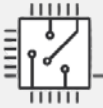


Forensic Audio Laboratory Setup and Maintenance



WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy-to-understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

WHAT IS THE PURPOSE OF THIS STANDARD?

Audio forensics encompasses several examinations, including enhancement, authentication, and signal analysis.

This standard provides guidance for the creation of a workspace for conducting forensic audio examinations and for the configuration, verification, and maintenance of systems within that space.

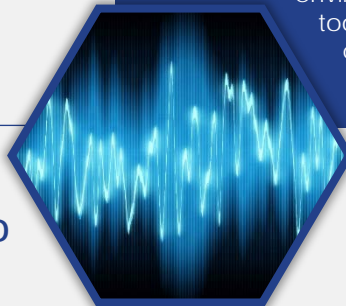
Control over the listening environment and optimization of equipment and software are key elements to ensure that audio examinations are performed under optimal conditions.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

This standard identifies the primary factors for optimally setting up an audio forensic workspace, identifies possible sources of acoustic and electrical interference, and provides guidance for minimizing their negative effects in a forensic audio examination.

It also addresses issues related to equipment and software verification and maintenance.

By following this standard, forensic examiners will be able to conduct examinations in controlled environments with properly managed tools, thereby providing greater confidence in results.



HOW IS THIS STANDARD USED, AND WHAT ARE THE KEY ELEMENTS?

Forensic science service providers (FSSPs) may use this standard to help establish a workspace for conducting forensic audio examinations and improving or maintaining an existing space.

Room acoustics (e.g., sound sources within the room), temperature/humidity factors, and electromagnetic interference (e.g., transmitting devices) all have the potential to negatively affect a forensic examiner's ability to conduct a forensic audio examination. This standard requires steps to be taken to eliminate or minimize sounds (i.e., signals) that are not part of the recording being examined.

This standard also includes considerations for the setup and testing of equipment, whether part of a permanent or temporary system.

This standard may also help to inform or improve upon existing FSSP policies regarding the configuration and verification of equipment and software used in forensic audio examinations. Optimizing audio playback and verifying signal path support the establishment of a consistent workflow, which leads to accurate and reproducible results.

Finally, maintenance of hardware and computer system components are addressed. Recording the inspection and maintenance of tools used to play back and process evidentiary audio recordings demonstrates that they are properly maintained.