

**A. Purpose**

- a. To provide a new employee with the training guidelines to conduct competent examinations of firearm and toolmark evidence, to render opinions relating to the examinations, and to provide expert witness testimony in a professional and unbiased manner.
- b. To provide guidance for a new examiner with prior firearms examination experience.
- c. To provide National Integrated Ballistic Information Network (NIBIN) technicians with the appropriate training to conduct acquisitions and correlation review of test fired and evidence cartridge cases.
- d. For current examiners, to stay abreast of new technology, current legal trends, and the latest research developments relevant to the discipline of firearm and toolmark examination.
- e. To provide guidance on procedure to complete the competency testing and request authorization for an employee to begin casework in the Firearms discipline.

**B. Responsibility**

Assigned Unit staff

**C. Procedure**

- a. New examiners shall follow the Connecticut Division of Scientific Services Firearm and Toolmark Unit Training Manual (QR FA-15).
  - i. This training manual is composed of twelve modules. New examiners will complete each module as assigned by the Unit lead. The modules do not need to be completed in numerical order, and some modules may be skipped based on the operational needs of the Division. They may be addressed at a later time. As an example, the following may be areas that examiners may be trained:
    1. NIBIN – acquisition and correlation
    2. Operability
    3. Serial Number Restoration
    4. Microscopic Comparison
  - ii. This training may be supplemented by the training modules on the National Forensic Science Training Center (NFSTC) website.
  - iii. Acceptance into the ATF's National Firearms Examiner Academy (NFEA) may replace parts of the DSS Firearm and Toolmark Unit Training Manual.

1. Any new examiner accepted into this program is still responsible for completing DSS-specific modules within the Firearm and Toolmark Unit Training Manual (e.g. Orientation, Safety, Evidence Handling).
2. Any new examiner accepted into this program is also responsible for reading all DSS standard operating procedures relating to the Firearms Unit and to the laboratory as a whole.
- iv. Training for new examiners may also be provided via a contractual service with a qualified trainer. In this circumstance, the qualifications of the trainer will be reviewed by a DSS employee with technical knowledge, Deputy Director and Director. The trainer will provide a training program as to the topic areas that will be covered. At a minimum, these topic areas should cover the similar areas as listed in the Unit Training Manual.
- v. Upon completion of training, the training files are provided to the Deputy Director and/or Assistant Director for review prior to providing a competency test. Once reviewed and found acceptable, new examiners shall be competency tested in the appropriate categories of testing prior to beginning independent casework. This is to evaluate their analytical skills and their ability to clearly communicate their findings in a report. The competency testing shall include an oral or written evaluation of the areas tested with the competency test. Refer to GL-14 on grading parameters for tests issued during the training process.

The competency testing shall include the following:

1. Evidence that involves a revolver and a handgun for the appropriate categories of testing.
  2. In a mechanical function test (operability) the competency should include the types of firearms typically encountered in casework and at least two guns in which one is not operating as designed and needs to be repaired.
  3. The comparison competency test(s) should include microscopic comparison of projectiles and fired cartridge cases. These may include shotshell casings and/or components. These ammunition components should have a representative sample of evidence typically encountered in casework (e.g. damaged).
  4. In comparisons, not all questioned samples shall have a matching known exemplar. In designing the competency test, not all comparisons shall be based on differences in class characteristics.
- vi. A memo shall be written to the Deputy Director stating that the analyst has successfully completed their training and passed the competency test.
    1. The Deputy Director will review the training files and generate a workflow request in Qualtrax to request that the new examiner be

authorized to conduct work in the specified categories of testing. Supporting documents may be appended to this workflow.

2. A Qualtrax workflow will be initiated for authorization of the examiner for casework. The workflow may include the following in which the analyst is being authorized to participate in conducting:
  1. Handle evidence
  2. Perform examination and/or analytical methods
  3. Utilize all applicable equipment in methods described in SOPs
  4. Report, review and authorization of results
  5. Perform administrative reviews
  6. Perform validations in the discipline
  7. Assist in the development of new methods
  8. Modification of methods
  9. Verification of methods
- vii. The new examiner's trainer or the Unit's technical responsibility/designee will be his/her verifier/technical reviewer of casework for a period of up to six (6) months. The verifier/technical reviewer will evaluate 100% of the evidence items and all conclusions reached. At the end of this period, the new examiner's work will be assessed. If at this assessment, the new examiner's work still needs 100% review, then the review will continue up to two (2) months and then reassessed. Once the new examiner has successfully been assessed, other examiners in the Unit may perform any verifications/technical reviews for the new examiner.
- viii. The new examiner may conduct verifications/technical reviews of others' casework in a category of testing after a period of up to six (6) months and a sufficient number of cases of their own independent casework in that category of testing.
  1. Once the examiner has completed the evaluation period, a memo shall be written to the Deputy Director stating the examiner has successfully completed the evaluation period and has been deemed competent to conduct technical reviews and verifications in that category of testing.
  2. The Deputy Director, after review, may endorse the memo and generate a workflow request in Qualtrax requesting that the examiner be authorized to conduct technical reviews and verifications based upon the examiner's casework experience in the specified categories of testing. Supporting documents may be appended to this workflow. The analyst may also be

authorized to participate in conducting administrative reviews (if not previously authorized).

- b. New examiners with prior experience shall review all General Laboratory SOPs and Unit-specific SOPs.
  - i. New examiners with prior experience shall be competency tested along with an oral/written evaluation in the appropriate categories of testing prior to beginning independent casework.
- c. NIBIN technicians/users shall be trained in the operation of the Integrated Ballistics Information System (IBIS) equipment by an approved instructor and shall follow the appropriate training modules within the Firearm and Toolmark Unit Training Manual.
- d. New and current examiners shall attend training when possible to stay abreast of new topics within the forensic discipline. This can include conferences, presentations, armorer's schools, webinars, etc.
  - i. Any certificates of attendance attained for training courses shall be kept with the examiner or analyst and a copy uploaded to Qualtrax under the Personnel-Electronic Filing Cabinet.
  - ii. Where possible, training agendas should be included with certificates and uploaded to the Qualtrax Electronic Filing Cabinet.
- e. Remediation and Retraining
  - i. Refer to GL-14 for guidance when a deficiency has been identified.

#### **D. References**

- a. QR FA-15: Connecticut Division of Scientific Services Firearm and Toolmark Unit Training Manual
- b. National Forensic Science Training Center website (<http://projects.nfstc.org/firearms/>)
- c. General Laboratory SOP 14, General Training