

## Ohio Attorney General's Office Bureau of Criminal Investigation

**Investigative Report** 

2023-1535

Officer Involved Critical Incident - 311 25th Street SW, Canton, Ohio



**Investigative Activity**: Receipt of OOCIC Video Production

**Activity Date**: July 26, 2023

Activity Location: BCI Richfield Office
Authoring Agent: Matthew Armstrong #146

#### Narrative:

On July 21, 2023, Ohio Bureau of Criminal Investigation (BCI) Special Agent (SA) Matt Armstrong (Armstrong) received the video productions created by the Ohio Organized Crime Investigations Commission (OOCIC). The productions were created from 3 video files submitted to OOCIC. They included footage from Officer Jacob Dryden's body worn camera, Officer Scott Wohlheter's body worn camera, and the dash camera footage from the cruiser they were operating near the time of the incident. The video productions have been stored in the BCI SIU case file as Reference Item E.

On July 31, 2023, SA Armstrong received the Forensic Video Analysis Report. Senior Forensic Analyst David Loomis completed the analysis and his report has been attached to this investigative report.

BCI SA Charles Moran has been requested to review and analyze the OOCIC video productions.

#### **Attachments:**

2023-07-06 OOCIC Submission Form

2023-07-31 OOCIC Report 23-00059





#### **Evidence Submission Form** Submilling Agency (or OOCIC Task Force Number) Case Investigator Submitting Investigator SA Armstrona SA Armstrong Ohio BCI Agency Case Number Court Date Agency County 2023-1535 N/A Summit Fax Number Telephone Number Cell Phone Number 330-523-0869 234-400-3395 E-Mail Address Mailing Address 4055 Highlander Pkwy matthew.armstrong@ohioago.gov State Richfield Ohio 44286 Submitted Items: When possible, submit original items. Additional items may be attached on a separate sheet. Item # Description Media Make / Model Recorder Make / Model Serial Number Blue Thumb Drive 32 GB 2 3 Requested Service: Please see attached form for descriptions for each process (check all that apply). Audio Video Digital Audio Audio Video Audio Video Reconst./Repair Analysis Duplication Photographs Analysis Duplication Reconst /Repair Redaction Redaction X Х Subject/Victim Information: Subject Name Custody Status Sex Race Jeffrev Neff Male Deceased Offense Date of Offense Location of Offense: (City, County) Victim(s): (Business Name (if applicable) and Address) Case Information: (Describe the incident that needs analyzed including time, date, camera or any other important information such as subject, clothing, or vehicle description. If specific still photos/images are required, please note the camera and time. See Attached Document. Submitted By SA Matthew Armstrong (Print Name) May we make a copy of the submission to use for training, research, or lab promotional purposes? Yes V No





To: OOCIC

From: SA Matthew Armstrong

Date: July 6, 2023

Re: Submission for Video Analysis BCI Case 2023-1535

The submitted video includes footage from two Canton Police body worn cameras (Item A), and cruiser camera footage from a Canton Police Department cruiser (Item B).

Item A - 00\_0050884756\_96\_17\_d3\_13-0050779735\_0050882514\_0050882525\_video0

This footage was captured by Officer Wohlheter's BWC. He was a witness to the shooting. The relevant footage to include in the video productions begins at 00:40 and ends at 03:00

Item A - 00 0056113383 96 17 72 64-0056060899 0056111062 0056111091\_video0

This footage was captured by Officer Dryden's BWC. He was shot at and shot the subject involved in this incident. The relevant footage to include in the video productions begins at 00:44 and ends at 03:00.

Item B - tick58083362-tick58103558-video0

This footage was captured by the cruiser camera. It captured the arrival of the officers at residence for a disturbance. It also audibly captured the sound of gunfire. The relevant footage to include in the video productions begins at 00:30 and can end at 03:00.

For this analysis please perform the following if possible:

- One production for each video which includes the addition of a time coder, frame counter and audio wave bar
- A separate production which includes all three videos synced if possible. If the Dash Camera cannot be sync to the BWC then please sync the two BWC's in a production.
  - One synced production at full speed
  - One synced production at half speed
- Please set the time code presentation the same on the multi-camera presentation and the individual presentation
- Include the file names for each of the videos being submitted and include the officer associated with each video



# Ohio Organized Crime Investigations Commission



Submission Date	Priority Code	Due Date
07/10/2023		
OOCIC Case Number	Shelf Loca	tion
23-00059		
(OOCIC Evide	ence Tech will complete	this section)
Refer to OC	IC Submission Number f	or Inquires

### **Evidence Submission Form**

Submitting Agency (or OOCIC Task Force Number)		Case Investigator Name:	Submitting Investigator:		
BCI Richfield		S/A Matthew Armstrong	S/A Matthew Armstrong		
County:		Agency Case Number:	Court Date:		
Summit		2023-1535			
Telephone Number: Cell Phone Number		FAX Number:			
234-400-3395	330-523-0869	866-218-0993			
Mailing Address:		E-Mail Address:			
4055 Highlander Pkwy Richfield, OH 44286		matthew.armstrong@ohioago.gov			

Submitted Items: (OOCIC Evidence Tech will complete this section)

ltem #	Description	Make	Model	Lot Number
1	Flash Drive/Jump Drive/Thumb Drive Black SanDisk 64 GB Thumb Drive			
W.P. 1.1 Flash Drive/Jump Drive/Thumb Drive 1 16GB Flash Drive		. 4		

Requested Services: (Check all that apply)

Video	Video	Digital	Audio	Audio	Audio	Video	Audio	Video
Analvsis	Duplication	Photographs	Analvsis	Duplication	Reconst./Repair	Reconst./Repair	Redaction	Redaction

Subject Information: (Complete as much as possible)

Subject Name:	Custody Status:	Sex:	Race:	DOB:	
Neff, Jeffrey	NC	Male			
Offense:	Date of Offense:		Location : (Ci	Location: (City, County)	
Officer Involved Shooting					

Additional information: (Data from Time Date Generator / Type of System / Court Date / Special Instructions. etc.) See attached document.

Submitted By:		Evidence Tech:	The sour four
	S/A Matthew Armstrong		Nissa Low



#### **Ohio Organized Crime Investigations Commission**

P.O. Box 968

Grove City, OH 43123 Telephone: (614) 277-1000 Facsimile: (614) 277-1010

## **Chain of Custody Report**

**Lab Case** 23-00059

Department Name: BCI Richfield

Incident Number 2023-1535

Item #1 Description: Flash Drive/Jump Drive/Thumb Drive Black SanDisk 64 GB Thumb Drive

	Date	Time	Custody Of	Location / Person	Transaction By
1	07/10/2023	9:05	Clerical/Evidence	Nissa Low	Nissa Low
1	07/10/2023	9:39	Evidence Storage	Shelf A3	Nissa Low
1	07/11/2023	8:59	Clerical/Evidence	Nissa Low	Nissa Low
1	07/11/2023	8:59	Analyst	David F. Loomis	Nissa Low
	07/19/2023	11:15	Clerical/Evidence	Nissa Low	Nissa Low
	07/19/2023	11:21	Evidence Disposal	Returned to Department	Nissa Low

Item # W.P. 1.1 Description: Flash Drive/Jump Drive/Thumb Drive 1 16GB Flash Drive

	<u>Date</u>	Time	Custody Of	Location / Person	Transaction By
ì	07/19/2023	11:05	Analyst	David F. Loomis	Nissa Low
	07/19/2023	11:15	Clerical/Evidence	Nissa Low	Nissa Low
	07/19/2023	11:21	Evidence Disposal	Returned to Department	Nissa Low



## Ohio Organized Crime Investigations Commission Forensic Video Analysis

Written July 26th, 2023

To:

BCI Richfield

OCIC Case Number:

23-00059

S/A Matthew Armstrong 4055 Highlander Pkwy

Richfield, OH 44286

Agency Case Number: 20

2023-1535

Type of Offense: Location of Offense:

Officer Involved Shooting

On July 10<sup>th</sup>, 2023, Special Agent Matthew Armstrong of BCI submitted one flash drive for the purpose of forensic video analysis. Special Agent Armstrong requested video presentations be created from video files contained on the flash drive. The item submitted will be referred to as ITEM ONE throughout the body of this report. The process, as it pertains to this case, is as follows:

- Inspect ITEM ONE to ascertain that no physical damage exists
- Generate and save a working copy of the contents of ITEM ONE
- Utilize software to create video presentations as requested
- Produce a 16GB flash drive containing video presentations

On July 11<sup>th</sup>, 2023, ITEM ONE was checked out of the evidence room by Senior Analyst David Loomis. ITEM ONE was a SanDisk Ultra 64GB flash drive with no label. ITEM ONE was inspected for damage and no damage was found. The contents of ITEM ONE were copied and verified via SHA256 hash using Quick Hash 3.0.4.

ITEM ONE contained two .mp4 video files with a display resolution of 1920 pixels by 1080 pixels using the h264 video codec, with audio at a 48000 hertz sample rate, stereo, using the mp4a audio codec. These two files represented the officers' body-worn cameras:

```
00_0050884756_96_17_d3_13-0050779735_0050882514_0050882525_video0.mp4
00_0056113383_96_17_72_64-0056060899_0056111062_0056111091_video0.mp4
```

ITEM ONE also contained one .mp4 video file with a display resolution of 1280 pixels by 720 pixels using the h264 video codec, with audio at a 24000 hertz sample rate, stereo, using the mp4a audio codec. This file represented the cruiser camera:

tick58083362-tick58103558-video0.mp4

The three .mp4 video files from ITEM ONE were imported into the Adobe Premiere CC 2023 video analysis software for review. A new timeline was created and the two body-worn camera views were synchronized based upon audio cues. The cruiser camera view was unable to be synchronized to the



## Ohio Organized Crime Investigations Commission Forensic Video Analysis

Written July 26th, 2023

body-worn camera views due to the distance of the officers from the cruiser at the time of the event of interest.

The synchronized Premiere timeline and the individual video files were imported into the Adobe After Effects CC 2023 video analysis and compositing software for the creation of the video presentations. A presentation for each individual camera, as well as the synchronized timeline was created. Frame counters, audio waveform effects, and a timecode effect were added to each presentation. Each presentation was duplicated to demonstrate the video in half-speed and original-speed views, for a total of eight video presentations. The presentations were edited to the scope requested by Special Agent Armstrong. Title slates were added and the eight video presentations were rendered out as universal .mp4 video files for demonstrative purposes.

The eight .mp4 video presentations were placed onto a 16GB flash drive as work product.

On July 19<sup>th</sup>, 2023, the 16GB flash drive was released to evidence for shipping, along with ITEM ONE.

David F. Loomis

Senior Forensic Analyst

614-277-1000

David. Loom is @Ohio AGO. gov

Matt S. Hilbert Supervisor Approval

Man Hiller

## DAVID F. LOOMIS - CURRICULUM VITAE

The Ohio Organized Crime Investigations Commission P.O. Box 968, Grove City, Ohio 43123 (614) 277-1000 / (614) 277-1010 fax / David.Loomis@OhioAGO.gov

## Professional Experience

#### Senior Forensic Audio/Video Analyst

The Ohio Organized Crime Investigations Commission

Office of the Ohio Attorney General

- Provides general supervision of the OOCIC Audio/Video laboratory
- Implements policy and procedures
- Reviews case files and lab testing practices
- Provides recommendations on training and equipment
- Assists in the hiring process of new Analysts
- Performs all other duties of Forensic Audio/Video Analyst (as listed below)

#### Forensic Audio/Video Analyst

August 2014 - March 2019 Columbus, Ohio

March 2019 - Present

Columbus, Ohio

The Ohio Organized Crime Investigations Commission Office of the Ohio Attorney General

 Performs forensic analysis of audio, video, photographic, and other evidence, whether analog or digital in nature, for investigation and court presentation

- Attends training, workshops, and seminars to maintain current working knowledge of trends and developments in the Forensic Audio/Video field
- Conducts testing and preparation of audio, video, and photographic evidence
- Clarification of evidentiary audio and video recordings
- Clarification of digital images
- Performs audio and video transcoding
- Forensic 2D and 3D animation
- Extraction of video from Digital Video Recorders
- Carves video data from various digital sources
- Duplication and digitization of audio and video recordings
- Repairs damaged audio and video tapes for evidentiary purposes
- Makes presentations to task force investigators and law enforcement agencies

#### Graphic Artist

April 2010 – June 2014

**Educational Outfitters** 

Pittsburgh, Pennsylvania

- Created various designs for email marketing campaigns, customer logos, t-shirts, store signage, and fliers
- Prepared media for use in email marketing campaigns, various printing and production processes
- Responsible for installation and maintenance of design software packages
- Designed and digitized artwork for embroidery

#### Freelance Photographer / Videographer

Self-Employed

Sept 2003 – April 2010

• Family and portrait photography

Denver, CO and Pittsburgh, PA

• Digital photo editing and digital photo restoration

• Video recording, editing, and DVD presentations

#### Forensic Animation Intern

Knott Laboratory

July 2003 – Sept 2003 Denver, Colorado

- Assisted a team of animators and engineers to create accident reconstruction animations for legal proceedings
- 3D modeling, animation, compositing, and video editing
- Use of photogrammetry and camera matching to reconstruct scenes
- 3D cut-away views of mechanical processes

#### Lead Network Transport Planner

Owest Communications International, Inc.

Nov 2000 – Nov 2001 Denver, Colorado

- Quarterly planning of nationwide wavelength services network (10 gigabit and 2.5 gigabit line system)
- Optimized the network plan using various equipment vendor and third-party software tools
- Calculated budgetary requirements for entire planned wavelength services network over various time periods
- Conducted studies of new nationwide network architectures, impacts of large customer deals, and potential fiber optic routes
- Utilized knowledge of various equipment interfaces (Nortel Preside / Ciena Wavewatcher) along
  with internal databases and the Microsoft Office suite to constantly improve processes, monitor
  planning progress, and analyze trends
- Tested and evaluated various vendor-specific and third party planning software
- Supported deployment planning of network transport technologies

#### Senior Network Transport Planner

June 1999 – Nov 2000

Owest Communications international, Inc.

Denver, Colorado

- Assisted with development of and updates to quarterly SONET network plans
- Actively supported planning efforts concerning new, changes to, and life cycle management / retirement of currently deployed network transport technologies
- Supported deployment planning of newly installed network assets
- Involved with scenario analysis concerning plan assumption changes / timing
- Utilized knowledge of Visual Basic for Excel to streamline current network data extraction from several weeks by many planners to minutes by a solo planner
- · Awarded Letter of Recognition from VP for outstanding work in streamlining operations

#### Space Communications Systems Controller

United States Air Force

June 1995 – June 1999 Schriever AFB, Colorado

22d Space Operations Squadron

50th Space Communications Squadron

- Responsible for operating and troubleshooting communication and computer resources valued at over \$440 million to support the Air Force Satellite Control Network (AFSCN)
- Directed and implemented fault isolation, testing, troubleshooting, and analysis of transmission links, including T1 through T3, to ensure proper operations
- Provided worldwide connectivity across seven Department of Defense space programs, NASA, and NOAA
- Maintained a 99% efficiency rating on over 4,000 satellite communications mission supports, directly contributing to work center's 93.3% success rate on satellite mission contacts
- Handpicked to assist contractors with implementation and test procedures on a \$7 million project to link new satellite operations center with resources located at Schriever Air Force Base

- Awarded Senior Airman Below the Zone (promoted to E-4 six months early)
- Awarded the National Defense Service Medal and Air Force Good Conduct Medal
- Decorated Awarded the Air Force Achievement Medal for Meritorious Service

#### **Education**

Bachelor of Arts

The Art Institute of Colorado

Media Arts and Animation

Denuer, Colorado

- Instruction in animation, video production, editing, and compositing, and audio production and editing
- 3.9 GPA
- Alpha Beta Kappa National Honor Society
- Portfolio Voted "Best Book" by AiC instructors at graduation

Journeyman

USAF Technical Training School

Communications, Computer Systems Operations

Biloxi, Mississippi

• Honor Graduate (98% average)

Undergraduate Studies

Fine Art, Liberal Arts, Mathematics

Ohio University A thens, Ohio

Certifications

LEVA Certified Forensic Video Technician

June 2016 - Present

**Training** 

LEVA Level 1 – Forensic Video Analysis and the Law (40 Hours)

April 2015

- Principles of CCTV Systems
- Non-Linear Editing
- Data Authentication and Integrity
- Video Compression
- Scientific Method
- Video and the Law
- Infrared Light

Issues of Bias in Forensic Science (8 Hours)

May 2015

- Defining Bias as it Applies to Scientific Fields
- Overview of Decision Making and How We Think
- Discussion of Methods to Counter-act Bias

Introduction to Forensic Audio Analysis (24 Hours)

September 2015

- Science and Physics of Sound
- Fundamentals of Recording and Playback Devices
- Audio Processing Techniques
- Critical Listening
- Best Practices

Hands-on Audio Clarification

## June 2016 LEVA Level 2 – Processing Digital Multimedia Evidence (40 Hours) Compression Theory Digital Video Acquisition Screen Capture Utilities Video File Formats and Video Containers Integrating Hashing into Workflow Technical Report Writing Legal Aspects of Digital Multimedia Evidence TCP/IP Networking Analytical Report Writing July 2016 NW3C CI 100 – Identifying and Seizing Electronic Evidence (2.5 Hours) Identifying sources of electronic evidence Preserving electronic evidence for analysis Best practices for seizure of electronic evidence NW3C CS 100 - Introduction to Computer Networks (2.75 Hours) August 2016 Networking overview OSI Model TCP/IP NW3C CI 102 – How Computers Work and Store Data (3 Hours) July 2018 Hardware and storage configurations Number systems (Decimal, Hexadecimal, Binary) Partitioning drives Identifying volumes File systems August 2018 U.S. Department of Homeland Security - Cyber Security Investigations (9 Hours) Overview of cybersecurity incident response and forensic analysis • Digital forensic concepts, forensic media preparation Digital evidence collection Triage process and analysis Suspicious trace analysis Data carving September 2018 LEVA Level 3 – Video Contrast and Comparison (40 Hours) Philosophy and principles of video contrast and comparison Scientific method Class Characteristics vs Individual Characteristics Effects of lighting, aspect ratio, resolution, and compression on video analysis Analytical report writing Types of bias in forensic video analysis and how to reduce them May 2019 LEVA Courtroom Testimony for Expert Witnesses (24 Hours) Trial procedure

Report writing techniques Effects of bias Moot court iNput Ace Video Evidence Training Symposium (15 Hours) June 2020 Video Analysis with iNput Ace • Trends in video analysis Issues with timing in video Digital video evidence recovery LEVA Level 4 – Advanced Forensic Video Analysis and the Law (40 Hours) December 2020 Advanced video analysis techniques • Creating demonstratives for court Preparation for advanced certification iNput Ace Video Evidence Training Symposium (12 Hours) March 2021 Video evidence narrative techniques Issues with video timing Video evidence workflow Amped Authenticate Training (20 Hours) June 2021 Image and video authentication techniques December 2021 Amped FIVE Training (25 Hours) Forensic Video Analysis theory Workflow in Amped FIVE • Digital image and video clarification techniques March 2022 iNput Ace Video Evidence Training Symposium (12 Hours) Video investigation training • Bias in video forensics Video compression refresher

Court Testimony

## State of Ohio vs Thaddeus Bumgardner

June 29th, 2016 14 CR 117

Common Pleas Court of Meigs County

Expert Witness Qualification

Testified concerning forensic audio analysis of evidence in a felonious assault trial

#### State of Ohio vs Tony Cohen

December 1st, 2017

Common Pleas Court of Summit County

2016-11-3966

Expert Witness Qualification

Testified concerning forensic video analysis of evidence in an aggravated robbery trial

State of Ohio vs Mark Mabry Common Pleas Court of Richland County October 16th, 2018 2018-CR-0255R

- Expert Witness Qualification
- Testified concerning deleted file recovery and forensic video analysis of evidence in an aggravated assault trial

## State Medical Board of Ohio vs Atta Asef, D.P.M.

State Medical Board of Ohio

August 21st, 2019 18-CRF-0038

- Expert Witness Qualification
- Testified concerning video authenticity in a State Medical Board adjudication hearing

#### State of Ohio vs Warriayre Armond Roundtree

December 11th, 2019

Franklin County Common Pleas Court

• Expert Witness Qualification

• Testified concerning forensic video analysis of evidence in an aggravated murder trial

#### State of Ohio vs Andrew Kirk Mitchell

April 7th, 2022

18-CR-01669

Franklin County Common Pleas Court

19-CR-01662

- Expert Witness Qualification
- Testified concerning forensic video analysis of evidence in a murder trial

#### State of Ohio vs Andrew Kirk Mitchell (Retrial)

April 13th, 2023

Franklin County Common Pleas Court

19-CR-01662

- Expert Witness Qualification
- Testified concerning forensic video analysis of evidence in a murder trial

#### State of Ohio vs Bria Kaye-Paige Henslee

May 17th, 2023

Franklin County Common Pleas Court

21-CR-01524

- Expert Witness Qualification
- Testified concerning forensic video analysis of evidence in a murder and assault trial

#### State of Ohio vs Tylan Chance Sims

June 6th, 2023

Franklin County Common Pleas Court

21-CR-00595

- Expert Witness Qualification
- Testified concerning forensic video analysis of evidence in a murder and felonious assault trial

## Professional Memberships

Law Enforcement and Emergency Services Video Association

August 2014 - Present

High Technology Crime Investigation Association

August 2018 - Present