

NIBIN Procedure Manual

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Version: 1.0

Effective Date: 2/1/2024

A. Purpose: To provide guidance for the use of the NIBIN system.

B. Scope: This procedure applies to the entry, handling of possible associations between evidence, and test fired cartridge cases entered into NIBIN.

C. Equipment

1. Integrated Ballistics Identification System (IBIS)/BrassTrax 3D/MatchPoint Plus
2. Comparison Microscope
3. Stereoscope
4. Scribes/Markers/Engravers

D. Chemicals, Reagents, Solvents, Standards

1. Acetone/Methanol/other cleaning solvents
2. Bleach/other disinfectants

E. Safety/PPE

1. Evidence received for NIBIN examinations may be contaminated with biological material. Refer to the current Alaska Scientific Crime Detection Laboratory (ASCDL) Health and Safety Manual for personal hygiene, PPE, handling, and disinfecting guidelines.
2. Ear protection and impact resistant safety glasses will be worn when test firing firearms.

F. Procedure

1. All examinations must be documented in the appropriate worksheet.
2. The Examiner or authorized NIBIN Technician will determine if the cartridge cases are suitable for NIBIN entry based on the quality of the toolmarks present.
3. Test fires shall be entered as known samples and will only be searched against unknown samples in the NIBIN database.
4. Cartridge cases recovered from a crime scene shall be entered as an unknown sample and will be searched against other unknown samples as well as test fired cartridge cases from known firearms in the NIBIN database.

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5. When a firearm is submitted for NIBIN entry:
 - a. The submitted firearm shall be test fired unless the firearm is not capable of firing, is unsafe to fire, is equipped with an action-type that does not automatically eject cartridge cases when fired or is otherwise not typically found at crime scenes.
 - b. Any action type may be test fired based on the circumstances of the case at the discretion of the Examiner or authorized NIBIN Technician.
 - c. The test fires will be evaluated for NIBIN entry.

6. Acquisition:
 - a. The procedures for acquiring cartridge cases outlined in the *IBIS BRASSTRAX 3D Training Guide* will be followed.
 - b. Acquisitions must be performed on all suitable ballistic evidence submitted.
 - c. Only the best exemplar(s) from a group of submitted casings identified through triage must be entered. However, this does not preclude the number of entries that can be made if it is determined that a grouping requires more than one entry.

Example: If the cartridge cases have two or more significantly different patterns (i.e. heavy shearing appears on some, but not all cartridge cases, or a cross hatched pattern which appears different when rotated),
 - d. All relevant information for the acquisition must be entered properly. The following fields are required:
 - i. Case number: The IBIS Case Number will consist of the Agency Laboratory Case number succeeded by Agency Item Number
Example: AK2300010 – P1423811 or 23-00001 - 1234
 - ii. Occurrence Date: The date of incident or firearm/cartridge case recovery
 - iii. Receipt Date: The date the evidence was scanned in Technician or Examiner’s possession
 - iv. Event Type: Type of incident (if known)
 - v. Originating Agency Name: Submitting Agency
 - vi. Originating Agency Reference: Submitting Agency Case Number
 - vii. Firearm Exhibit Details: Firearm information to include:
 - A. Exhibit Number, Make, Model, Caliber, Type, and Serial Number as well as Importer Name and State (if applicable)
 - B. The IBIS Exhibit Number will be “A”, “B”, “C” for evidence and “T” for test fires followed by the corresponding Item or Tag number. Example: 1A – 1234 or 1T – 1234
 - e. The individual performing the cartridge case acquisition shall document the acquisition for each exhibit by completing NIBIN Notes in BrassTrax and/or LIMS.

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7. If evidence is resubmitted for microscopic comparison due to a NIBIN Lead, the following steps shall be taken:
 - a. A Request for Laboratory Services will be required/submitted.
 - b. A qualified Firearm Examiner will conduct a microscopic comparison of the evidence and document the findings in the appropriate LIMS worksheet(s).
 - c. A report will be generated and distributed to the requesting Agency.
8. Reporting:
 - a. Attempts will be made to report all leads to the submitting agency within one business day.
 - b. Leads may be reported without recalling evidence for microscopic confirmation. (NIBIN LEADS already say 'presumptive leads' for investigative purposes)

G. Quality Requirements

1. Poorly marked evidence should not be entered into the NIBIN system.
2. Triage of cartridge cases shall be performed by an authorized NIBIN Technician or Firearm Examiner.
3. All comparisons shall be performed on a comparison microscope by a qualified Firearms Examiner. All microscopic conclusions will be verified by a second qualified Firearms Examiner.

H. Interpretations/Opinions

1. Suitable for NIBIN Entry - Cartridge cases that exhibit sufficient toolmarks for entry in the NIBIN database.
2. Not Suitable for NIBIN Entry - Cartridge cases that do not exhibit sufficient toolmarks for entry in the NIBIN database or that are not suitable for NIBIN entry based on action type.
3. Unable to Compare - When the requested evidence has been destroyed or is otherwise unavailable for comparison.
4. Lead – A possible association between two cartridge cases based on review of NIBIN images alone. This level of association requires confirmation by two qualified Reviewers.

I. Limitations

1. Firearms that do not automatically eject cartridge cases when fired, i.e. derringers, revolvers, single-shot rifles/shotguns, air guns, BB guns and muzzleloading firearms are not suitable for entry into NIBIN. Manually operated action types that are otherwise not typically found at crime scenes may

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also be unsuitable for NIBIN entry. However, any action type may be entered in NIBIN based on the circumstances of the case at the discretion of the Examiner, NIBIN Technician.

2. Based on the quality of evidence submitted or test fires produced, cartridge cases may not be suitable for NIBIN entry.
3. Based on variables associated with the NIBIN system, the correlation results may or may not contain leads on related cases.
4. The evidence may be destroyed before a microscopic comparison can be performed.

J. References

1. *IBIS BRASSTRAX 3D Training Guide*, Forensic Technology WAI Inc. (current version)
2. *IBIS MATCHPOINT+ Training Guide*, Forensic Technology WAI Inc. (current version)
3. Minimum Required Operating Standards (MROS) for National Integrated Ballistic Information Network Sites, Firearms Operations Division, ATF (current version)

K. Additional Factors

1. All items entered in this individual characteristic database are treated as evidence.

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REVISION HISTORY

| NPM 1.0 Page | NPM 1.0 Page | Revision made |
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