

OSAC 2022-N-0035 Standard for On-Scene Collection and Preservation of Document Evidence

*Crime Scene Investigation & Reconstruction Subcommittee Scene Examination
Scientific Area Committee
Organization of Scientific Area Committees (OSAC) for Forensic Science*





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Collection and Preservation of Document Evidence*

OSAC Proposed Standard

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Prepared by
Crime Scene Investigation & Reconstruction Subcommittee
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Disclaimer:

This OSAC Proposed Standard was written by the Organization of Scientific Area Committees (OSAC) for Forensic Science following a process that includes an [open comment period](#). This Proposed Standard will be submitted to a standards developing organization and is subject to change.

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Foreword

This document delineates standards and recommendations for the collection and preservation of document evidence and related items during scene investigations. The methods in this standard are intended to maintain the integrity of document evidence so that reliable, accurate, and relevant conclusions can be obtained. Proper collection and preservation of document evidence ensures that the integrity of the evidence is maintained from the point of collection, through possible forensic examination, and to the presentation of the evidence in the courtroom. This document should be utilized in conjunction with departmental policies to inform or augment applicable policies.

This document has been drafted by the Crime Scene Investigation and Reconstruction Subcommittee of the Organization of Scientific Area Committees (OSAC) for Forensic Science through a consensus process.

This standard provides guidance on some safety issues but is not exhaustive. It is the responsibility of the appropriate agency to develop a full health and safety plan.

All hyperlinks and web addresses shown in this document are current as of the publication date of this standard.

Keywords: scene investigation, collection, preservation, physical evidence, document evidence



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Standard for On-Scene Collection and Preservation of Document Evidence

1. Scope

This document provides specific guidance for the collection of documents as evidence when the physical characteristics of the document are of interest.

2. Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Guiding Principles for Scene Investigation and Reconstruction [OSAC Proposed Standard]

Standard for On-Scene Collection and Preservation of Physical Evidence [OSAC Proposed Standard]

3. Terms and Definitions

For purposes of this document, the following definitions apply.

3.1

alteration

A modification made to a document by any combination of physical, chemical, or mechanical means including, but not limited to, obliterations, additions, over writings, or erasures. (ANSI/ASB Standard 035)

3.2

chain of custody

Chronological record of the handling and storage of an item from its point of collection to its final return or disposal. (OSAC Preferred Term)

3.3

charred documents

Items damaged by heat or fire. (SWGDOC P01)

3.4

contamination

The undesirable introduction of a substance to an item at any point in the forensic process. (ISO/FDIS 21043-1:2018[E])

NOTE This includes undesirable transfer of a substance within an item or between items, also referred to as cross-contamination.

3.5

document

Any material containing marks, symbols, or signs visible, partially visible, or invisible (to the naked eye) that can ultimately convey meaning or a message. (ASB Technical Report 071, Draft)

NOTE This definition of a document is broad; it extends to electronic documents, including e-mail and other electronic communications, word processed documents and databases. In addition to documents that are readily accessible from computer systems and other electronic devices and media, the definition covers those documents that are stored on servers and back-up systems and electronic documents that have been ‘deleted’; it also extends to additional information stored and associated with electronic documents known as metadata. (Practice Direction 31A – Disclosure and Inspection UK)

3.6

examination

The process of observing, searching, detecting, recording, prioritizing, collecting, analyzing, measuring, comparing and/or interpreting (ASB Technical Report 071-Draft).

3.7

exemplars

Samples of handwriting, printed text, paper, ink, etc., known (or purported) to have been produced by a particular individual, machine, or manufacturer (ASB Technical Report 071-Draft)

3.8

forensic document examiner

FDE

Addresses inquiries that arise in matters where the authenticity, genuineness, or source of documents is questioned; does not involve the study of handwriting for personality assessment, creation of a personality profile, or analysis, or judgment of a writer’s personality or character. (ASB Standard 011-Draft, ASB Technical Report 071-Draft)

3.9

personal protection equipment

PPE

Equipment worn to minimize exposure to a variety of hazards such as body-fluids, irritants, or contaminants. Examples of PPE: gloves, foot and eye protection, respirators, and full body suits.

3.10

scene

A place or object that is subject to and/or requires forensic examination. (ISO/FDIS 21043-1:2018[E])

NOTE A crime scene is a common description of a scene where a presumed crime has been committed. The scene can be a person or an animal.

**3.11
scene investigation**

An examination of a scene to locate, document, process, collect, and preserve items of potential evidentiary value.

**3.12
scene investigator**

An individual, however named, who is responsible for performing elements of scene investigation.

**3.13
writing instrument**

Any tool used to create handwritten markings on a substrate. Typically used to describe the use of a pen, pencil, crayon, or other marker (ASB Technical Report 071, Draft).

**3.14
requested writing**

Handwriting samples prepared by a particular person specifically for the purpose of comparison, usually to questioned material.

4. General Collection and Preservation of Document Evidence

Document evidence can be examined for source attribution, the presence of hidden writing, latent indented writing (e.g., blank pages), impressions, fracture matching, or alteration detection. Proper collection, handling, and storage can preserve potential evidentiary value, maximizing the capability of forensic document analysis.

Scene investigators should collaborate with a forensic document examiner (FDE) to ensure that document evidence is properly documented and collected. An FDE can aid in the identification of probative evidence for document examination, including a document in question and additional materials or equipment that can be of use in analyzing a questioned document. Collaboration with an FDE during a scene investigation can increase the efficiency of an investigation through analysis.

4.1. Cross Contamination Considerations

- a) Document evidence shall be handled, collected, and preserved in a manner that prevents contamination, tampering, alteration or loss.

4.2. Document Evidence Collection and Preservation

- a) The method employed for the collection and preservation of document evidence can vary based on scene context and anticipated analysis.
- b) The original document shall be collected if available and if the document can be legally seized.

NOTE A scene investigator shall submit high-resolution copies in place of an original

document only when prior authorization from an FDE or other individual with the appropriate expertise has been granted.

- c) If original writing is on a fixed substrate (e.g., wall, floor) and cannot be collected, the questioned writing shall be preserved by uncompressed evidence quality photography with the camera lens perpendicular to the sample, proper lighting, and the inclusion of a scale.
- d) Items from different suspected sources, material types, and locations should be collected and packaged separately.
- e) Document evidence requiring further analysis, such as DNA, fingerprints, or trace evidence, should be placed into breathable packaging such as paper bags, envelopes, or cardboard containers. Generally, plastic is not an acceptable packaging material.
- f) Document evidence shall be protected from alteration. When collecting document evidence, a scene investigator shall not mark the document itself, or mark the package while it contains the document. Document evidence shall not be unnecessarily folded, torn, marked, soiled, stamped, or written on. Document items shall be collected intact and in their entirety. Packaging shall be of the appropriate size to avoid damage or alteration to the document.
- g) Document evidence examination often relies on exemplars for comparison. Consideration should be made on the scene to identify potentially related materials or equipment that could aid in the examination of a document. Further discussion on possible exemplars will be noted in subsequent sections.
- h) Storage of document evidence should avoid extreme temperature and humidity, which can cause alteration to materials or equipment.
- i) If the collection or preservation of document evidence is beyond the technical skills, knowledge, or resources available to the scene investigator, an FDE or other individual with the appropriate expertise shall be contacted for consultation or assistance.

5. Collection of Documents for Handwriting Comparison

Handwriting analysis relies on the comparison between a questioned document and other documents with a known author or an exemplar written by a person of interest under the direction of investigators. It is important that sufficient samples be collected for a successful examination to be conducted.

5.1. Collection of Existing Documents

Documents containing existing written text often best represent an individual's natural handwriting and depict natural variance in writing. Scene investigators should attempt to

identify and collect existing written documents during scene examinations when within the legal authority to do so. Existing documents that can be of use as comparative exemplars, include but are not limited to:

- a) Existing documents attributed to a suspected author(s), such as receipts, checks, business records, correspondence, applications, identification cards, or diaries.
- b) Samples of writing produced contemporaneous to, and with similar material as, the questioned document can aid in comparative value.
- c) Blank pages potentially associated with existing documents can contain decipherable indentations that can have comparative value.

5.2. Scene Considerations for Requested Writing

Requested writing samples are commonly used for comparison to a questioned document. Protocols for obtaining requested writing samples should be determined by the laboratory performing the examination.

- a) Requested writing samples should be prepared using materials similar to the questioned document. The instrument and materials used to create the requested writing sample shall be collected.

6. Collection of Materials and Equipment Used to Produce Questioned Documents

Document evidence can be associated with the materials or equipment used to generate the document. In these cases, it is important to collect possible materials/equipment such as writing instruments, office equipment, or paper for comparison purposes. These items can be collected at an initial scene or at a later time under a separate legal authority.

Once located, these items shall be collected in a manner that prevents damage to the item as small details or imperfections are useful for source attribution.

Scene investigators should attempt to locate materials or equipment that could have been utilized to create the document in question.

6.1. Ink/Toner Cartridge Evidence

- a) Ink/toner cartridge evidence for writing instruments, printers, and stamp pads shall be packaged separately from any document.
- b) Depending on the writing instrument being collected and the handling needed (such as shipping), padding or leak-proof packaging shall be utilized to prevent breakage or leakage.

- c) The make, model, and color of the ink/toner cartridge shall be recorded.

6.2. Machine Evidence

- a) When machines, components, and accessories are collected, they shall be securely packaged in a manner to protect from damage.
- b) Ink/toner cartridges should be removed from the machine prior to packaging. The ink/toner cartridges shall be packaged with padding in leak-proof containers to prevent breakage and leakage.
- c) Typewriter ribbons should not be removed from the machine.
- d) Upon collection, the make, model, serial number, information about any toner supplies and components, and machine repair and service history shall be recorded.
- e) Documents produced contemporaneous to the questioned document can aid in comparative value. If the suspect machine is not available for collection, other documents that could have been generated by the same machine should be collected.
- f) Any item used to generate or alter a document can be useful for the anticipated analysis of source attribution. Additional evidence for source attribution which should be collected includes but is not limited to:
 - a. Paper or other document substrates;
 - b. Stamps, embossing, and seal devices (shall not be cleaned before packaging);
 - c. Document-assembly items such as staplers, staples, paper clips, hole punches, envelopes, tape, and glue as relevant to the questioned document;
 - d. Documents possibly used as templates for counterfeits such as driver's licenses, social security cards, and passports

7. Collection of Items with Suspected Indented Writing

Indented writing, typing, or other markings can occur when two or more documents are stacked, leaving indentations on the document(s) beneath. Documents that do not contain visible marks even when using oblique lighting (e.g. pads of paper, checkbooks), can contain valuable indentation evidence and shall be collected for additional laboratory processing.

7.1. Collection

- a) Hard-sided or padded packaging should be utilized for collection and preservation. Due to the fragile nature of indented writing, it is especially important to avoid writing atop packaging after the item is within the packaging, placing heavy items atop packaging, and exposure to extreme temperature environments to avoid alteration.

8. Charred Documents

Charred documents are particularly fragile and should be protected or immobilized as soon as possible to minimize damage. Any movement of the document or around the document (e.g., air circulation, doors opening, or foot traffic) can lead to damage of charred documents. As such, photographs should be taken when the document is discovered, and it shall be photographed before it is moved.

8.1. Collection

- a) A rigid, flat box padded with sheet-cotton or similar material can be used to immobilize and preserve the document.

NOTE If the intent of collecting the document includes analysis for volatile substances, such as ignitable liquids, a non-breathable container should be used (e.g., an unused paint can).

- b) Charred documents are often found in multiple fragments and shall all be collected.
- c) Scene investigators should not attempt to separate or flatten documents on scene.

9. Liquid-Soaked Documents

Wet documents are fragile and shall be handled delicately. As such, photographs should be taken when the document is discovered and it shall be photographed before it is moved, when possible.

9.1. Collection

Collecting a wet document on scene should be done by sliding a flat, rigid, clean surface (e.g., cardboard sheet) underneath the item. The wet document should be transported atop the rigid surface to a location where it can be dried. Once dried, package documents in a breathable container.

NOTE If the intent of collecting the document includes analysis for volatile substances, such as ignitable liquids, a non-breathable container should be used (e.g., an unused lined paint can). A document that can be analyzed for volatile substances should not be dried.

9.2. Handling Precautions

If the document is submerged in a liquid and there are concerns with the document fragility or integrity, the investigator should contact the FDE to get advice whether the document should be maintained in water, frozen, or otherwise preserved.

When necessary, separating or unfolding a document should be done by an FDE or under their direction to minimize further alterations or damage.

9.3. Drying

Special considerations should be taken when drying wet documents as folded or multiple page documents can stick together. An FDE should be consulted prior to drying any wet and folded or multiple page document(s).

- a) Documents shall be dried in a secure location.
- b) To dry a wet document, place the document atop an absorbent surface (e.g., a clean paper towel) or a surface that provides for airflow (e.g., a clean, non-metallic window-type screen). Trace evidence shall be retained.
- c) When documents are dried with a surface utilizing airflow, clean paper should be placed underneath the item to catch possible trace evidence. Trace evidence shall be retained.
- d) Drying cabinets or fume hoods can be used to dry items.

9.4. Packaging

After drying, the document shall be packaged within a clean, dry, rigid, and breathable material such as cardboard. If the original packaging is not suitable, the item shall be placed in new, clean breathable packaging and the original packaging shall be retained as evidence. The document should be packaged in a manner that secures or pads the document within the container.

10. Collection of Documents for Physical Fit Examination

Physical fit examinations consist of the evaluation, examination, and comparison of broken, cut, torn, or otherwise separated items to determine if two or more pieces were at one time a single source. Examples of document evidence for physical fit examination can include but are not limited to shredded paper, ripped checks, or torn typewriter ribbons. Handwriting, printing, surface markings, or visible defects can continue across the separated items and can be useful for association between different fragments.

10.1. Collection

- a) At the scene, if evidence can be of value for physical fit examination, all relevant material (e.g., torn paper and pad) shall be collected.
- b) Precautions shall be taken to preserve the fragile edges and prevent the loss, damage, or contamination of exposed ends that can be capable of fitting together. To minimize damaging fragile edges of the pieces, no attempt shall be made to reassemble questioned evidence items prior to formal examination.

10.2. Shredded Paper

- a) Shredded paper shall be collected with a minimum of disturbance to avoid further mixing.
- b) Shredded paper that is found in separate locations shall not be packaged together.
- c) When possible, the entire shredder should be collected intact.
- d) Shredded paper should be transported within the item in which it is found on the scene. When fo der, the bag or container which collects the shredded paper should be used to collect and transport the fragments. When the collection of the bag or container is not possible, ensure that commingled fragments stay together when collected.

NOTE Fragments contained within the shredder blades shall be collected as well.

Appendix A
(informative)

Bibliography

This is not meant to be an all-inclusive list as the group recognizes other publications on this subject may exist. At the time this document was drafted, these were some of the publications available for reference. Additionally, any mention of a particular software tool or vendor as part of this bibliography is purely incidental, and any inclusion does not imply endorsement by the authors of this document.

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