

CRIME SCENE UNIT

Crime Scene Sciences & Evidence Section



Director Rachel Lucas
Deputy Director Cinese Caldwell



CRIME LAB SERVICES

Crime Scene Sciences and Evidence Management Section

- ❑ **Crime Scene Unit**
- ❑ **Photography Unit**
- ❑ **Evidence Management Unit**

Analytical Sciences Branch

- ❑ **Drug Analysis Unit**
- ❑ **Forensic Biology Unit**
- ❑ **Trace Analysis Unit**
- ❑ **Questioned Documents**

Comparative Sciences Branch

- ❑ **Firearms Analysis Unit**
- ❑ **Latent Print Unit**



ACCREDITATIONS



The Forensic Science and Evidence Services Division is accredited to ISO/IEC 17020 (Crime Scene Unit) & ISO/IEC 17025 (Forensic Labs) and by the ANSI National Accreditation Board (ANAB)



ANAB is the largest accreditation body in North America



HISTORY



- The Baltimore Police Department Crime Laboratory was created in 1948.
- The Mobile Unit now known as the Crime Scene Unit was created in 1954.
- The Baltimore Police Department was one of the first departments in the country to employ civilians as Crime Scene Technicians.



CRIME SCENE UNIT

- ❖ The Crime Scene Unit responds to crime scenes to document, collect, and preserve evidence.
- ❖ We are the mobile arm of the laboratory.
- ❖ Crime Scene Unit consists of (5) Squad Supervisors, (1) Administrative Supervisor, and (30+) Crime Lab Technicians (CLTs)



EDUCATION AND TRAINING

- ❖ Crime Lab Technicians (CLT) must have at least a Bachelor of Science degree in a natural science (biology, chemistry, etc.), forensic science, or a forensic related discipline.
- ❖ Majority of the Crime Scene unit has obtained or is pursuing a Masters Degree.
- ❖ Training timeline:
 - 120 hour Crime Scene Academy
 - Module Training when a CSA cannot be held
 - Observation and Mentoring period with Senior CLT's
 - Independent case work as a primary CLT
 - Begin with lesser offenses and gradually increase to handling more serious offenses
 - Additional external training available per CLT interest (Blood stain pattern, clandestine grave, drone forensics, shooting reconstruction)



SCHEDULE

- ❖ Crime Scene Unit Operations are 24/7, 365 (Holidays included)
- ❖ CLTs work (4) days a week, (10) hours a day
- ❖ Days off rotate between weekends and weekdays.
 - ❖ (8) consecutive weeks of weekends
 - ❖ (8) consecutive weeks of weekdays
- ❖ There are (5) Crime Scene squads:
 - ❖ (2) working day shift permanently
 - ❖ (2) working night shift permanently
 - ❖ The 5th squad works permanent night shift - weekdays



PROCEDURES

- ❖ Our unit operates under an SOP, Technical Manual, and BPD Policies and Procedures.
- ❖ If we depart from procedures, the reason and what we did must be documented accordingly.



CRIME SCENE RESPONSE

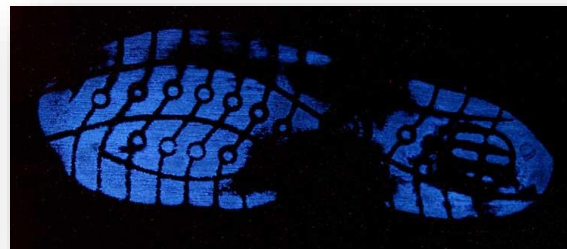
- ❖ Police Involved Incident
- ❖ Homicide
- ❖ Shooting
- ❖ Questionable Death
- ❖ Cutting/Stabbing
- ❖ Rape/ Sex Offense
- ❖ Arson
- ❖ Assault (varying degree)
- ❖ Child Abuse
- ❖ Robbery (Commercial, Residential, Armed/Unarmed)
- ❖ Use of Force
- ❖ Commercial and Residential Burglary

*Additional calls may be approved by Supervision



CRIME SCENE SERVICES

- ❖ Photography
- ❖ Evidence collection
- ❖ Latent print processing
- ❖ Crime scene sketching
- ❖ DNA swabbing
- ❖ Alternate light source application
- ❖ Trace evidence collection
- ❖ Luminol or Blue Star
- ❖ Fingerprint elimination collection
- ❖ Gun Shot Residue (GSR) collection
- ❖ Temperature collection
- ❖ 3D laser scanning



CRIME SCENE DUTIES



- ❖ Documentation, preservation, collection, and identification of evidence at crime scenes
 - ❖ Photography
 - ❖ Latent print processing
 - ❖ Crime Scene sketching
 - ❖ Recovering, processing, and packaging evidence
 - ❖ 3-D Laser scanning (FARO)
 - ❖ Notes & Reports
 - ❖ Court testimony



PROCESSING OF CRIME SCENES

- ❖ While on scene, the Detective or Primary Officer and the CLT work together to process the scene.
 - The Detective will be the actual investigator while the CLT carries the forensic expertise.

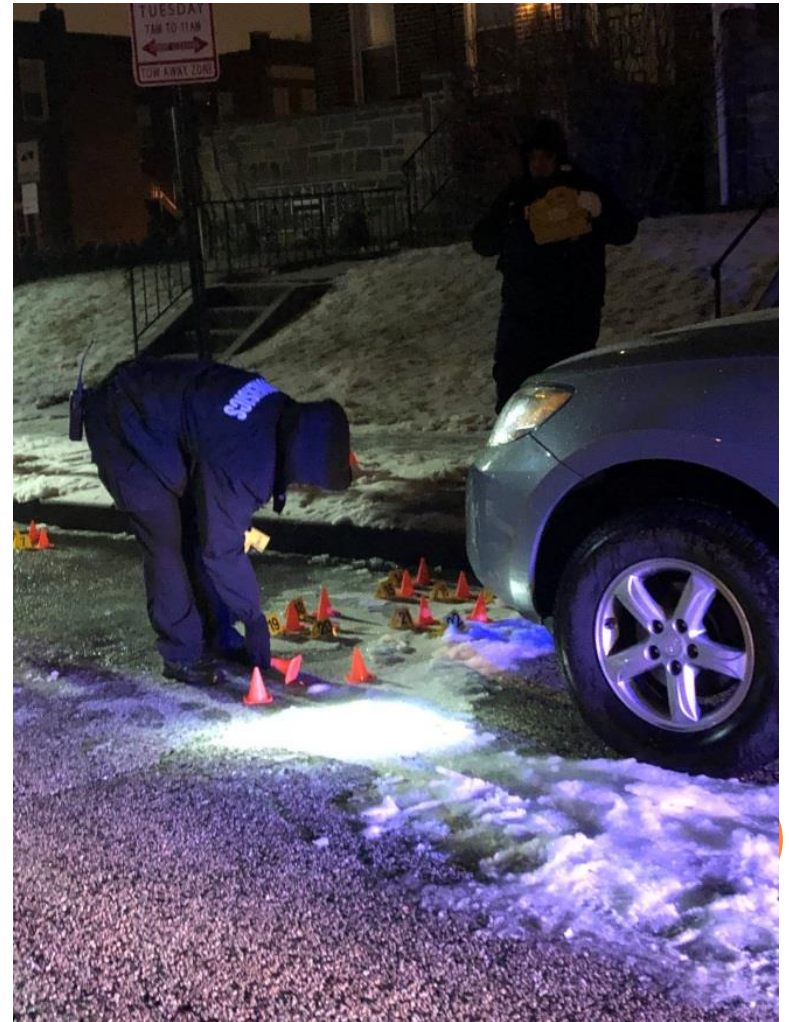
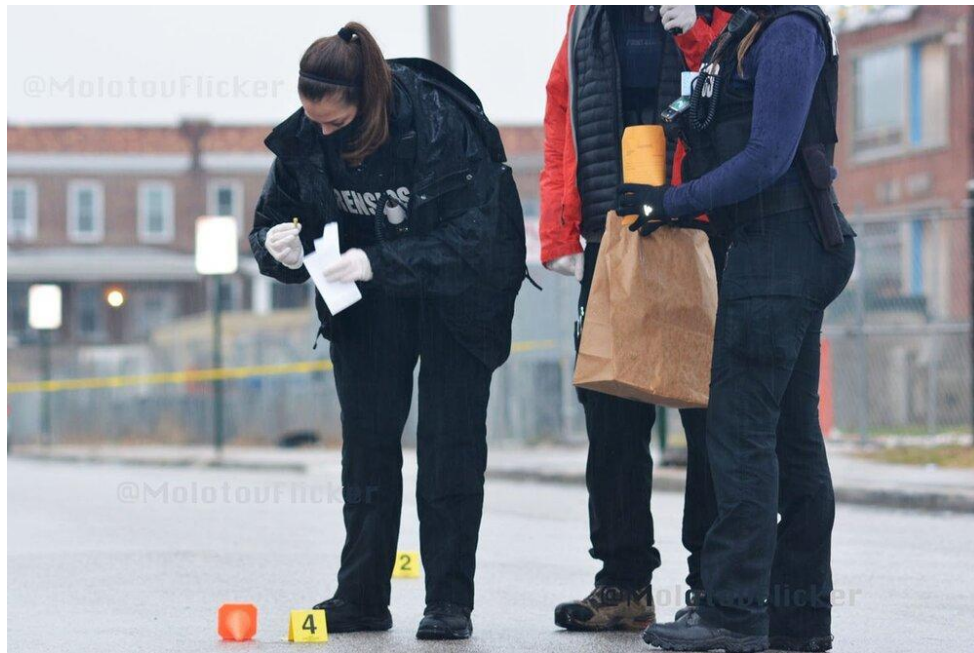
- ❖ CLT Process

- Debrief & Documentation
- Photography
- Evidence Identification
- Mark Evidence
- Evidence Collection
- Sketching
- Evidence Preservation
- Additional Processing
- Submission to Evidence Management Unit



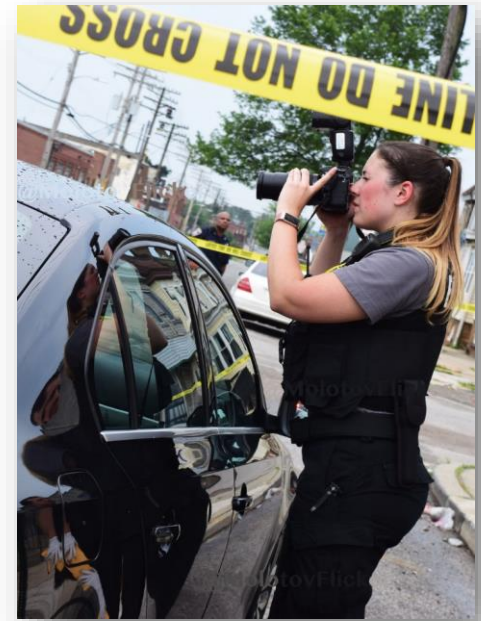
CRIME SCENE CONDITIONS

Crime Scene Technicians may work in harsh conditions – extreme heat and cold, and are sometimes exposed to horrific and challenging situations.



TYPES OF PHOTOGRAPHS

- ❖ Overall
 - Overview of location, person, vehicle
- ❖ Midrange
 - Evidence establishing photo shows relationship of evidence to scene and to other pieces of evidence
- ❖ Close-up
 - Depicts a piece of evidence, features of a person
- ❖ Available Light
 - Shows existing ambient light at scene, no additional light added



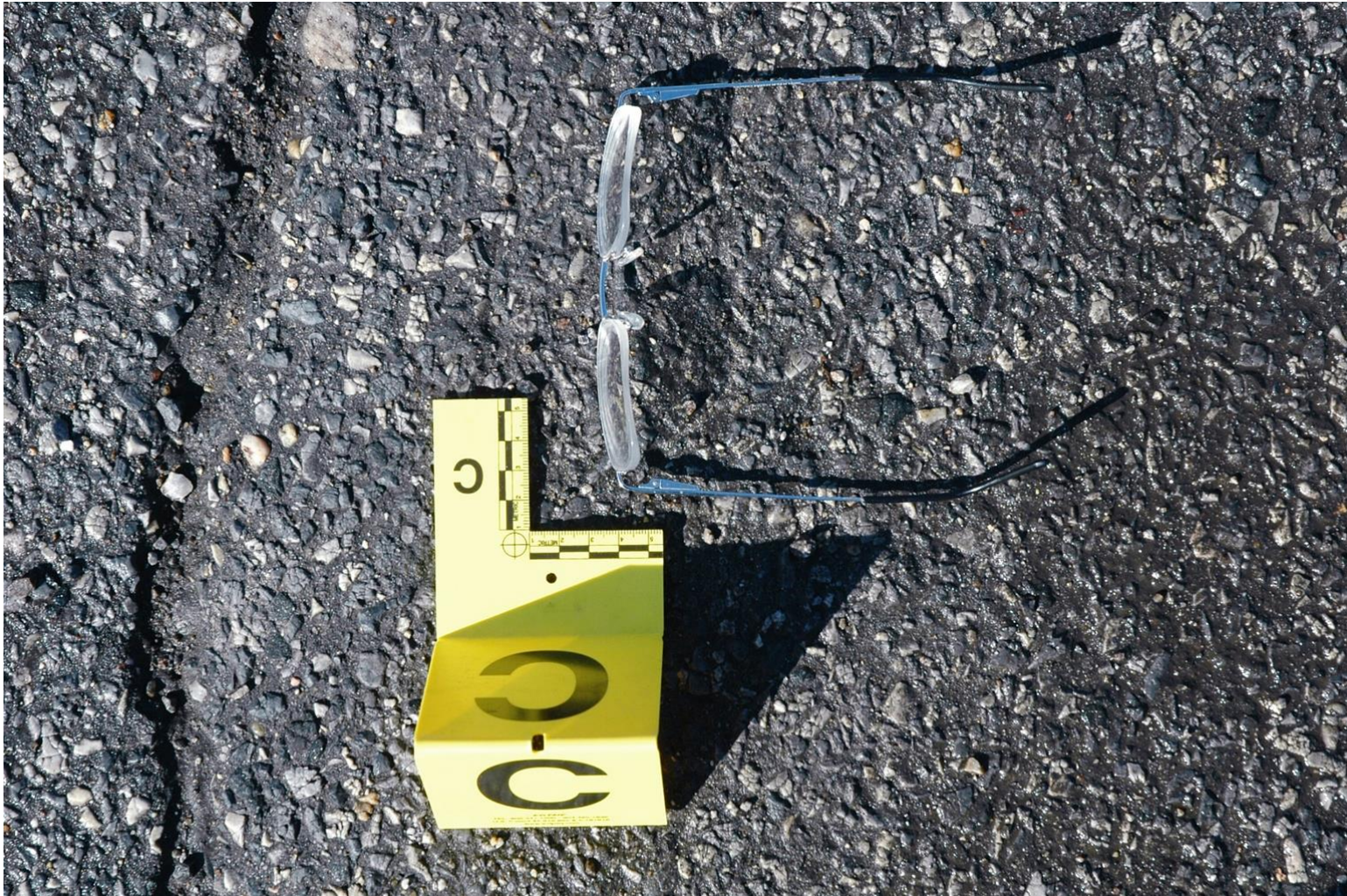
OVERALL PHOTOGRAPH



MIDRANGE PHOTOGRAPHS



CLOSE-UP PHOTOGRAPH





WE OPEN LATE MONROE FOOD STAMP
FOOD MART
LOWEST PRICES IN THE NEIGHBORHOOD

ATM

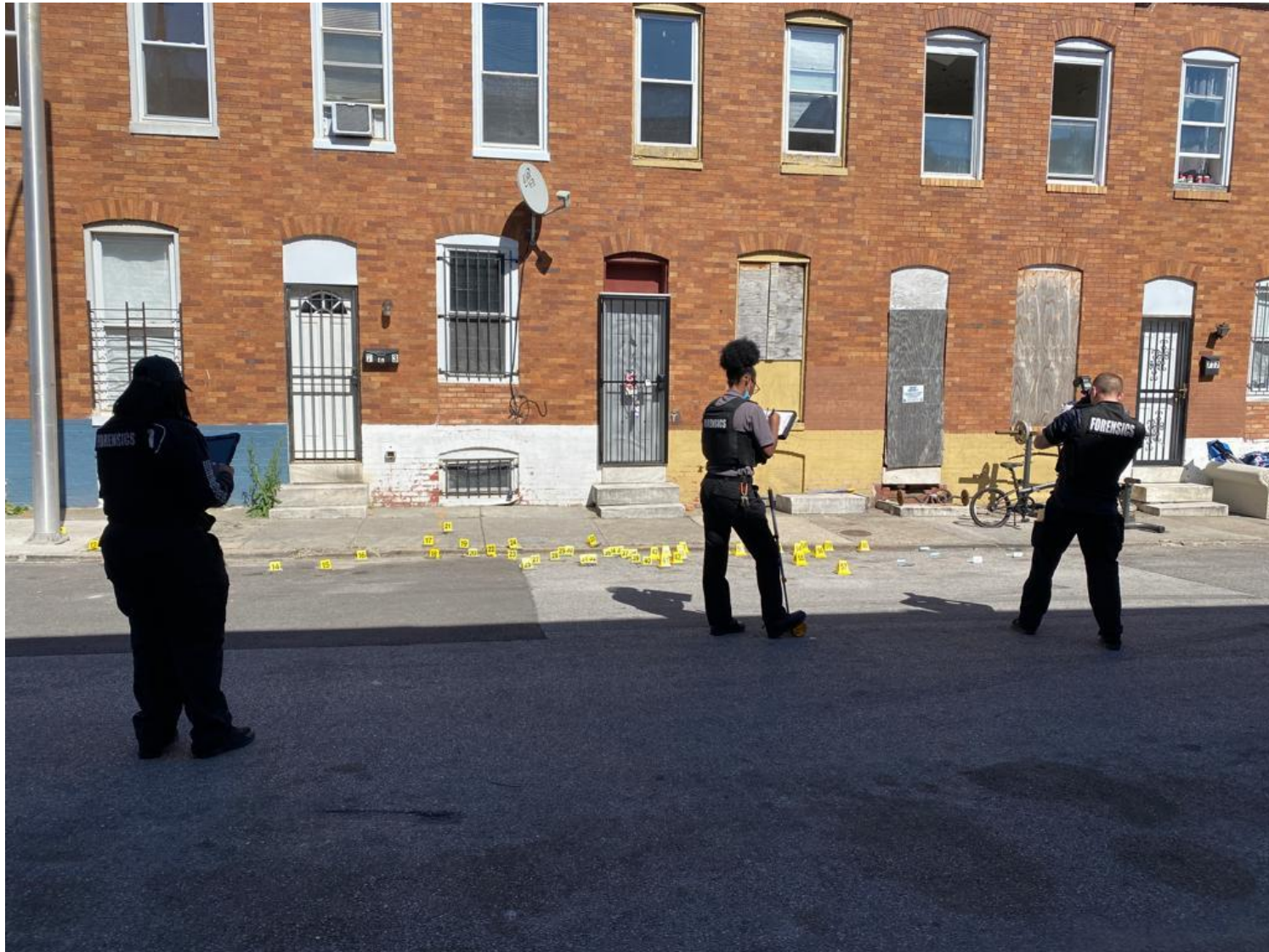
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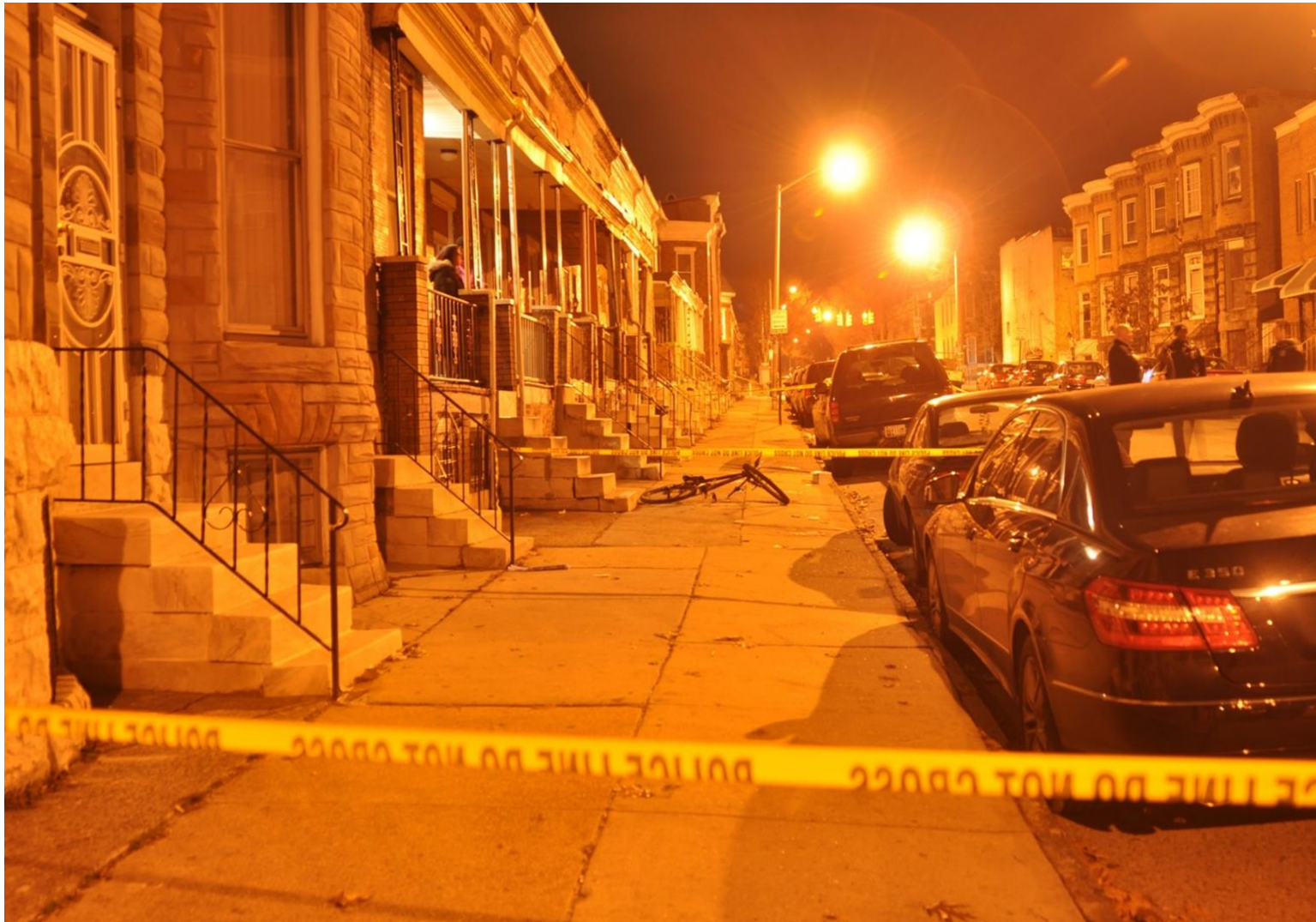
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Squad Teamwork



AVAILABLE LIGHT PHOTOGRAPHS

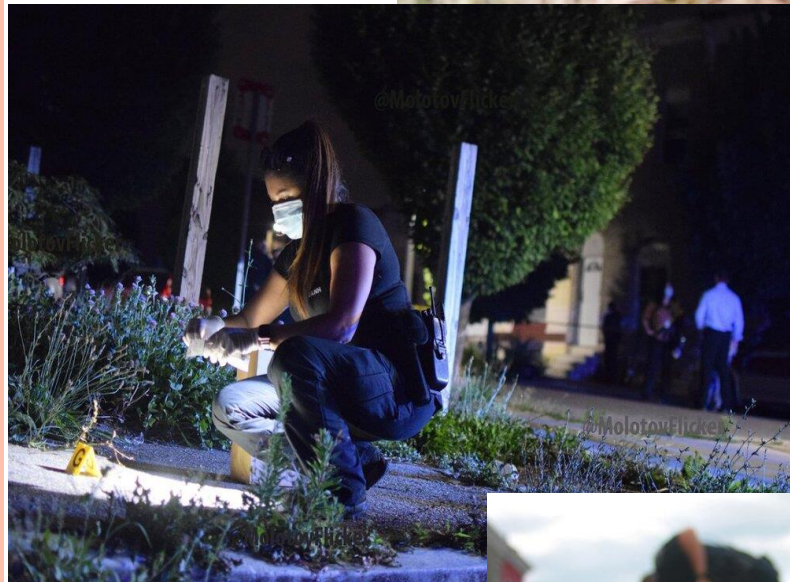


AVAILABLE LIGHT PHOTOGRAPHS





Placing evidence markers distinguishes the different types of evidence found during processing of crime scenes



- We use number markers for all Firearms evidence & lettered markers for any other type of evidence

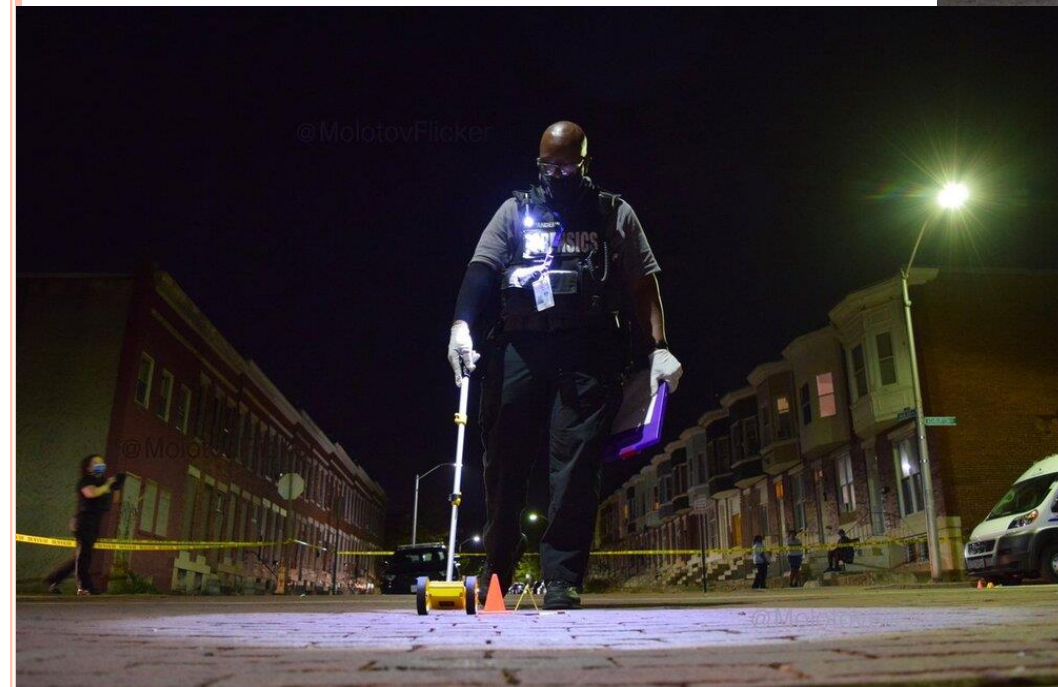
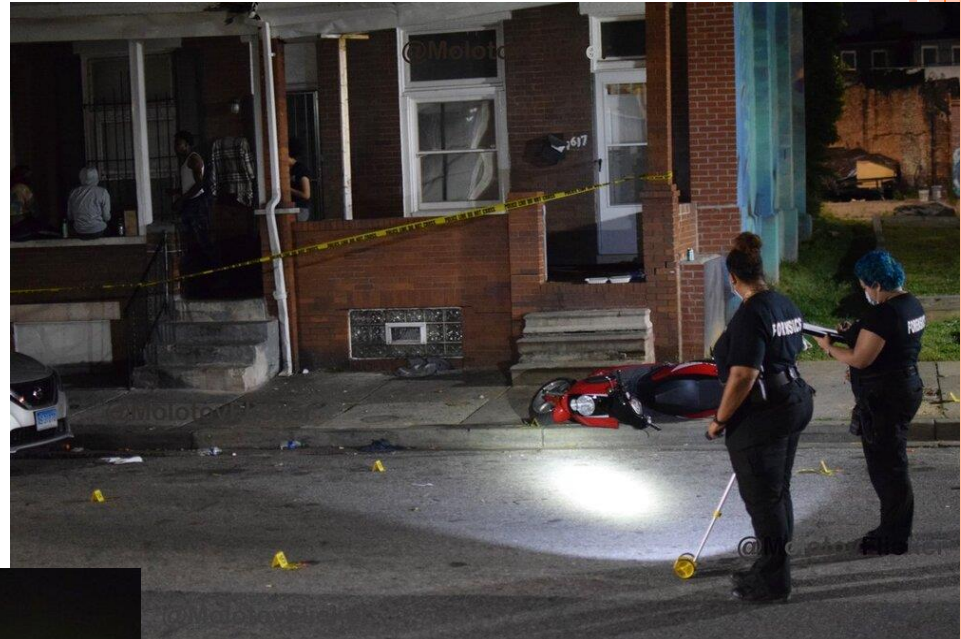


Briefing Room Art



Sketching

If a crime scene is a Homicide, Shooting, Police Involved Shooting, or any scene that *may* be a Homicide, CSU personnel create a sketch.



FARO 3D Laser Scanner

- Creates accurate, complete, photorealistic 3D images of any environment or object
- Advanced functions and range
- Protection in all weather conditions



FARO 3D LASER SCANNER

- Used on all Police Involved incidents, some Homicide or Shooting scenes and other extenuating circumstances, CSU personnel may scan a scene using 3D technology
- The Accident Investigation Unit (AIU) uses 3D scanners on serious traffic accidents
- Laser Scanning is a way of high speed surveying that captures all points visible within range
- Millions of points collected to create a point cloud of data from the surface of an object
- Collects measurements and places them within the scan; replaces manual sketching
- Can place evidence into the 3D representation



COURT DELIVERABLES

- ❖ Crime scene reports
 - Completed with an application called Crime Pad
- ❖ Crime scene photographs
 - Uploaded to Evidence.com by Photography Unit
- ❖ Final crime scene sketch
 - Completed with a computer program
 - Requested by Detective or Attorney to complete
 - SAO can request as well
- ❖ Latent fingerprints
 - Self-requested upon CSU submission
 - Latent Print unit maintains custody



FARO ZONE



EVIDENCE MANAGEMENT UNIT

- ❖ CLT's process and package evidence recovered from crime scenes and submit it to the Evidence Management Unit.
- ❖ Evidence being submitted is written on a 56 form, each evidence package being submitted will have a separate 56 form(ex. Firearms evidence vs. DNA swabs vs. general property)

EVIDENCE



EVIDENCE MANAGEMENT UNIT

- ❖ The 56 form details the case information, the personnel submitting it, the responsible Officer/Detective on the case, and the items being submitted
- ❖ The Evidence Management Unit intakes the evidence detailed on each 56 form and generates a Property Number by the Evidence Management System: SAFE Evidence Management System



EVIDENCE MANAGEMENT UNIT

- ❖ The property number will always be associated with the evidence it is assigned to
- ❖ Once evidence is taken in, it is separated into respective storage locations until needed for further investigation, forensic testing, release back to a citizen, or proper disposal



DIGITAL FORENSICS

- As of September 26, 2023, 3,066 Cell Phones have been submitted to our Evidence Management Unit in 2023.
 - 362 additional electronic devices (tablets, hotspots, laptops, etc.)
 - Cell Phones and other electronic devices are submitted for varying case types as both general property and a part of criminal investigations



DIGITAL FORENSICS

- ❑ Currently BPD utilizes a network of trained Detectives and various Agencies to complete the analysis of digital evidence
- ❑ Approximately 500 devices were analyzed by our Computer and Electronic Crimes Unit (CECU)
 - Digital Video Recording (DVR) recovery, image analysis and enhancement are other services offered.



DIGITAL FORENSICS

- In an effort to provide more centralized services for the analysis of digital evidence, the Forensic Science and Evidence Services Division is building a Digital Forensics Unit
- The inaugural team will be comprised of five civilian personnel tasked with creating Standard Operating Procedures and a reporting structure that will align with accreditation standards.



CONTACT INFORMATION

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Questions?

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