

**+**  
**NEW**

**IBIS®** | **CLEARCASE™**



**FULLY  
AUTOMATED  
CARTRIDGE  
CASE TRIAGE  
SOLUTION**

**Accelerate crime gun  
investigations with ease,  
objectivity and reliability**



# THE PROBLEM

The number of firearm-related offenses committed in the United States in 2023 totaled 362,348, according to information collected by the Federal Bureau of Investigation’s Crime Data Explorer. To capture and prosecute such offenders, law enforcement depends on the swift processing of evidence found at these crime scenes, particularly cartridge cases for submission to NIBIN (National Integrated Ballistic Information Network) managed by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF).

The current process for triaging casings and submitting ideal samples to NIBIN is predominantly manual and reliant on the availability of trained technicians. If multiple firearms or machine-gun conversion devices are used in a shooting, it takes a significant amount of time to recover and triage all the casings. And in some instances, cartridge cases can’t be triaged until other evidence—DNA, fingerprints and gunshot residue (GSR)—is processed, which can take weeks or even months.

During this lag time, investigators lose opportunities to establish and pursue critical leads so offenders remain at large with the ability to shoot again. Therefore, it’s crucial to equip investigators with the data and tools they need to advance their cases and reduce gun violence by bringing perpetrators to justice.

# THE SOLUTION

IBIS® ClearCase™ is a fully automated cartridge case triage solution for law enforcement agencies and forensic labs. It accelerates crime gun investigations with ease, objectivity and reliability by enabling any individual—trained or untrained—to rapidly triage fired cartridge cases (FCCs).

ClearCase is built on the same state-of-the-art algorithms used by IBIS (Integrated Ballistic Identification System), the worldwide standard in ballistic identification technology. Not only does the solution determine the ideal candidates to submit to NIBIN for additional analysis, but it also tells investigators the number and caliber of firearms involved in an incident so they can immediately begin the search for suspects.

The technology streamlines ballistic evidence collection, processing and analysis, reducing dependence on specialized resources who are often overburdened in performing subjective and manual analysis. The solution is easy to use, and results are fast and free from human bias or error. ClearCase integrates with existing workflows and also supports advanced workflows for collecting and preserving DNA, fingerprint and GSR evidence during triage. With ClearCase, investigations can keep moving and lab technicians can focus on hit confirmation and other critical activities.

In addition, the solution can identify cartridge cases that carry different markings even though they were fired by the same weapon. When such a disparity is recognized, ClearCase automatically nominates two candidates from that weapon for NIBIN entry, each representing the highest likelihood of producing a match.

# PROVEN IBIS TECHNOLOGY

For more than 30 years, law enforcement agencies around the globe have relied on IBIS 3D imaging and analysis to process evidence from gun crimes. For example, it’s the sole technology approved for acquiring ballistic imagery and extracting electronic signatures for storage in NIBIN.






Its advanced algorithms compare extracted signatures among millions of previously acquired exhibits to reveal the most likely matches to establish case links. A match found in NIBIN provides an investigative lead, making collaboration possible among agencies across jurisdictions.

ClearCase is the latest innovation in the IBIS product line, developed to complement the NIBIN program by enabling agencies and labs to swiftly identify the ideal casings to enter into the ballistic ID system. It also gives investigators preliminary insights into the number and caliber of firearms involved in an incident, so they can pursue leads and disrupt cycles of violence more quickly.

Drawing on the IBIS technology backbone and decades of use, ClearCase operates as a standalone solution that reduces ballistic analysis backlogs by automating the manual processes associated with cartridge case triage. In fact, it enables ATF’s MROS Gold Standard to be achieved if suitable casings are submitted into NIBIN within two (2) business days.\*

\* ATF NIBIN MROS 2.0 | Para 5.8 | (2022)

# KEY BENEFITS

-  **TIME SAVINGS**  
Significantly cuts down the amount of time to process evidence from a crime scene.
-  **COST-EFFECTIVENESS**  
Reduces operational expenses; annual fee includes hardware, software, ongoing maintenance, and 24/7 support.
-  **RELIABILITY**  
Delivers consistent and reliable results.
-  **SCALABILITY**  
Easily processes an unlimited number of cartridge cases.
-  **OPERATIONAL EFFICIENCY**  
Streamlines the triage process and seamlessly integrates with existing investigative workflows to improve overall efficiency.

# MAIN FEATURES

-  **EASY TO USE**  
Includes user-friendly web and mobile apps and an acquisition unit with an intuitive touchscreen. No specialized training required.
-  **BASED ON PROVEN TECHNOLOGY**  
Builds on 30+ years of innovation in ballistic identification. It uses proven, state-of-the-art IBIS algorithms.
-  **STREAMLINED TRIAGE**  
Processes cartridge cases swiftly, turning days or weeks into minutes. The infinite-loop carousel handles an unlimited number of casings with ease.
-  **TRACE EVIDENCE PRESERVATION**  
Enables DNA, fingerprints and GSR to be preserved. Evidence collection and ballistic analysis are simplified, not compromised.
-  **ACTIONABLE INSIGHTS**  
Provides immediate investigative insights, identifying the number and caliber of firearms involved. It also recommends the ideal cartridge cases for submission to your ballistic identification network (e.g., NIBIN).



# SOLUTION COMPONENTS



## MOBILE APP

For evidence collection and exhibit logging:

- Easy to use on iOS and Android
- Download from Google and Apple Stores
- Quick logging of evidence, including GPS location data
- Access to triage summary and detailed report



## STERILE TUBES

For the option of preserving DNA, fingerprint and GSR evidence:

- Patented, sturdy tubes from LOCI Forensics B.V.
- Single use with sterile guarantee
- Fit majority of calibers, up-to 5.56 NATO
- Used with tamperproof NFC tags for both evidence identification and preservation

## WEB CONSOLE

For user and data management:

- Manage users and incident information
- Access, manage and download data
- View interactive incident maps
- Download detailed reports in PDF format

## ACQUISITION UNIT

For fast cartridge case acquisition:

- Designed for agency and lab environments
- Plug-and-play configuration for easy setup
- Regular LAN or Wi-Fi compatibility
- Simple and intuitive touchscreen interface
- Infinite-loop carousel for unlimited acquisitions



## TRIAGE CASING HOLDERS

For processing evidence collected in envelopes:

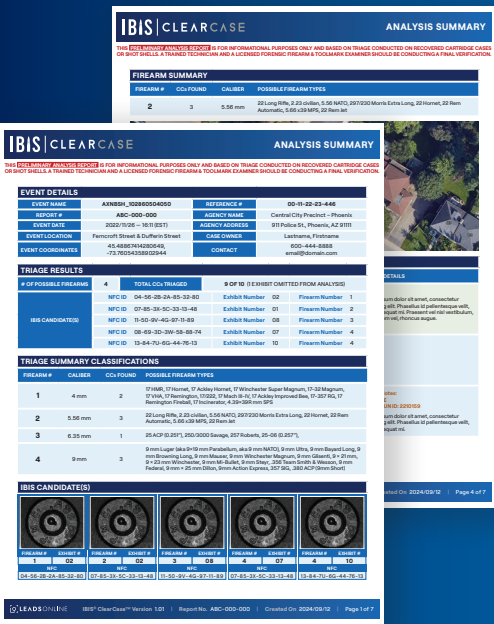
- Integrate with existing workflows
- Sturdy design for multiple uses
- Fit majority of calibers, up-to 5.56 NATO
- Used with standard NFC tags for evidence identification



## DETAILED REPORTS

With easy-to-read layout:

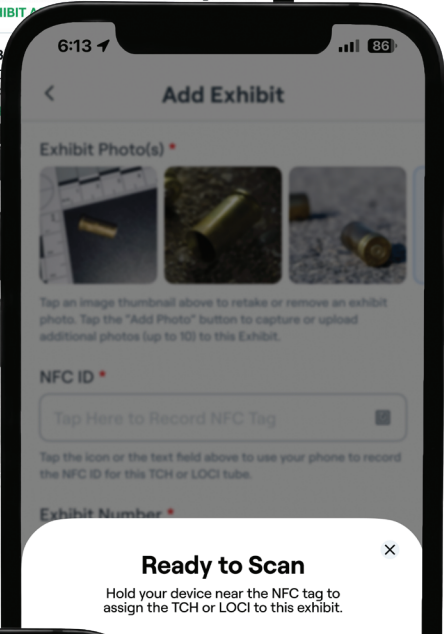
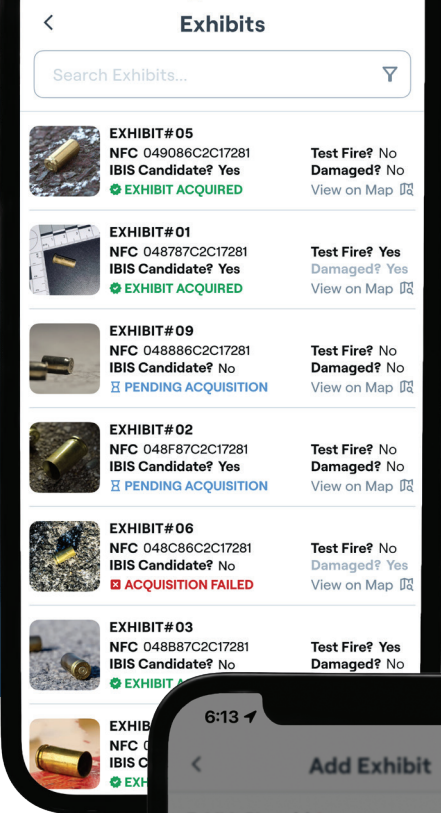
- Categorized summary with detailed results
- Include incident map based on GPS data
- Provide the firearm trail for each identified gun
- Shareable PDF format





# WORKFLOW

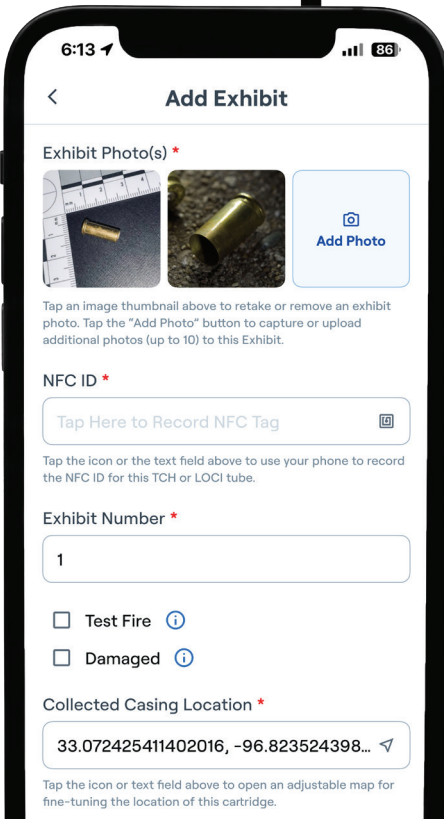
Based on proven IBIS algorithms, ClearCase streamlines cartridge case triage so investigators can collect evidence, acquire casings, and access investigative insights more swiftly. The workflow consists of three phases and does not require the involvement of firearms experts.



## PHASE 1 EVIDENCE COLLECTION

Evidence can be collected at a crime scene using standard envelopes or sterile LOCI tubes that preserve DNA, fingerprints and GSR.

- An NFC (near field communication) tag is affixed to each piece of evidence to make it uniquely identifiable.
- Then each piece of evidence can be registered via the app by a simple tap of the mobile device on each NFC tag.
- GPS data for each exhibit's location also is logged automatically.



## PHASE 2 CARTRIDGE CASE ACQUISITION

The acquisition unit (AU) can be stationed within an agency or lab environment.

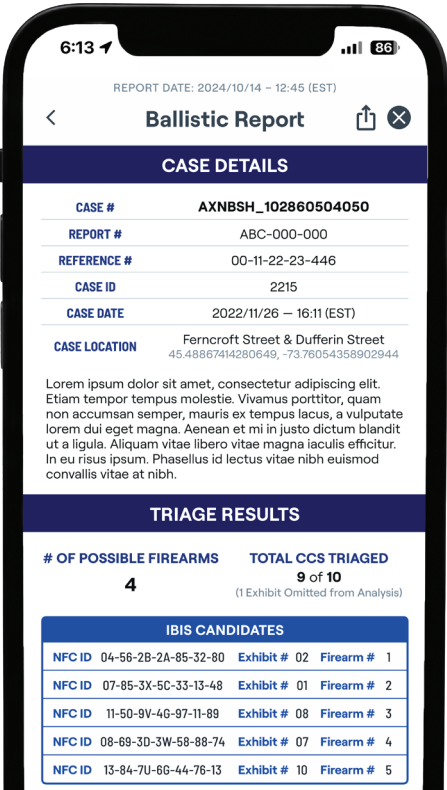
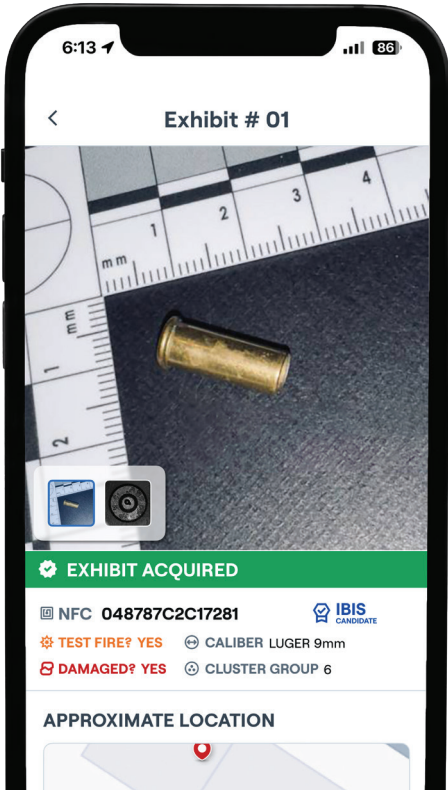
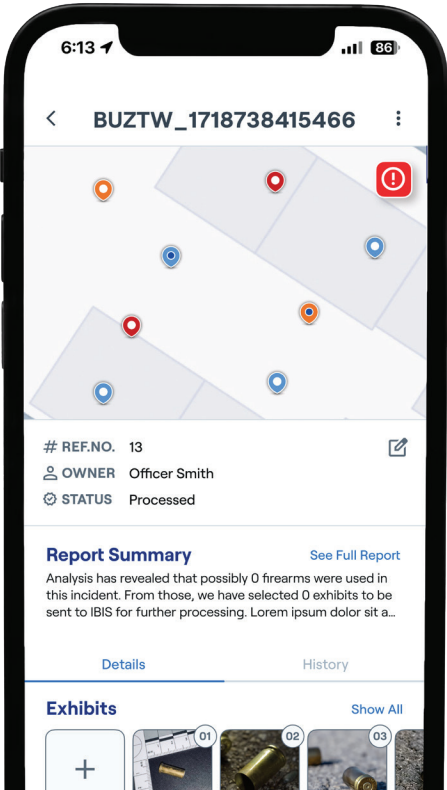
- Collected exhibits with their unique NFC tag are placed into the AU's carousel.
- The acquisition process starts with the press of a button on the touchscreen.
- Detailed 3D images of all collected evidence are taken, reliably capturing all relevant data from each casing.



## PHASE 3 DATA PROCESSING & RESULTS

All acquired data is processed, analyzed and stored in the cloud using highly secure communication and data management protocols.

- Within minutes, a notification is sent to the user's mobile device with a summary of the results.
- A detailed report can be downloaded in PDF format, including a visual recreation of the shooting based on the GPS data and highlighting the firearm trail for each identified gun.
- Incident details and user information can be updated easily via web login using any computer connected to the internet.





**ClearCase is the future of  
rapid crime gun intelligence,  
designed to meet the  
increasing challenges of law  
enforcement with unmatched  
ease and reliability.**



**Discover how ClearCase will accelerate  
your crime gun investigations.**

Visit our website to learn more about ClearCase, and  
explore our comprehensive suite of investigative tools.

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