NIBIN Use

Eff. Date: ~~03/17/2023~~

Purpose

The National Integrated Ballistic Information Network (NIBIN) is an automated ballistic imaging network that provides local law enforcement partners with the ability to compare fired casings from crime guns with other such casings to connect crimes. NIBIN is vital to a violent crime reduction strategy because it provides investigators the ability to compare their ballistics evidence against evidence from other crimes on a national, regional, and local level, thus generating investigative links that would rarely be revealed absent the technology.

These policies and procedures are designed to ensure that firearms that meet the standards defined herein and collected fired cartridge casings are processed and uploaded to NIBIN to generate timely and actionable investigative leads for all participating agencies.

As a NIBIN site, the City of Madison Police Department (MPD) strives to meet the Bureau of Alcohol, Tobacco, Firearms, and Explosives' (BATFE or ATF) most current Minimum Required Operating Standards (MROS) as they relate to ensuring the quality, integrity, and timeliness of the ballistic data shared in NIBIN.

The purpose of this standard operating procedure is to set forth standards, methodologies, and safety protocols for the use of NIBIN by MPD personnel, as well as for the sharing of NIBIN technology with area law enforcement agencies.

DEFINITIONS

The following terms shall have the meanings specified:

- **BRASSTRAX™:** A cartridge case acquisition station that captures highly detailed images of cartridge cases to include breech face firing pin impressions on the primer and ejector markings.
- **Correlation:** The automated comparison of an acquired digital image to other images in the databases using an algorithm that provides a list of possible matches.
- **Correlation Review:** The on-screen comparison of digital images made by an authorized technician/specialist to determine the potential for multiple cartridge casings to have been fired from the same weapon.
- **Crime Gun:** Any firearm used, or suspected to have been used, in a crime, including firearms that are abandoned, found, or otherwise taken into law enforcement custody if they are either suspected to have been used in a crime or their proper disposition can be facilitated through a firearms trace.
- **Crime Gun Intelligence Center (CGIC):** An ATF-led interagency collaboration focused on analyzing and investigating gun crime in a local community. CGIC unites cutting-edge technology and a dedicated multiagency investigative team to identify, disrupt, and prosecute serial shooters and their sources of crime guns.
- **Firearm:** A weapon that acts by force of gunpowder as defined in Wisconsin State Statute 167.31 (c). For tracing, a firearm also includes the frame or receiver of a firearm.
- **Firearms and Toolmark Examiner ("Firearms Examiner"):** A forensic scientist who is an expert in evidence regarding firearms, ballistics, and toolmarks, who may also be required to serve as an expert witness, prepare courtroom evidence, provide courtroom testimony, and provide training to law enforcement personnel.
- **Found gun:** Any gun discovered with no apparent owner or abandoned on either private or public property.
- **IBIS (Integrated Ballistics Identification System**): An automated ballistics imaging and analysis system that populates a computerized database of digital ballistic images of casings from crime guns, or the technology that enables the imaging and identification of large quantities of firearm

evidence across a network of sites, as well as the automated identification of likely matching cartridge casings.

- **IBIS Technician ("IBIS Tech" or "NIBIN Technician"):** A trained technician/specialist able to use IBIS equipment for the acquisition and correlation review of digital images of firearms ballistic evidence. IBIS Technicians can determine potential links of two or more cartridge cases fired from the same weapon.
- **IBIS User ("NIBIN User"):** A person who has successfully completed the ATF approved NIBIN Acquisition Training or BRASSTRAX Data Acquisition Course and has been authorized by ATF to log into the NIBIN system.
- **MATCHPOINT™:** The system that stores the images uploaded from BRASSTRAX and contains the algorithm program for correlation reviews.
- **Microscopic Comparison ("Scope" or "Confirmation"):** The process employed by a trained firearms examiner to determine whether two or more fired casings were fired by the same firearm.
- **NIBIN:** National Integrated Ballistic Information Network is a database managed by the ATF that automates the imaging of the unique identifiers of casings fired from crime guns and stores the digital images for comparison across a national network of participating sites.
- **NIBIN Hit:** The result of two or more firearms ballistic evidence acquisitions that have been microscopically identified as a match after microscopic examination by a firearms examiner. NIBIN Hits are based on correlation review of digital images using MATCHPOINT™ and microscopic confirmation by a firearms examiner which generates a crime laboratory report. This information/intelligence can be used for investigative purposes and is suitable for court purposes.
- **NIBIN Lead:** An association between two or more pieces of firearm ballistic evidence based on a correlation of the digital images in the NIBIN database by at least a trained IBIS technician, but not yet confirmed by microscopic examination by a firearms examiner. A NIBIN Lead is intended to provide a lead for investigative purposes, support a finding of probable cause, and does not necessarily require microscopic confirmation.

NIBIN PROCESS

Qualified NIBIN users enter fired cartridge casing evidence into the Integrated Ballistic Identification System utilizing a BRASSTRAX station located in a secure area within the MPD Forensic Services Unit (FSU) laboratory. The images acquired by the BRASSTRAX station are entered into the MATCHPOINT program which compares uploaded images against the NIBIN database using an algorithm that provides a list of possible matches. A trained technician/specialist compares possible matches to determine the potential for two cartridge casings to have been fired from the same weapon.

A NIBIN Lead is generated when two NIBIN technicians and a firearms examiner all agree that there is a high probability that the fired cartridge casings in question have been fired from the same weapon. At this point, a NIBIN Lead notification will be sent to the originating agency. **NIBIN Leads shall be used for investigative purposes only. A NIBIN Lead shall not be used as the sole basis for a search or arrest warrant.**

A match or NIBIN Hit can only be determined after microscopic comparison and confirmation by a firearms and tool mark examiner from the Wisconsin State Crime Lab (WSCL). This information/intelligence can be used for investigative purposes and is suitable for court purposes.

Test-firing and/or submission of spent cartridge cases for NIBIN submissions does not constitute a complete function test and/or laboratory examination of these items. If a function test of a firearm is needed for investigative reasons, a complete examination must be completed by the Wisconsin State Crime Lab using standard request protocols.

PROCEDURES

MPD personnel will continue to respond to incidents involving firearms and fired cartridge casings per policy and standard operating procedures.

MPD personnel will continue to preserve, collect, package, and document all evidence including firearms and fired cartridge casings per MPD policy and standard operating procedures.

Qualified IBIS (NIBIN) Users will work with MPD Property personnel to ensure the timely identification and retrieval of evidence relevant to the NIBIN system. Evidence recovered prior to July 23, 2021 will need to be identified and individually requested for consideration into the NIBIN system.

Qualified IBIS (NIBIN) Users will enter test fired and/or evidence cartridge cases into the NIBIN database per their training and experience, knowing that not all ammunition components or firearms will fit the criteria needed to use NIBIN most effectively.

Qualified IBIS (NIBIN) Users will complete an entry in the Activity tab of the MPD Law Enforcement Records Management System (LERMS) to document the entry of any fired cartridge casing(s) into NIBIN.

A. EVIDENTIARY FIRED CARTRIDGE CASINGS

The following criteria will act as a guide in determining which cartridge cases should be entered into NIBIN:

- Any firearm of any caliber that ejects the fired cartridge case during its cycle of operation has potential for entry.
- Characteristics of each casing will be reviewed to determine if each casing has potential for entry.
- Multiple cartridge cases will be visually screened and grouped according to class characteristics. If one or more groups are found to be visually distinguishable from each other, one cartridge case from each group may be entered. Absent distinguishable groups, only one casing from each incident will be entered.

B. TEST FIRING OF CRIME GUNS

In general, NIBIN test firing is mandatory for all weapons deemed to be crime guns as defined above, to include semi-automatic pistols, semi-automatic rifles, and long guns that use handgun ammunition.

Prior to test firing any crime gun, the NIBIN user will notify the Detective Lieutenant of the district in which the incident involving the crime gun occurred, or the Investigative Services Lieutenant who oversees the Violent Crime Unit (VCU)/Burglary Crime Unit (BCU), of the NIBIN user's intent to conduct a test fire. Once permission is received from the lieutenant, the NIBIN user will swab the crime gun for the presence of touch deoxyribonucleic acid (DNA) prior to conducting a test fire.

PRELIMINARY FIREARM EXAMINATION

When examining any firearm, proper safety procedures shall always be followed. If there are any questions regarding the safety of test firing a firearm, an MPD armorer shall be consulted.

Firearms that are not typically test fired include revolvers, single shot or bolt action rifles, shotguns, weapons never fired, or firearms deemed unsafe, inoperable, or incomplete.

Possible reasons for not test firing include, but are not limited to, the following:

- the firearm is unsafe
- the firearm was deemed unsuitable for NIBIN entry
- the firearm was never fired and was never licensee-transferred
- the firearm is contaminated in such a way as to make it a potential biohazard
- a NIBIN partner has already test fired and submitted the firearm for NIBIN entry
- the firearm is a law enforcement officer (LEO) issued firearm and involved in an officer involved shooting. LEO firearms from officer-involved shootings are not test fired and are not entered into NIBIN.

CRIME GUN PROCEDURE

Based on a thorough examination of the submitted firearm by the Forensic Services Unit Investigator, determine whether the firearm will be fired manually or utilizing the Ransom Master Series Forensic/Ballistic Testing Machine. Only qualified users may operate the Ransom Master Series Forensic/Ballistic Machine. ~~or remotely. If it is deemed necessary to fire the weapon remotely, make arrangements with an outside agency with remote weapon firing capabilities.~~

If the firearm is determined to be suitable for entry into the NIBIN system, it will be test fired twice with unaltered, complete, live rounds. Choose test ammunition based on the firearm caliber or gauge, design, and fired evidence for potential comparison. Trained personnel will examine the ammunition for any defects, manufacture marks, corrosion, or other factors that may influence test firing and quality of tests. If the firearm is unsafe to fire with standard ammunition, a primed empty (cartridge or shot shell) or reduced load may be used to test fire the firearm.

Test firing will be conducted by a minimum of two MPD personnel at the MPD Training Center indoor range. All range safety rules must be followed to include donning of appropriate hearing and eye protection, and the use of ventilation and warning systems.

The two test fired casings will be collected and the casing that represents the best marking will be selected for entry into the BRASSTRAX machine. Upon the completion of the test fire, the firearm will be repackaged and returned to evidentiary property room. The test fired casings are not considered evidence and will be placed in an envelope and retained for 30 days after entry into the BRASSTRAX machine.

All NIBIN Leads will be forwarded to the Detective Lieutenant of the district in which the incident involving the crime gun occurred, or the Investigative Services Lieutenant who oversees the Violent Crime Unit (VCU)/Burglary Crime Unit (BCU).

INTELLIGENCE SHARING

Pertinent, investigative information is added to a case management system that allows investigators the ability to review NIBIN leads and share with external law enforcement entities. This information will be logged via MPD's records section.

FOLLOW-UP

NIBIN leads are forwarded to the assigned Lead Detective or Detective Lieutenant and will be investigated thoroughly and appropriately. If a NIBIN Lead is later confirmed by a Tool Mark Examiner, FSU personnel shall be notified for reporting purposes to the Bureau of Alcohol, Tobacco, Firearms, and Explosives.

EXTERNAL USE OF MPD EQUIPMENT & FACILITIES

MPD will make available its NIBIN system to other law enforcement agencies by appointment. Other law enforcement agencies must provide a certified NIBIN user for entering their casings as MPD will not be responsible for entering casings from outside jurisdictions. Certified users must make an appointment, provide identification, sign in and out, and agree to the terms detailed in the signed memorandum of understanding (MOU) between the ATF and the City of Madison Police Department when using MPD's NIBIN system.

Certified NIBIN users from other law enforcement agencies may also use the MPD Training Center indoor range for test firing of crime guns free of charge, but must supply their own ammunition. A representative from the other law enforcement agency will need to contact the MPD Training Coordinator to check range availability and schedule range dates. Test firing will be conducted by a minimum of two personnel (both from outside agency or in conjunction with a MPD certified NIBIN user if one is available). The Ransom Master Series Forensic/Ballistic Testing Machine is available for external use when scheduled with a MPD

qualified user. All range safety rules must be followed to include donning of appropriate hearing and eye protection, and the use of ventilation and warning systems.

PUBLICITY AND DISCLOSURE OF INFORMATION

Per MPD's MOU with the Bureau of Alcohol, Tobacco, Firearms, and Explosives, any MPD personnel who become aware of, or participate in, publicity related to the NIBIN system and investigations within their jurisdiction should advise ATF personnel of same in advance of or as soon as practicable, but no later than within 48 hours. NIBIN system information may be shared with other law enforcement and prosecutor's offices in furtherance of criminal investigations and prosecutions. All requests for police records should be facilitated by the MPD Records Custodian. Where there is objection to release of ATF records to the public, the MPD Records Custodian will work with ATF Regional Counsel to follow state and federal law.

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