OSAC PROPOSED STANDARD 2026-N-1046
Standard for the Collection of Known Handwriting in Forensic Document Examination

Forensic Document Examination Subcommittee
Pattern/Impression Scientific Area Committee (SAC)
Organization of Scientific Area Committees (OSAC) for Forensic Science



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OSAC Proposed Standard

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Standard for the Collection of Known Handwriting in Forensic Document Examination

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Foreword

The purpose of this standard is to ensure that known handwriting exemplars are obtained in a manner that maximizes their usefulness and reliability in comparative examinations of questioned documents. Proper collection mitigates the risk of non-authenticity, distortion/disguise, or lack of representativeness.

The collection of digitally captured specimen signatures is outside the scope of this standard.

This standard does not purport to address all the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.

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

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Standard for the Collection of Known Handwriting in Forensic Document Examination

1. Scope

1.1. This standard establishes minimum requirements and best practices for the collection of known handwriting and signatures, including requested handwriting exemplars and known course of business handwriting, for use in forensic document examinations. Proper collection of known handwriting is critical for providing suitable material for comparison.

1.2. This standard applies to all personnel involved in the collection of known handwriting for forensic document examination purposes, including law enforcement, investigators, legal professionals, and forensic document examiners.

2. Normative References

2.1. ANSI/ASB Standard 207 Standard for Collection and Preservation of Document Evidence, 1st ed., 2026.

2.2. ANSI/ASB Technical Report 071 Forensic Document Examination Terms and Definitions, 1st ed., 2025.

3. Terms and Definitions

For purposes of this document, the following terms and definitions apply.

3.1.
Collector
Entity (i.e., person or group of people) responsible for the acquisition of known handwriting, whether through normal course of business or a requested handwriting session.

4. Requirements for Collection of Known Handwriting

4.1. General Requirements for All Known Handwriting

The procedures outlined below are provided to the collector to ensure the known handwriting is a comprehensive picture of the writer's handwriting habits and range of variation. This can minimize many limitations inherent in the collection of known handwriting.

4.1.1. Sufficiency of Quantity

The collector should attempt to ensure a sufficient quantity of known handwriting is collected to demonstrate the range of natural variation present in the subject's handwriting. The exact quantity will depend on the complexity of the questioned handwriting and the consistency and availability of the known handwriting exemplars.

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As a general guideline, a minimum of 10-20 repetitions of individual words, phrases, or signatures found in the questioned handwriting should be sought, if possible.

4.1.2. Sufficiency of Quality

4.1.2.1. The collector should obtain the best quality of available or accessible known handwriting exemplars. This provides the most handwriting information (macro/microscopically) for use in handwriting comparisons. The following provides a suggested order of importance of known handwriting to be collected for examination from most effective to least effective:

4.1.2.1.1. Original – Version of document that contains the original execution of handwriting with a writing instrument (i.e., pen, pencil, crayon, etc.), which is sometimes referred to as a "wet signature".

4.1.2.1.2. Reproduction copies – Digital reproductions should be submitted in a digital format. Physical reproductions should be submitted in first generation and should not be "copies of a copy". Reproduction copies include:

a) Color scan (e.g., pdf, jpeg, tiff)
b) Color photocopy
c) Examination quality photographs
d) Other photographs (i.e., camera phones)
e) Carbonless copy
f) Black and white scan

4.1.3. Comparability

4.1.3.1. The collector should ensure prioritizing the collection of known handwriting that is as similar in format and manner of execution as practicable to the questioned handwriting in terms of:

4.1.3.1.1. Content: Words, phrases, numbers, symbols, names, etc.

4.1.3.1.1.1. For signatures, the content shall be the same name.

4.1.3.1.2. Writing Instrument: Felt-tip pen, pencil, gel pen, spray paint, etc.

4.1.3.1.3. Writing Substrate: Lined paper, unlined paper, checks, forms, specific document types, etc.

4.1.3.1.4. Writing Style: Hand printing, cursive, upper case, lower case, signatures, etc.

4.1.3.1.4.1. Signatures are to be written in a similar style (i.e., mixed, text-based, etc.).

4.1.3.1.4.2. The collector should endeavor to acquire course of business signatures with pictorial similarity to stylized questioned signatures.

4.1.3.1.4.3. The collector should collect samples that are representative of alternative designs, if observed.

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4.1.3.1.5. Writing Conditions/Scenario: While standing, on an uneven surface, while handcuffed, under the influence of drugs and alcohol, etc.

Note: It may not be possible to replicate handwriting under the influence of drugs or alcohol, but there may be instances where course of business handwriting exemplars were executed under these conditions.

4.1.3.1.6. Writing Date: Known handwriting exemplars should be as contemporaneous as possible to the questioned handwriting. Ideally, known handwriting from before, during, and after the date of the questioned handwriting should be sought.

4.1.4. Verification of Writer(s)

4.1.4.1. The collector should ensure the writer of all known handwriting is unequivocally established. This can be achieved through:

a) Direct observation by the collector of the handwriting act.
b) Admission by the writer.
c) Statement of a witness to the handwriting act.
d) Statement of a witness verifying recognition of a decedent's writing.
e) Documented provenance for course of business documents (e.g., employment records, official documents).
f) The separation of multiple writers on document(s).

4.1.5. Prevention of Contamination

4.1.5.1. The collector should ensure all known documents are handled carefully to prevent the introduction of extraneous or immaterial markings and the obliteration or removal of existing handwriting, including indentations or latent writing.

4.1.5.2. If additional forensic examination(s) is expected, the collector should wear non-woven gloves when handling documents.

4.1.6. Documentation

4.1.6.1. The collector shall document the following information for all known handwriting exemplars:

a) Date and time of collection.
b) Location of collection.
c) Name and title of collector(s).
d) Name of the writer(s).
e) Case identifier/number.
f) Detailed description of each item collected (e.g., "Requested handwriting exemplar on three pages", "Company ledger entries from 2023").
g) Method of collection (i.e., course of business or requested handwriting exemplars).

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h) Any unusual circumstances or observations during collection (e.g., writer's demeanor, medical issues, suspected disguise).
i) Purported date of course of business handwriting exemplars.

4.2. Requirements for Collection of Requested Handwriting Exemplars

The procedures outlined below are provided to the collector to ensure the collection of requested known handwriting exemplars is representative of the writer's handwriting habits and range of variation. This can minimize many limitations inherent in the collection of requested known exemplars.

4.2.1. Environment

4.2.1.1. The collector shall provide the following:
4.2.1.1.1. An environment that is comfortable, free from distractions, and has adequate lighting.
4.2.1.1.2. Comfortable seating at a table of appropriate height.
4.2.1.1.3. Appropriate rest breaks and hydration, as needed.

Note: The environment may need to be altered to reflect the environment under which the questioned handwriting was executed (i.e., standing, handcuffed, intoxicated, etc.). See Section 4.1.3.1.5.

4.2.2. Materials

4.2.2.1. The collector shall provide one or more of the following appropriate writing substrate(s):
A) Standard, unlined paper
b) Wide-ruled paper
c) College-ruled paper
d) Agency-specific handwriting collection forms
e) Blank forms similar to the questioned document (e.g., blank check, blank bank deposit slip, blank car title, blank signature line, etc.)
f) Other (e.g., on a wall, bathroom stall)
4.2.2.2. The collector shall provide one or more of the following appropriate writing instrument(s):
a) Ballpoint pen

Note: A ballpoint pen is ideal because it allows for the determination of directionality and pen pressure by a Forensic Document Examiner (FDE).

b) Writing instrument similar to that used for the questioned handwriting (e.g., non-ballpoint pen, pencil, crayon, spray paint, lipstick, etc.)
4.2.2.3. The collector should not provide an eraser.

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4.2.3. Dictation Procedure

4.2.3.1. The collector shall not display the questioned document or its contents to the writer immediately prior to or during the collection process.

4.2.3.2. Prior to dictation, the collector shall provide instructions to the writer to include the following:

a) Ensure dominant hand usage.

b) Provide normal and natural handwriting (i.e., do not disguise or distort handwriting).

c) Provide writing in the same sentence case (i.e., uppercase, lowercase, cursive, manuscript printing) as the questioned item.

4.2.3.3. During dictation, the collector shall:

a) Dictate the words, phrases, numbers, and letter combinations present in the questioned handwriting.

i. For signatures, dictate the name of the questioned signature (may not be the writer's own name).

ii. For a limited amount of questioned handwriting, dictate the actual content as well as additional content not related to the questioned handwriting.

iii. For an extended amount of questioned handwriting, dictate the exact text of the questioned handwriting.

b) Dictate the material at a comfortable, natural pace.

c) Not dictate individual letters or emphasize spelling.

d) Dictate each repetition separately to capture the writer's natural variation.

i. For signatures, dictate the material at least 20 times.

ii. For a limited amount of questioned handwriting, dictate the material at least 10-15 times.

iii. For an extended amount of questioned handwriting, dictate the material at least three times, preferably more.

iv. Remove completed samples from the writer's view after completion.

iv. Sequentially number completed samples.

4.2.3.4. The collector and the writer should sign and date each sample page collected.

Note: If dictation cannot be conducted due to legal or other restrictions, the requested writing information can be provided in a typed form, preferably a sans serif font (e.g., Arial).

4.2.3.5. If collecting signatures, the collector shall:

a) Attempt to replicate the signature conditions (i.e., signature line, box, form, size constraints, location).

b) Obtain individual signatures on separate sheets.

Note: Collecting multiple signatures on a single sheet in list format provides an opportunity for the writer to replicate intentionally distorted handwriting.

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4.2.3.6. The collector should prevent opportunities by the writer to intentionally distort their handwriting through the following:

a) Remove each exemplar from writer's view after completion.
b) Do not tell the writer the purpose of the collection.
c) Include a mixture of common words and phrases with the questioned text.
d) Vary the order of dictation.
e) Require the writer to fill out forms or sign names in natural contexts.
f) Prolong the collection process and obtain additional samples if intentional distortion is suspected.
g) Collect handwriting samples from both hands, if necessary.

4.2.3.7. If the writer cannot accomplish any of the above instructions, the collector shall instruct the writer to attempt their best effort (i.e., attempt cursive, attempt spelling).

4.2.4. Writer Information

4.2.4.1. The collector shall record the writer's name and date of collection.

4.2.4.2. The collector should record the writer's date of birth, dominant hand, and any relevant medical conditions (e.g., injuries, tremors) that might affect their handwriting. This information may be requested by an FDE.

4.3. Requirements for Collection of Known Course of Business Handwriting Exemplars

The procedures outlined below are provided to the collector to ensure the course of business known handwriting exemplars are a comprehensive picture of the writer's handwriting habits and range of variation. The provision of original, comprehensive course of business handwriting exemplars may eliminate the need for requested writing exemplars.

4.3.1. Sufficiency of Quantity

The collector should obtain a sufficient quantity of known handwriting (i.e., at least 10-20 documents) to represent the natural variation of the writer over a relevant period. A lesser quantity is permissible if that is all that is available (e.g., the writer is deceased or incapacitated).

Note: Sufficiency of quantity is assessed by an FDE during a handwriting examination. See ANSI/ASB Standard 070 Standard for Examination of Handwritten Items.

4.3.2. Sufficiency of Quality

See Section 4.1.2.

4.3.3. Comparability

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The collector shall seek documents containing known handwriting that are comparable in content, writing style, writing instrument, and writing surface to the questioned handwriting. See Section 4.1.3 for additional information.

4.3.4. Verification of Writer and Verification of Provenance

4.3.4.1. The collector shall verify the provenance of the handwriting (source and background). This can be accomplished by:

a) Establishing a clear chain of custody from the point of origin to the collector (then to the FDE).

b) Ensuring documents bear identifying information (e.g., dates, names, account numbers) that link them to the purported writer.

c) Obtaining affidavits or sworn statements from individuals who can attest to the writer of the documents, if necessary.

Note: The collector should be aware that any subject may provide self-serving known handwriting exemplars. Self-serving known handwriting is handwriting that the writer believes does not represent the handwriting depicted in the questioned handwriting (i.e., providing known handwriting to eliminate themselves as the writer of the questioned handwriting).

4.3.5. Contemporaneousness

The collector shall prioritize collection of documents created around the same time as the questioned document. Non-contemporaneous documents may not represent the writer's habits at the time the questioned handwriting was written.

Note: Contemporaneousness is influenced by the age of the writer, the health of the writer, change in circumstance, temporary or permanent disability, or other factors affecting the writer.

5. Considerations and Limitations

5.1. Range of Variation

Understanding and capturing the range of variation within an individual's handwriting is paramount. A limited sample (e.g., insufficient quantity, insufficient comparability) may not adequately represent this range of variation, leading to inconclusive or erroneous findings.

5.2. Intentional Distortion

5.2.1. Individuals may attempt to distort their handwriting during requested exemplar collection. The methods outlined in Section 4.2.3 are designed to mitigate this, but

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collectors must remain vigilant. Recognizing signs of intentional distortion is crucial as well as the inter-relatedness of these signs:

a) Heavy pen pressure.
b) Unnatural hesitations.
c) Inconsistent letter formations.
d) Use of non-dominant hand.
e) Unreasonably slow writing, with grotesque letter formations.
f) Unreasonably fast writing, with scrawled and illegible handwriting.
g) Copying a font.

Note: A limited quantity of known handwriting increases the effectiveness of intentional distortion, which can severely limit the findings of a handwriting comparison.

5.3. Influencing Factors

5.3.1. Individuals' handwriting may be influenced by a variety of internal and external factors.

a) Physical/Medical Conditions: Illness, injury, medication, age, tremors.
b) Emotional State: Stress, anxiety, fatigue.
c) Writing Position: Writing plane (i.e., vertical, horizontal, sloped), writing while handcuffed, writing while in an awkward position.
d) Writing Instrument: Different types of pens, pencils, lipstick, etc.
e) Writing Substrate: Different types of paper, forms, etc.
f) Writing Surface: Different surfaces (i.e., hard, soft, textured, etc.).
g) Alcohol/Drug Influence: Intoxication and withdrawal can significantly alter handwriting.

5.4. Mitigation

5.4.1. Mitigation of these factors may produce more comparable known handwriting exemplars. Possible mitigation strategies include but are not limited to:

a) Having writer return at a later time to provide requested exemplars.
b) Assume a more comfortable/unencumbered writing position.
c) Attempt to replicate writing conditions of the questioned handwriting.

5.5. Original Handwriting vs. Reproduction Copies

Reproduction copies of handwriting (e.g., scanned images, photocopies, faxes) may lack the fine detail and pressure characteristics present in original handwriting. The use of non-original documents introduces limitations due to potential loss of detail, distortion of the writing, or the inability to assess certain characteristics (e.g., line quality, pen pressure, indented writing). Findings drawn from copies are inherently more limited than those from originals.

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5.6. Incomplete or Insufficient Known Handwriting

The primary limitation in forensic document examination is often the lack of sufficient known handwriting. Insufficient quantity, lack of comparability, and contemporaneousness influenced by the writer's range of variation can restrict the FDE's findings.

5.7. Illiteracy or Limited Handwriting Skills

For individuals with very limited handwriting skills, the amount of individuality present in their handwriting/signature can restrict the FDE's findings. When requesting handwriting of an illiterate writer, obtain a large quantity of specimens by having the subject execute the mark many times more than a literate writer. Because of the simplicity of an illiterate mark, it is vital to obtain a large quantity of samples to reveal the writer's handwriting habits to distinguish from accidental variations.

5.8. Preservation, Storage, and Transportation of Known Handwriting

See ANSI/ASB Standard 207 Standard for Collection and Preservation of Document Evidence for procedures and/or requirements for preservation, labeling, handling, packaging, transporting, and storing known handwriting.

5.8.1. Receipt, transfer, and disposition of known handwriting shall comply with legal requirements, forensic service providers' standard operating procedures, or other considerations.

5.8.2. Use appropriate personal protective equipment such as gloves, masks, and gowns to prevent contact with blood and other hazardous fluids.

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Annex A

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