Standard for Collection and Preservation of Document Evidence





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Foreword

This document delineates requirements 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.

The American Academy of Forensic Sciences established the Academy Standards Board (ASB) in 2015 with a vision of safeguarding Justice, Integrity, and Fairness through Consensus Based American National Standards. To that end, the ASB develops consensus based forensic standards within a framework accredited by the American National Standards Institute (ANSI), and provides training to support those standards. ASB values integrity, scientific rigor, openness, due process, collaboration, excellence, diversity and inclusion. ASB is dedicated to developing and making freely accessible the highest quality documentary forensic science consensus Standards, Guidelines, Best Practices, and Technical Reports in a wide range of forensic science disciplines as a service to forensic practitioners and the legal system.

This document was revised, prepared, and finalized as a standard by the Crime Scene Investigation Consensus Body of the AAFS Standards Board. The draft of this standard was developed by the Crime Scene Investigation and Reconstruction Subcommittee of the Organization of Scientific Area Committees (OSAC) for Forensic Science.

Questions, comments, and suggestions for the improvement of this document can be sent to AAFS-ASB Secretariat, asb@aafs.org or 401 N 21st Street, Colorado Springs, CO 80904.

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Standard for Collection and Preservation of Document 1 Evidence 2 1 Scope 3 This standard provides the requirements for the collection and preservation of document evidence 4 5 and related items (materials and equipment used to produce questioned documents) during 6 investigations. 7 2 Normative References 8 There are no normative reference documents. Annex A, Bibliography, contains informative 9 references. 10 3 Terms and Definitions 11 For purposes of this document, the following definitions apply. 12 3.1 13 alteration A modification made to a document by any combination of physical, chemical, or mechanical means 14 including, but not limited to, obliterations, additions, over writings, or erasures. 15 16 (ANSI/ASB Standard 035) 17 3.2 18 charred document(s) 19 Document(s) damaged by heat or fire. 20 (ANSI/ASB Standard 127). 21 3.3 22 collected writing 23 A subset of known writing. Samples of a known person's handwriting/signatures that have been 24 produced throughout the course of day-to-day business, are typically not related to the case at 25 hand, and have been collected for the purposes of comparison against questioned material. Examples include letters, diaries, business records, forms, or checks. These are also known as 26 27 normal course specimens, course of business specimens, or undictated writing. 28 3.4 29 contamination 30 Undesirable introduction of a substance to an item at any point in the forensic process. 31 NOTE This includes undesirable transfer of a substance within an item or between items, also referred to as 32 cross-contamination. 33 (ISO 21043-1) 34 3.5 35 document

Any material containing marks, symbols, or signs visible, partially visible, or invisible (to the naked

eye) that may ultimately convey meaning or a message.

36

37

- 38 **3.6**
- 39 examination
- 40 The process of observing, searching, detecting, recording, prioritizing, collecting, analyzing,
- 41 measuring, comparing and/or interpreting.
- 42 **3.7**
- 43 exemplars
- 44 Samples of handwriting, printed text, paper, ink, etc., known (or purported) to have been produced
- by a particular individual, machine, or manufacturer.
- 46 **3.8**
- 47 forensic document examiner
- 48 **FDE**
- 49 A forensic service provider who addresses inquiries that arise in matters where the authenticity,
- genuineness, or source of a document is questioned, and does not provide personality assessment,
- creation of a personality profile, or analysis, or judgment of a writer's personality or character.
- 52 **3.9**
- 53 requested writing
- Handwriting samples prepared by a particular person specifically for the purpose of comparison,
- usually to questioned material.
- 56 **3.10**
- 57 **scene**
- A place, or object that is subject to and/or requires forensic examination.
- 59 (ISO/FDIS 21403-1:2018[E])
- 60 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.
- 62 **3.11**
- 63 **scene investigation**
- An examination of a scene to locate, document, process, collect, and preserve items of potential
- 65 evidentiary value.
- 66 **3.12**
- 67 **scene investigator**
- 68 An individual, however named, who is responsible for performing elements of scene investigation.
- 69 **3.13**
- 70 writing instrument
- 71 Any tool used to create handwritten markings on a substrate. Typically used to describe the use of a
- 72 pen, pencil, crayon, or other marker.
- 73 4 Collection and Preservation of Document Evidence
- **74 4.1 General**
- 75 Document evidence can be examined for source attribution (or association), the presence of hidden
- 76 writing, latent indented writing (e.g., blank/missing pages), impressions, fracture matching,

- preservation, restoration, or alteration detection. Proper collection, handling, and storage can
- 78 preserve potential evidentiary value, maximizing the capability of forensic document analysis.
- 79 Scene investigators should collaborate with a forensic document examiner (FDE) to ensure that
- 80 document evidence is properly documented and collected. A FDE can aid in the identification of
- 81 probative evidence for document examination, including a document in question and additional
- 82 materials or equipment that can be of use in analyzing a questioned document. Collaboration with
- 83 the FDE during a scene investigation can increase the efficiency of an investigation through
- 84 analysis.

85 **4.2 Legal Considerations**

- Scene practitioners shall conduct themselves with the expectation that their work may be used in
- 87 every step of the legal process, and therefore shall ensure that they comply with applicable legal
- 88 standards.

89 4.3 Cross Contamination Considerations

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

92 4.4 Document Evidence Collection and Preservation

- 93 **4.4.1** The method employed for the collection and preservation of document evidence varies
- based on scene context and anticipated analysis.
- 95 **4.4.2** The original document shall be collected in its entirety, if available.
- 96 **4.4.3** A scene investigator shall submit high-resolution copies in place of an original document
- only when prior authorization from a FDE or other individual with the appropriate expertise has
- 98 been granted.
- 99 **4.4.4** If original writing is on a fixed substrate (e.g., wall, floor) and cannot be collected, the
- questioned writing shall be preserved by uncompressed examination quality photography with the
- camera lens perpendicular to the sample, proper lighting (e.g., even lighting, avoidance of over
- 102 exposure), and the inclusion of a scale.
- NOTE In some instances it can be beneficial to remove the writing from the fixed substrate through careful
- 104 extraction of the substrate.
- 105 **4.4.5** Document evidence from different suspected sources, material types, and locations shall be
- 106 collected and packaged separately in an appropriate size container to avoid damage or alteration to
- the document.
- 108 **4.4.6** Document evidence shall not be unnecessarily folded, torn, marked, soiled, stamped, or
- written on.
- 110 **4.4.7** Packaging shall not be marked on while it contains the document.
- 4.4.8 Document evidence requiring further analysis, such as DNA, latent prints, or trace evidence,
- should be placed into breathable packaging such as paper bags, envelopes, or cardboard containers.

- 113 **4.4.9** Plastic packaging should be used for samples that may be subject to indentation analysis
- and are not subject to DNA or latent print analysis.
- 115 **4.4.10** Document evidence examination often relies on exemplars for comparison. Consideration
- should be made to identify potentially related materials or equipment that could aid in the
- examination of a document.
- 118 **4.4.11** Storage of document evidence should avoid extreme temperature and humidity, which can
- cause alteration to materials or equipment.
- 120 **4.4.12** If the collection or preservation of document evidence is beyond the technical skills,
- knowledge, or resources available to the scene investigator, a FDE or other individual with the
- appropriate expertise shall be contacted for consultation or assistance.

5 Collection of Documents for Handwriting Comparison

- 124 **5.1 General**
- Handwriting examination relies on the comparison between a questioned document and other
- documents with a known author (e.g., collected writing) or a requested writing written by a person
- of interest under the direction of investigators. Collection of an insufficient quantity or quality of
- samples can have a deleterious effect on the examination of documentary evidence.
- 129 **5.2 Collected Writing**
- 130 **5.2.1** Documents containing existing written text often best represent an individual's natural
- handwriting and depict natural variation in writing. Scene investigators shall attempt to identify
- and collect existing written documents during scene examinations. Existing documents that can be
- used in examination, include but are not limited to the following.
- a) Collected writings which could be attributed to a suspected writer(s), such as receipts, checks,
- business records, correspondence, applications, identification cards, or diaries.
- 1) Samples of writing produced contemporaneous to, and with similar material as, the questioned document.
- Samples of writing that are of a comparable style to the questioned document (e.g., hand printing, cursive, and signatures).
- b) Blank pages potentially associated with existing documents can contain decipherable indentations.
- 142 c) Documents containing signatures that may be the source of tracings and/or simulations, or electronically reproduced onto another document.
- d) Documents containing voids in signature locations or document fragments containing only
- signatures, that may have been used to affix a signature to a document through physical cut and paste.
- **5.2.2** Collected writing shall not be attributed to a known writer without supporting information.
- 148 The supporting information shall be documented.

149 **5.3 Requested Writing**

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

153 6 Materials and Equipment Used to Produce Questioned Documents

154 **6.1 General**

- 155 **6.1.1** Document evidence can be associated with the materials or equipment used to generate the
- document. In these cases, possible materials/equipment such as office equipment (e.g., printers,
- shredders, typewriters) or paper products (e.g., printer paper, envelopes, labels) shall be collected
- for comparison purposes.
- NOTE Writing instruments may be collected, but have limited value to a FDE examination.
- 160 **6.1.2** 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.
- 162 **6.1.3** Scene investigators shall attempt to locate materials or equipment that could have been
- utilized to create the document in question.

164 6.2 Collection of Machine Evidence

- 165 **6.2.1** When machines, components, and accessories are collected, they shall be securely packaged
- in a manner to protect from damage.
- 167 **6.2.2** Machines should not be altered in any way to include removal of ink/toner cartridges,
- creating test prints, stamps, impressions, or typing on a typewriter, unless directed by a FDE or by
- laboratory policy. If test prints are taken at the scene, they shall be submitted along with the
- machine.
- 171 **6.2.3** Typewriter ribbons should not be removed from the machine.
- 172 **6.2.4** Upon collection, the make, model, serial number, information about any toner supplies and
- components, and machine repair and service history shall be recorded.
- 174 **6.2.5** Documents produced contemporaneously to the questioned document can aid in an
- examination; other documents that could have been generated by the same machine should be
- 176 collected. Any item used to generate or alter a document can be useful in the analysis of source
- attribution. Additional evidence for source attribution which should be collected includes but is not
- 178 limited to:
- a) paper, envelopes, or other document substrates;
- b) stamps, embossing, and seal devices (items shall not be cleaned before packaging);
- 181 c) document-assembly items such as staplers, staples, paper clips, hole punches, tape, and glue;

- d) documents possibly used as templates for counterfeits such as identification cards, social security cards, and passports.
- 184 **6.3 Collection of Ink/Toner Cartridge Evidence**
- 185 **6.3.1** Ink/toner cartridge evidence for printers and stamp pads shall be packaged separately from
- any document.
- 187 **6.3.2** Depending on the ink/toner cartridge being collected and the handling needed (such as
- shipping), padding or leak-proof packaging shall be utilized to prevent breakage or leakage.
- 189 **6.3.3** The make, model, and color of the ink/toner cartridge shall be recorded.
- 190 7 Items with Suspected Indented Writing
- 191 **7.1 General**
- 192 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 laboratory processing.
- Documents collected for suspected indented writing examinations should be submitted to a FDE for
- 197 Electrostatic Detection Device (EDD) examination prior to DNA or latent print processing. DNA and
- latent print processing will destroy suspected indented writing.
- **7.2 Collection**
- Hard-sided or padded packaging shall be utilized for collection and preservation. Due to the fragile
- 201 nature of indented writing, the scene investigator shall avoid the following actions: writing atop
- 202 packaging after the item is within the packaging, placing heavy items atop packaging, and exposure
- 203 to extreme temperature environments.
- 204 8 Charred Documents
- 205 **8.1 General**
- 206 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. Photographs
- shall be taken upon discovery of the document and prior to collection of the document.
- 210 **8.2 Collection**
- **8.2.1** Scene investigators shall ensure charred documents are completely extinguished prior to
- collection. If heat, embers or smoke are present, extinguish the charred documents by suffocation
- and allow the documents cool prior to collection.
- **8.2.2** A rigid, flat box padded with sheet-cotton batting or similar material can be used to
- immobilize and preserve the document.

- 216 **8.2.3** If the intent of collecting the document includes analysis for volatile substances, such as
- ignitable liquids, a non-breathable container shall be used (e.g., an unused paint can).
- 218 **8.2.4** Charred documents are often found in multiple fragments. All fragments of the charred
- 219 document shall be collected.
- **8.2.5** Scene investigators shall not attempt to separate or flatten documents on scene.
- 221 **8.2.6** Charred documents shall be transported in-person to the laboratory rather than mailed or
- shipped to protect the documents from being further damaged.
- 223 9 Liquid-Soaked Documents
- 224 **9.1 General**
- Wet documents are fragile and shall be handled delicately. Photographs shall be taken upon
- discovery of the document and prior to collection of the document.
- **9.2 Collection**
- 228 **9.2.1** Collecting a wet document on scene should be done by sliding a clean, flat, rigid material
- (e.g., cardboard sheet such as the back of a notebook) 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.
- **9.2.1.1** If attempts to collect a saturated document with a flat, rigid material would result in
- damage, the document should be collected by adhering the exposed surface to a non-woven
- polyester fabric (e.g., Hollytex®a or Reemay®b) as the document is removed.
- 235 **9.2.2** If the intent of collecting the document includes analysis for volatile substances, such as
- ignitable liquids, a non-breathable container shall be used (e.g., an unused lined paint can).
- **9.2.2.1** A document suspected of being saturated with a volatile substance shall not be dried.
- 238 **9.3 Handling Precautions**
- 239 **9.3.1** If the document is submerged in a liquid and there are concerns with the document fragility
- or integrity, the investigator should collect the document submerged in the liquid in a leakproof
- container. After collection, the investigator should contact a FDE to get advice on whether the
- document should be maintained in the liquid, frozen, or otherwise preserved.
- **9.3.2** When necessary, separating or unfolding a document should be done by a FDE or under
- their direction to minimize further alterations or damage.

^a This term is used as an example only, and does not constitute an endorsement of this product by the AAFS Standards Board.

^b This term is used as an example only, and does not constitute an endorsement of this product by the AAFS Standards Board.

- 245 **9.4 Drying**
- 246 **9.4.1** The scene investigator shall evaluate liquid soaked documents to determine the appropriate
- drying actions to take prior to drying the documents. Special considerations should be taken when
- drying wet, folded or multiple page documents as they can stick together.
- **9.4.1.1** A FDE should be consulted prior to drying or separating wet documents in complex
- circumstances (e.g., large mass of documents, presence of blood or other obscuring liquid, presence
- of solvent or bleaching liquid).
- 252 **9.4.1.2** If the scene investigator will be unfolding or separating wet documents prior to drying,
- 253 the documents should be preserved through photography in the event the documents are damaged
- during the process.
- 255 **9.4.2** Documents shall be dried in a secure location.
- 256 **9.4.3** To dry a wet document, place the document atop an absorbent surface (e.g., a clean paper
- towel, blotting paper) or a surface that provides for airflow (e.g., a clean, non-metallic window-type
- screen). Trace evidence shall be retained.
- 259 **9.4.4** 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.
- 261 **9.4.5** Drying cabinets or fume hoods can be used to dry items.
- **9.5 Packaging**
- After drying, the document shall be packaged within a clean, dry, rigid, and breathable material
- such as cardboard. The document should be packaged in a manner that secures or pads the
- document within the container. If the original packaging used for collection is not suitable, the item
- shall be placed in new, clean breathable packaging and the original packaging shall be retained as
- evidence.
- 268 **10 Torn, Cut, or Broken Evidence**
- 269 **10.1 General**
- 270 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.
- 276 **10.2 Collection**
- 277 **10.2.1** At the scene all relevant material (e.g., torn paper and pad) shall be collected.
- 278 **10.2.2** The scene investigator shall be mindful of fragile edges and prevent the loss, damage, or
- contamination of exposed ends that can be capable of fitting together. To minimize damaging the

- fragile edges of the pieces, no attempt shall be made to reassemble questioned evidence items prior
- to formal examination.
- NOTE Small actions such as smoothing out wrinkled paper could dislodge critical fibers needed for an
- 283 examination.
- 284 **10.3 Shredded Paper**
- 285 **10.3.1** Shredded paper shall be collected with a minimum of disturbance to avoid further mixing.
- 286 **10.3.2** Shredded paper that is found in separate locations shall not be packaged together.
- 287 **10.3.3** When possible, the entire shredder should be collected intact.
- 288 **10.3.4** To avoid potential loss of evidence, shredded paper should be transported within the
- container in which it is found on scene. When found within a shredder, 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, the scene investigator shall ensure that
- commingled fragments stay together upon collection.
- 293 **10.3.5** Fragments contained within the shredder blades shall also be collected.

294	Annex A
295	(informative)
296	Bibliography
298 li	The following bibliography is not intended to be an all-inclusive list, review, or endorsement of terature on this topic. The goal of the bibliography is to provide examples of publications ddressed in the standard.
300 1 301] ANSI/ASB Standard 127, Standard for the Preservation and Examination of Charred Documents 2022. 1^{st} Ed. c
302 2 303	ANSI/ASB Standard 128, Standard for the Preservation and Examination of Liquid Soaked Documents. 2022. 1st Ed.c
304 3 305	ANSI/ASB Standard 159, Standard for Scene Investigation and Reconstruction - Foundational Principles. 2024. 1st Ed. ^c
306	

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