

2021-S-0011 Standards for the Technical Review of Bloodstain Pattern Analysis Reporting

*Bloodstain Pattern Analysis Subcommittee
Physics/Pattern Interpretation Scientific Area Committee
Organization of Scientific Area Committees (OSAC) for Forensic Science*



Draft OSAC Proposed Standard

2021-S-0011 Standards for the Technical Review of Bloodstain Pattern Analysis Reporting

Prepared by
Bloodstain Pattern Analysis Subcommittee
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Disclaimer:

This OSAC Proposed Standard was written by the Bloodstain Pattern Analysis Subcommittee/Physics/Pattern Interpretation Scientific Area Committee of 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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The STRP panel will consist of an independent and diverse panel, including subject matter experts, human factors scientists, quality assurance personnel, and legal experts, which will be



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tasked with evaluating the proposed standard based on a comprehensive list of science-based criteria.

For more information about this important process, please visit our website at:

<https://www.nist.gov/topics/organization-scientific-area-committees-forensic-science/scientific-technical-review-panels>

1 Standards for the Technical Review of Bloodstain Pattern
2 Analysis Reporting

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4 Foreword

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6 This document provides standards for the technical review of Bloodstain Pattern
7 Analysis (BPA) reporting.

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9 1. Scope

10 This document is intended to be applicable to all reports where BPA classifications
11 or BPA case conclusions are rendered.

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13 2. Introduction

14 In addition to an administrative review, all bloodstain pattern analysis reports shall
15 be subject to a technical review. The technical review is designed to ensure the
16 correct application of the methodology, and the appropriateness of the conclusions.
17 This review offers an opportunity to identify potential errors and sources of bias
18 which may have occurred during the analysis or in the generation of the report. In
19 addition, the technical review provides a means of reassurance and confidence to its
20 stakeholders that quality measures have been followed.

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22 3 Normative References

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24 Standard for a Bloodstain Pattern Analyst’s Training Program, ANSI/ASB Standard
25 032, 1st Ed.2020

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27 Standard for Report Writing in Bloodstain Pattern Analysis. ANSI/ASB Standard 031,
28 1st Ed. 2020

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30 4 Terms and Definitions.

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32 4.1 Terms

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34 The following terms are meant to convey the meanings specified.

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36 4.1.1

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38 Shall – Used to indicate a provision is mandatory (unless otherwise documented for
39 non-compliance)

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41 4.1.2

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43 Should – Used to indicate that a provision is not mandatory, but recommended as
44 good practice.

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4.2 Definitions

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

4.2.1

Administrative Review - An evaluation of the report and supporting documentation for consistency with a forensic science service provider's policies, and for editorial correctness.

4.2.2

Forensic Science Service Provider (FSSP) – A forensic science agency or forensic science practitioner providing forensic sciences services.

4.2.3

Technical Review – A qualified second party's evaluation of reports, notes, data, and other documentation to ensure there is appropriate and sufficient support for the actions, results, conclusions, opinions, and interpretations.

4.2.4

Discrepancy – as noted by the technical reviewer, any deviation from the accepted FSSP procedures or a difference of opinion regarding reported observations, classifications or case conclusions.

5. General

5.1 Forensic Science Service Providers shall establish written policies and procedures for the Technical Review of BPA reporting. (*Refer to ANSI/ASB Standard 031 Standard for Report Writing in Bloodstain Pattern Analysis*)

5.2 The technical review shall be performed by a trained bloodstain pattern analyst. (*Refer to ANSI/ASB Standard 032 Standards for a Bloodstain Pattern Analyst's Training Program*)

- When selecting a technical reviewer, objectivity is essential. Any issues which affect the objectivity of the reviewer shall be considered.

The technical reviewer should be made aware of the scope of the original analysis, prior to viewing documents which contain the reporting analyst's work product or conclusions.

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6 Technical Review Process

No undue pressure or influence shall be exerted between the reviewer and the analyst during the technical review process. Communications between the technical reviewer and the analyst should be limited to promote the independence of the review.

The reviewer shall examine materials in the following sequence in order to minimize bias and have the opportunity to form independent conclusions prior to reviewing the analyst's report. Deviations from this process should be documented.

6.1 Scene/Evidence Documentation

- a. Photographic Images – All photographic images that were supplied to or generated by the reporting analyst.
- b. Crime scene diagrams/documentations/scans/videos

6.2 Forensic/medical reports

6.3 Analyst's supporting documentation

6.4 Other relevant documentation (e.g., police reports, court transcripts)

6.5 Outside forensic service provider BPA report (if references are made to it in the original analyst's report)

6.6 Analyst's report

7 Discrepancies

Upon completion of the initial review, any discrepancies the reviewer identifies with the procedures employed and/or with the observations, classifications, or case conclusions shall be brought to the attention of the analyst.

Any amendments made to the supporting materials (e.g., observations, notes, etc.) as a result of the technical review shall be documented (initial dated) by the analyst.

8 Conflict Resolution

129 Every attempt shall be made to resolve discrepancies that occur during the
130 review process, and the discrepancies shall be documented.

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132 In the event both parties cannot come to an agreement on an observation,
133 pattern classification, or case conclusion (*an unresolved discrepancy*), at
134 minimum the following steps shall be taken during the conflict resolution:
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- 136 • If a discrepancy occurs over the observation/classification of a specific
137 stain pattern, the resolution shall be to report the most specific
138 classification that results in an agreement. For instance, this may mean
139 reporting to a higher level of classification (*i.e., less specific*) or reporting
140 as inconclusive/no conclusion.
 - 141 ○ *Example: A discrepancy between the classification of pattern as an*
142 *expiration pattern vs. an impact pattern might result in the*
143 *classification being reported as a spatter pattern.*
- 144 • If a discrepancy occurs over a case conclusion, the resolution shall be to
145 report the most specific case conclusion on which both the analyst and the
146 reviewer agree.
 - 147 ○ *Example: A discrepancy in a case conclusion between whether a*
148 *victim was kneeling or upright during an impact bloodshed event*
149 *might result in the reporting of the height (area of convergence) of*
150 *the impact pattern alone with no further conclusion.*

151 If necessary, a second technical reviewer may be consulted to assist in resolving
152 a discrepancy. The consultation shall be documented in the original case file.

153 154 9 Documentation of the Technical Review

155 The technical review shall be documented and maintained in the case file of the
156 analyst. The documentation shall include, at minimum:

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- 158 • Signature (or electronic equivalent) of the reviewer(s)
- 159 • Date(s) of review
- 160 • Case file identification

161 The signature of the technical review confirms the reviewer is in agreement with
162 the observations, classifications and case conclusions in the report and each are
163 supported in the case file.

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