

Meet and/or Exceed Requirements

Forensic Technology Inc.

Integrated Ballistic Identification System (IBIS) Includes;

BRASSTRACK for digital imaging of cartridge cases

BULLETTRAX for digital imaging of bullets

MATCHPOINT for reviewing and analyzing correlation

- a. Integrated Ballistic Identification System (IBIS). This system being physically installed at a government facility with secure internet communication lines specializes in 3D microscopy to capture unique marks left by firearms on fired bullets and cartridges cases. After a fired bullet and/or cartridge case is entered into IBIS, IBIS uses algorithms to reveal the most likely matches within IBIS networks, which includes millions of bullets and cartridges within national and international programs. High-Definition 3D viewing makes it easy to review results, ranked by similarity, by using virtual microscopy to visually compare surface details. Matches found in IBIS are used to provide investigative leads, and if required for court testimony, IBIS matches can be formally confirmed by a firearms examiner.
- b. Minimum Specifications:
 - 1) Conduct Site Survey and Installations of System and conduct factory test
 - 2) Conduct On-Site or Virtual training program on their system
 - 3) Provide secure communication lines for system
 - 4) Ballistic Identification System must have the following capabilities
 1. Digitally captures regions of interest on a cartridge case in 2D and 3D, revealing impression details and multiple viewing perspectives
 2. High-definition 3D to capture surface topography, to include 3D virtual microscopy
 3. Automated acquisition produces consistent image quality and uniformity for optimal comparison performance
 4. Intelligence Surface tracking technology that will automatically adapt to the deformations of damaged and fragmented bullets
 5. Comparison algorithms specialized for large quantities of firearm evidence
 6. 3D comparison viewers with capabilities beyond conventional optical comparison microscopy.
 7. Intelligent surface-tracking technology automatically adapts to the deformations of damaged and fragmented bullets.
 8. Must be able to process all calibers and all firearms types

Attachment 1: NIBIN/IBIS Specifications

- 5)** Data Management System that preserves and protects the captured data and coordinates automated data sharing. Serves as network's focal point for data access and management. Finds evidence matches with the highest similarity in the top search results. Maintains strong performance even when searching large databases. The system must have image and metadata standards to enable consistent comparisons locally and internationally.
- 6)** The system must have correlation algorithms that provide 3D viewing tools to review the correlation results. The system must have a comprehensive infrastructure of organized and standardized data sharing for ballistic identification, to include metadata enabled comparisons.
- 7)** The system must have a central user account, data encryption, antivirus, audit logs, and firewalls, security patch update management, security policies enforced across the network.
- 8)** The system must have interconnected IBIS networks at all levels (local, regional, national, and international) for optimal collaboration in finding linked crimes, and must be compatible with ATF's National Integrated Ballistic Information Network (NIBIN).
- 9)** Support and Service plan for five (5) years from the date of purchase to cover all hardware, software, and technical support.

Salient, physical, functional characteristics:

- Must have BRASSTRAX Acquisition Station
- Must have MATCHPOINT Analysis Station for Cartridge Cases
- Must have Stereo Zoom Microscope
- 24/7 Access to IBIS Solution
- Cartridge Case Kit
- Continuous Remote Software Upgrades
- IBIS Application Updates
- User Documentation
- Global Customer and Technical Support
- Custom User Reporting and Analysis
- Annual Status Reports
- Proactive Performance Warning System
- Workstation Refresh
- Defective Hardware Replacement
- Performance Hardware Upgrades
- Preventative Maintenance Visits
- Ongoing User Training and Development
- Interactive e-Learning
- Customer Care and Virtual Coaching