



**International Association of Arson  
Investigators  
Evidence Collection Technician  
(IAAI-ECT)  
Program Manual**

**International Association of Arson Investigators  
Program Manual For  
Evidence Collection Technician Professional Designation**

**1. Program Description**

The International Association of Arson Investigators, Evidence Collection Technician program (IAAI-ECT) is administered by the IAAI and is designed to verify an applicant's level of fundamental abilities as measured against various core job performance requirement (JPR) of established professional qualifications standards and standard industry practices related to evidence collection on fire scenes. This measurement is not all inclusive of the incorporated professional standards cited but lays the foundation for measuring the holder's fundamental ability to perform specific evidence collection tasks related to fire scene investigation at an acceptable level as measured against published acceptable practices.

Portions of the following professional documents and standard practices were considered when developing this professional designation and incorporated practical testing:

NFPA 1033, Standard for Professional Qualifications for Fire Investigators, 2014 edition

Section 4.4 – Evidence Collection and Preservation

ASTM E1188-05, Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator

ASTM E1459 – 92 (Reapproved 2005), Standard Guide for Physical Evidence Labeling and Related Documentation

CFITrainer.net – Evidence Collection Tool Box  
(<http://www.cfitrainer.net/resources.aspx>)

This program was designed at the direction of the Board of Directors of the IAAI and is in accordance with the objectives outlined in section 2 (D) of the IAAI constitution and bylaws related to the establishment of high professional standards of conduct among members.

It is the intent of this program to encourage continued educational and professional development through the recognition of an individual's accomplishment in reaching core abilities and competencies related to fire investigation.

**2. Program Oversight**

The IAAI-ECT program will be administered by the IAAI staff based on the policies and directives of the IAAI Board of Directors. The staff will measure an application against the program requirements as established by the IAAI Training and Education Committee

and approved by the IAAI Board of Directors. Additionally, IAAI staff will facilitate and coordinate the administration of the comprehensive program examination to applicants that are deemed to have met the minimum established program requirements and will provide the appropriate credentials to those successfully challenging the examination. The comprehensive examination database will be maintained by the IAAI- Training and Education Committee with the assistance of necessary subject matter experts.

### **3. Application and Facilitation Fees**

The application and facilitation fees are determined by the Board of Directors who will set the initial application and facilitation fees and renewal fees for IAAI members and non members. Application and facilitation fees are not subject to refund. If an application is rejected based on lack of experience or training, the application will be held in abeyance until further documentation is submitted. If no further documentation is submitted within six months of request by the IAAI office, the application will be rejected and the individual will be required to reapply and remit new application and facilitation fees. If an application is rejected as a result of an individual failing to successfully challenge the comprehensive practical examination at a scheduled offering, they will be allowed one opportunity to re-test at a scheduled offering within a six month period. This re-test will require the payment of additional facilitation fees. If an application is rejected as a result of an individual failing to successfully challenge the comprehensive practical examination at the retest, the applicant will be required to reapply and remit new application and facilitation fees.

### **4. Program Requirements**

Applicants for this professional designation must provide documentation of meeting minimum program requirements including work experience; and training and education. Additionally, applicants must achieve a passing score on the comprehensive practical examination as established by the IAAI. An applicant does not have to be a member of the IAAI or any chapter to apply for this professional designation. The requirements of each area are outlined below.

#### **4.1 General Experience:**

The applicant for this professional designation must have 18 months of general experience in a fire investigation related industry.

General experience is defined as practical experience which would allow an individual to develop fundamental knowledge and abilities related to fire scene investigation without the specific assignment of specialized duties or requirements. This general experience can usually be obtained through ancillary duties related to job responsibilities of Fire Officers and Suppression personnel, Insurance Adjusters and Investigators, Law Enforcement Investigators and Crime Scene Technicians and other fields that are directly involved with the investigation and documentation of fire events.

*The applicant shall provide adequate documentation to support this experience such as employment records or a letter of certification from an employer.*

## **4.2 Specific Work Experience**

The applicant for this professional designation must have participated in a minimum of 7 fire scene examinations in which forensic evidence was collected. The applicant is responsible for submitting general supporting document that includes the location of the examination, the date of the examination, and the particular type(s) of evidence collected.

*The applicant shall provide adequate documentation to support this experience such as a letter of certification from an employer containing a minimum of the location of the examination, date of the examination, and particular type(s) of evidence collected.*

## **4.3 Training and Education:**

The applicant for this professional designation must document completion of a minimum of 29 hours of tested training. This minimum number of hours consists of a number of required training courses from the CFITrainer.net distance learning platform.

### **Required Training:**

CFITrainer.net -DNA (3 hours)

CFITrainer.net -Documenting the Event (4 hours)

CFITrainer.net -Ethics and the Fire Investigator (3 hours)

CFITrainer.net -Evidence Examination: What happens at the Lab (4 hours)

CFITrainer.net -Introduction to Evidence Module (4 hours)

CFITrainer.net -NFPA 1033 and Your Career (2 hours)

CFITrainer.net -Physical Evidence at the Fire Scene (4 hours)

CFITrainer.net -The Practical Application of the Relationship Between NFPA 1033 and NFPA 921 (2 hours)

CFITrainer.net -The Scientific Method for Fire and Explosion Investigation (3 hours)

### **Substitutions or Alternatives:**

Other evidence collection courses may be considered for substitution and equivalent training credit on a case by case basis. Course work submitted for substitution consideration should include a comprehensive syllabus or training agenda for evaluation. All course substitutions will be considered for approval by the IAAI Training and Education Committee or their designee and will be submitted to the IAAI Board of Directors for ratification.

*The applicant shall provide a PDF copy of the CFITrainer.net transcript that documents satisfactory completion of all required courses.*

#### **4.4 Comprehensive Practical Examination:**

Applicants that submit proper documentation to support their experience; and training and education will be allowed to participate in a comprehensive practical examination (also known as an Evidence Skills Practicum). This practical examination will be based on the core job performance requirements and recommended guidelines related to evidence collection outlined above; and the testing protocols will be developed from readily available authoritative text and treatises related to fire investigation evidence collection. Applicants must pass all critical elements and achieve a minimum score of 70% on each of the 10 components of the practical testing to be deemed to have successfully challenged the exam. Applicants that fail to perform a critical element on a particular component or do not meet the minimum score on a particular component will be given one opportunity to remediate that component. Applicants are limited to remedial attempts on two components in a particular scheduled offering. If an applicant does not meet the minimum established criteria on the remedial examination or fails to achieve a passing score on more than three components during a scheduled offering, their application will be rejected. The applicant will be allowed one opportunity to re-test at a scheduled offering within a six month period and must successfully challenge all ten components without remediation of any station. This re-test will require the payment of additional facilitation fees. If an applicant does not meet the established criteria during the re-test, the application will be rejected and all fees forfeited. The applicant can reapply for this professional designation no sooner than six months from the date of the re-test exam and must submit a new application and will be responsible for resubmission of the appropriate application and facilitation fees. A current list of text is contained in appendix A.

The practical examination test bank is developed and maintained by the IAAI Training and Education Committee. This test bank contains enough exercises to provide for remedial examination, if necessary, where no question from the original exercises will appear on subsequent remedial examination(s) given to an applicant at a particular scheduled offering.

***Applicants challenging the comprehensive practical examination (Evidence Skills Practicum) must perform all critical steps and must obtain a minimum passing score of 70% on each of ten components to pass this examination. An applicant that fails to achieve a passing score on their first attempt will be provided one opportunity to remediate a particular exercise, with a limit of remediation attempts on no more than two components.. The remedial exam(s) will cover substantially the same subject matter but, will not contain the same exercise as the first examination.***

#### **5. Renewal:**

All holders of this professional designation will be required to renew their application every three years based on the date of initial approval or renewal. It is the holder's

responsibility to remember their expiration date and to submit the required documentation in a timely fashion. Applicants applying for renewal of this professional designation must provide documentation of continued meeting of minimum program requirements, including an additional 18 months of general work experience during the preceding three years; specific work experience to include a minimum of 12 fire scene examinations where evidence was collected during the preceding three years, and 24 hours of tested training and education accumulated during the preceding three years, as established by the IAAI Training and Education Committee and approved by the IAAI Board of Directors. Renewal applicants will not be required to re-challenge the comprehensive practical exam. If an individual allows this professional designation to lapse or expire, they must reapply for this program. Requests for exceptions based on extenuating circumstances must be submitted in writing for consideration by the IAAI Training and Education Committee who will make a recommendation to the by the Board of Directors for final action.

***Applicants submitting a renewal application shall provide adequate documentation to support the continued work experience, specific work experience and training and education requirements. Course transcripts or certificates of training will be accepted as documentation for the training requirement so long as the transcript or certificate clearly indicates the training was tested.***

## **6. Appeals:**

Appeals regarding the rejection of an application or regarding any portion or question of the comprehensive practical examination should be directed, in writing, to the IAAI Training and Education Committee within 30 days. The IAAI Training and Education Committee will investigate any question presented and provide a written response to the applicant within a reasonable time. If the issue is not resolved to the satisfaction of the applicant, they can then appeal to the Board of Directors under the guidelines established under the Ethical Practices and Grievances Committee Standard Operating Procedures.

## **7. Right of Use:**

***The IAAI-ECT program is open to both members and non-members of the International Association of Arson Investigators. The right of use to the IAAI-ECT designation and IAAI-ECT logo are conditionally granted upon successful completion of the application process. Misuse of the IAAI-ECT designation and/or IAAI-ECT logo, as well as unethical, unprofessional, or criminal behavior of an individual holding this certification can subject the individual to sanctions by the IAAI Ethical Practices and Grievances Committee and/or the Board of Directors in accordance with the IAAI Constitution and By-laws and existing policies including, but not limited to revocation of certification privileges and suspension of membership.***



International Association of Arson Investigators  
Application for  
Evidence Collection Technician  
Professional Designation  
(IAAI-ECT)

***Applicant Information:***

**NAME:**

**ADDRESS 1:**

**ADDRESS 2:**

**CITY:            STATE:            ZIP CODE:**

**IAAI Member? No      Member Number:**

*Note: It is not required that an applicant be a member of the International Association of Arson Investigators. This information is solicited to assist the office staff in processing applications.*

***Work Experience:***

**Please provide information regarding your work experience documenting a minimum of 18 months of general experience in the fire investigation industry.**

**Employer:**

**Supervisor:**

**Phone Number:**

**ADDRESS 1:**

**ADDRESS 2:**

**CITY:            STATE:            ZIP CODE:**

**Years of Experience:            From:            To:**

Certification letter from employer attached?

***Specific Work Experience:***

**Please provide information regarding a minimum of 7 fire scenes that you participated in that you are submitting in support of your application for the Evidence Collection Technician Program. Certification of this information should be included in the certification letter submitted by your employer. All events submitted as part of this application must have been conducted in the past five (5) years (3 years for renewal applications).**

Location	Date	Evidence Collected

***Required Training:***

**Please provide a CFITrainer.net transcript indicating completion of all required training and attach to the application as a PDF file.**

**By submitting this application to the International Association of Arson Investigators, either through mail or electronic communications, the applicant certifies the information to be true and correct to the best of their knowledge and certifies that they have read and understand the program requirements. For electronic submissions, the accompanying e-mail will be considered as the applicant's signature and certification of the application. The intentional submission of false information as part of this application will be cause for immediate rejection of the application and potentially subject the applicant to other penalties, including removal of IAAI member benefits.**

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**Name** **Signature** **Date**



## Appendix A

### Recommended Reference Text for IAAI Evidence Collection Technician Exam

#### **NFPA 921, 2014 Edition, Chapters 3, 4, 13, 16, and 17**

NFPA, (2014). *NFPA 921 Guide for Fire and Explosion Investigations, 2014 Edition*  
Quincy, MA: NFPA.

#### **Fire Investigator: Principles and Practices to NFPA 921 and 1033, Third Edition Chapters 2, 10, 13, 14, and 15**

IAAI/NFPA/IAFC, *Fire Investigator: Principles and Practices to NFPA 921 and 1033,  
Third Edition*. Sudbury, MA: Jones and Bartlett Learning.

#### **Forensic Fire Scene Reconstruction, 2<sup>nd</sup> Edition, Chapter 4**

Icove, D. J., & DeHaan, J. D. (2009). *Forensic Fire Scene Reconstruction*. Upper Saddle  
River, NJ: Pearson Prentice Hall.

#### **Kirk's Fire Investigation, 7<sup>th</sup> Edition, Chapter 14 (as it relates to evidence)**

DeHaan, J. D. (2011). *Kirk's Fire Investigation, 7th Edition*. Upper Saddle River, NJ:  
Pearson Prentice Hall.

#### **ASTM E1188-05, Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator**

ASTM International. (2005). *ASTM E1188-05, Standard Practice for Collection and  
Preservation of Information and Physical Items by a Technical Investigator*. West  
Conshohocken, PA: ASTM International.

#### **ASTM E1459 – 92 (Reapproved 2005), Standard Guide for Physical Evidence Labeling and Related Documentation**

ASTM International. (2005). *ASTM E1459 - 92 (Reapproved 2005), Standard Guide for  
Physical Evidence Labeling and Related Documentation*. West Conshohocken, PA:  
ASTM International.

#### **CFITrainer.net – Evidence Collection Tool Box**

Various, (2009), *CFITrainer.net*. Retrieved Dec. 16, 2010, from IAAI, Crofton, MD.  
Web site: <http://www.cfitrainer.net/resources.aspx>.

#### **interFIRE Online**

Various Articles, (2010), *interFIRE Online - An O and C Process, Criminalistics*.  
Retrieved Dec. 17, 2010, from Stonehouse Media, Inc, Lambertville, NJ. Web site:  
[http://www.interfire.org/res\\_file/m\\_fse\\_cr.asp](http://www.interfire.org/res_file/m_fse_cr.asp).