the scene prior to the fire.
8. Question the witnesses and record facts pertaining to anything unusual about the activity or any facts concerning persons, vehicles, sounds, odors, prior to and during the fire. Record descriptions and time of sounds, color of smoke, and any odors noticed by witnesses.
9. Reconstruct the immediate area activity. Work with origin and cause investigation, feeding information from witnesses.
10. Alert Lead Investigator to information given by witnesses, for example, whether a window was open or closed.

GENERAL AREA INVESTIGATION

The General Area Investigation interviews persons who may not have direct knowledge of the fire scene, but might have details about the people, the property, or the events surrounding the fire. This would include responsibilities like conducting the neighborhood canvass.

Duties

1. Select and assemble investigative equipment.
2. Review maps and evaluate ingress and egress and select a systematic pattern for canvassing the area.
3. Search area of ingress and egress for associative evidence, such as footprints, tire tracks, torn clothing, blood, hair, fingerprints, or other evidence that may relate to a suspect(s).
4. Search surrounding areas that may have received fire damage and document.
5. Determine possibility of delivery people being in the area and make a list of their names and addresses for follow-up interviews.
6. Canvass neighborhood for witnesses. Take contact information and interview.
7. Canvass business premises that may be related to ingress and egress, such as all-night service stations, cafes, taverns, and toll bridges. Inquire about security cameras, tickets, and other methods of tracking individuals.
8. Prepare a suspect list with necessary facts relating to the investigation.
9. Record descriptions of suspects, suspect vehicles, and suspect premises for future use.
10. Check sources of evidence recovered at the crime scene.
11. Check items and buildings in the surrounding area for possible connection to the fire, such as a discarded flammable liquid bottle. Mark these locations for the team members responsible for Photography and Schematics.
12. Alert Lead Investigator to any potential areas of evidence, such as where a car was parked at the time of the incident, and any information gained from the canvass.

PHOTOGRAPHY

Photography completely documents the scene and evidence collected.

Duties

1. Select and assemble equipment.
2. Photograph immediate and general area including victims, crowd, and vehicles.
3. Photograph team operations.
4. Photograph area of origin and damage showing measurements.
5. Photograph evidence as found.
6. Photograph immediate and general area from aerial perspective.
7. Take scene reconstruction photographic series.
8. Secure blueprints, maps, and previous photos of the scene, if available and necessary.
9. Photograph known or potential suspects.
10. Identify additional photographic needs with all scene investigators.
11. Maintain photograph record log.

SCHEMATICS

Schematics draws diagrams to describe the layout and measurements of the scene and the location of collected evidence.

Duties

1. Select and assemble equipment.
2. Diagram immediate fire area.
3. Diagram general area.
4. Identify evidence found by indicating the assigned evidence numbers on the evidence control sketch showing location found.
5. Show necessary measurements of heights, lengths, and widths.
6. Make artist's conception of scene prior to fire with the help of witnesses showing where furniture was arranged or how the structure was before the fire.
7. Prepare a legend on the diagrams.
8. Inventory collected evidence with the team member handling evidence and ensure that all evidence is noted on the control sketch.
9. Properly mark and identify the evidence control sketch and other diagrams for proper court presentation.
10. Coordinate with the Lead Investigator and other investigators.

EVIDENCE COLLECTION

Evidence Collection responsibilities include evidence identification, documentation, collection, labeling, preservation, and maintaining a chain of custody.

Duties

1. Select and assemble collection equipment.
2. Prepare evidence control log and set up evidence collection point.
3. Measure and record the area of origin and the location of all collected items contained within it, coordinating with Schematics.
4. Collect all evidence directed by investigators. Retain necessary control samples.
5. Properly package, label, and store evidence.
6. Record all properly marked and packaged evidence on the evidence control log.
7. Maintain custody and control of collected evidence at the scene.
8. Verify collected evidence with evidence control log before departing the scene.
9. Document the chain of custody and submit to temporary storage through the Requesting Agency.
10. Prepare laboratory analysis requests and transmit evidence to the laboratory.

SPECIALIZED FORENSICS

Specialized Forensics tasks may be required at a scene where there has been a fatality or where there is hazardous or delicate evidence like body fluids or hair. Forensics tasks may include determining a preliminary cause of death, collecting evidence from a body, and searching for trace evidence.

Duties

1. Select and assemble equipment.
2. Conduct preliminary walkthrough of scene with Lead Investigator and team member responsible for Origin and Cause Investigation.
3. Assist Lead Investigator in evaluating the situation and discuss the method of approach.
4. Assist General Area Search personnel where appropriate.
5. Assist Immediate Area Search personnel.
6. Coordinate with Federal, State and/or local laboratory personnel as appropriate.
7. Act as technical advisor for all laboratory-oriented questions arising at the scene.
8. Conduct field tests where appropriate.
9. Assist the team member handling Evidence and the Lead Investigator in the evaluation of collected evidence.
10. Assist the team member handling Evidence with proper packaging for submission to the laboratory.

FOLLOW UP INVESTIGATION

The Follow-Up Investigation should be conducted after the scene has been processed. It can include looking into financial, insurance, personal, and civic records to support the cause determination. If a crime has been committed, the follow-up investigation will concentrate on identifying evidence of participation and establishing a case.

Duties

1. Coordinate with on-scene team members for case briefing.
2. Review all case materials, including photographs, witness statements, lab reports and the like.
3. Based on cause determination made at scene, create appropriate follow-up investigation plan.
4. Follow-up all leads generated on-scene, including re-interviewing, fact-checking, and corroborating statements.
5. Work with laboratory personnel to interpret lab findings and order additional tests if necessary.
6. Coordinate with necessary information-yielding organizations like insurance companies, police departments, and government agencies.
7. If accidental fire is determined, report product or system faults to appropriate regulatory and consumer-protection agencies.
8. If incendiary fire is determined, spearhead investigation into motive, including interpersonal, financial, and insurance, and evidence of participation.
9. Maintain case records through trial phase, if necessary, and help expert witnesses prepare for trial.