



BULLETIN STANDARDS

April 2020

BULLETIN SUMMARY

The Organization of Scientific Area Committees (OSAC) for Forensic Science [Standards Bulletin](#) provides an update on forensic science standards that are moving through the Registry Approval Process at OSAC and those moving through the development process at standards developing organizations (SDOs).

This bulletin is organized to capture the following standard development phases in the OSAC Registry Approval and SDO processes:

- After being published by an SDO, selected standards and guidelines may proceed to the OSAC Registry Approval Process, where they are evaluated further for technical merit and impact on the forensic science community.
- In the SDO process, OSAC committees or task groups submit an idea (i.e., work item), a partially drafted document, or a fully drafted document to an SDO for further development, commenting, and publishing.

Number of New Standards Placed on the OSAC Registry: None

Number of OSAC Registry Documents Open for Comment: Twelve (12)

Number of SDO Documents Open for Comment: Sixteen (16)

OSAC REGISTRY UPDATES



The [OSAC Registry](#) serves as a trusted repository of high-quality, science-based standards and guidelines for forensic science practice. All documents included on the Registry have progressed through the formal SDO process and have been published as standards. OSAC elevates standards to the OSAC Registry as an endorsement of the document's high quality and to encourage its adoption by relevant stakeholders in the forensic science community.

Intent to Add to the OSAC Registry – Items Open for Comment

Please submit your comments by **11:59 p.m. ET on May 7, 2020** on whether the following standards should be included on the OSAC Registry.

Anthropology

- *ANSI/ASB 045, Standard for Stature Estimation in Forensic Anthropology, First Edition, 2019.* Submit your comments [here](#).
- *ANSI/ASB 090, Standard for Sex Estimation in Forensic Anthropology, First Edition, 2019.* Submit your comments [here](#).

Biological Methods

- *ANSI/ASB 022, Standard for Forensic DNA Analysis Training Programs, First Edition, 2019.* Submit your comments [here](#).

Materials (Trace)

- *ASTM E1967-19 Standard Test Method for the Automated Determination of Refractive Index of Glass Samples Using the Oil Immersion Method and a Phase Contrast Microscope.* Submit your comments [here](#).
- *ASTM E2330-19 Standard Test Method for Determination of Concentrations of Elements in Glass Samples Using Inductively Coupled Plasma Mass Spectrometry (ICP-MS) for Forensic Comparisons.* Submit your comments [here](#).

Toxicology

- *ANSI/ASB 036, Standard Practices for Method Validation in Forensic Toxicology, First Edition, 2019.* Submit your comments [here](#).

Wildlife Forensics

- *ANSI/ASB 019, Wildlife Forensics General Standards, First Edition, 2019.* Submit your comments [here](#).
- *ANSI/ASB 028, Wildlife Forensics Morphology Standards, First Edition, 2019.* Submit your comments [here](#).
- *ANSI/ASB 029, Report Writing in Wildlife Forensics: Morphology and Genetics, First Edition, 2019.* Submit your comments [here](#).
- *ANSI/ASB 046, Wildlife Forensics Validation Standards – STR Analysis, First Edition, 2019.* Submit your comments [here](#).
- *ANSI/ASB 047, Wildlife Forensics Validation Standard – Validating New Primers for Sequencing, First Edition, 2019.* Submit your comments [here](#).
- *ANSI/ASB 048, Wildlife Forensics DNA Standard Procedures, First Edition, 2019.* Submit your comments [here](#).

In the Comment Adjudication Phase

- None currently.

In the Appeals Phase

- [*ANSI/ASB Standard 020, Standard for Validation Studies of DNA Mixtures, and Development and Verification of a Laboratory's Mixture Interpretation Protocol, First Edition, 2018.*](#)
- [*ANSI/ASB Standard 040, Standard for Forensic DNA Interpretation and Comparison Protocols, First Edition, 2019.*](#)

For a list of all standards currently under consideration, please visit the [OSAC website](#).

Has your organization already started implementing OSAC Registry Approved Standards? Complete OSAC's [Laboratory Implementation Declaration Form](#) and send it to mark.stolorow@nist.gov to let us know. Share your implementation experience and be featured in a future OSAC news post.

SDO UPDATES

New or Revised Standards



On February 28, 2020 the American Academy of Forensic Science Standards Board (ASB) announced the publication of [*ANSI/ASB Standard 088, General Guidelines for Training, Certification, and Documentation of Canine Detection Disciplines, First Edition, 2020.*](#) This document, initially developed by OSAC's Dogs & Sensors Subcommittee and finalized by the ASB Dogs and Sensors Consensus Body, contains requirements for the development of training of canine handlers and canines and will also detail the canine team assessments and the basis

for certification procedures including record keeping and document management. This standard does not cover discipline specific guidelines.

Comment Period Open on Draft Documents

ASB:

- [*ASB Standard 130, Standard for Training in Forensic DNA Amplification Methods using Capillary Electrophoresis Sequencing, First Edition.*](#) This standard provides the general requirements for a forensic DNA laboratory's training program in forensic DNA amplification methods for capillary electrophoresis (CE) sequencing. This standard applies to forensic human and wildlife mitochondrial DNA amplification, and wildlife nuclear DNA amplification. **Comment deadline April 20, 2020.**
- [*ASB Standard 131, Standard for Training in Forensic DNA Sequencing using Capillary Electrophoresis Sequencing, First Edition.*](#) This standard provides the general requirements for a forensic DNA laboratory's training program in forensic DNA sequencing using capillary electrophoresis. This standard applies to forensic human and wildlife mitochondrial DNA amplification, and wildlife nuclear DNA amplification. **Comment deadline April 20, 2020.**

- [*ASB Standard 137, Standard for Examination and Documentation of Footwear and Tire Impression Evidence.*](#) This new standard provides the examination process and minimum documentation requirements for relevant observations and conclusions/interpretations encountered during footwear/tire tread examinations. The required documentation as outlined in this standard will allow for an appropriate review. **Comment deadline April 27, 2020.**
- *Recirculation** – [*ASB Standard 093, Standard Test Method for the Examination and Testing of Firearms.*](#) This new standard establishes standard procedures for the examination and testing of a firearm by firearm and toolmark examiners or technicians. Following these procedures, an examiner or technician will be able to conduct, document, and report the examination and testing of a firearm. **Comment deadline May 4, 2020.**
- *2nd Recirculation** – [*ASB 038, Standards for Internal Validation of Forensic DNA Testing Methods.*](#) This new standard details the general requirements for performing an internal validation of all forensic DNA analysis methods within a forensic DNA laboratory. **Comment deadline May 11, 2020.**
- *Recirculation** – [*ASB 062, Standard for Topography Comparison Software for Firearm and Toolmark Analysis.*](#) This new standard specifies the minimum requirements for computer software intended to compare 2D and/or 3D digital representations of toolmarks. It covers necessary conditions for consistent and interpretable comparisons. **Comment deadline May 11, 2020.**
- *Recirculation** – [*ASB 063, Implementation of 3D Technologies in Forensic Firearm and Toolmark Comparison Laboratories.*](#) This new document provides requirements for the proper implementation of 3D technologies (software and/or hardware)/technical procedure(s) required in a forensic toolmark laboratory. This standard includes requirements for setting up the physical environment for the instrumentation as well as requirements for instrument calibration and validation. **Comment deadline May 11, 2020.**

*Please note that comments on a re-circulation will only be accepted on revised sections of a document, comments made to text not revised from the original comment period will not be accepted.

For the ASB documents listed above, download the [comment template](#) and return it to asb.@aaafs.org by the comment deadline.

ASTM International – Comment deadline May 6, 2020:

- [*New Practice for Training in the Forensic Examination of Human Hair by Microscopy*](#) (WK56743). This practice is intended for use by laboratory personnel responsible for training forensic hair examiners to prepare them to perform forensic hair examinations including microscopical human hair comparisons. It contains relevant suggested reading assignments and structured exercises for hands-on practical experience for the trainee.
- [*New Terminology for the Examination of Fire Debris*](#) (WK63459). This is a compilation of terms and corresponding definitions that are used in fire debris analysis. Legal or scientific terms that are generally understood or defined adequately in other readily available sources may not be included.
- [*New Guide for a Systematic Approach to Analysis and Identification of Ignitable Liquids*](#) (WK64631). This guide describes a systematic approach for the analyses of solid (e.g. fire debris) and liquid samples for the presence of ignitable liquids and their residues. It also addresses evidence handling, extraction methodologies, instrumental analysis techniques, and analytical data interpretation.
- [*New Practice for Forensic Examination and Identification of Intact Explosives*](#) (WK67862). This practice is intended to assist forensic explosive examiners in their evaluation, selection, and application of techniques to

identify intact explosives. A foundation for the consistent approach to the analysis of intact explosives is provided by describing methods used to develop discriminatory information.

- [*New Guide for Determination and Comparison of Color by Visual Observation in Forensic Soil Examination*](#) (WK70035). The purpose of this document is to recommend best practices for describing the color of forensic soil/geologic material determined by visual assessment and comparison to a reference color chart.
- [*New Guide for Collection of Soils and Other Geological Evidence for Criminal Forensic Applications*](#) (WK70187). This is a guide for the documentation, collection, and preservation of soil and other geological evidence for use in criminal investigations. It is designed as a resource for professionals whose job responsibilities include the collection and preservation of soil evidence and for forensic scientists to enable them to advise crime scene investigators.
- [*New Practice for Quality Assurance of Forensic Science Service Providers Performing Chemistry Analyses*](#) (WK71108). This practice discusses procedures for quality assurance of forensic science service providers performing forensic chemistry analyses. It provides a framework of quality in the processing of evidence including maintaining a quality management system; personnel duties, qualifications, training, education, and professional development; facility considerations; evidence handling; analytical procedures; instrument and equipment performance; chemicals and reagents; casework documentation and reporting; proficiency and competency testing; method validation and verification; audits; deficiency of analysis; and documentation requirements.
- [*New Guide for Latent Print Evidence Imaging Resolution*](#) (WK66357). This guide provides procedures for verifying that digital cameras and scanners can capture the necessary details in images of latent print evidence.
- [*New Guide for Training Guidelines for Video Analysis, Image Analysis and Photography*](#) (WK66417). This document recommends topics and guidelines for training within the disciplines of video analysis, image analysis, and photography as a supplement to Practice E2917.

For access to the ASTM documents listed above, contact Brian Milewski (bmilewski@astm.org) to become a member of [Committee E30](#) on Forensic Science.

New Work Proposals for New or Revised Standards

- None currently.

New Fire Debris & Explosive Resources Now Available

OSAC's Fire Debris & Explosives (FD&E) Subcommittee is pleased to announce a new resource for the forensic science community. This new resource, entitled *Analysis of Explosives Reference List* is an extensive list of published books, reviews, guides, studies, on-line resources, and articles that is subdivided by topic and year of publication for ease of use. The FD&E Subcommittee has also updated the *Analysis of Fire Debris Reference List* which is an analogous resource. Both resources are available on the [FD&E Subcommittee's web page](#).

Participants Needed for Organic Gunshot Residue Interlaboratory Study

OSAC's Organic Gunshot Residue Task Group (TG) is looking for participants to join an interlaboratory study on the collection and analysis of organic gunshot residues. This study is intended to support a draft standard practice the TG has developed which contains methodologies for gas chromatography/mass spectrometry (GC/MS) and liquid chromatography/mass spectrometry (LC/MS) analyses of organic gunshot residues. Visit the [Gunshot Residue Subcommittee webpage](#) to learn more about the study and how you can participate.

Participants Needed for Bullet Black Box Study

NIST and Noblis are seeking participants for a bullet black box study to evaluate the accuracy, repeatability, and reproducibility of bullet comparisons by firearms examiners. For more information please click [here](#).

Request for Comments on SWGDRUG Documents

The Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG) has posted two DRAFT revised documents for review by the forensic science community. To ensure the document addresses the needs of the community, SWGDRUG invites comments and suggestions.

The two documents are available on the [SWGDRUG website](#). Please provide your comments on this proposed document using the provided survey links.

PART IV A- QUALITY ASSURANCE/GENERAL PRACTICES: www.surveymonkey.com/r/2C3Z2XN

SUPPLEMENTAL DOCUMENT SD-5, REPORTING EXAMPLES: www.surveymonkey.com/r/2QJXQZK

Responses from the community will be collected until May 10, 2020.

National Institute of Justice Funding Opportunities

The National Institute of Justice (NIJ) has released [solicitations](#) for several forensic science research and development opportunities. If you are considering submitting a research proposal to NIJ, a helpful list of OSAC identified R&D needs can be found [here](#).