



Ohio Attorney General's Office
Bureau of Criminal Investigation
Investigative Report



2022-0498

Officer-Involved Critical Incident-34 E. Fulton Ave., Columbus 43215

Investigative Activity: Video Review, Document Review

Involves: Ohio Organized Crime Investigations Commission

Activity Date: 6/9/2022

Activity Location: OCIC

Authoring Agent: SA John Butterworth

Narrative:

On Thursday, June 09, 2022, Ohio Bureau of Criminal Investigation (BCI) Special Agent (SA) John Butterworth (SA Butterworth) received disks and documents from the Ohio Organized Crime Investigations Commission (OCIC). SA Butterworth had previously sent video recordings (Item #1029999) to OCIC from surveillance cameras received from the Franklin County Sheriff's Office. OCIC was requested to perform various enhancements of the submitted video as detailed below.

SA Butterworth reviewed the documents from OCIC. The documents were:

1. OCIC Evidence Submission Form 22-00022

This document was the submission sheet created to submit the video recordings to OCIC. It also documented the creation of data disks by OCIC.

2. OCIC Chain of Custody Report. 22-00022

This document was the Chain of Custody for OCIC.

3. OCIC Curriculum Vitae 22-00022

This document was the curriculum vitae for OCIC Analyst David Loomis.

4. OCIC Forensic Video Analysis Report 22-00022.

The report was authored by OCIC Analyst David Loomis. The report stated during examination of the three DVD's provided by SA Butterworth, there was no audio files associated with any of the videos submitted. During the review of the video provided, Analyst Loomis noted errors in the video and small gaps of time between video segments. Due to these errors, a video timeline could not be generated. PDF image sequences were compiled for frame by frame review.



Ohio Attorney General's Office
Bureau of Criminal Investigation
Investigative Report



2022-0498

Officer-Involved Critical Incident-34 E. Fulton Ave., Columbus 43215

SA Butterworth reviewed the data disks created by OCIC and noted the following:

Three disks were created by OCIC after the review of the video footage by OCIC Analyst Loomis. The first disk created contained the PDF image sequences for review of the submitted parking garage surveillance footage. These PDF images are for frame by frame review of the incident. The second and third disk are copies of the first disk. Each disk contains two image sequences in PDF format.

ADDITIONAL FACTORS FOR EVALUATING THE VIDEO RECORDINGS

There are numerous other factors that need to be considered when reviewing and evaluating the videos and audio recordings of this incident. Those factors are:

A. Video recording devices record within the video and sound capabilities available, and they record objectively. Video recordings lack the history, perspective, and interest of the people involved. The positions, angles, obstacles, lighting, and distance from the incident are also factors that need serious consideration.

B. Video recording devices also record more information about a particular scene or incident than the person(s) involved in the incident can process during the critical incident. Video recording devices rarely record an event from the same perspective of the officer. It captures the action but not the perception, decision making, focus, or intent of the officer. Video recordings often miss tactile cues or other actions of a subject.

C. The speed of the incident is remarkable. The speed and complexity of rapidly evolving situation(s) that occur during use of force encounters are difficult concepts to comprehend by only watching the video.

The documents received from OCIC were submitted to the electronic BCI case file and were attached to this report. The disks received from OCIC were submitted to the physical BCI case file as item P00020-1030111 for reference only.



Ohio Organized Crime Investigations Commission



Submission Date	Priority Code	Due Date
03/18/2022		
OOCIC Case Number	Shelf Location	
22-00022		
(OOIC Evidence Tech will complete this section) Refer to OCIC Submission Number for Inquires		

Evidence Submission Form

<u>Submitting Agency (or OOCIC Task Force Number)</u> Ohio Bureau of Criminal Investigation		<u>Case Investigator Name:</u> S/A John Butterworth	<u>Submitting Investigator:</u> S/A John Butterworth
<u>County:</u> Madison		<u>Agency Case Number:</u> 2022-0498	<u>Court Date:</u>
<u>Telephone Number:</u> 740-845-2479	<u>Cell Phone Number</u>	<u>FAX Number:</u>	
<u>Mailing Address:</u> 1560 State Route 56 SW London, OH 43140		<u>E-Mail Address:</u> john.butterworth@ohioattorneygeneral.gov	

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

Item #	Description	Make	Model	Lot Number
1	DVD - Video DVD labeled "3.7.22 Shooting @ Comm. Garage"			
2	DVD - Video DVD labeled "3.7.22 9:34a-9:40a Fulton St. Parking Garage"			
3	DVD - Video DVD labeled "3.7.22 9:38a-9:56a FSPG Fl. 7 & 8"			
W.P. 1.1	Data CD 3 CDs.			

Requested Services: (Check all that apply)

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

Subject Information: (Complete as much as possible)

<u>Offense:</u> Officer Involved Shooting	<u>Date of Offense:</u> 03/07/2022	<u>Location : (City, County)</u> Franklin County Parking Garage
--	---------------------------------------	--

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

Officer involved critical incident at Franklin County Parking Garage.

Submitted By:

S/A John Butterworth

Evidence Tech:

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 22-00022
Department Name: Ohio Bureau of Criminal Investigation
Incident Number 2022-0498

Item # 1 Description : DVD - Video DVD labeled "3.7.22 Shooting @ Comm. Garage"

<u>Date</u>	<u>Time</u>	<u>Custody Of</u>	<u>Location / Person</u>	<u>Transaction By</u>
03/18/2022	11:40	Analyst	David F. Loomis	Nissa Low
06/02/2022	15:51	Clerical/Evidence	Matt S. Hilbert	Nissa Low
06/02/2022	15:52	Evidence Storage	Shelf C12	Nissa Low
06/09/2022	14:00	Clerical/Evidence	Cindy McCreary	Nissa Low
06/09/2022	14:01	Evidence Disposal	Returned to Department	Nissa Low

Evidence released to S/A Butterworth.

Item # 2 Description : DVD - Video DVD labeled "3.7.22 9:34a-9:40a Fulton St. Parking Garage"

<u>Date</u>	<u>Time</u>	<u>Custody Of</u>	<u>Location / Person</u>	<u>Transaction By</u>
03/18/2022	11:40	Analyst	David F. Loomis	Nissa Low
06/02/2022	15:51	Clerical/Evidence	Matt S. Hilbert	Nissa Low
06/02/2022	15:52	Evidence Storage	Shelf C12	Nissa Low
06/09/2022	14:00	Clerical/Evidence	Cindy McCreary	Nissa Low
06/09/2022	14:01	Evidence Disposal	Returned to Department	Nissa Low

Evidence released to S/A Butterworth.

Item # 3 Description : DVD - Video DVD labeled "3.7.22 9:38a-9:56a FSPG Fl. 7 & 8"

<u>Date</u>	<u>Time</u>	<u>Custody Of</u>	<u>Location / Person</u>	<u>Transaction By</u>
03/18/2022	11:40	Analyst	David F. Loomis	Nissa Low
06/02/2022	15:51	Clerical/Evidence	Matt S. Hilbert	Nissa Low
06/02/2022	15:52	Evidence Storage	Shelf C12	Nissa Low
06/09/2022	14:00	Clerical/Evidence	Cindy McCreary	Nissa Low
06/09/2022	14:01	Evidence Disposal	Returned to Department	Nissa Low

Evidence released to S/A Butterworth.

<u>Date</u>	<u>Time</u>	<u>Custody Of</u>	<u>Location / Person</u>	<u>Transaction By</u>
06/02/2022	15:47	Analyst	David F. Loomis	Nissa Low
06/02/2022	15:51	Clerical/Evidence	Matt S. Hilbert	Nissa Low
06/02/2022	15:52	Evidence Storage	Shelf C12	Nissa Low
06/09/2022	14:00	Clerical/Evidence	Cindy McCreary	Nissa Low
06/09/2022	14:01	Evidence Disposal	Returned to Department	Nissa Low

Evidence released to S/A Butterworth.



Ohio Organized Crime Investigations Commission
Forensic Video Analysis

Written June 14th, 2022

To: Ohio Bureau of Criminal Investigation
740-845-2000
1560 State Route 56 SW
London, OH 43140

OCIC Case Number: 22-00022

Agency Case Number: 2022-0498

Type of Offense: Officer Involved Shooting
Location of Offense: Franklin County Parking Garage

On March 18th, 2022, Special Agent John Butterworth of BCI submitted three DVDs for the purpose of forensic video analysis. The items submitted will be referred to as ITEM ONE, ITEM TWO, and ITEM THREE throughout the body of this report. The process, as it pertains to this case, is as follows:

- Inspect ITEM ONE, ITEM TWO, and ITEM THREE to ascertain that no physical damage exists
- Generate and save a working copy of the contents of ITEM ONE, ITEM TWO, and ITEM THREE
- Extract still images a video segments to PDF image sequences for frame-by-frame review
- Produce a data CD of PDF image sequences

On March 18th, 2022, Senior Analyst David Loomis of OOCIC received custody of ITEM ONE, ITEM TWO, and ITEM THREE.

ITEM ONE was a Maxell DVD+R labeled:

“3.7.22
Shooting @
Comm Garage”

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 TWO was a Maxell DVD+R labeled:

“3-7-22
9:34a-9:40a
Fulton St. Parking Garage”



Ohio Organized Crime Investigations Commission Forensic Video Analysis

Written June 14th, 2022

ITEM TWO was inspected for damage and no damage was found. The contents of ITEM TWO were copied and verified via SHA256 using Quick Hash 3.0.4.

ITEM THREE was a Maxell DVD+R labeled:

3-7-22

9:38a-956a

FSPG

F1 7&8”

ITEM THREE was inspected for damage and no damage was found. The contents of ITEM THREE were copied and verified via SHA256 hash using Quick Hash 3.0.4.

ITEM ONE contained five proprietary “.2” video files with a display resolution of 1280 pixels by 960 pixels using the H264 video codec, and the associated, proprietary VicoNet media player.

ITEM TWO contained forty-two proprietary “.2” video files with a display resolution of 1280 pixels by 960 pixels using the H264 video codec, and the associated, proprietary VicoNet media player.

ITEM THREE contained twenty proprietary “.2” video files with a display resolution of 1280 pixels by 960 pixels using the H264 video codec, and the associated, proprietary VicoNet media player.

No associated audio was found in any of the submitted video files.

The proprietary “.2” video files from ITEM ONE, ITEM TWO, and ITEM THREE were converted to universal .mp4 video files for processing using the iNput Ace forensic video analysis and conversion tool.

The video files depicting the events described by Special Agent Butterworth were reviewed within iNput Ace and Adobe Premiere Pro. Visible errors were noted in the original video at the time of the event of interest. Due to the errors and small gaps of time between video segments, a synchronized video timeline could not be generated. Video segments of the event of interest were rendered out and compiled into two .PDF image sequences for frame-by-frame review.

The two .PDF image sequences were placed onto a data CD. A total of three copies of the CD were created.

On June 2nd, 2022, the three CDs were returned to the evidence room, along with ITEM ONE, ITEM TWO, and ITEM THREE. Special Agent John Butterworth of BCI was notified that his submission was complete and ready to be picked up.



Ohio Organized Crime Investigations Commission
Forensic Video Analysis

Written June 14th, 2022

David F. Loomis
Senior Forensic Analyst
614-277-1000
David.Loomis@OhioAGO.gov



Matt S. Hilbert
Supervisor Approval

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

March 2019 – *Present*
Columbus, Ohio

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
- Responsible for reviewing and approving lab reports
- 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

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
Pittsburgh, Pennsylvania

Educational Outfitters

- 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

Sept 2003 – April 2010
Denver, CO and Pittsburgh, PA

Self-Employed

- Family and portrait photography

- 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

Qwest 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

Qwest Communications international, Inc.

June 1999 – Nov 2000

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

22d Space Operations Squadron

50th Space Communications Squadron

June 1995 – June 1999

Schriever AFB, Colorado

- 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

Media Arts and Animation

*The Art Institute of Colorado
Denver, 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

Communications, Computer Systems Operations

*USAF Technical Training School
Biloxi, Mississippi*

- Honor Graduate (98% average)

Undergraduate Studies

Fine Art, Liberal Arts, Mathematics

*Ohio University
Athens, 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

LEVA Level 2 – Processing Digital Multimedia Evidence (40 Hours)	June 2016
<ul style="list-style-type: none"> • 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 	
NW3C CI 100 – Identifying and Seizing Electronic Evidence (2.5 Hours)	July 2016
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • Networking overview • OSI Model • TCP/IP 	
NW3C CI 102 – How Computers Work and Store Data (3 Hours)	July 2018
<ul style="list-style-type: none"> • Hardware and storage configurations • Number systems (Decimal, Hexadecimal, Binary) • Partitioning drives • Identifying volumes • File systems 	
U.S. Department of Homeland Security - Cyber Security Investigations (9 Hours)	August 2018
<ul style="list-style-type: none"> • 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 	
LEVA Level 3 – Video Contrast and Comparison (40 Hours)	September 2018
<ul style="list-style-type: none"> • 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 	

LEVA Courtroom Testimony for Expert Witnesses (24 Hours)	May 2019
<ul style="list-style-type: none"> • Trial procedure • Report writing techniques • Effects of bias • Moot court 	
iNput Ace Video Evidence Training Symposium (15 Hours)	June 2020
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • Advanced video analysis techniques • Creating demonstratives for court • Preparation for advanced certification 	
iNput Ace Video Evidence Training Symposium (12 Hours)	March 2021
<ul style="list-style-type: none"> • Video evidence narrative techniques • Issues with video timing • Video evidence workflow 	
Amped Authenticate Training (20 Hours)	June 2021
<ul style="list-style-type: none"> • Image and video authentication techniques 	
Amped FIVE Training (25 Hours)	December 2021
<ul style="list-style-type: none"> • Forensic Video Analysis theory • Workflow in Amped FIVE • Digital image and video clarification techniques 	
iNput Ace Video Evidence Training Symposium (12 Hours)	March 2022
<ul style="list-style-type: none"> • Video investigation training • Bias in video forensics • Video compression refresher 	

Court Testimony

State of Ohio vs Thaddeus Bumgardner	June 29th, 2016
Common Pleas Court of Meigs County	14 CR 117
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • 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
Franklin County Common Pleas Court

December 11th, 2019
18-CR-01669

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

State of Ohio vs Andrew Kirk Mitchell
Franklin County Common Pleas Court

April 7th, 2022
19-CR-01662

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

Professional Memberships

Law Enforcement and Emergency Services Video Association

August 2014 – Present

High Technology Crime Investigation Association

August 2018 - Present