

**Purpose:**

The methods and procedures presented in this outline address the areas which should be focused upon to assist the examiner in the proper examination and processing of video, digital and multimedia related evidence. The examination pathway followed by the examiner to achieve proper evidentiary results is further augmented and directed by the General Laboratory Standard Operating Procedures and the appropriate technical references maintained within the Multimedia and Image Enhancement Unit.

**Responsibility:**

Forensic Science Examiners assigned to the Unit

**Procedure:**

The following outline (documented on MMIE-SOP-26 Appendix 1) should be used for all persons newly assigned to the Multimedia and Image Enhancement Unit:

1. Overview of Laboratory
  - A. General Laboratory Tour
  - B. Safety Tour
  - C. General Laboratory SOPs
  - D. Introduction to LIMS
  - E. Introduction to Evidence Receiving
  - F. Read all Unit SOPs
2. Forensic Photography (Refer to MMIE SOP-18, 19, 20, 21 and 22)
  - A. Background of Forensic Photography and Law Enforcement Photography
  - B. Overview of analog photography (negatives, etc.)
  - C. Evidentiary Photography
  - D. File formats (JPEG, TIFF, RAW)
  - E. Use of scales

- F. Lighting Methods and enhancement via lighting
  - G. Producing a 1:1 image
  - H. Image processing
  - I. Storage
3. Analog Video Analysis (Refer to MMIE SOP-02, 03, 04, 05 and 07)
- A. Overview of analog video
  - B. Types of analog video/audio
  - C. Introduction to equipment used for analog video
  - D. Repairing analog video/audio
  - E. Types of analysis of analog video
  - F. Introduction to worksheet and wording used for analog video
  - G. Sub-items and derivatives for analog video/audio
4. Digital Image Analysis (Refer to MMIE SOP-02, 03, 04, 05, 06, 08, 09, 12, 13, 14 and 28)
- A. Overview of still images and image analysis
  - B. Different ways of acquiring/extracting still images
  - C. Methods of analysis of still images
  - D. Introduction to software programs used in analysis
  - E. Introduction to printing of images
  - F. Sub-items and derivatives for image analysis
  - G. Worksheets and reports for image analysis
5. Digital Video Analysis (Refer to MMIE SOP-02, 03, 04, 06, 08, 09, 12, 14, 16, and 28)
- A. Overview of digital video, compression and codecs
  - B. Software programs used for analysis
  - C. Proper methods for video analysis

- D. Acquiring still images and other types of analysis
  - E. Converting video to different formats
  - F. Redactions
  - G. Sub-items and derivatives for video analysis
  - H. Worksheets and reports for video analysis
6. Audio Analysis (Refer to SOP-02, 03, 04, 07, 08, 10 and 11)
- A. Overview of audio
  - B. Introduction to software programs used for analysis
  - C. Proper methods for analysis
  - D. Converting audio formats
  - E. Types of audio analysis
  - F. Redactions
  - G. Sub-items and derivatives for audio analysis
  - H. Worksheets and reports for audio analysis
7. DVR Analysis (Refer to MMIE SOP-02, 03, 04, 09 and 16)
- A. Overview of DVRs
  - B. Types of DVRs (including manufacturers, etc.)
  - C. Important considerations of DVRs (overwriting, date/time, etc.)
  - D. Proper methods of DVR analysis (including seizing)
  - E. Photographing DVRs
  - F. Navigating a DVR
  - G. Export methods of DVRs (CD/DVD, USB, analog, etc.)
  - H. Sub-items and derivatives for DVRs
  - I. Worksheets and reports for DVRs

8. Video Retrievals (Refer to MMIE SOP-16)
  - A. Taking calls/emails pertaining to retrievals
  - B. Information needed from agencies
  - C. Considerations of DVRs and scheduling for agencies
  - D. Equipment needed
  - E. Arrival at scene
  - F. Documenting retrieval process while at scene
  - G. DVR retrieval process
  - H. Submitting to Lab as a case
  - I. Sub-items and derivatives for video retrievals
  - J. Worksheets and reports for video retrievals
9. Comparative Analysis (Refer to MMIE SOP-02, 03, 04, 06, 12 and 13)
  - A. Overview of types of comparisons
  - B. Review of image analysis
  - C. Setting up a comparison
  - D. Software used in comparisons
  - E. Charting – Digital and Hard Copy/Poster
  - F. Sub-items and derivatives for comparisons
  - F. Worksheets and reports
10. Court (Refer to SOP-GL-17)
  - A. Qualifications and ethical responsibilities
  - B. Technical Testimony
  - C. Dress and Demeanor
  - D. Court Monitoring Procedures
  - E. Moot Court

## 11. Competency and Approval for Casework and Technical Reviews

At the end of the training program, a memo/email shall be written to the Deputy Director stating that the analyst has successfully completed their training and has been administered a competency case that evaluated their analytical skills and their ability to clearly communicate their findings in a report.

The Deputy Director may review the training files or simply endorse this memo/email and generate a request to the Quality Unit requesting that this analyst be authorized to perform casework in that discipline.

The analyst will perform casework and after gaining experience in conducting analysis and reporting findings in a variety of evidence type/conclusions in the discipline, their experience will be evaluated for the ability to conduct technical reviews. This evaluation period may include technical review ghosting with an experienced examiner. Once the analyst has completed the evaluation period, a memo/email shall be written to the Deputy Director stating that the analyst has successfully completed their evaluation period and has been deemed competent to conduct technical reviews in that discipline.

The Deputy Director, after review, may endorse this memo/email and generate a request to the Quality Unit requesting that this analyst be authorized to perform technical reviews based upon the analyst's casework experience in that discipline.

## 12. Retraining

In the event it is identified that an examiner has failed a proficiency or technical and administrative reviews have identified an issue in the casework, the employee shall complete a retraining and competency period as detailed in SOP-GL-14 and SOP-GL-1.

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