



April 2015

# Bulletin

Rocky Mountain Information Network

**CRIME GUNS AND BALLISTIC EVIDENCE + NIBIN AND eTRACE:**  
Actionable, Tactical, And Strategic Information

Law Enforcement Sensitive



## SUCCESS STORY:

Ultra ELECTRONICS FORENSIC TECHNOLOGY



# NIBIN LINKS SUSPECT TO HOMICIDE — A GLENDALE, ARIZONA STORY

On June 24th, 2014 Mark Woodruff was found shot and killed in his vehicle in the driveway of his residence in the 4400 block of W. Maryland Ave. Crime scene investigation led to the collection of one shell casing. Investigators knew that a second casing was missing from the scene, after finding two bullet holes — one in vehicle and one in victim.



Two days later, a Gustin Woodman was stopped on traffic stop by Glendale Police Sergeant and Motor Officer for racing another vehicle.

Woodman was found in possession of a handgun with a shell casing inside. Both the handgun and shell casing were placed into evidence.



Approximately a month after the Woodruff homicide both casings were entered into NIBIN at the Phoenix Police Department as part of the Phoenix Metro NIBIN program.

The casings were run through the NIBIN database.



At this point, investigators had no suspects, no witness, and very little information to help solve this case.



Members of the Glendale Police Department Forensic Unit were able to forensically link the casing obtained from inside Woodman's handgun to the casing left at the homicide scene at 4400 W Maryland.



Now a suspect, Gustin Woodward was located in Pennsylvania in the Berks County Prison on separate charges.

The case agent flew to Pennsylvania and interviewed Gustin Woodward who confessed to his involvement in the shooting death of Mark Woodruff.



### • Actionable, Tactical, and Strategic Information

The resolution of this case would not have been possible without the combined efforts of the following partnerships:

- Glendale Police Department: Homicide, Forensic Units
- Phoenix Police Department: NIBIN Squad
- ATF(NIBIN)
- DPS (CIRU)
- Muhlenberg Police Department



PROVIDED BY ULTRA ELECTRONICS FORENSIC TECHNOLOGY | WWW.ULTRA-FORENSICTECHNOLOGY.COM

## CRIME GUNS AND BALLISTIC EVIDENCE + NIBIN AND eTRACE: ACTIONABLE, TACTICAL, AND STRATEGIC INFORMATION

A shots-fired call is received from a residential neighborhood. When police arrive, they find a deceased gunshot victim along with numerous spent casings in the street.

Officers conduct a traffic stop. During the stop, the driver—a convicted felon—is found to be in possession of illegal drugs and a handgun.

The firearm seized during the traffic stop might be the gun that was used in the homicide. Spent casings found at the scene could be the key to linking a suspect to other shooting incidents. The analysis of a firearm could help identify a suspect involved in illegal firearms trafficking.

NIBIN (National Integrated Ballistic Information Network) and eTrace, used as part of a comprehensive regional crime gun strategy, can help law enforcement identify crime gun sources and identify, apprehend and prosecute those who unlawfully use firearms.

NIBIN is a national database of digital images taken from spent bullets and cartridge casings found at crime scenes or from firearms seized by law enforcement agencies.

eTrace systematically tracks a recovered firearm and identifies the manufacturer or importer, then the wholesaler/retailer and the first retail purchaser.

The intelligence obtained through these programs can assist investigators across traditional jurisdictional boundaries while providing law enforcement with tactical and strategic information. NIBIN and eTrace are administered by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF).

### NIBIN

Cartridge case evidence is compared against others in the database and possible matches are reviewed. High confidence matches and “hits” (the linkage of two different crime investigations, and confirmed by a Firearms Examiner, that were not previously known to be related) have the potential to:

- link crimes
- provide valuable tactical and strategic analysis
- provide investigators with leads and suspects
- prevent future crimes by removing shooters before they have the opportunity to re-offend

## eTrace

When a firearm is recovered in conjunction with a criminal investigation and traced, the information can be used to

- link suspects to a firearm
- identify possible traffickers
- identify unlawful firearm purchases
- provide important administrative and strategic analysis (e.g., identify trends and patterns with regard to the make, model and caliber of recovered firearms, time-to-crime rates, etc.)

## Crime Gun Intelligence Resources

<https://www.atf.gov/content/Firearms/firearms-enforcement/NIBIN> - ATF site dedicated to providing information regarding NIBIN, including locating NIBIN sites, NIBIN resources, fact sheets and success stories.

<https://www.atf.gov/content/Firearms/firearms-enforcement/atf-national-tracing-center> - ATF site providing information about the National Tracing Center and firearms tracing.

[www.phoenix.gov/police/neighborhood-resources/gun-law](http://www.phoenix.gov/police/neighborhood-resources/gun-law) - Phoenix PD Crime Gun Intelligence webpage providing information regarding gun enforcement programs, NIBIN and other helpful links and videos.

<http://www.theiacp.org/Gun-Violence-Reduction-2> - International Association of Chiefs of Police site with numerous links regarding best practices, regional crime gun protocols, statistics, etc.

<http://forensictechnology.com/13/> - Ultra Electronics – Forensic Technology created the Integrated Ballistic Identification System in 1991 and manufactures the entry and analysis stations used by participating NIBIN agencies. This webpage provides information on how to obtain The 13 Critical Tasks book and schedule the one-day workshop free of charge.

*Gagliardi, P. The 13 Critical Tasks: An Inside-Out Approach to Solving More Gun Crime, 2nd. Ed. 2014, Forensic Technology WAI, Inc, Cote St-Luc, QC, Canada, ISBN:978-0-615-39145-8*

**Developing a Firearms Investigation Protocol for Your Agency** is a free webinar slated for 1 p.m. (EDT), Tuesday, May 12. The webinar will take participants through a comprehensive approach to firearms-related investigations, beginning at the crime scene. The chances of a successful investigation improve with protocols to ensure the correct handling and documentation of firearms, forensic examination and use of tools including NIBIN and eTrace. Presenters include Det. Stephen Barborini and Laurie Van Deusen with the Palm Beach County Sheriff's Office Violent Crimes Division. For information or to register, visit [www.justiceclearinghouse.com](http://www.justiceclearinghouse.com)

## Contact the authors or [click here to read the full article](#)

Brandon Huntley is a sergeant with the Phoenix Police Department (PPD), currently assigned as the supervisor for the Crime Gun Intelligence Squad, which is part of the Assaults Unit in the Violent Crimes Bureau. He supervises a team of civilian and sworn personnel who enter ballistic evidence into the NIBIN program and conduct firearms traces through eTrace. Sgt. Huntley is a 20-year veteran with PPD and has served in a variety of investigative and other assignments. Contact Sgt. Huntley at [brandon.huntely@phoenix.gov](mailto:brandon.huntely@phoenix.gov) or 602.262.4829.

Darrell Smith retired from Phoenix Police Department after a 30-year career that involved a variety of assignments including serving with ATF as a task force officer. After retiring from PPD, he joined ATF as a Crime Gun Intelligence Coordinator, with responsibility for investigating crimes linked through NIBIN and eTrace. He also volunteers with PPD as a Reserve Officer. Smith can be reached at [darrell.smith@atf.gov](mailto:darrell.smith@atf.gov) or 602.776.5463.

### ATF Contacts

Arizona  
Phoenix Field Division  
[PhoenixDiv@atf.gov](mailto:PhoenixDiv@atf.gov)  
602.776.5400

### Colorado

Denver Field Division  
[DenverDiv@atf.gov](mailto:DenverDiv@atf.gov)  
303.575.7600

### Idaho

Seattle Field Division  
[SeattleDiv@atf.gov](mailto:SeattleDiv@atf.gov)  
206.204.3205

### Montana

Denver Field Division  
[DenverDiv@atf.gov](mailto:DenverDiv@atf.gov)  
303.575.7600

### Nevada

San Francisco Field Division  
[SanFranciscoDiv@atf.gov](mailto:SanFranciscoDiv@atf.gov)  
925.557.2800

### New Mexico

Phoenix Field Division  
[PhoenixDiv@atf.gov](mailto:PhoenixDiv@atf.gov)  
602.776.5400

### Utah

Denver Field Division  
[DenverDiv@atf.gov](mailto:DenverDiv@atf.gov)  
303.575.7600

### Wyoming

Denver Field Division  
[DenverDiv@atf.gov](mailto:DenverDiv@atf.gov)  
303.575.7600

## The First 48 – Employing Timely Crime Gun Intelligence Strategies to Firearm-Related Investigations

Consider the following situations that patrol officers across the United States respond to on a daily basis:

- A shots-fired call is received in a residential neighborhood. Upon the arrival of first responders, they find a deceased gunshot victim along with numerous spent casings strewn about the street.
- Officers conduct a traffic stop. During the stop the driver, who is a convicted felon, is found to be in possession of illegal drugs and a handgun.

Obviously, in each of the situations described above, evidence will be collected, impounded and likely submitted to the crime lab for forensic analysis. The evidence is important for each case, however, could the firearm seized during the traffic stop be the gun that was used to commit a homicide or armed robbery in yours or another jurisdiction? Perhaps the gun was purchased by a suspect involved in illegal firearms trafficking. Could this suspect be identified simply through the analysis of the make, model and serial number on the firearm? Could the spent casings found at the murder scene be the key to linking the shooter to other shooting incidents? The answer to all of these questions is **YES**, and CRIME GUN INTELLIGENCE programs including NIBIN (National Integrated Ballistic Information Network) and eTrace, administered by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), are the keys to identifying and unlocking this information.

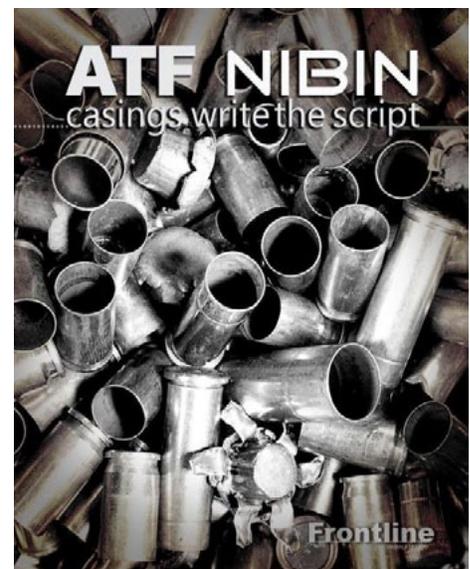
### NIBIN



Firearms, which are comprised of a variety of materials including metal parts, create unique markings on the fired bullet and spent cartridge case when the trigger is pulled and a round is fired. The National

Integrated Ballistic Information Network (NIBIN), administered by ATF, is a national database of digital images taken from these spent bullets and cartridge casings found at crime scenes or test-fired exemplars from eligible firearms seized by law enforcement agencies.

To use NIBIN, firearm examiners and NIBIN technicians enter cartridge case evidence into the Integrated Ballistic Identification Systems (IBIS) that are deployed to participating agencies. The entry is compared against others in the database and possible matches are reviewed by certified personnel. If a high confidence match to another case is identified (also referred to as a potential candidate for comparison, or PCC), this information should be provided immediately to investigators for follow-up investigation. To be considered a confirmed “hit” (defined as a linkage of two crimes that were not previously known to be related), the PCC must be examined by a certified Firearms Examiner to confirm the match. These high confidence matches and hits have the potential to not only link crimes, provide valuable tactical and strategic analysis, but also to provide investigators with leads and suspects involved in these violent crimes.



## eTrace

Firearms tracing through eTrace, another program administered by ATF, involves the systematic tracking of a recovered firearm beginning with the manufacturer or importer to the wholesaler/retailer and the first retail purchase. When a firearm is



recovered in conjunction with a criminal investigation, the firearm trace can be submitted online via eTrace. The information provided in the trace results can be used to link suspect(s) to a firearm, to identify possible traffickers, as well as unlawful firearm purchases to include “straw purchasers” (situations involving the purchase of a firearm for a prohibited person, i.e. convicted felon, by a person who can lawfully purchase firearms). Law enforcement agencies that have entered into a memorandum of understanding with ATF can complete their own traces via eTrace or trace requests can be submitted to the ATF National Tracing Center. In addition to tactical applications for the trace results in conjunction with active investigations, tracing results also provide important administrative and strategic analysis. Examples include the identification of trends and patterns with regard to the make, model and caliber of recovered firearms, time-to-crime rates, as well as many other potential data fields.

As part of a comprehensive regional crime gun strategy, crime gun intelligence programs such as NIBIN and eTrace are effective tools to help law enforcement identify, apprehend and prosecute those who unlawfully use firearms, as well as to identify their source(s) of crime guns. The intelligence obtained through these programs provides many potential tactical and strategic applications for law enforcement and can assist investigators across traditional jurisdictional boundaries. However, to achieve the goals of identifying and prosecuting these suspects involved in the unlawful use of firearms, to include the commission of violent crimes, the following four elements are critical to achieve success:

1. **Comprehensive Data Collection** – with regard to NIBIN, the non-fatal/injury shootings hold as much potentially valuable information as those involving fatalities/injuries. Therefore, evidence from every shooting scene should be processed, shooting-related evidence collected and submitted in a timely manner. Until a shooting incident is proven to not be connected to any other shootings (even in other jurisdictions), it should be viewed as holding potentially key information to solving other shooting incidents with little to no suspect information. Experience has shown that even seemingly random shooting incidents with no apparent suspect information can prove to be the key to solving a murder involving the same firearm. Analysis of results obtained through NIBIN and tracing can also be utilized strategically to prioritize certain calibers that prove to be more prevalent than others.
2. **Timeliness** – refers to the time between the incident and notification of results from NIBIN and eTrace to the investigator. Recent research has indicated that the value of the intelligence gleaned from NIBIN results drops significantly after one week. Entering firearm-related into NIBIN within 24-48 hours of a shooting incident and providing the results to investigators is critical to the ability to link crimes in a timely manner. When this occurs, suspects can be identified more quickly and future crimes prevented through the apprehension of these suspects before they can re-offend. When firearm traces are submitted and the results incorporated with NIBIN “hit” data, the intelligence provides investigators with a comprehensive history of the firearm.
3. **Investigative Follow-Up** – NIBIN and tracing results must be provided to investigators and analysts for follow-up and analysis of the associated reports and linkages identified. Investigators assigned to cases associated through NIBIN must be notified as soon as the high confidence match (or PCC) is identified. Due to a number of issues, including possible delays with the crime lab confirmation process, the opportunity to collect important evidence and conduct immediate follow-up cannot be missed during this time. The role of the analyst cannot be overstated, as additional linkages can be made and investigative priorities established. Other crimes and/or suspects may be identified through the subsequent research and implementation of other sources of intelligence

including social network analysis, social media and cell phone analysis, other law enforcement databases, etc.

4. **Feedback** – includes an effective communication loop with everyone involved in the crime gun intelligence process: analysts, patrol officers, investigators, crime lab personnel, property management, prosecutors (just to name a few). As criminals and criminal networks change and adapt, so, too must those involved in the implementation of crime gun intelligence programs to ensure the information is beneficial to investigators and prosecutors. It is imperative to share best-practices and success stories, as this will not only assist with the continual development and refinement of these programs, but will also serve to aid with training and marketing.

Although there are approximately 150 NIBIN sites across the United States, access to one of these sites can present challenges for agencies that do not possess IBIS equipment. To overcome this issue, regional programs such as the Phoenix Metro NIBIN Program can help.

Due to a limited number of NIBIN sites in Arizona, the Phoenix Metro NIBIN Program was launched by the Phoenix Police Department (PPD) in July, 2010 in partnership with ATF.

Personnel from law enforcement agencies throughout Arizona receiving the requisite training and certification are welcome, and encouraged, to enter their ballistic evidence at the Phoenix Police Department NIBIN site utilizing one of the three IBIS BRASSTRAX entry and four MATCHPOINT analysis stations. To date, 22 agencies have participated in this program, with three agencies joining since the beginning of 2015. Since the inception of this program, more than 29,000 entries have been completed at the PPD NIBIN site representing 36 different law enforcement agencies. Hundreds of hits have been identified during this time, with many of these hits involving shootings and other firearm-related crimes that have occurred in different jurisdictions. The case linkages and intelligence provided would not have been possible without this regional program. The implementation of programs focusing on timely and comprehensive crime gun intelligence such as PPD's INTEL program (**I**mmediate **N**IBIN and **T**racing **E**quals **L**eads) help to achieve the four elements requisite for providing valuable intelligence and investigative leads.



In closing, Pete Gagliardi (retired ATF Special Agent in Charge and author of [The 13 Critical Tasks: An Inside-Out Approach to Solving More Gun Crime](#)) makes the analogy that “every gun tells a story” and this information is available from both inside and outside of the gun. Crime Gun Intelligence programs, particularly NIBIN and eTrace, are critical to ensuring that this story is heard and they should be a part of every investigation involving a firearm.

### Crime Gun Intelligence Resources

[www.nibin.gov](http://www.nibin.gov) – ATF site dedicated to providing information regarding NIBIN, including locating NIBIN sites, NIBIN resources, fact sheets and success stories

<https://www.atf.gov/content/Firearms/firearms-enforcement/atf-national-tracing-center> - ATF site providing information about the National Tracing Center and firearms tracing

[www.phoenix.gov/police/neighborhood-resources/gun-law](http://www.phoenix.gov/police/neighborhood-resources/gun-law) - PPD Crime Gun Intelligence webpage providing information regarding gun enforcement programs, NIBIN and other helpful links and videos

<http://www.theiacp.org/Gun-Violence-Reduction-2> - International Association of Chiefs of Police site with numerous links regarding best practices, regional crime gun protocols, statistics, etc.

<http://forensictechnology.com/13/> - Ultra Electronics – Forensic Technology created the IBIS system in 1991 and manufactures the entry and analysis stations used by participating NIBIN agencies. This webpage provides information on how to obtain the 13 Critical Tasks book and schedule the one day workshop *free of charge*.

Gagliardi, P. *The 13 Critical Tasks: An Inside-Out Approach to Solving More Gun Crime, 2<sup>nd</sup>. Ed. 2014, Forensic Technology WAI, Inc, Cote St-Luc, QC, Canada, ISBN:978-0-615-39145-8*

### **About the Authors**

ATF Crime Gun Intelligence Coordinator Darrell Smith ([darrell.smith@atf.gov](mailto:darrell.smith@atf.gov))

Darrell retired from the Phoenix Police Department after a 30 year career, however still serves the Phoenix Police Department as a volunteer Reserve Officer. Darrell worked a variety of assignments, including gun enforcement investigations where he was assigned to the ATF as a task force officer. After retiring, Darrell was hired by ATF as a Crime Gun Intelligence Coordinator, responsible for investigating crimes linked through the use of the National Integrated Ballistic Information Network (NIBIN) and eTrace.

Phoenix Police Department Sergeant Brandon Huntley ([brandon.huntley@phoenix.gov](mailto:brandon.huntley@phoenix.gov))

Brandon is a sergeant with the Phoenix Police Department, currently assigned as the supervisor for the Crime Gun Intelligence Squad which is part of the Assaults Unit in the Violent Crimes Bureau. In this capacity, Brandon supervises a team of civilian and sworn personnel who enter ballistic evidence into the National Integrated Ballistic Information Network (NIBIN) and conduct firearm traces through the ATF on-line tracing database, eTrace. Brandon is a 20-year veteran and has served in a variety of investigative and other assignments.

### **Success Stories**

On 5/28/14 a NIBIN Investigative Association (NIA) was identified by a forensic technician from the Glendale Police Department as part of their participation in the Phoenix Metro NIBIN Program. This association involved a shots-fired incident that occurred in Glendale in 2012 and a shots-fired incident that occurred in Phoenix, also in 2012. Through the use of the NIBIN database, this Phoenix case had also been connected to another shots-fired incident that occurred in Phoenix in 2012 and had been confirmed as a “hit” by the PPD Crime Lab. A suspect in one of these cases had subsequently been identified, arrested and charged with Disorderly Conduct and Discharging a Firearm in City Limits. This suspect later pled guilty and was placed on probation after serving two months in jail.

While conducting research of the cases involved with the most recent NIA, it was determined that this suspect was currently on probation. PPD investigators, in conjunction with probation officers from Maricopa County Adult Probation, made contact with the suspect and a search of his residence was conducted as a term of his probation. During this search, a handgun and shotgun were found. The suspect, a prohibited possessor due to his felony conviction(s), admitted to being in possession of the firearms that were found inside his residence and he admitted to his involvement in the shots-fired incidents that were connected through the NIBIN Investigative Associations in Glendale and Phoenix. After being booked and charged with these firearm-related offenses, the suspect ultimately pled guilty to being a prohibited possessor, as well as unlawful discharge of a firearm and was sentenced to one year in the Department of Corrections to be followed by two years of probation.



# Regional Information Sharing Systems® (RISS)

## RISSafe™

Safeguarding Law Enforcement Through Information Sharing



### What is event deconfliction?

Investigative efforts, such as undercover operations, can create situations in which agency personnel work in close proximity to each other. In other situations, agencies or officers may interfere with each other's investigations, causing investigative efforts to be disrupted or, worse, officers to be unintentionally hurt or killed. The use of an officer safety event deconfliction system provides controlled and secure monitoring of these operations and the immediate notification of affected parties when potential conflicts arise with other law enforcement actions or events.

### What is RISSafe?

The RISS Officer Safety Event Deconfliction System (RISSafe) maintains data on planned law enforcement investigative events submitted for inclusion (e.g., raids, controlled buys, surveillances), as well as appropriate noninvestigative events, with the goal of identifying and alerting affected agencies or officers of potential conflicts. RISSafe is used in conjunction with mapping software to verify data on event locations when an event is entered into the system. Staff members assigned to a RISSafe Watch Center are responsible for assisting officers, entering and monitoring events, responding to conflicts, and notifying affected parties. In the event of a conflict, RISSafe Watch Center staff will receive an alarm and notify involved parties of the pending conflict.

RISSafe permits authorized users to enter events remotely. When an officer enters data into RISSafe remotely, he or she is advised that the event is accepted. If a conflict is identified, the remote officer and appropriate parties are notified of the conflict. Authorized users are able to enter event data on a 24/7 basis but do not have the ability to see other users' entries into the system.

Officers may also contact their RISSafe Watch Center by phone, fax, or e-mail to initiate the event submission process.

RISSafe is a valuable tool to warn officers of potential "blue-on-blue" situations prior to engaging in high-risk operations, such as undercover activities, arrests, stings, sweeps, drug buy/busts, and other events that officers face daily.



### What is RISSafe Mobile?

RISSafe Mobile enables officers to submit law enforcement events to RISSafe via their mobile device. RISSafe Mobile supports the following mobile operating system platforms: iPhone® OS (including the iPad®), Windows Mobile®, Android™ devices, and BlackBerry®.

### Why should I use RISSafe?

#### Easy to Use

The system enables law enforcement personnel to easily submit event information 24/7 and receive immediate notification of potential conflicts.

#### Valuable

RISSafe enhances officer safety, improves agency operations, and strengthens information sharing.

#### Secure

RISSafe is available through accessing RISSNET, which employs state-of-the-art technologies to safeguard and provide fine-grained access control to resources.

#### Connectivity

Efforts are under way to interconnect the three nationally recognized event deconfliction systems—RISSafe, Case Explorer, and SAFETNet.

#### No Cost

There is no cost for law enforcement officers to use RISSafe.