

# **Challenge Exam Practical Evaluation for Fire Investigator Certification**

#### Overview

In addition to the written examination, there are eight Practical Tasks all candidates must pass in order to become a certified Fire Investigator. An overview of the tasks are below, followed by details for each task.

## Day 1 Practical Evaluation: Southbury Training School

The Practical Skills Station evaluation, conducted at the practical day is held at Southbury Training School (Southbury, CT), is a comprehensive exercise that evaluates candidates on their ability to conduct an origin and cause investigation at an actual fire scene. Candidates will be required to physically conduct exterior and interior examinations, hypothesize origin and cause, and show how they would prove their hypothesis. Candidates will be required to collect evidence using the correct container and method of collection, as well as photographing the scene and creating a diagram (Sketch). Finally, candidates will interview the first-in firefighter. Candidates will have to be able to print out a minimum of 4 pictures to submit with their report.

#### Day 2 Practical Evaluation: Rocky Hill Fire Department

All candidates will be required to submit a written fire investigation report of the fire they inspected on Day 1 of the practical evaluation. Candidates will then be required to testify at a mock trial, using the report they submitted. Each candidate will also be required to brief an executive fire officer on the fire scene investigated on Day 1 of the practical evaluation. The briefing will be two to five minutes in length.

#### **Task Details**

### **Task 1: Conduct an Exterior Survey**

Conduct an exterior survey, given standard equipment and tools, so that evidence is preserved, fire damage is interpreted, hazards are identified to avoid injuries, accessibility to the property is determined, and all potential means of ingress and egress are discovered.

**Rated Skills:** Verbally describe the building construction and condition, Conduct 360 degree survey of the fire scene, Observe and describe effects of fire suppression, Observe and describe fire effects, Identify hazards to avoid possible injuries, Identify entry/exit points, Verbally describe area of scene security

Performance Standard: NFPA 1033, 4.2.3 (A) (B) Fire Investigator

### Task 2: Conduct an Interior Survey

Conduct an exterior survey, given standard equipment and tools, so that evidence is preserved, fire damage is interpreted, hazards are identified to avoid injuries, accessibility to the property is determined, and all potential means of ingress and egress are discovered.

**Rated Skills:** Verbally describe structural condition and interior finish, Conduct 360 degree survey of the fire scene, Locate Fire Scene, Observe and describe effects of fire suppression, Observe and describe fire effects, Observe and describe fire spread and burn patterns, Identify hazards to avoid possible injuries, Identify and preserve potential evidentiary value requiring further evaluation

Performance Standard: NFPA 1033, 4.2.3 (A) (B) Fire Investigator

### Task 3: Determine Origin and Cause

Conduct an origin and cause investigation utilizing the scientific method, given standard equipment and tools so that evidence is preserved, fire damage is interpreted, hazards are identified to avoid injuries, area of origin is identified, and potential ignition sources identified.

**Rated Skills:** Observe and describe signs of fire development, Show fire effects through observation and reconstruction, Interpret variations of burn patterns, Identify area of origin, Develop hypothesis of fire cause, Identify any protected areas in the area of origin, Use protected areas to reconstruct elements of the scene, Explain testing of hypothesis, State Final Hypothesis

**Performance Standard:** NFPA 1033, 4.2.4 (A) (B), 4.2.5 (A) (B), 4.2.6 (A) (B), 4.2.7 (A) (B) Fire Investigator

#### **Task 4: Collect and Document Evidence**

Take a sample as evidence without contaminating it, ensuring the proper container is used, the proper sample size is taken, and the sample is documented and the chain of custody is established.

**Rated Skills:** Locate proper area to take evidence, Select the proper container, Mark the evidence before taking the sample, Wear gloves while handling evidence, Use appropriate collection method, Seal container with evidence tape/marked container, Enter evidence in log, Document entire process with photographs, Select methods used to secure evidence

Performance Standard: NFPA 1033, 4.3.2 (A) (B), 4.4.2 (A) (B) Fire Investigator

#### Task 5: Conduct a Field Interview

Plan and conduct a field interview of a person of interest in the course of a fire investigation, given a standard fire investigation scenario, so that information key to the investigation is acquired.

**Rated Skills:** Reviewed provided information, Requested additional information if required, Developed an interview strategy, Conducted and documented the interview, Exhibited strong listening skills

Performance Standard: NFPA 1033, 4.5.1 (A) (B), 4.5.2 (A) (B) Fire Investigator

### Task 6: Brief a Group of Fire Investigation Professionals

Brief an executive fire officer on the fire scene investigated on Day 1 of the practical evaluation. Brief the executive fire officer with a two-to-five-minute presentation, so that the information is accurate and the presentation is completed within the allotted time. Be prepared to answer follow-up questions

**Rated Skills:** Identified the audience's needs, Verbally presented known information within two to five minutes, Answered follow-up questions

Performance Standard: NFPA 1033, 4.7.2 (A) (B), Fire Investigator

# Task 7: Prepare a Written Investigation Report

Prepare a written investigation report, given investigative findings, documentation, and a specific audience, so that the report accurately reflects the investigative findings, is concise, expresses the investigator's opinion, and meets the needs or requirements of the intended audience(s).

**Rated Skills:** Analyzed investigation information and incident reports, Wrote initial investigation report, Included properly supported opinion of fire cause, Included necessary supporting evidence/documentation, Determined the reader's needs or requirements, Reviewed the report for grammar and accuracy

Performance Standard: NFPA 1033, 4.7.1(A) (B) Fire Investigator

### **Task 8: Testify During Legal Proceedings**

Testify during legal proceedings, given investigative findings, contents of reports, and consultation with legal counsel, so that all pertinent investigative information and evidence is presented clearly and accurately and the investigator's demeanor and attire are appropriate to the proceedings.

**Rated Skills:** Answered questions concisely; Differentiated between facts and opinions; Exhibited clear recollection of report content; Confidently handled evidence and photographs; Gave technical answers that supported his/her conclusion

Performance Standard: NFPA 1033, 4.7.3(A) (B) Fire Investigator