



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



2022-0001

Officer-Involved Critical Incident - 2307 10th Street SW, Canton, Ohio

Investigative Activity: Video Analysis; Video Review
Involves: James Williams (S), Officer Robert Huber (S),
OOCIC (O), BCI (O)
Activity Date: 3/24/2022
Activity Location: BCI – 4055 Highlander Parkway, Richfield, Ohio 44286
Authoring Agent: SA Charles Moran #67

Narrative:

On March 24, 2022, Ohio Bureau of Criminal Investigation (BCI) Special Agent (SA) Chuck Moran (Moran) received an envelope from the Ohio Organized Crime Investigations Commission (OOCIC), via FedEx. The envelope contained the following items:

- Envelope containing discs consisting of work product for OOCIC case #22-00003
- Envelope labeled OOCIC Item #1 consisting of a USB thumb drive that SA Moran previously sent to OOCIC
- Envelope labeled OOCIC Item #2 consisting of a disc labeled, “2022-0001 – Item 67 Preliminary Findings” previously sent to OOCIC

The work product discs contained three video presentations generated by OOCIC and the SHA256 hash values for the OOCIC video presentations, OOCIC Item #1 and OOCIC Item #2.

On January 24, 2022, SA Moran submitted a USB thumb drive to OOCIC containing a body-worn camera (BWC) video from Canton Police Department (CPD) Officer Robert Huber. The USB thumb drive also contained selected surveillance videos from the Digital Video Recorder (DVR) that was recovered from the residence and incident scene located at 2307 10th Street SW, Canton, Ohio 44706. A few days later, SA Moran submitted a disc containing videos recovered from Marquetta Williams’ cell phone.

The videos were submitted to OOCIC as part of an investigation of the incident and officer-involved shooting that occurred on January 1, 2022, involving a male subject, James Williams, and CPD Officer Robert Huber. SA Moran requested OOCIC to add a time code effect, an audio wave form effect, crop the videos, sync the videos on one screen, create a video presentation played at full speed and create a second video presentation played at 50% speed and again at full speed.



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On April 1, 2022, SA Moran received an electronic copy of the reports and documents generated by OOCIC for this case. SA Moran reviewed the OOCIC reports and documents and noted the following:

- ***OOCIC Case #22-00003 – Reports and Documents***

Page 1 – OOCIC Evidence Submission Form – This listed the items that were submitted to OOCIC.

Page 2 – OOCIC Chain of Custody Report – This provided the chain of custody for the items submitted to OOCIC.

Pages 3-6 – OOCIC Forensic Video Analysis – This report was authored by OOCIC Forensic Video Analyst David Loomis. The report listed the items that were submitted and the video files that were included for each item.

Forensic Video Analyst David Loomis documented the following information about the DVR videos:

“The video files originally from the DVR at the location of the incident contained an irregular date/time stamp which prohibited precise synchronization based upon the date/time. Due to a lack of visual overlap between the various cameras, a precise synchronization could not be achieved based on visual cues. Attempting to precisely synchronize the DVR cameras with the body-worn camera also failed. As a result, the body-worn camera presentation was created separately. A video timeline presentation was created with the DVR cameras, but it was only generally synchronized based upon the irregular timestamp and limited visual overlap between cameras. The four-camera view should not be used to calculate precise timing.”

The BWC video was edited to the scope requested by SA Moran. An audio waveform effect was added, a timecode effect was added and a title slate was added. A second presentation was created demonstrating the BWC video at half-speed and original speed.

The DVR videos were used to create a four-camera presentation. The video files were aspect adjusted and contrast adjusted. The videos were edited to the scope requested by SA Moran. Title slates were added.

The video file(s) from OOCIC Item #2 (video from Marquetta Williams' cell phone) occurred prior to the BWC video and were not included in the OOCIC presentations.



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Pages 7-11 – OOCIC Forensic Video Analyst David Loomis' Curriculum Vitae – This document listed all of OOCIC Forensic Video Analyst David Loomis' employment, training and relevant experience.

ADDITIONAL FACTORS TO CONSIDER WHEN EVALUATING VIDEO EVIDENCE

Based upon SA Moran's training and experience, the following additional factors should be considered when evaluating the available video evidence:

- The speed of this 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.
- Video recordings are for storage and review.
- Video recordings capture light and create a digital representation of reality (two-dimensional video compared to three-dimensional reality).
- Video and audio 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 and audio recording devices rarely record an event from the same perspective of the officer or subjects involved.
- 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.
- Video and audio recording devices record within the video and sound capabilities available, and they record objectively.
- Video and audio 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.
- Video and audio recordings are only components of an investigation and should not be the only evidence relied upon.
- All available evidence, statements and other information must be evaluated alongside the video recordings available.

PROCESS OF VIDEO REVIEW FOR OOCIC 22-00003 FOUR CAMERA VIEW PRESENTATION

- Based upon OOCIC Forensic Video Analyst David Loomis' report documenting that the four DVR cameras could not be precisely synchronized due to the irregular date/time



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stamp and lack of visual overlap, SA Moran considers this presentation to be for overview purposes only.

- Without the four DVR videos being precisely synchronized, the exact movements of the parties involved in the incident (in the context of how they relate or interact with each other) should not be considered absolute.
- Based upon other evidence, videos and statements, it is known that James Williams fired the semi-auto rifle numerous times during the incident and CPD Officer Robert Huber fired his semi-auto pistol numerous times during the incident.
- iNPUT ACE was used for review.
- Relevant images marked based upon best available visual cues.
- No timing estimates were derived from this presentation.
- Please note that the review of this presentation was challenging due to the lack of precise synchronization and also due to the lack of an audio component available to identify actions (that are not visually observed) by sounds.

- **22-00003 Four Camera View**

iNPUT ACE – Interrogate Tab

SA Moran placed the video presentation into iNPUT ACE under the “Interrogate” tab. The video file hash was identified as f3383cbe06d702d3428acf973b4fd6e5. The video codec was h264, the pixel format was yuv420p and the pixel dimension was 4096/2160 (1.896:1). The video presentation consisted of 2,000 frames. The frame rate was 15fps (note that this is much lower than many other types of video usually at 30fps or 60fps). The video presentation was 00:03:53:86 (hh:mm:ss:ms) long.

SA Moran marked multiple images and labeled them by the frame (F) number identified by iNPUT ACE.



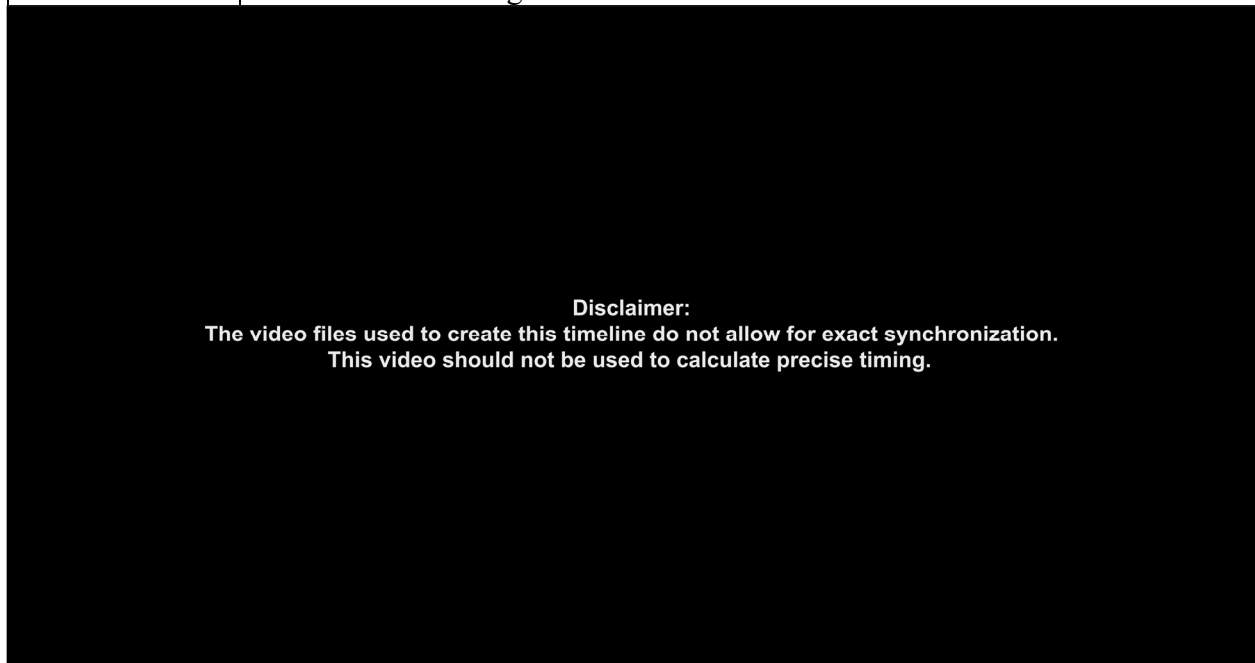
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Marked Image	F78 – Four Camera View
Notes	OOCIC Forensic Video Analyst David Loomis added a disclaimer portion of the video presentation. The disclaimer stated, “The video files used to create this timeline do not allow for exact synchronization. This video should not be used to calculate precise timing.” See the marked image below:



Disclaimer:
The video files used to create this timeline do not allow for exact synchronization.
This video should not be used to calculate precise timing.



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PROCESS OF VIDEO REVIEW FOR OOCIC 22-00003 VIDEO PRESENTATION

- Forensic Video Analyst David Loomis edited the body-worn camera (BWC) video to the scope requested by SA Moran.
- Forensic Video Analyst David Loomis added an audio waveform effect.
- Forensic Video Analyst David Loomis added a timecode effect.
- Forensic Video Analyst David Loomis added a title slate.
- Forensic Video Analyst David Loomis created a second presentation demonstrating the BWC video at half-speed and original speed.
- SA Moran used iNPUT ACE for review.
- SA Moran marked relevant images based upon best available visual and audio cues.
- Frames-per-second (fps) rate was determined to be 29.97fps.
- Timing estimates were made using the total number of frames between the selected frames/images in 30fps ($1/30 = 0.0333333333333333$) seconds.
- Timing was rounded up or down to the nearest hundredth place decimal (example 0.36666674 was rounded to 3.67 seconds).
- The time code effect was used to count frames between significant events.
- The audio wave form effect was used to identify sounds when reviewing the video presentation, especially during frame-by-frame review.

- ***22-00003 Video Presentation***

iNPUT ACE – Interrogate Tab

SA Moran placed the video presentation into iNPUT ACE under the “Interrogate” tab. The video file hash was identified as 0f35d51c3ee22ad6eb7a5e20cd3598da. The video codec was h264, the pixel format was yuv420p, and the pixel dimension was 2560/14404096/2160 (1.778:1). The video presentation consisted of 1500 frames. The frame rate was 29.97fps. The video presentation was 00:01:50:11 (hh:mm:ss:ms) long.

SA Moran marked multiple images and labeled them by the frame (F) number identified by iNPUT ACE. SA Moran also calculated the time between/elapsed many of the marked images. The marked images and information are:



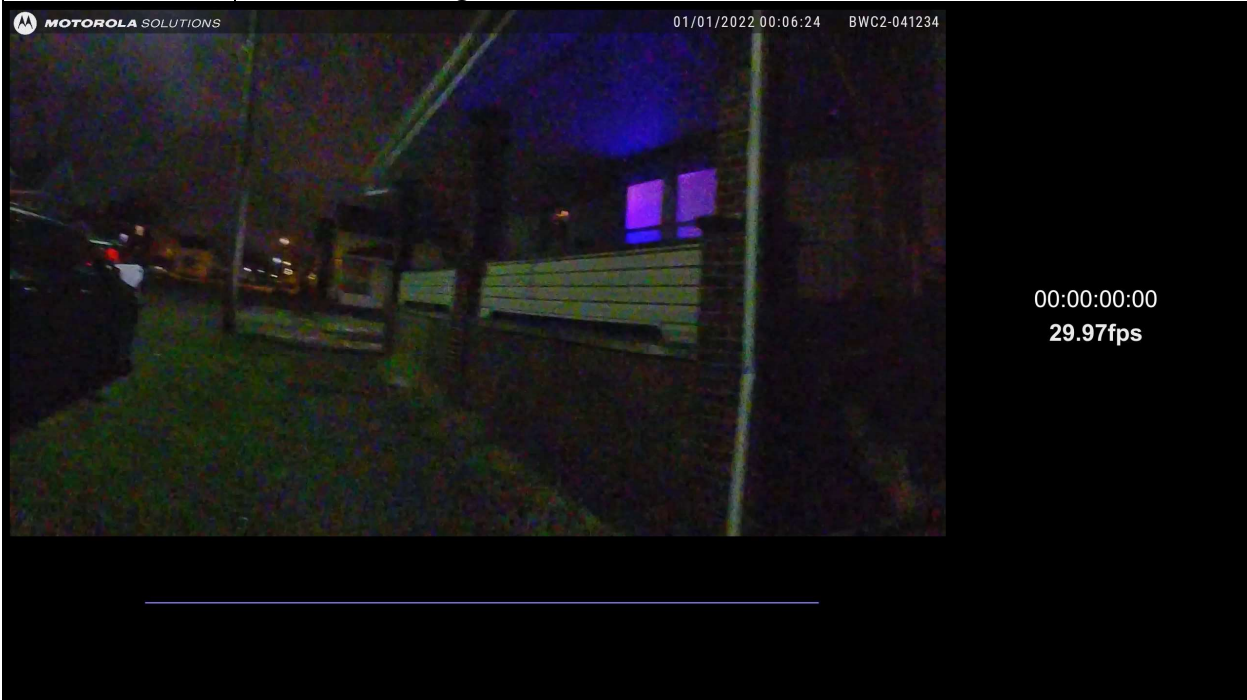
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Marked Image	F152 – 00-00-00-00 – Video Presentation – BWC
Notes	This was the frame when the OOCIC video presentation began with Officer Huber's BWC video. He was positioned near the front porch and sidewalk on the front side of the residence. He was facing west. See marked image below:





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Marked Image	F570 – 00-00-13-28 – Video Presentation – BWC
Time Elapsed	13.93 seconds (from previous marked image, F152 – 00-00-00-00)
Notes	Officer Huber walked west along the sidewalk and then turned and faced north toward the front of the residence. See marked image below:





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Marked Image	F962 – 00-00-27-00 – Video Presentation – BWC
Time Elapsed	13.07 seconds (from previous marked image, F570 – 00-00-13-28)
Notes	Officer Huber turned and walked west along the sidewalk, toward the southwest corner of the residence and driveway. He turned around and faced northeast toward the residence, driveway and patio. See marked image below:





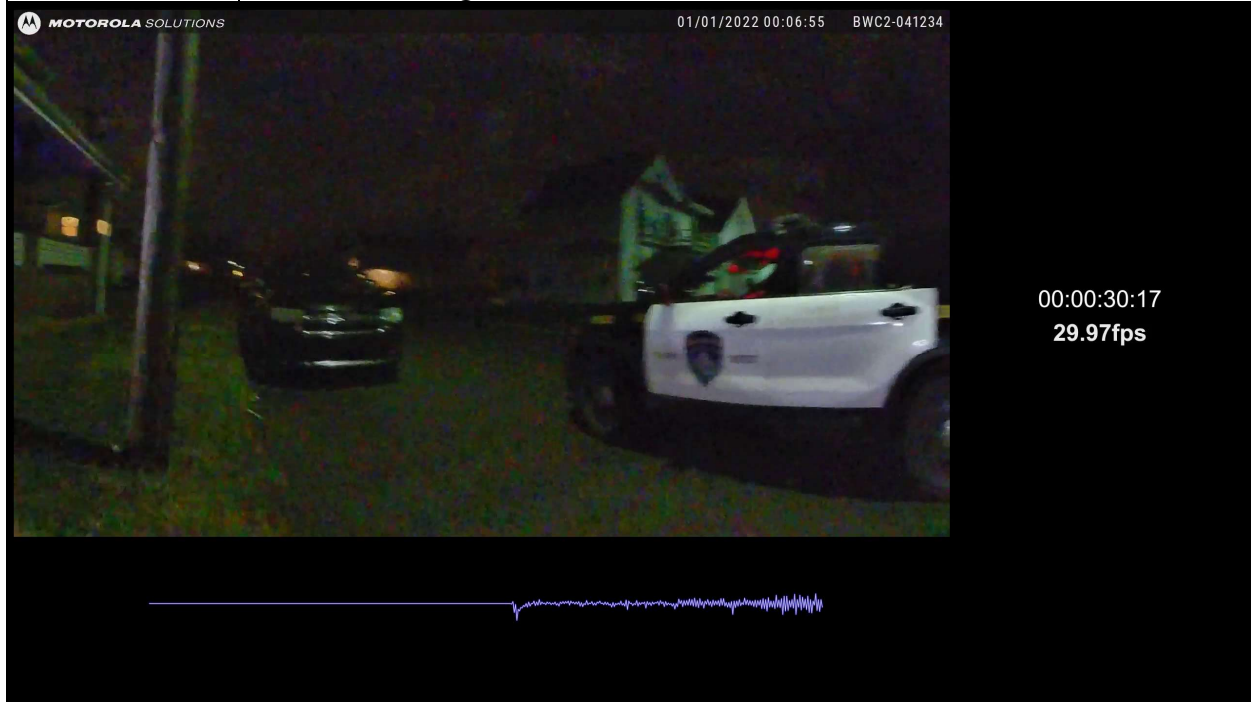
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Marked Image	F1068 – 00-00-30-17 – Video Presentation – BWC
Time Elapsed	3.57 seconds (from previous marked image, F962 – 00-00-27-00)
Notes	This was the first frame when Officer Huber's BWC audio recording activated. Officer Huber was walking southeast toward the street and his cruiser. See marked image below:





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Marked Image	F1214 – 00-00-35-13 – Video Presentation – BWC
Time Elapsed	4.87 seconds (from previous marked images, F1068 – 00-00-30-17)
Notes	Officer Huber continued walking southeast into the street. He turned and faced the front of the residence. He was positioned in the street near the driver's side front tire of a black SUV parked in front of the residence. See marked image below:





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Marked Image	F1526 – 00-00-45-25 – Video Presentation – BWC
Time Elapsed	10.40 seconds (from previous marked image, F1214 – 00-00-35-13)
Notes	Officer Huber radioed that his location was in the “2300 block of 10 th Street. 2307 10 th Street Southwest.” He walked backwards to the southeast in the street and was near the driver’s side rear bumper of the black SUV parked in front of the residence. He was facing northwest. See marked image below:

MOTOROLA SOLUTIONS

01/01/2022 00:07:10 BWC2-041234



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Marked Image	F1907 – 00-00-58-16 – Video Presentation – BWC
Time Elapsed	12.70 seconds (from previous marked image, F1526 – 00-00-45-25)
Notes	Officer Huber radioed, “Saw the male’s head through the fence after I heard the shots. Got out of my cruiser, went up to the porch and I saw him putting the rifle away.” He moved sideways to the northeast and was positioned near the curb and street on the southeast side of the residence. See marked image below:





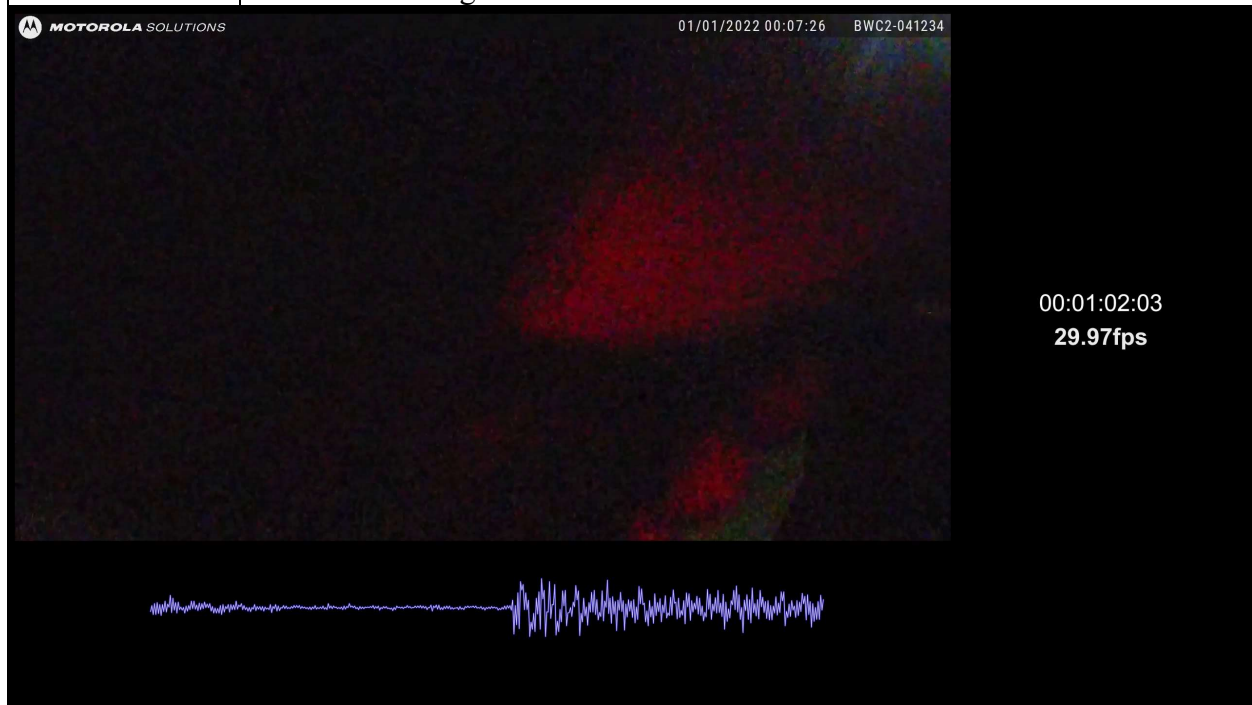
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Marked Image	F2013 – 00-01-02-03 – Video Presentation – BWC
Time Elapsed	3.57 seconds (from previous marked image, F1907 – 00-00-58-16)
Notes	This was the first gunshot heard (likely being fired by James Williams). Officer Huber had his pistol in his left hand and began raising it as he moved southwest into the street. He was positioned near the rear bumper of the black SUV parked in front of the residence. See marked image below:





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Marked Image	F2122 – 00-01-05-22 – Video Presentation – BWC
Time Elapsed	3.63 seconds (from previous marked image, F2013 – 00-01-02-03)
Notes	Officer Huber had his pistol in his left hand as he moved west in the street in front of the residence. He approached the front bumper of his cruiser. There were multiple gunshots heard (likely being fired by James Williams) on the audio portion of the video. The gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot. See marked image below:

MOTOROLA SOLUTIONS 01/01/2022 00:07:30 BWC2-041234

00:01:05:22
29.97fps



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Marked Image	F2162 – 00-01-07-02 – Video Presentation - BWC
Time Elapsed	1.33 seconds (from previous marked image, F2122 – 00-01-05-22)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber moved north near the end of driveway on the southwest side of the residence. Between the last frame marked (F2122), there were multiple gunshots heard (likely being fired by James Williams) on the audio portion of the video. The gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>



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Cropped Image	F2162 – 00-01-07-02 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber moved north near the end of driveway on the southwest side of the residence. Between the last frame marked (F2122), there were multiple gunshots heard (likely being fired by James Williams) on the audio portion of the video. The gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Possible muzzle flash from James Williams' rifle



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Marked Image	F2169 – 00-01-07-09 – Video Presentation – BWC
Time Elapsed	0.23 second (from previous marked image, F2162 – 00-01-07-02)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the end of driveway on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>

MOTOROLA SOLUTIONS
01/01/2022 00:07:31 BWC2-041234



00:01:07:09
29.97fps





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Cropped Image	F2169 – 00-01-07-09 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the end of driveway on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Possible muzzle flash from James Williams' rifle



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Marked Image	F2176 – 00-01-07-16 – Video Presentation – BWC
Time Elapsed	0.23 seconds (from previous marked image, F2169 – 00-01-07-09)
Notes	<p>In this frame, a light, opaque cloud (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the end of driveway on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>

MOTOROLA SOLUTIONS 01/01/2022 00:07:32 BWC2-041234

00:01:07:16
29.97fps



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Cropped Image	F2176 – 00-01-07-16 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a light, opaque cloud (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the end of driveway on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Light-colored cloud, possible gunpowder, from James Williams' rifle



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Marked Image	F2183 – 00-01-07-23 – Video Presentation – BWC
Time Elapsed	0.23 seconds (from previous marked image, F2176 – 00-01-07-16)
Notes	<p>In this frame, a light, opaque cloud and a possible muzzle flash (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the driveway and sidewalk on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>

MOTOROLA SOLUTIONS 01/01/2022 00:07:32 BWC2-041234



00:01:07:23
29.97fps





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Cropped Image	F2183 – 00-01-07-23 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a light, opaque cloud and a possible muzzle flash (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the driveway and sidewalk on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Light-colored cloud, possible gunpowder, and possible muzzle flash from James Williams' rifle



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Marked Image	F2188 – 00-01-07-28 – Video Presentation – BWC
Time Elapsed	0.17 seconds (from previous marked image, F2183 – 00-01-07-23)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the driveway and sidewalk on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>

MOTOROLA SOLUTIONS 01/01/2022 00:07:32 BWC2-041234



00:01:07:28
29.97fps





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Cropped Image	F2188 – 00-01-07-28 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the driveway and sidewalk on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Possible muzzle flash from James Williams' rifle



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Marked Image	F2195 – 00-01-08-05 – Video Presentation – BWC
Time Elapsed	0.23 seconds (from previous marked image, F2188 – 00-01-07-28)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the driveway and sidewalk on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>

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00:01:08:05
29.97fps





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Cropped Image	F2195 – 00-01-08-05 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the driveway and sidewalk on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Possible muzzle flash from James Williams' rifle



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Marked Image	F2202 – 00-01-08-12 – Video Presentation – BWC
Time Elapsed	0.23 seconds (from previous marked image, F2195 – 00-01-08-05)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the driveway and sidewalk on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>

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00:01:08:12
29.97fps





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Cropped Image	F2202 – 00-01-08-12 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north near the driveway and sidewalk on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Possible muzzle flash from James Williams' rifle



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Marked Image	F2218 – 00-01-08-28 – Video Presentation – BWC
Time Elapsed	0.53 seconds (from previous marked image, F2202 – 00-01-08-12)
Notes	<p>It is likely that James Williams fired a shot at approximately F2210, but Officer Huber moved his arms downward, while holding his pistol, and his left arm blocked the view of the top of the fence where the light clouds and bright flashes were previously observed. This is also due to the constant pace of the gunshots (between .20 and .25 second apart) and the audio waveform effect still had the constant stream of spikes due to the volume of the gunshots.</p> <p>In this frame, a light, opaque cloud (believed to be gunpowder and from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north in the driveway on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>





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Cropped Image	F2218 – 00-01-08-28 – Video Presentation – BWC (Cropped)
Notes	<p>It is likely that James Williams fired a shot at approximately F2210, but Officer Huber moved his arms downward, while holding his pistol, and his left arm blocked the view of the top of the fence where the light clouds and bright flashes were previously observed. This is also due to the constant pace of the gunshots (between .20 and .25 second apart) and the audio waveform effect still had the constant stream of spikes due to the volume of the gunshots.</p> <p>In this frame, a light, opaque cloud (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north in the driveway on the southwest side of the residence.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Light-colored cloud, possible gunpowder, from James Williams' rifle



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Marked Image	F2231 – 00-01-09-11 – Video Presentation – BWC
Time Elapsed	0.43 seconds (from previous marked image, F2218 – 00-01-08-28)
Notes	<p>It is likely that James Williams fired a shot at approximately F2225, but Officer Huber moved his arms upward, while holding his pistol, and his left arm blocked the view of the top of the fence where the light clouds and bright flashes were previously observed. This is also due to the constant pace of the gunshots (between .20 and .25 second apart) and the audio waveform effect still had the constant stream of spikes due to the volume of the gunshots. In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north in the driveway and approached the rear of a motorcycle parked in the driveway.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>

MOTOROLA SOLUTIONS 01/01/2022 00:07:33 BWC2-041234



00:01:09:11
29.97fps





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Officer-Involved Critical Incident - 2307 10th Street SW, Canton, Ohio

Cropped Image	F2231 – 00-01-09-11 – Video Presentation – BWC (Cropped)
Notes	<p>It is likely that James Williams fired a shot at approximately F2225, but Officer Huber moved his arms upward, while holding his pistol, and his left arm blocked the view of the top of the fence where the light clouds and bright flashes were previously observed. This is also due to the constant pace of the gunshots (between .20 and .25 second apart) and the audio waveform effect still had the constant stream of spikes due to the volume of the gunshots. In this frame, a brief and bright flash (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north in the driveway and approached the rear of a motorcycle parked in the driveway.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Possible muzzle flash from James Williams' rifle



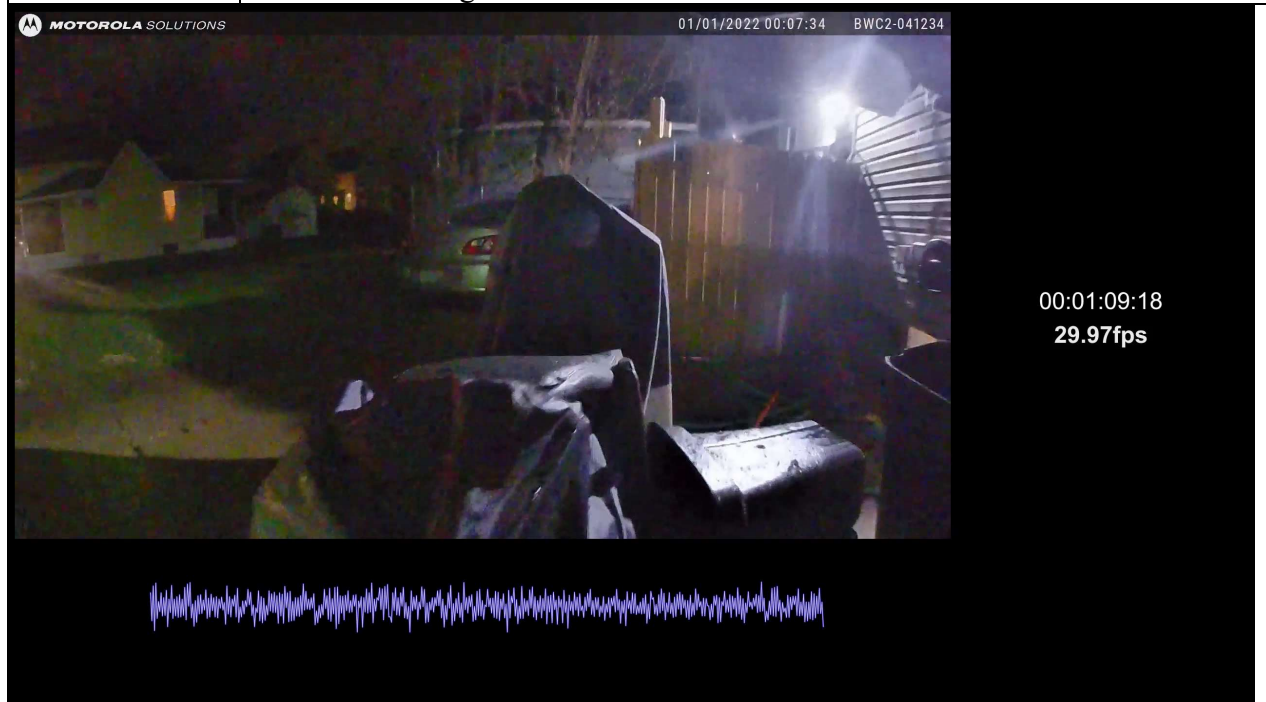
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Officer-Involved Critical Incident - 2307 10th Street SW, Canton, Ohio

Marked Image	F2238 – 00-01-09-18 – Video Presentation – BWC
Time Elapsed	0.23 seconds (from previous marked image, F2231 – 00-01-09-11)
Notes	<p>In this frame, a brief and bright flash of light (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north slightly in the driveway and was near the rear of a motorcycle parked in the driveway. He held his pistol out in front of him in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>





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Cropped Image	F2238 – 00-01-09-18 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a brief and bright flash of light (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north slightly in the driveway and was near the rear of a motorcycle parked in the driveway. He held his pistol out in front of him in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Possible muzzle flash from James Williams' rifle



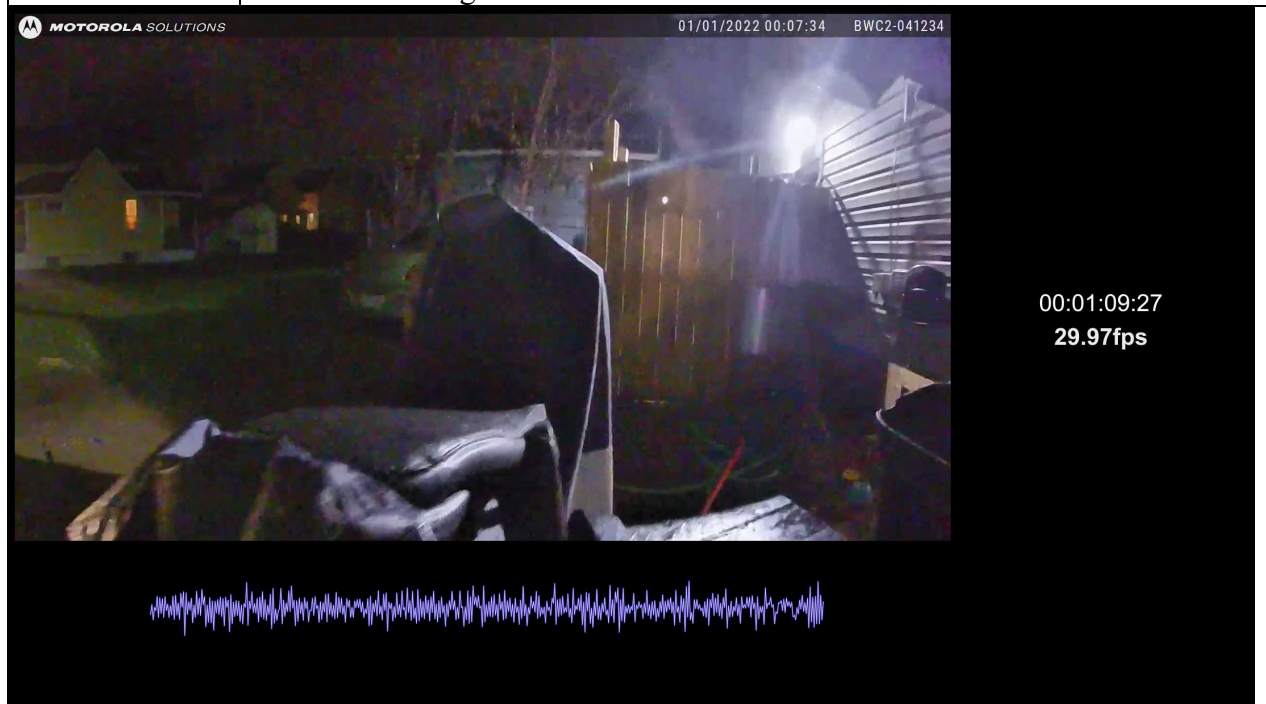
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Marked Image	F2247 – 00-01-09-27 – Video Presentation – BWC
Time Elapsed	0.30 seconds (from previous marked image, F2238 – 00-01-09-18)
Notes	<p>In this frame, a light, opaque cloud and a possible muzzle flash (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north slightly in the driveway and was near the rear of a motorcycle parked in the driveway. He held his pistol out in front of him in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>





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Cropped Image	F2247 – 00-01-09-27 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a light, opaque cloud (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber continued moving north slightly in the driveway and was near the rear of a motorcycle parked in the driveway. He held his pistol out in front of him in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Light-colored cloud, possible gunpowder, from James Williams' rifle



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Marked Image	F2255 – 00-01-10-05 – Video Presentation – BWC
Time Elapsed	0.27 seconds (from previous marked image, F2247 – 00-01-09-27)
Notes	<p>In this frame, a light, opaque cloud (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber stopped moving forward and moved slightly to his right. He was near the rear of a motorcycle parked in the driveway. He held his pistol out in front of him in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>





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Cropped Image	F2255 – 00-01-10-05 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a light, opaque cloud (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber stopped moving forward and moved slightly to his right. He was near the rear of a motorcycle parked in the driveway. He held his pistol out in front of him in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Light-colored cloud, possible gunpowder, from James Williams' rifle



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Marked Image	F2263 – 00-01-10-13 – Video Presentation – BWC
Time Elapsed	0.27 seconds (from previous marked image, F2255 – 00-01-10-05)
Notes	<p>In this frame, a brief and bright flash of light (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber stopped moving forward and moved slightly to his right. He was near the rear of a motorcycle parked in the driveway. He held his pistol out in front of him in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>





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Cropped Image	F2263 – 00-01-10-13 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a brief and bright flash of light (believed to be a muzzle flash from the rifle that James Williams was firing) was observed above the wood fencing surrounding the patio.</p> <p>Officer Huber stopped moving forward and moved slightly to his right. He was near the rear of a motorcycle parked in the driveway. He held his pistol out in front of him in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Possible muzzle flash from James Williams' rifle



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Marked Image	F2269 – 00-01-10-19 – Video Presentation – BWC
Time Elapsed	0.20 seconds (from previous marked image, F2263 – 00-01-10-13)
Notes	Officer Huber fired the (approximately) first (1) shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel. Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot. See marked image below:





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Cropped Image	F2269 – 00-01-10-19 – Video Presentation – BWC (Cropped)
Notes	Officer Huber fired the (approximately) first (1) shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel. Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot. See cropped marked image below:



Light-colored cloud, possible gunpowder, from Officer Huber's pistol



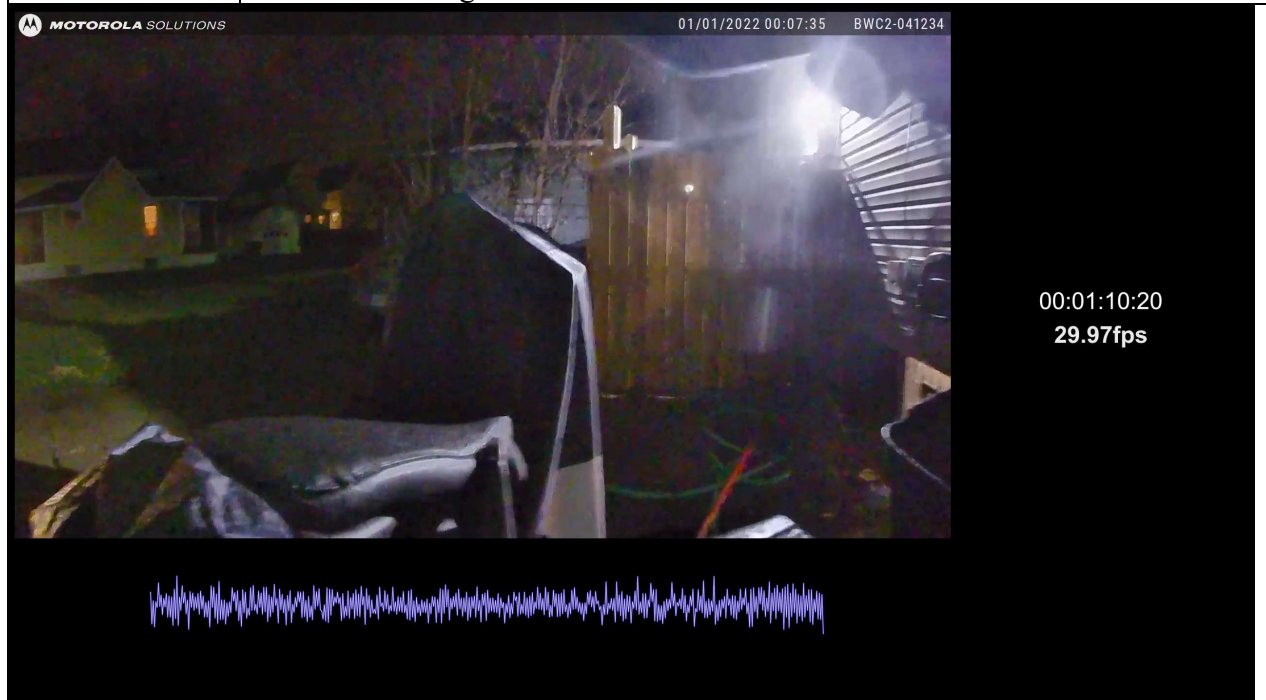
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Officer-Involved Critical Incident - 2307 10th Street SW, Canton, Ohio

Marked Image	F2270 – 00-01-10-20 – Video Presentation – BWC
Time Elapsed	0.03 seconds (from previous marked image, F2269 – 00-01-10-19)
Notes	<p>In this frame, a light, opaque cloud and a possible muzzle flash (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio. This is also due to the constant pace of the gunshots (between .20 and .30 second apart) and the audio waveform effect still had the constant stream of spikes due to the volume of the gunshots. The frame (F2263) when James Williams possibly fired his previous gunshot was at 00:01:10:13 (8 frames prior x 0.03333333 = 0.27 seconds).</p> <p>Officer Huber stood near the rear of the motorcycle parked in the driveway and held his pistol out in front of him and in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>





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Cropped Image	F2270 – 00-01-10-20 – Video Presentation – BWC (Cropped)
Notes	<p>In this frame, a light, opaque cloud and a possible muzzle flash (believed to be gunpowder from the rifle barrel that James Williams was firing) was observed above the wood fencing surrounding the patio. This is also due to the constant pace of the gunshots (between .20 and .25 second apart) and the audio waveform effect still had the constant stream of spikes due to the volume of the gunshots.</p> <p>Officer Huber stood near the rear of the motorcycle parked in the driveway and held his pistol out in front of him and in the direction of the fence and James Williams.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Light-colored cloud, possible gunpowder, from James Williams' rifle



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Officer-Involved Critical Incident - 2307 10th Street SW, Canton, Ohio

Marked Image	F2279 – 00-01-10-29 – Video Presentation – BWC
Time Elapsed	0.30 seconds (from previous marked image F2270, 00-01-10-20)
Notes	<p>Officer Huber fired the (approximately) second (2) shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel.</p> <p>It is possible that James Williams made a movement(s) (unknown exact movement), due to some changes/lighting observed behind the fence slats (especially two slats to the right of bright-colored hole/circle on fence). It is unknown exactly, but possible, that James Williams fired a shot in F2278 due to the constant pace of the gunshots (between .20 and .25 second apart), and the audio waveform effect still had the constant stream of spikes due to the volume of the gunshots.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See marked image below:</p>





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Cropped Image	F2279 – 00-01-10-29 – Video Presentation – BWC (Cropped)
Notes	<p>Officer Huber fired the (approximately) second (2) shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel. It is possible that James Williams made a movement(s) (unknown exact movement), due to some changes/lighting observed behind the fence slats (especially two slats to the right of bright colored hole/circle on fence). It is unknown exactly, but possible, that James Williams fired a shot in F2278 due to the constant pace of the gunshots (between .20 and .30 second apart), and the audio waveform effect still had the constant stream of spikes due to the volume of the gunshots.</p> <p>Again, the gunshots were so loud and so rapid that the audio waveform effect was nearly a constant stream of spikes and was virtually impossible to identify each individual gunshot.</p> <p>See cropped marked image below:</p>



Light-colored cloud, possible gunpowder, from Officer Huber's pistol



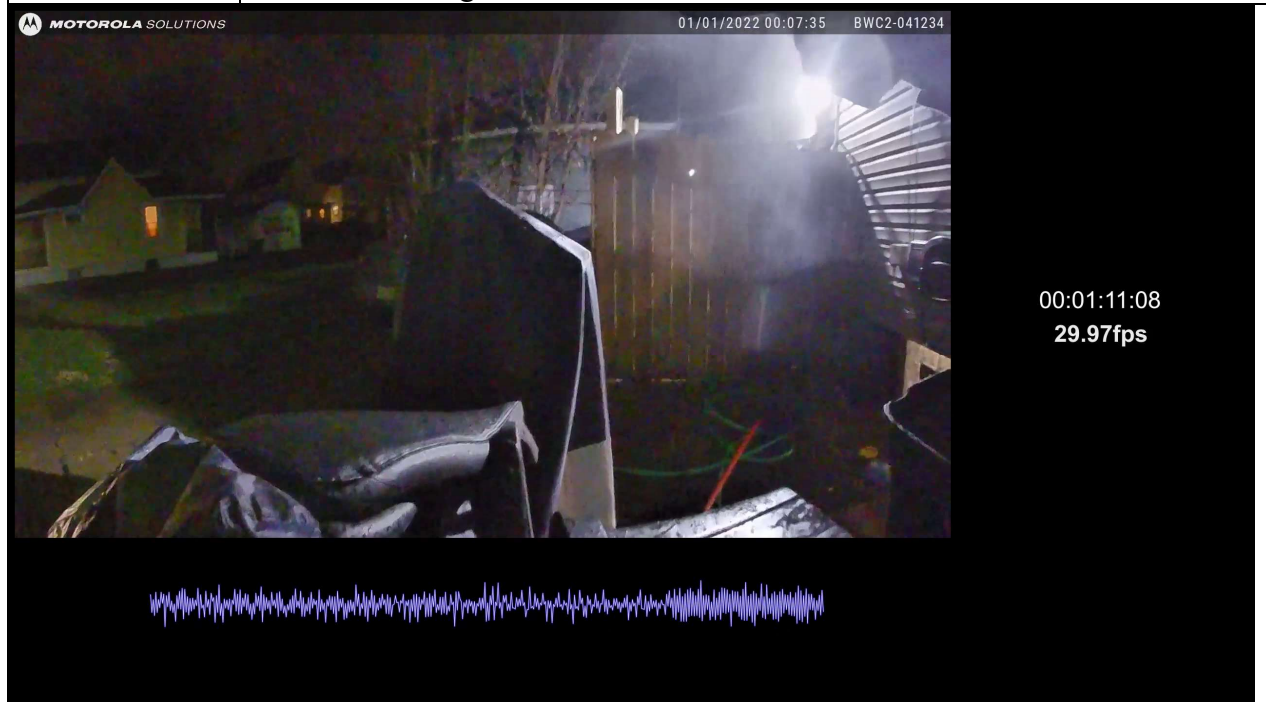
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Officer-Involved Critical Incident - 2307 10th Street SW, Canton, Ohio

Marked Image	F2288 – 00-01-11-08 – Video Presentation – BWC
Time Elapsed	0.30 seconds (from previous marked image, F2279 – 00-01-10-29)
Notes	<p>Officer Huber fired the (approximately) third (3) shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel. The lighting and changes near the fence slats were not clear enough to determine what James Williams was doing at this moment. The audio waveform effect was able to show a slight spike, likely recording the gunshot fired by Officer Huber. See marked image below:</p>





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Officer-Involved Critical Incident - 2307 10th Street SW, Canton, Ohio

Marked Image	F2297 – 00-01-11-17 – Video Presentation – BWC
Time Elapsed	0.30 seconds (from previous marked image, F2288 – 00-01-11-08)
Notes	Officer Huber fired the (approximately) fourth (4) shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel. The lighting and changes near the fence slats were not clear enough to determine what James Williams was doing at this moment. The audio waveform effect was able to show a slight spike, likely recording the gunshot fired by Officer Huber. See marked image below:

MOTOROLA SOLUTIONS 01/01/2022 00:07:36 BWC2-041234

00:01:11:17
29.97fps



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Marked Image	F2306 – 00-01-11-26 – Video Presentation – BWC
Time Elapsed	0.30 seconds (from previous marked image, F2297 – 00-01-11-17)
Notes	<p>Officer Huber fired the (approximately) fifth (5) shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel. He began to move slightly backwards.</p> <p>The lighting and changes near the fence slats were not clear enough to determine what James Williams was doing at this moment.</p> <p>The audio waveform effect was able to show a slight spike, likely recording the gunshot fired by Officer Huber.</p> <p>See marked image below:</p>

MOTOROLA SOLUTIONS 01/01/2022 00:07:36 BWC2-041234



00:01:11:26
29.97fps





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Marked Image	F2315 – 00-01-12-05 – Video Presentation – BWC
Time Elapsed	0.30 seconds (from previous marked image, F2306 – 00-01-11-26)
Notes	<p>Officer Huber fired the (approximately) sixth (6) shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel. He moved slightly backwards.</p> <p>The lighting and changes near the fence slats were not clear enough to determine what James Williams was doing at this moment.</p> <p>The audio waveform effect was able to show a slight spike, likely recording the gunshot fired by Officer Huber.</p> <p>See marked image below:</p>

MOTOROLA SOLUTIONS 01/01/2022 00:07:36 BWC2-041234

00:01:12:05
29.97fps



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Marked Image	F2323 – 00-01-12-13 – Video Presentation – BWC
Time Elapsed	0.27 seconds (from previous marked image, F2315 – 00-01-12-05)
Notes	<p>Officer Huber fired the (approximately) seventh (7) shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel. He moved slightly backwards.</p> <p>The lighting and changes near the fence slats were not clear enough to determine what James Williams was doing at this moment.</p> <p>The audio waveform effect was able to show a slight spike, likely recording the gunshot fired by Officer Huber.</p> <p>See marked image below:</p>

MOTOROLA SOLUTIONS 01/01/2022 00:07:36 BWC2-041234

00:01:12:13
29.97fps



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Marked Image	F2332 – 00-01-12-22 – Video Presentation – BWC
Time Elapsed	0.30 seconds (from previous marked image, F2323 – 00-01-12-13) 0.33 seconds (including this frame)
Notes	Officer Huber fired the (approximately) eighth (8) and final shot from his pistol in the direction of the fence and James Williams. A light, opaque cloud (believed to be gunpowder) was observed near the end of Officer Huber's pistol barrel. He moved slightly backwards. The lighting and changes near the fence slats were not clear enough to determine what James Williams was doing at this moment. The audio waveform effect was able to show a slight spike, likely recording the gunshot fired by Officer Huber. See marked image below:

MOTOROLA SOLUTIONS 01/01/2022 00:07:37 BWC2-041234

00:01:12:22
29.97fps



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Frame	F2384 – 00-01-14-14 – Video Presentation – BWC
Notes	Officer Huber radioed, “Shots fired!” as he continued moving backwards. No marked image was created for this frame, due to no noticeable and significant visual changes.

Frame	F2471 – 00-01-17-11 – Video Presentation – BWC
Notes	Officer Huber yelled, “Police! Get down now!” He stopped moving and was positioned near the southwest corner of the residence. Officer Paris’ cruiser headlights were observed illuminating the driveway on the left side of the video screen. No marked image was created for this frame, due to no noticeable and significant visual changes.

Frame	F2554 – 00-01-20-04 – Video Presentation – BWC
Notes	Officer Huber repeated, “Police! Get down now!” He stopped moving and was positioned near the southwest corner of the residence. Officer Paris’ cruiser headlights and emergency lights were observed illuminating the driveway on the left side of the video screen. No marked image was created for this frame, due to no noticeable and significant visual changes.

Frame	F2686 – 00-01-24-16 – Video Presentation – BWC
Notes	Officer Huber turned and ran to the rear of his cruiser in the street. He radioed, “Shots fired.” No marked image was created for this frame, due to no noticeable and significant visual changes.

Frame	F3216 – 00-01-42-07 – Video Presentation – BWC
Notes	A voice, believed to be Officer Paris, said, “Huber, where’s he at man?” Officer Huber used the flashlight on his pistol to illuminate the patio area on the west side of the residence and stated, “He was right there. See the gun...oh fuck. Yeah, we’re good.” Officer Huber was breathing heavily and rapidly.

Frame	F3300 – 00-01-45-01 – Video Presentation – BWC
Notes	This was the last frame of the video presentation. Officer Huber was positioned near the rear bumper of his cruiser and asked Officer Paris to provide him with cover for a moment.



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- ***Both Video Presentations – 22-00003 Four Camera View and 22-00003 Video Presentation***

iNPUT ACE – Workflow Tab

SA Moran selected the iNPUT ACE “Workflow” tab. SA Moran selected “Advanced” output and in the “FORMAT” pane. SA Moran then selected “BMP” (Bitmap) under IMAGE. BMP was chosen as the output due to it being lossless. All of the marked images were selected and connected to the “Output to BMP” node and the workflow was executed.

SA Moran connected selected marked images from the “22-00003 Video Presentation” that showed movements, actions and possible gunshots and connected them to “CROP” filter nodes. SA Moran used the “CROP” filter nodes to highlight areas of interest in each selected marked image. The following marked images were connected to “CROP” filter nodes:

F2162
F2169
F2176
F2183
F2188
F2195
F2202
F2218
F2231
F2238
F2247
F2255
F2263
F2269
F2270
F2279

SA Moran selected “Advanced” output and in the “FORMAT” pane. SA Moran then selected “BMP” (Bitmap) under IMAGE. BMP was chosen as the output due to it being lossless. All of the selected marked images connected to “CROP” filter nodes were selected and connected to the “Output to BMP” node and the workflow was executed.

These cropped images and descriptions were included above directly after the full marked image.



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TIMING AND ACTION SUMMARY FOR OOCIC 22-00003 VIDEO PRESENTATION

SA Moran created a spreadsheet with multiple tabs calculating time between several moments during the event.

- The total time from the start of the BWC video presentation to the eighth and final shot fired by Officer Huber is approximately 72.77 seconds long.

- *F152 – 00:00:00:00 through F2332 – 00:01:12:22*

- *About 2183 frames x 1/30 (0.03333333) = 72.76665939*

- The total time from the start of the BWC video presentation to the first gunshot captured on the audio recording (likely fired by James Williams) is approximately 62.13 seconds long.

- *F152 – 00:00:00:00 through F2103- 00:01:02:03*

- *About 1864 frames x 1/30 (0.03333333) = 62.13332712*

- The total time when the BWC video captured the first gunshot on the audio recording (likely fired by James Williams) to the first gunshot visually observed (likely fired by James Williams) on the video recording as Officer Huber rounded the southwest corner of the residence is approximately 5.00 seconds long.

- *F2013 – 00:01:02:03 through F2162 – 00:01:07:02*

- *About 150 frames x 1/30 (0.03333333) = 4.9999995*

- The total time when the BWC video captured the first gunshot on the audio recording (likely fired by James Williams) to the first gunshot visually observed being fired by Officer Huber is approximately 8.57 second long.

- *F2013 – 00:01:02:03 through F2269 – 00:01:10:19*

- *About 257 frames x 1/30 (0.03333333) = 8.56666581*

- The total time when the BWC video visually captured the first gunshot visually observed (likely fired by James Williams) to the first gunshot visually observed being fired by Officer Huber is approximately 3.60 seconds long.

- *F2162 – 00:01:07:02 through F2269 – 00:01:10:19*

- *About 108 frames x 1/30 (0.03333333) = 3.59999964*

- The total time when the BWC video visually captured the first gunshot visually observed being fired by Officer Huber, including a possible gunshot fired by James Williams and Officer



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



2022-0001

Officer-Involved Critical Incident - 2307 10th Street SW, Canton, Ohio

Huber's three through eight gunshots which were visually observed and captured on audio, through the eighth and final gunshot fired by Officer Huber is approximately 2.13 seconds.

- *F2269 – 00:01:10:19 through F2332 – 00:01:12:22*

- *About 64 frames x 1/30 (0.03333333) = 2.13333312*

- The total time when the BWC video visually captured eight or nine gunshots visually observed likely being fired by James Williams (prior to Officer Huber's first gunshot) through Officer Huber's eighth gunshot visually observed and captured on audio is approximately 3.83 seconds.

- *F2218 – 00:01:08:28 through F2331 – 00:01:12:22*

- *About 115 frames x 1/30 (0.03333333) = 3.83333295*

- **22-00003 Video Presentation – Speed Views**

This video presentation played the same video as presented in “21-00141 Presentation,” but at 50% speed and then it repeated at full speed. It captured the same events as the “21-00141 Presentation” and was created for demonstrative purposes.

Reference Items:

The OOCIC work product discs and OOCIC Item #1 were submitted to the BCI case file as part of reference item N. The iNPUT ACE project file, derivatives (marked images and cropped images), workflow notes and the frame and timing spreadsheet were placed on a disc and were submitted to the BCI case file as part of reference item N.

Attachments:

The derivatives (marked images and cropped images), workflow notes and the frame and timing spreadsheet were uploaded to the BCI Matrix case file and were attached to this report for reference. The frame and timing spreadsheet tabs were converted to PDF and were uploaded to the BCI Matrix case file and were also attached to this report.



Ohio Organized Crime Investigations Commission



Submission Date	Priority Code	Due Date
01/24/2022		
OOCIC Case Number	Shelf Location	
22-00003		
(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> BCI Richfield		<u>Case Investigator Name:</u> S/A Charles Moran	<u>Submitting Investigator:</u> S/A Charles Moran
<u>County:</u> Summit		<u>Agency Case Number:</u> 2022-00001	<u>Court Date:</u>
<u>Telephone Number:</u> 234-400-3618	<u>Cell Phone Number:</u> 330-807-7261	<u>FAX Number:</u> 866-218-0993	
<u>Mailing Address:</u> 4055 Highlander Pkwy Richfield, OH 44286		<u>E-Mail Address:</u> charles.moran@ohioattorneygeneral.gov	

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

Item #	Description	Make	Model	Lot Number
1	Flash Drive/Jump Drive/Thumb Drive Black and silver thumb drive			
2	Video CD CD labeled "2022-0001 - Item 67 Preliminary Findings -1 Vide File			
W.P. 1.1	DVD - Data 3 DVDs.			

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>Subject Name:</u> Williams, James	<u>Custody Status:</u> NC	<u>Sex:</u> Male	<u>Race:</u> African American	<u>DOB:</u>
<u>Offense:</u> Officer Involved Shooting	<u>Date of Offense:</u> 01/01/2022	<u>Location : (City, County)</u> Canton, Stark County		

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

See memorandum for further details and analysis request details. Items 1 and 2 listed above were placed on a 4GB USB thumbdrive for submission.

Submitted By:

S/A Charles Moran

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 22-00003
Department Name: BCI Richfield
Incident Number 2022-00001

Item # 1 Description : Flash Drive/Jump Drive/Thumb Drive Black and silver thumb drive

<u>Date</u>	<u>Time</u>	<u>Custody Of</u>	<u>Location / Person</u>	<u>Transaction By</u>
01/24/2022	12:57	Clerical/Evidence	Nissa Low	Nissa Low
01/24/2022	13:15	Evidence Storage	Shelf A1	Nissa Low
01/25/2022	9:03	Clerical/Evidence	Cindy McCreary	Nissa Low
01/25/2022	9:04	Analyst	David F. Loomis	Nissa Low
03/23/2022	13:49	Clerical/Evidence	Nissa Low	Nissa Low
03/23/2022	13:49	Evidence Disposal	Returned to Department	Nissa Low

Item # 2 Description : Video CD CD labeled "2022-0001 - Item 67 Preliminary Findings -1 Vide File

<u>Date</u>	<u>Time</u>	<u>Custody Of</u>	<u>Location / Person</u>	<u>Transaction By</u>
01/31/2022	13:35	Clerical/Evidence	Matt S. Hilbert	Nissa Low
01/31/2022	13:36	Evidence Storage	Shelf D29	Nissa Low
02/02/2022	8:47	Clerical/Evidence	Nissa Low	Nissa Low
02/02/2022	11:04	Evidence Storage	Shelf A1	Nissa Low
02/07/2022	12:05	Clerical/Evidence	Nissa Low	Nissa Low
02/07/2022	12:06	Analyst	David F. Loomis	Nissa Low
03/23/2022	13:48	Clerical/Evidence	Nissa Low	Nissa Low
03/23/2022	13:48	Evidence Disposal	Returned to Department	Nissa Low

Item # W.P. 1.1 Description : DVD - Data 3 DVDs.

<u>Date</u>	<u>Time</u>	<u>Custody Of</u>	<u>Location / Person</u>	<u>Transaction By</u>
03/23/2022	13:45	Analyst	David F. Loomis	Nissa Low
03/23/2022	13:48	Clerical/Evidence	Nissa Low	Nissa Low
03/23/2022	13:48	Evidence Disposal	Returned to Department	Nissa Low



Ohio Organized Crime Investigations Commission
Forensic Video Analysis

Written March 31st, 2022

To: BCI Richfield OCIC Case Number: 22-00003
S/A Charles Moran
4055 Highlander Pkwy
Richfield, OH 44286
Agency Case Number: 2022-00001

Type of Offense: Officer Involved Shooting
Location of Offense: Canton, Stark County

On January 24th, 2022, Special Agent Charles Moran of BCI submitted on flash drive for the purpose of forensic video analysis. Special Agent Moran requested video presentations be created from video files contained on the flash drive. The item submitted will be referred to as ITEM ONE. The process, as it pertains to this case, is as follows:

- Inspect items to ascertain that no physical damage exists
- Generate and save a working copy of the contents of submitted items
- Convert proprietary video files to a universal format for processing
- Utilize software to create video presentations as requested
- Produce a data DVD of video presentations

On January 25th, 2022, ITEM ONE was checked out of the evidence room by Senior Analyst David Loomis.

ITEM ONE was an unknown brand 4GB 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 one .mp4 video file with a display resolution of 1920 pixels by 1080 pixels using the h264 video codec, with audio at a 48000 hertz sample rate, 46 kilobits per second data rate, stereo, using the mp4a audio codec:

00_0003975141_96_17_8f_0e-0003957780_0003972473_0003972522_video0.mp4

ITEM ONE also contained seventeen proprietary .avi video files with a display resolution of 960 pixels by 1080 pixels using the HEVC video codec:

2307 10th St SW DVR\CH1\Open Video (AVI)\CH1_2022-01-01_124101_2022-01-01_125507_ID09460.AVI

2307 10th St SW DVR\CH1\Open Video (AVI)\CH1_2022-01-01_125510_2022-01-01_125704_ID09461.AVI



Ohio Organized Crime Investigations Commission
Forensic Video Analysis

Written March 31st, 2022

2307 10th St SW DVR\CH1\Open Video (AVI)\CH1_2022-01-01_125707_2022-01-01_125734_ID09462.AVI

2307 10th St SW DVR\CH1\Open Video (AVI)\CH1_2022-01-01_125737_2022-01-01_130525_ID09463.AVI

2307 10th St SW DVR\CH1\Open Video (AVI)\CH1_2022-01-01_130525_2022-01-01_134631_ID09479.AVI

2307 10th St SW DVR\CH2\Open Video (AVI)\CH2_2022-01-01_125646_2022-01-01_125725_ID09449.AVI

2307 10th St SW DVR\CH2\Open Video (AVI)\CH2_2022-01-01_125728_2022-01-01_130252_ID09450.AVI

2307 10th St SW DVR\CH2\Open Video (AVI)\CH2_2022-01-01_130252_2022-01-01_134358_ID09486.AVI

10th St SW DVR\CH3\Open Video (AVI)\CH3_2022-01-01_123107_2022-01-01_125837_ID09466.AVI

2307 10th St SW DVR\CH3\Open Video (AVI)\CH3_2022-01-01_125840_2022-01-01_130128_ID09467.AVI

2307 10th St SW DVR\CH3\Open Video (AVI)\CH3_2022-01-01_130128_2022-01-01_134231_ID09468.AVI

2307 10th St SW DVR\CH4\Open Video (AVI)\CH4_2022-01-01_123804_2022-01-01_124922_ID09421.AVI

2307 10th St SW DVR\CH4\Open Video (AVI)\CH4_2022-01-01_124925_2022-01-01_125352_ID09422.AVI

2307 10th St SW DVR\CH4\Open Video (AVI)\CH4_2022-01-01_125355_2022-01-01_125443_ID09423.AVI

2307 10th St SW DVR\CH4\Open Video (AVI)\CH4_2022-01-01_125446_2022-01-01_125634_ID09424.AVI

2307 10th St SW DVR\CH4\Open Video (AVI)\CH4_2022-01-01_125637_2022-01-01_125707_ID09425.AVI

2307 10th St SW DVR\CH4\Open Video (AVI)\CH4_2022-01-01_125710_2022-01-01_130204_ID09426.AVI



Ohio Organized Crime Investigations Commission Forensic Video Analysis

Written March 31st, 2022

On February 2nd, 2022, Special Agent Moran submitted an additional DVD for this case. The item submitted will be referred to as ITEM TWO.

On February 7th, 2022, ITEM TWO was checked out of the evidence room by Senior Analyst Loomis.

ITEM TWO was a Verbatim CD-R labeled:

“ 2022-0001 – Item 67

Preliminary findings

-1 video file”

The contents of ITEM TWO were copied and verified via SHA256 hash using Quick Hash 3.0.4.

ITEM TWO contained one .mp4 video file with a display resolution of 1080 pixels by 1920 pixels using the h264 video codec, with audio at a 48000 hertz sample rate, 256 kilobits per second data rate, stereo, using the mp4a audio codec:

-3361408574055414289.mp4

The proprietary .avi video files from ITEM ONE were converted to universal .mp4 video files for processing using the iNput Ace forensic video analysis and conversion software.

The video files from ITEM ONE and ITEM TWO were brought into the Adobe Premiere CC 2022 video analysis software for review and the creation of a synchronized video timeline.

The video files originally from the DVR at the location of the incident contained an irregular date/time stamp which prohibited precise synchronization based upon the date/time. Due to a lack of visual overlap between the various cameras, a precise synchronization could not be achieved based on visual cues. Attempting to precisely synchronize the DVR cameras with the body-worn camera also failed. As a result, the body-worn camera presentation was created separately. A video timeline presentation was created with the DVR cameras, but it was only generally synchronized based upon the irregular timestamp and limited visual overlap between cameras. The four-camera view should not be used to calculate precise timing.

The body-worn camera view

(00_0003975141_96_17_8f_0e0003957780_0003972473_0003972522_video0.mp4) was brought into the Adobe After Effects CC 2022 video analysis and compositing software for the creation of the video presentations. The video was edited to the scope of the event requested by Special Agent Moran. An audio waveform effect was added. A timecode effect was added. A second presentation was created demonstrating the video at half-speed and original speed. Title slates were added and the video presentations were rendered out as universal .mp4 video files for demonstrative purposes.



Ohio Organized Crime Investigations Commission Forensic Video Analysis

Written March 31st, 2022

The DVR video timeline was brought into the Adobe After Effects for the creation of the four-camera view presentation. The video files were aspect adjusted and contrast adjusted. The video was edited to the scope of the event requested by Special Agent Moran. Title slates were added and the four-camera presentation was rendered out as a universal .mp4 video file for demonstrative purposes.

The video file from ITEM TWO contained video that occurred prior to the event requested by Special Agent Moran and prior to the body-worn camera video and was not included in any of the presentations.

The three video presentations were placed onto a data DVD. A total of three copies of the DVD were created.

On March 23rd, 2022, the three DVDs were returned to the evidence room for shipping, along with ITEM ONE and ITEM TWO.

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@OhioAttorneyGeneral.gov

Professional Experience

Senior Forensic Audio/Video Analyst

March 2019 – *Present*

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

Columbus, Ohio

- 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

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

Columbus, Ohio

- 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

Sept 2003 – April 2010

Self-Employed

Denver, CO and Pittsburgh, PA

- Family and portrait photography

- Digital photo editing and digital photo restoration
- Video recording, editing, and DVD presentations

Forensic Animation Intern

July 2003 – Sept 2003

Knott Laboratory

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

Nov 2000 – Nov 2001

Qwest Communications International, Inc.

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

Qwest 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

June 1995 – June 1999

United States Air Force

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

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

- 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

- 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

U.S. Department of Homeland Security - Cyber Security Investigations (9 Hours) August 2018

- 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

- 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

- Trial procedure
- Report writing techniques
- Effects of bias
- Moot court

Court Testimony

State of Ohio vs Thaddeus Bumgardner

June 29th, 2016

Common Pleas Court of Meigs County

14 CR 117

- 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

October 16th, 2018

Common Pleas Court of Richland County

2018-CR-0255R

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

State of Ohio vs Warriayre Armond Roundtree

December 11th, 2019

Franklin County Common Pleas Court

18-CR-01669

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

Professional Memberships

Law Enforcement and Emergency Services Video Association

August 2014 – Present

High Technology Crime Investigation Association

August 2018 - Present

00:00:04:04	00:00:18:02		00:00:34:21	00:00:39:17	00:00:49:29
00:00:04:05	00:00:18:03		00:00:34:22	00:00:39:18	00:00:50:00
00:00:04:06	00:00:18:04		00:00:34:23	00:00:39:19	00:00:50:01
00:00:04:07	00:00:18:05		00:00:34:24	00:00:39:20	00:00:50:02
00:00:04:08	00:00:18:06		00:00:34:25	00:00:39:21	00:00:50:03
00:00:04:09	00:00:18:07		00:00:34:26	00:00:39:22	00:00:50:04
00:00:04:10	00:00:18:08		00:00:34:27	00:00:39:23	00:00:50:05
00:00:04:11	00:00:18:09		00:00:34:28	00:00:39:24	00:00:50:06
00:00:04:12	00:00:18:10		00:00:34:29	00:00:39:25	00:00:50:07
00:00:04:13	00:00:18:11		00:00:35:00	00:00:39:26	00:00:50:08
00:00:04:14	00:00:18:12		00:00:35:01	00:00:39:27	00:00:50:09
00:00:04:15	00:00:18:13		00:00:35:02	00:00:39:28	00:00:50:10
00:00:04:16	00:00:18:14		00:00:35:03	00:00:39:29	00:00:50:11
00:00:04:17	00:00:18:15		00:00:35:04	00:00:40:00	00:00:50:12
00:00:04:18	00:00:18:16		00:00:35:05	00:00:40:01	00:00:50:13
00:00:04:19	00:00:18:17		00:00:35:06	00:00:40:02	00:00:50:14
00:00:04:20	00:00:18:18		00:00:35:07	00:00:40:03	00:00:50:15
00:00:04:21	00:00:18:19		00:00:35:08	00:00:40:04	00:00:50:16
00:00:04:22	00:00:18:20		00:00:35:09	00:00:40:05	00:00:50:17
00:00:04:23	00:00:18:21		00:00:35:10	00:00:40:06	00:00:50:18
00:00:04:24	00:00:18:22		00:00:35:11	00:00:40:07	00:00:50:19
00:00:04:25	00:00:18:23		00:00:35:12	00:00:40:08	00:00:50:20
00:00:04:26	00:00:18:24		TOTAL	00:00:40:09	00:00:50:21
00:00:04:27	00:00:18:25		FRAMES	00:00:40:10	00:00:50:22
00:00:04:28	00:00:18:26		146	00:00:40:11	00:00:50:23
00:00:04:29	00:00:18:27		0.03333333	00:00:40:12	00:00:50:24
00:00:05:00	00:00:18:28		TIME	00:00:40:13	00:00:50:25
00:00:05:01	00:00:18:29		4.86666618	00:00:40:14	00:00:50:26
00:00:05:02	00:00:19:00		4.87	00:00:40:15	00:00:50:27
00:00:05:03	00:00:19:01			00:00:40:16	00:00:50:28
00:00:05:04	00:00:19:02			00:00:40:17	00:00:50:29
00:00:05:05	00:00:19:03			00:00:40:18	00:00:51:00
00:00:05:06	00:00:19:04			00:00:40:19	00:00:51:01
00:00:05:07	00:00:19:05			00:00:40:20	00:00:51:02
00:00:05:08	00:00:19:06			00:00:40:21	00:00:51:03
00:00:05:09	00:00:19:07			00:00:40:22	00:00:51:04
00:00:05:10	00:00:19:08			00:00:40:23	00:00:51:05
00:00:05:11	00:00:19:09			00:00:40:24	00:00:51:06
00:00:05:12	00:00:19:10			00:00:40:25	00:00:51:07
00:00:05:13	00:00:19:11			00:00:40:26	00:00:51:08
00:00:05:14	00:00:19:12			00:00:40:27	00:00:51:09
00:00:05:15	00:00:19:13			00:00:40:28	00:00:51:10
00:00:05:16	00:00:19:14			00:00:40:29	00:00:51:11
00:00:05:17	00:00:19:15			00:00:41:00	00:00:51:12
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00:00:12:26	00:00:26:24			12.70	
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FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #			
F152	F570	F962	F1068	F1214	F1526	F1907	F2013			
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00:00:05:25	00:00:19:23			00:00:41:08	00:00:51:20					
00:00:05:26	00:00:19:24			00:00:41:09	00:00:51:21					
00:00:05:27	00:00:19:25			00:00:41:10	00:00:51:22					
00:00:05:28	00:00:19:26			00:00:41:11	00:00:51:23					
00:00:05:29	00:00:19:27			00:00:41:12	00:00:51:24					
00:00:06:00	00:00:19:28			00:00:41:13	00:00:51:25					
00:00:06:01	00:00:19:29			00:00:41:14	00:00:51:26					

00:00:06:02	00:00:20:00			00:00:41:15	00:00:51:27				
00:00:06:03	00:00:20:01			00:00:41:16	00:00:51:28				
00:00:06:04	00:00:20:02			00:00:41:17	00:00:51:29				
00:00:06:05	00:00:20:03			00:00:41:18	00:00:52:00				
00:00:06:06	00:00:20:04			00:00:41:19	00:00:52:01				
00:00:06:07	00:00:20:05			00:00:41:20	00:00:52:02				
00:00:06:08	00:00:20:06			00:00:41:21	00:00:52:03				
00:00:06:09	00:00:20:07			00:00:41:22	00:00:52:04				
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00:00:06:20	00:00:20:18			00:00:42:03	00:00:52:15				
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00:00:07:13	00:00:21:11			00:00:42:26	00:00:53:08				
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00:00:07:17	00:00:21:15			00:00:43:00	00:00:53:12				
00:00:07:18	00:00:21:16			00:00:43:01	00:00:53:13				

00:00:07:19	00:00:21:17			00:00:43:02	00:00:53:14					
00:00:07:20	00:00:21:18			00:00:43:03	00:00:53:15					
00:00:07:21	00:00:21:19			00:00:43:04	00:00:53:16					
00:00:07:22	00:00:21:20			00:00:43:05	00:00:53:17					
00:00:07:23	00:00:21:21			00:00:43:06	00:00:53:18					
00:00:07:24	00:00:21:22			00:00:43:07	00:00:53:19					
00:00:07:25	00:00:21:23			00:00:43:08	00:00:53:20					
00:00:07:26	00:00:21:24			00:00:43:09	00:00:53:21					
00:00:07:27	00:00:21:25			00:00:43:10	00:00:53:22					
00:00:07:28	00:00:21:26			00:00:43:11	00:00:53:23					
00:00:07:29	00:00:21:27			00:00:43:12	00:00:53:24					
00:00:08:00	00:00:21:28			00:00:43:13	00:00:53:25					
00:00:08:01	00:00:21:29			00:00:43:14	00:00:53:26					
00:00:08:02	00:00:22:00			00:00:43:15	00:00:53:27					
00:00:08:03	00:00:22:01			00:00:43:16	00:00:53:28					
00:00:08:04	00:00:22:02			00:00:43:17	00:00:53:29					
00:00:08:05	00:00:22:03			00:00:43:18	00:00:54:00					
00:00:08:06	00:00:22:04			00:00:43:19	00:00:54:01					
00:00:08:07	00:00:22:05			00:00:43:20	00:00:54:02					
00:00:08:08	00:00:22:06			00:00:43:21	00:00:54:03					
00:00:08:09	00:00:22:07			00:00:43:22	00:00:54:04					
00:00:08:10	00:00:22:08			00:00:43:23	00:00:54:05					
00:00:08:11	00:00:22:09			00:00:43:24	00:00:54:06					
00:00:08:12	00:00:22:10			00:00:43:25	00:00:54:07					
00:00:08:13	00:00:22:11			00:00:43:26	00:00:54:08					
00:00:08:14	00:00:22:12			00:00:43:27	00:00:54:09					
00:00:08:15	00:00:22:13			00:00:43:28	00:00:54:10					
00:00:08:16	00:00:22:14			00:00:43:29	00:00:54:11					
00:00:08:17	00:00:22:15			00:00:44:00	00:00:54:12					
00:00:08:18	00:00:22:16			00:00:44:01	00:00:54:13					
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00:00:08:22	00:00:22:20			00:00:44:05	00:00:54:17					
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00:00:09:00	00:00:22:28			00:00:44:13	00:00:54:25					
00:00:09:01	00:00:22:29			00:00:44:14	00:00:54:26					
00:00:09:02	00:00:23:00			00:00:44:15	00:00:54:27					
00:00:09:03	00:00:23:01			00:00:44:16	00:00:54:28					
00:00:09:04	00:00:23:02			00:00:44:17	00:00:54:29					
00:00:09:05	00:00:23:03			00:00:44:18	00:00:55:00					

00:00:09:06	00:00:23:04			00:00:44:19	00:00:55:01				
00:00:09:07	00:00:23:05			00:00:44:20	00:00:55:02				
00:00:09:08	00:00:23:06			00:00:44:21	00:00:55:03				
00:00:09:09	00:00:23:07			00:00:44:22	00:00:55:04				
00:00:09:10	00:00:23:08			00:00:44:23	00:00:55:05				
00:00:09:11	00:00:23:09			00:00:44:24	00:00:55:06				
00:00:09:12	00:00:23:10			00:00:44:25	00:00:55:07				
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00:00:09:15	00:00:23:13			00:00:44:28	00:00:55:10				
00:00:09:16	00:00:23:14			00:00:44:29	00:00:55:11				
00:00:09:17	00:00:23:15			00:00:45:00	00:00:55:12				
00:00:09:18	00:00:23:16			00:00:45:01	00:00:55:13				
00:00:09:19	00:00:23:17			00:00:45:02	00:00:55:14				
00:00:09:20	00:00:23:18			00:00:45:03	00:00:55:15				
00:00:09:21	00:00:23:19			00:00:45:04	00:00:55:16				
00:00:09:22	00:00:23:20			00:00:45:05	00:00:55:17				
00:00:09:23	00:00:23:21			00:00:45:06	00:00:55:18				
00:00:09:24	00:00:23:22			00:00:45:07	00:00:55:19				
00:00:09:25	00:00:23:23			00:00:45:08	00:00:55:20				
00:00:09:26	00:00:23:24			00:00:45:09	00:00:55:21				
00:00:09:27	00:00:23:25			00:00:45:10	00:00:55:22				
00:00:09:28	00:00:23:26			00:00:45:11	00:00:55:23				
00:00:09:29	00:00:23:27			00:00:45:12	00:00:55:24				
00:00:10:00	00:00:23:28			00:00:45:13	00:00:55:25				
00:00:10:01	00:00:23:29			00:00:45:14	00:00:55:26				
00:00:10:02	00:00:24:00			00:00:45:15	00:00:55:27				
00:00:10:03	00:00:24:01			00:00:45:16	00:00:55:28				
00:00:10:04	00:00:24:02			00:00:45:17	00:00:55:29				
00:00:10:05	00:00:24:03			00:00:45:18	00:00:56:00				
00:00:10:06	00:00:24:04			00:00:45:19	00:00:56:01				
00:00:10:07	00:00:24:05			00:00:45:20	00:00:56:02				
00:00:10:08	00:00:24:06			00:00:45:21	00:00:56:03				
00:00:10:09	00:00:24:07			00:00:45:22	00:00:56:04				
00:00:10:10	00:00:24:08			00:00:45:23	00:00:56:05				
00:00:10:11	00:00:24:09			00:00:45:24	00:00:56:06				
00:00:10:12	00:00:24:10			TOTAL FRAMES	00:00:56:07				
00:00:10:13	00:00:24:11			312	00:00:56:08				
00:00:10:14	00:00:24:12			0.03333333	00:00:56:09				
00:00:10:15	00:00:24:13			TIME	00:00:56:10				
00:00:10:16	00:00:24:14			10.399999	00:00:56:11				
00:00:10:17	00:00:24:15			10.40	00:00:56:12				
00:00:10:18	00:00:24:16				00:00:56:13				
00:00:10:19	00:00:24:17				00:00:56:14				
00:00:10:20	00:00:24:18				00:00:56:15				
00:00:10:21	00:00:24:19				00:00:56:16				

00:00:10:22	00:00:24:20				00:00:56:17					
00:00:10:23	00:00:24:21				00:00:56:18					
00:00:10:24	00:00:24:22				00:00:56:19					
00:00:10:25	00:00:24:23				00:00:56:20					
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00:00:10:28	00:00:24:26				00:00:56:23					
00:00:10:29	00:00:24:27				00:00:56:24					
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00:00:11:01	00:00:24:29				00:00:56:26					
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00:00:11:25	00:00:25:23				00:00:57:20					
00:00:11:26	00:00:25:24				00:00:57:21					
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00:00:12:01	00:00:25:29				00:00:57:26					
00:00:12:02	00:00:26:00				00:00:57:27					
00:00:12:03	00:00:26:01				00:00:57:28					
00:00:12:04	00:00:26:02				00:00:57:29					
00:00:12:05	00:00:26:03				00:00:58:00					
00:00:12:06	00:00:26:04				00:00:58:01					
00:00:12:07	00:00:26:05				00:00:58:02					
00:00:12:08	00:00:26:06				00:00:58:03					

FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #					
F2162	F2169	F2176	F2183	F2188	F2195	F2202	F2218	F2231	F2238	F2247	F2255	F2263	F2269					
TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE					
00:01:07:02	00:01:07:09	00:01:07:16	00:01:07:23	00:01:07:28	00:01:08:05	00:01:08:12	00:01:08:28	00:01:09:11	00:01:09:18	00:01:09:27	00:01:10:05	00:01:10:13	00:01:10:19					
													TOTAL FRAMES					
00:01:07:03	00:01:07:10	00:01:07:17	00:01:07:24	00:01:07:29	00:01:08:06	00:01:08:13	00:01:08:29	00:01:09:12	00:01:09:19	00:01:09:28	00:01:10:06	00:01:10:14	1					
00:01:07:04	00:01:07:11	00:01:07:18	00:01:07:25	00:01:08:00	00:01:08:07	00:01:08:14	00:01:09:00	00:01:09:13	00:01:09:20	00:01:09:29	00:01:10:07	00:01:10:15	0.03333333					
00:01:07:05	00:01:07:12	00:01:07:19	00:01:07:26	00:01:08:01	00:01:08:08	00:01:08:15	00:01:09:01	00:01:09:14	00:01:09:21	00:01:10:00	00:01:10:08	00:01:10:16	TIME					
00:01:07:06	00:01:07:13	00:01:07:20	00:01:07:27	00:01:08:02	00:01:08:09	00:01:08:16	00:01:09:02	00:01:09:15	00:01:09:22	00:01:10:01	00:01:10:09	00:01:10:17	0.03					
			TOTAL FRAMES	00:01:08:03	00:01:08:10	00:01:08:17	00:01:09:03	00:01:09:16	00:01:09:23	00:01:10:02	00:01:10:10	00:01:10:18	0.03					
00:01:07:07	00:01:07:14	00:01:07:21	5	00:01:08:04	00:01:08:11	00:01:08:18	00:01:09:04	00:01:09:17	00:01:09:24	00:01:10:03	00:01:10:11	TOTAL FRAMES	0.03					
TOTAL FRAMES	TOTAL FRAMES	TOTAL FRAMES	0.03333333	TOTAL FRAMES	TOTAL FRAMES	00:01:08:19	00:01:09:05	TOTAL FRAMES	00:01:09:25	00:01:10:04	00:01:10:12	6						
7	7	7	TIME	7	7	00:01:08:20	00:01:09:06	7	00:01:09:26	TOTAL FRAMES	TOTAL FRAMES	0.03333333						
0.03333333	0.03333333	0.03333333	0.16666665	0.03333333	0.03333333	00:01:08:21	00:01:09:07	0.03333333	TOTAL FRAMES	8	8	TIME						
TIME	TIME	TIME	0.17	TIME	TIME	00:01:08:22	00:01:09:08	TIME	9	0.03333333	0.03333333	0.19999998						
0.23333331	0.23333331	0.23333331		0.23333331	0.23333331	00:01:08:23	00:01:09:09	0.23333331	0.03333333	TIME	TIME	0.20						
0.23	0.23	0.23		0.23	0.23	00:01:08:24	00:01:09:10	0.23	TIME	0.26666664	0.26666664							
						00:01:08:25	TOTAL FRAMES		0.29999997	0.27	0.27							
						00:01:08:26	13		0.30									
						00:01:08:27	0.03333333											
						TOTAL FRAMES	TIME											
						16	0.43333329							ALL FRAMES TOTAL				
						0.03333333	0.43							108				
						TIME								0.03333333				
						0.53333328								TOTAL TIME FROM WHEN 1ST SHOT FIRED BY SUBJECT OBSERVED ON BWC TO 1ST SHOT BY OFFICER				
						0.53								3.59999964				
														3.60 seconds				

FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #	FRAME #						
F2269	F2270	F2279	F2288	F2297	F2306	F2315	F2323	F2332						
TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE	TIMECODE						
00:01:10:19	00:01:10:20	00:01:10:29	00:01:11:08	00:01:11:17	00:01:11:26	00:01:12:05	00:01:12:13	00:01:12:22						
TOTAL FRAMES								TOTAL FRAMES						
1	00:01:10:21	00:01:11:00	00:01:11:09	00:01:11:18	00:01:11:27	00:01:12:06	00:01:12:14	1						
0.03333333	00:01:10:22	00:01:11:01	00:01:11:10	00:01:11:19	00:01:11:28	00:01:12:07	00:01:12:15							
	00:01:10:23	00:01:11:02	00:01:11:11	00:01:11:20	00:01:11:29	00:01:12:08	00:01:12:16	0.03333333						
TIME	00:01:10:24	00:01:11:03	00:01:11:12	00:01:11:21	00:01:12:00	00:01:12:09	00:01:12:17	TIME						
0.03	00:01:10:25	00:01:11:04	00:01:11:13	00:01:11:22	00:01:12:01	00:01:12:10	00:01:12:18	0.03333333						
0.03	00:01:10:26	00:01:11:05	00:01:11:14	00:01:11:23	00:01:12:02	00:01:12:11	00:01:12:19	0.03						
	00:01:10:27	00:01:11:06	00:01:11:15	00:01:11:24	00:01:12:03	00:01:12:12	00:01:12:20							
	00:01:10:28	00:01:11:07	00:01:11:16	00:01:11:25	00:01:12:04	TOTAL FRAMES	00:01:12:21							
	TOTAL FRAMES	TOTAL FRAMES	TOTAL FRAMES	TOTAL FRAMES	TOTAL FRAMES	8	TOTAL FRAMES							
	9	9	9	9	9	0.03333333	9							
	0.03333333	0.03333333	0.03333333	0.03333333	0.03333333	TIME	0.03333333							
	TIME	TIME	TIME	TIME	TIME	0.26666664	TIME							
	0.29999997	0.29999997	0.29999997	0.29999997	0.29999997	0.27	0.29999997							
	0.30	0.30	0.30	0.30	0.30		0.30							
													ALL FRAMES TOTAL	
														64
														0.03333333
														TOTAL TIME FOR 8 SHOTS FIRED BY OFFICER AND 1 (F2270) SHOT FIRED BY SUBJECT
														2.13333312
														2.13 seconds



00:00:00:00
29.97fps





00:00:13:28
29.97fps





00:00:27:00
29.97fps





00:00:30:17
29.97fps





00:00:35:13
29.97fps





00:00:45:25
29.97fps





00:00:58:16
29.97fps





00:01:02:03
29.97fps





00:01:05:22
29.97fps





00:01:07:02
29.97fps





00:01:07:09
29.97fps





00:01:07:16
29.97fps





00:01:07:23
29.97fps





00:01:07:28
29.97fps





00:01:08:05
29.97fps





00:01:08:12
29.97fps





00:01:08:28
29.97fps





00:01:09:11
29.97fps





00:01:09:18
29.97fps



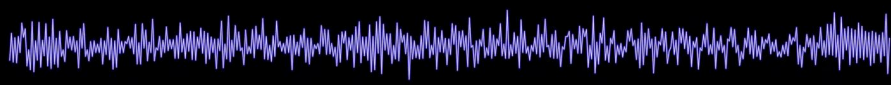


00:01:09:27
29.97fps





00:01:10:05
29.97fps





00:01:10:13
29.97fps





00:01:10:19
29.97fps





00:01:10:20
29.97fps



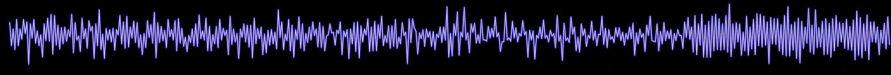


00:01:10:29
29.97fps





00:01:11:08
29.97fps





00:01:11:17
29.97fps





00:01:11:26
29.97fps





00:01:12:05
29.97fps





00:01:12:13
29.97fps





00:01:12:22
29.97fps



































Disclaimer:

**The video files used to create this timeline do not allow for exact synchronization.
This video should not be used to calculate precise timing.**

Interrogate

Workflow

Tools

Settings

FILE LIST

Filter / Sort

- Group 1 Video - Four Camera View (1)
- 22-00003 Four Camera View.m...
- Group 1 (82)
 - F78 - Four Camera View
 - F152 - Four Camera View
 - F258 - Four Camera View
 - F316 - Four Camera View
 - F384 - Four Camera View
 - F448 - Four Camera View
 - F472 - Four Camera View
 - F549 - Four Camera View
 - F674 - Four Camera View
 - F859 - Four Camera View
 - F892 - Four Camera View
 - F960 - Four Camera View
 - F1030 - Four Camera View
 - F1171 - Four Camera View
 - F1357 - Four Camera View
 - F1478 - Four Camera View
 - F1783 - Four Camera View
 - F1913 - Four Camera View
 - F2005 - Four Camera View

Output to BMP

FORMAT

VIDEO

- AVI
- FLV
- MPG
- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic

Advanced



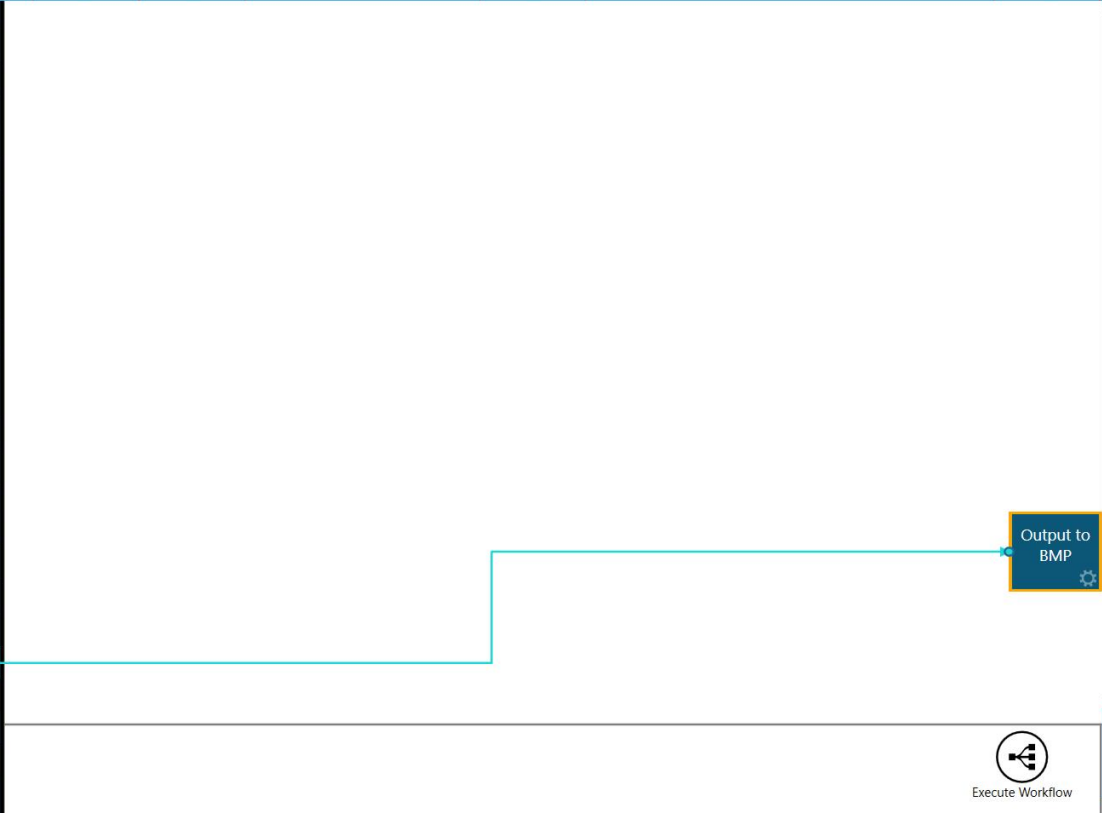
Interrogate

Workflow

Tools

Settings

- F2762 - Four Ca...
- F2763 - Four Ca...
- F2766 - Four Ca...
- F2767 - Four Ca...
- F2770 - Four Ca...
- F2771 - Four Ca...
- F2774 - Four Ca...
- F2776 - Four Ca...
- F2777 - Four Ca...
- F2780 - Four Ca...
- F2784 - Four Ca...
- F2790 - Four Ca...
- F2799 - Four Ca...
- F2828 - Four Ca...
- F2829 - Four Ca...
- F2859 - Four Ca...
- F2917 - Four Ca...
- F3164 - Four Ca...
- F3263 - Four Ca...
- F3508 - Four Ca...
- F871 - Four...
- Group 2 Video - Video Preser...
- 22-00003 Vid...
- Group 2 (31)



FORMAT

VIDEO

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- MOV
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- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

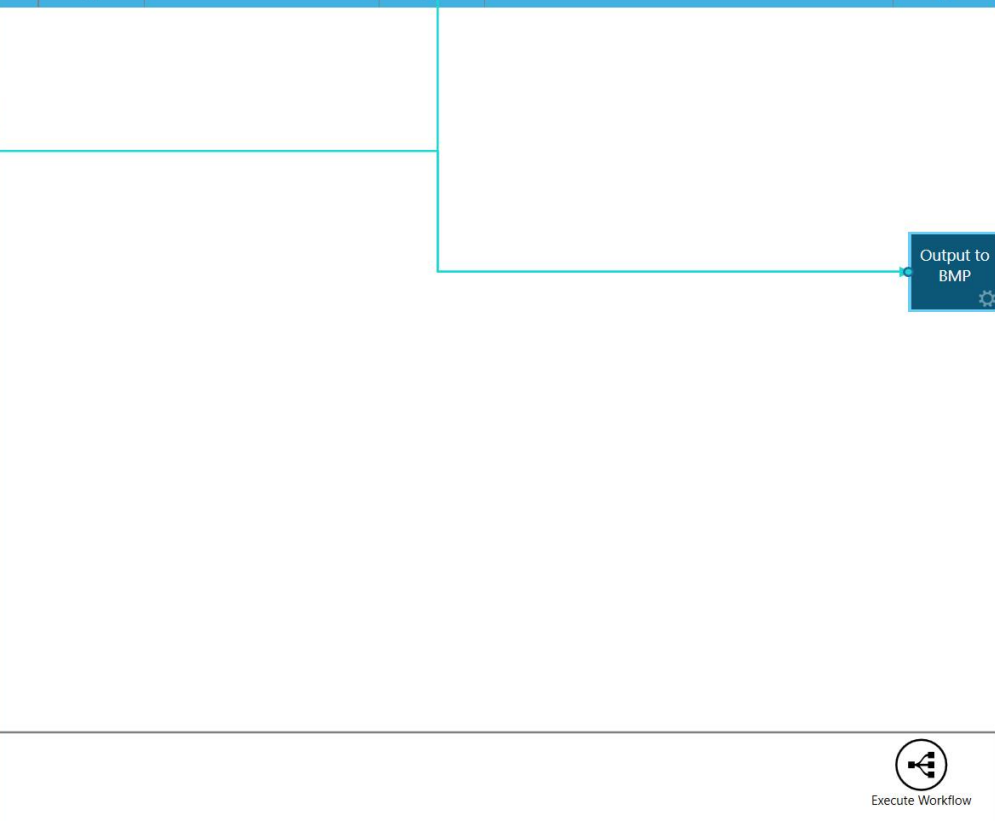
Integration

Basic

Advanced

- Interrogate
- Workflow
- Tools
- Settings

- F3263 - Four Camera View
- F3508 - Four Camera View
- Group 2 Video - Video Presentation (1)
- 22-00003 Video Presentation...
- Group 2 (31)
- F152 - 00-00-00-00 - Video Prese...
- F570 - 00-00-13-28 - Video Prese...
- F962 - 00-00-27-00 - Video Prese...
- F1068 - 00-00-30-17 - Video Prese...
- F1214 - 00-00-35-13 - Video Prese...
- F1526 - 00-00-45-25 - Video Prese...
- F1907 - 00-00-58-16 - Video Prese...
- F2013 - 00-01-02-03 - Video Prese...
- F2122 - 00-01-05-22 - Video Prese...
- F2162 - 00-01-07-02 - Video Prese...
- F2169 - 00-01-07-16 - Video Prese...
- F2176 - 00-01-07-09 - Video Prese...
- F2183 - 00-01-07-23 - Video Prese...
- F2188 - 00-01-07-28 - Video Prese...
- F2195 - 00-01-08-05 - Video Prese...
- F2202 - 00-01-08-12 - Video Prese...
- F2218 - 00-01-08-28 - Video Prese...
- F2231 - 00-01-09-11 - Video Prese...
- F2238 - 00-01-09-18 - Video Prese...
- F2247 - 00-01-09-27 - Video Prese...



- FORMAT
 - VIDEO
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 - JPEG
 - PNG
 - TIF
 - Integration
- Basic
- Advanced



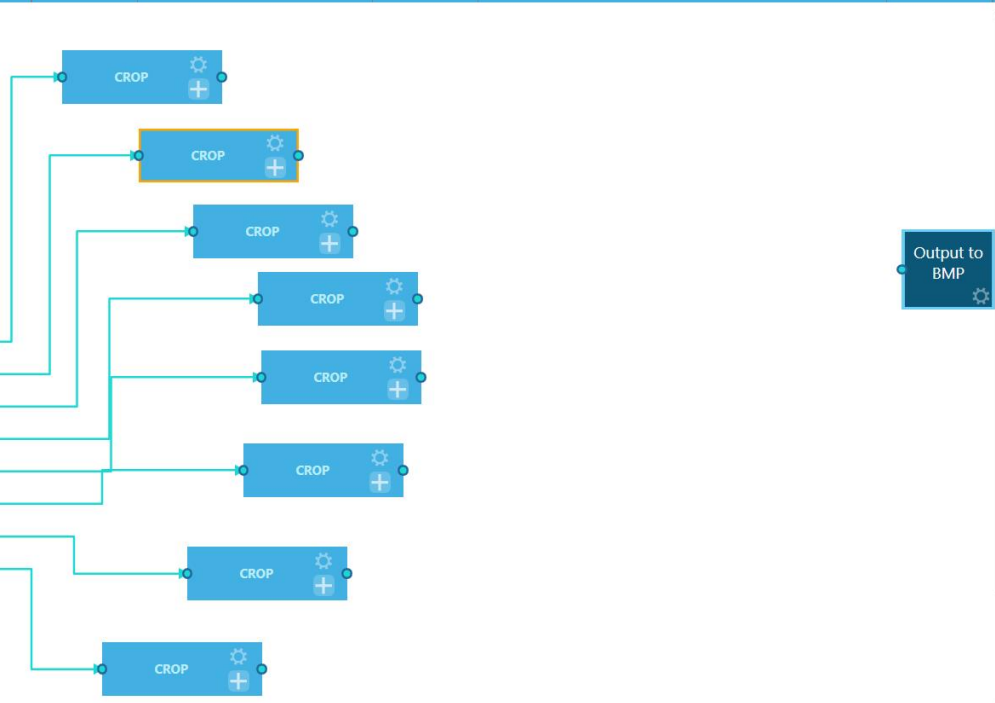
Interrogate

Workflow

Tools

Settings

- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
- F2162 - 00-01-07-02 - Video Pres...
- F2169 - 00-01-07-16 - Video Pres...
- F2176 - 00-01-07-09 - Video Pres...
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- F2238 - 00-01-09-18 - Video...
- F2247 - 00-01-09-27 - Video...
- F2255 - 00-01-10-05 - Video...
- F2263 - 00-01-10-13 - Video...
- F2269 - 00-01-10-19 - Video...
- F2270 - 00-01-10-20 - Video...
- F2279 00-01-10-29 - Video Pr...
- F2288 - 00-01-11-08 - Video Pres...
- F2297 - 00-01-11-17 - Video Pres...
- F2306 - 00-01-11-26 - Video Pres...
- F2315 - 00-01-12-05 - Video Pres...
- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...



FORMAT

VIDEO

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- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic

Advanced



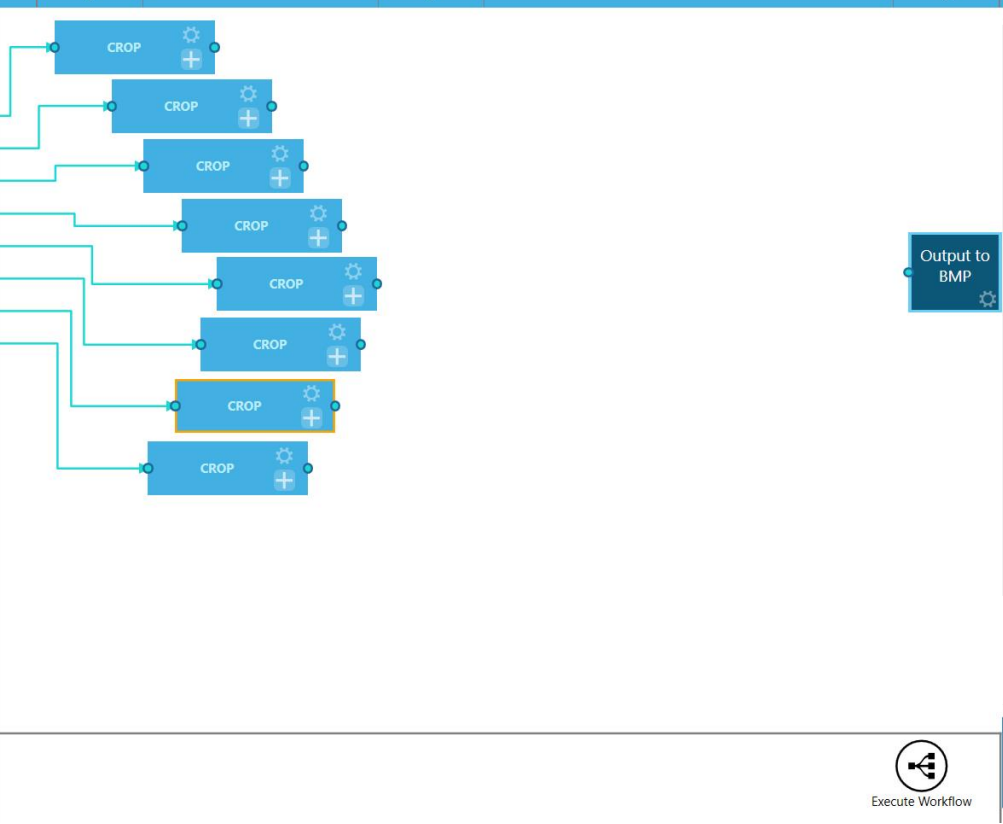
Interrogate

Workflow

Tools

Settings

- F1907 - 00-00-58-16 - Video Pres...
- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
- F2162 - 00-01-07-02 - Video...
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- F2332 - 00-01-12-22 - Video Pres...



FORMAT

VIDEO

- AVI
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- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic

Advanced



Interrogate

Workflow

Tools

Settings

- F1907 - 00-00-58-16 - Video Pres...
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- F2306 - 00-01-11-26 - Video Pres...
- F2315 - 00-01-12-05 - Video Pres...
- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

CROP

CROP


Crop Settings

Size Width Height

Preset Sizes X1 X2 X3 X4

X

Y



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

FORMAT

VIDEO

- AVI
- FLV
- MPG
- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic Advanced



- Interrogate
- Workflow
- Tools
- Settings
- F1907 - 00-00-58-16 - Video Pres...
- F2013 - 00-01-02-03 - Video Pres...
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- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

CROP

CROP


Crop Settings

Size Width: Height:

Preset Sizes X1 X2 X3 X4

X:

Y:



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

- FORMAT
- VIDEO
 - AVI
 - FLV
 - MPG
 - MOV
 - MP4
 - WMV
 - MKV
 - Avid MXF
 - Custom
- AUDIO
 - WAV
- IMAGE
 - BMP
 - JPEG
 - PNG
 - TIF
- Integration
- Basic
- Advanced

Execute Workflow

Interrogate

Workflow

Tools

Settings

- F1907 - 00-00-58-16 - Video Pres...
- F2013 - 00-01-02-03 - Video Pres...
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- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

CROP

CROP


Crop Settings

Size Width: 297 Height: 282

Preset Sizes X1 X2 X3 X4

X: 1427

Y: 170



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

FORMAT

VIDEO

- AVI
- FLV
- MPG
- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic Advanced



Interrogate

Workflow

Tools

Settings

- F1907 - 00-00-58-16 - Video Pres...
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- F2315 - 00-01-12-05 - Video Pres...
- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

CROP

CROP


Crop Settings

Size Width: 294 Height: 314

Preset Sizes X1 X2 X3 X4

X: 1395

Y: 233



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

FORMAT

VIDEO

- AVI
- FLV
- MPG
- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic Advanced

Execute Workflow

Interrogate

Workflow

Tools

Settings

- F1907 - 00-00-58-16 - Video Pres...
- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
- F2162 - 00-01-07-02 - Video...
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- F2315 - 00-01-12-05 - Video Pres...
- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

CROP

CROP

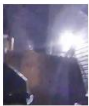
Crop Settings

Size Width: 291 Height: 343

Preset Sizes X1 X2 X3 X4

X: 1412

Y: 196



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

Execute Workflow

FORMAT

VIDEO

- AVI
- FLV
- MPG
- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic Advanced

Interrogate

Workflow

Tools

Settings

- F1907 - 00-00-58-16 - Video Pres...
- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
- F2162 - 00-01-07-02 - Video...
- F2169 - 00-01-07-16 - Video...
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- F2269 - 00-01-10-19 - Video Pres...
- F2270 - 00-01-10-20 - Video Pres...
- F2279 00-01-10-29 - Video Prese...
- F2288 - 00-01-11-08 - Video Pres...
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- F2306 - 00-01-11-26 - Video Pres...
- F2315 - 00-01-12-05 - Video Pres...
- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

CROP


Crop Settings

Size Width Height

Preset Sizes X1 X2 X3 X4

X

Y



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

FORMAT

VIDEO

- AVI
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- WMV
- MKV
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- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
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- TIF

Integration

Basic Advanced



- Interrogate
 - Workflow
 - Tools
 - Settings
- F1907 - 00-00-58-16 - Video Pres...
 - F2013 - 00-01-02-03 - Video Pres...
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 - F2176 - 00-01-07-09 - Video...
 - F2183 - 00-01-07-23 - Video...
 - F2188 - 00-01-07-28 - Video...
 - F2195 - 00-01-08-05 - Video...
 - F2202 - 00-01-08-12 - Video...
 - F2218 - 00-01-08-28 - Video...
 - F2231 - 00-01-09-11 - Video Pres...
 - F2238 - 00-01-09-18 - Video Pres...
 - F2247 - 00-01-09-27 - Video Pres...
 - F2255 - 00-01-10-05 - Video Pres...
 - F2263 - 00-01-10-13 - Video Pres...
 - F2269 - 00-01-10-19 - Video Pres...
 - F2270 - 00-01-10-20 - Video Pres...
 - F2279 00-01-10-29 - Video Prese...
 - F2288 - 00-01-11-08 - Video Pres...
 - F2297 - 00-01-11-17 - Video Pres...
 - F2306 - 00-01-11-26 - Video Pres...
 - F2315 - 00-01-12-05 - Video Pres...
 - F2323 - 00-01-12-13 - Video Pres...
 - F2332 - 00-01-12-22 - Video Pres...

CROP


Crop Settings

Size Width: 325 Height: 357

Preset Sizes X1 X2 X3 X4

X: 1329

Y: 127



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

FORMAT

VIDEO

- AVI
- FLV
- MPG
- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic Advanced



- Interrogate
- Workflow
- Tools
- Settings

- F1907 - 00-00-58-16 - Video Pres...
- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
- F2162 - 00-01-07-02 - Video...
- F2169 - 00-01-07-16 - Video...
- F2176 - 00-01-07-09 - Video...
- F2183 - 00-01-07-23 - Video...
- F2188 - 00-01-07-28 - Video...
- F2195 - 00-01-08-05 - Video...
- F2202 - 00-01-08-12 - Video...
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- F2231 - 00-01-09-11 - Video Pres...
- F2238 - 00-01-09-18 - Video Pres...
- F2247 - 00-01-09-27 - Video Pres...
- F2255 - 00-01-10-05 - Video Pres...
- F2263 - 00-01-10-13 - Video Pres...
- F2269 - 00-01-10-19 - Video Pres...
- F2270 - 00-01-10-20 - Video Pres...
- F2279 00-01-10-29 - Video Prese...
- F2288 - 00-01-11-08 - Video Pres...
- F2297 - 00-01-11-17 - Video Pres...
- F2306 - 00-01-11-26 - Video Pres...
- F2315 - 00-01-12-05 - Video Pres...
- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

CROP


Crop Settings

Size Width: 513 Height: 504

Preset Sizes X1 X2 X3 X4

X: 1130

Y: 66



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

FORMAT

VIDEO

- AVI
- FLV
- MPG
- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic Advanced

Execute Workflow

Interrogate

Workflow

Tools

Settings

- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
- F2162 - 00-01-07-02 - Video Pres...
- F2169 - 00-01-07-16 - Video Pres...
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- F2238 - 00-01-09-18 - Video...
- F2247 - 00-01-09-27 - Video...
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- F2279 00-01-10-29 - Video Pr...
- F2288 - 00-01-11-08 - Video Pres...
- F2297 - 00-01-11-17 - Video Pres...
- F2306 - 00-01-11-26 - Video Pres...
- F2315 - 00-01-12-05 - Video Pres...
- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

CROP


Crop Settings

Size Width Height

Preset Sizes X1 X2 X3 X4

X

Y



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

Output to BMP

FORMAT

VIDEO

- AVI
- FLV
- MPG
- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic Advanced

Execute Workflow

Interrogate

Workflow

Tools

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- F2332 - 00-01-12-22 - Video Pres...

CROP


Crop Settings

Size Width Height

Preset Sizes X1 X2 X3 X4

X

Y



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

Output to BMP

FORMAT

VIDEO

- AVI
- FLV
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- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
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- TIF

Integration

Basic Advanced

Execute Workflow

Crop Settings

Size Width Height

Preset Sizes X1 X2 X3 X4

X

Y



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK

Cancel

- Interrogate
- Workflow
- Tools
- Settings

- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
- F2162 - 00-01-07-02 - Video Pres...
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- F2315 - 00-01-12-05 - Video Pres...
- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

Project Actions Help

FORMAT

- VIDEO
 - AVI
 - FLV
 - MPG
 - MOV
 - MP4
 - WMV
 - MKV
 - Avid MXF
 - Custom
- AUDIO
 - WAV
- IMAGE
 - BMP
 - JPEG
 - PNG
 - TIF
- Integration

Output to BMP

Execute Workflow

Basic Advanced

Interrogate

Workflow

Tools

Settings

- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
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- F2332 - 00-01-12-22 - Video Pres...

CROP


Crop Settings

Size Width: Height:

Preset Sizes X1 X2 X3 X4

X:

Y:



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

Output to BMP

FORMAT

VIDEO

- AVI
- FLV
- MPG
- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
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Integration

Basic Advanced

Execute Workflow

- Interrogate
- Workflow
- Tools
- Settings
- F2013 - 00-01-02-03 - Video Pres...
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- F2332 - 00-01-12-22 - Video Pres...


Crop Settings

Size Width: Height:

Preset Sizes X1 X2 X3 X4

X:

Y:



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

Output to BMP

- FORMAT
- VIDEO
 - AVI
 - FLV
 - MPG
 - MOV
 - MP4
 - WMV
 - MKV
 - Avid MXF
 - Custom
- AUDIO
 - WAV
- IMAGE
 - BMP
 - JPEG
 - PNG
 - TIF
- Integration
- Basic
- Advanced

Execute Workflow

Interrogate

Workflow

Tools

Settings

- F2013 - 00-01-02-03 - Video Pres...
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Crop Settings

Size Width Height

Preset Sizes X1 X2 X3 X4

X

Y



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

Output to BMP

FORMAT

VIDEO

- AVI
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- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic

Advanced

Execute Workflow

- Interrogate
- Workflow
- Tools
- Settings
- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
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- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

Crop Settings

Size Width Height

Preset Sizes X1 X2 X3 X4

X

Y



Original Dimensions: Width: 2560 Height: 1440

Preview Crop

OK Cancel

Output to BMP

- FORMAT
- VIDEO
 - AVI
 - FLV
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 - MP4
 - WMV
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 - Avid MXF
 - Custom
- AUDIO
 - WAV
- IMAGE
 - BMP
 - JPEG
 - PNG
 - TIF
- Integration
- Basic
- Advanced

Execute Workflow

Interrogate

Workflow

Tools

Settings

- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
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- F2323 - 00-01-12-13 - Video Pres...
- F2332 - 00-01-12-22 - Video Pres...

Crop Settings

Size Width Height

Preset Sizes X1 X2 X3 X4

X

Y



OK Cancel

Output to BMP

FORMAT

VIDEO

- AVI
- FLV
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- MOV
- MP4
- WMV
- MKV
- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic Advanced

Execute Workflow

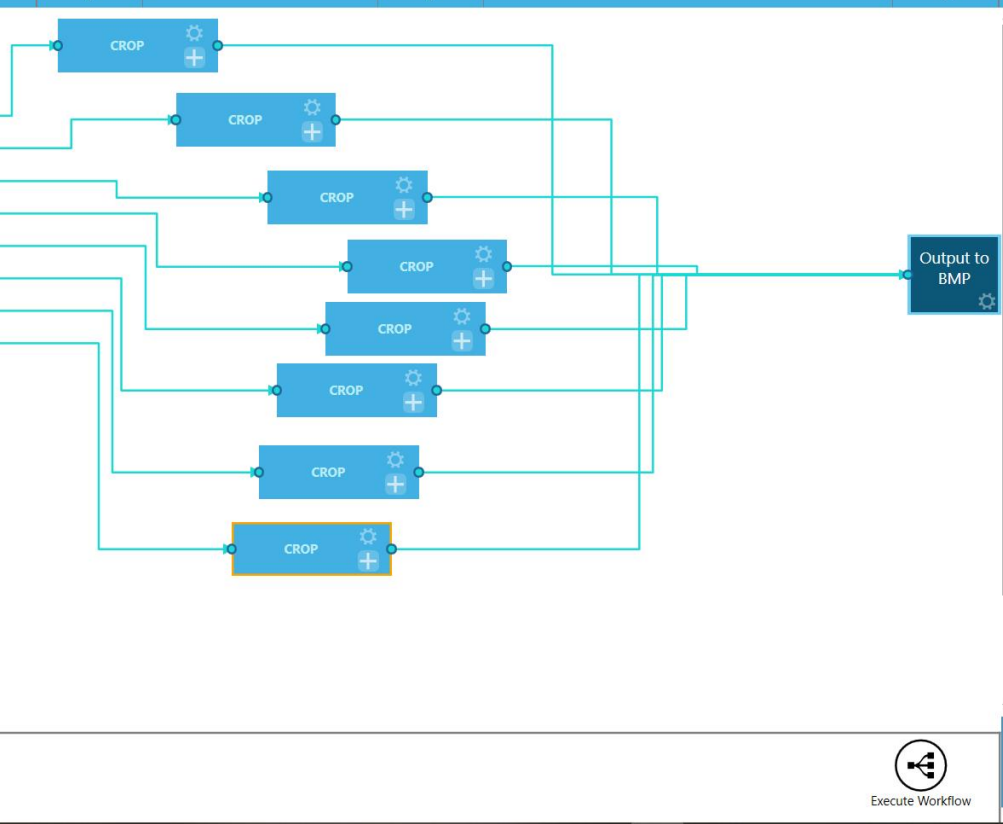
Interrogate

Workflow

Tools

Settings

- F1907 - 00-00-58-16 - Video Pres...
- F2013 - 00-01-02-03 - Video Pres...
- F2122 - 00-01-05-22 - Video Pres...
- F2162 - 00-01-07-02 - Video...
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FORMAT

VIDEO

- AVI
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- Avid MXF
- Custom

AUDIO

- WAV

IMAGE

- BMP
- JPEG
- PNG
- TIF

Integration

Basic

Advanced



Execute Workflow

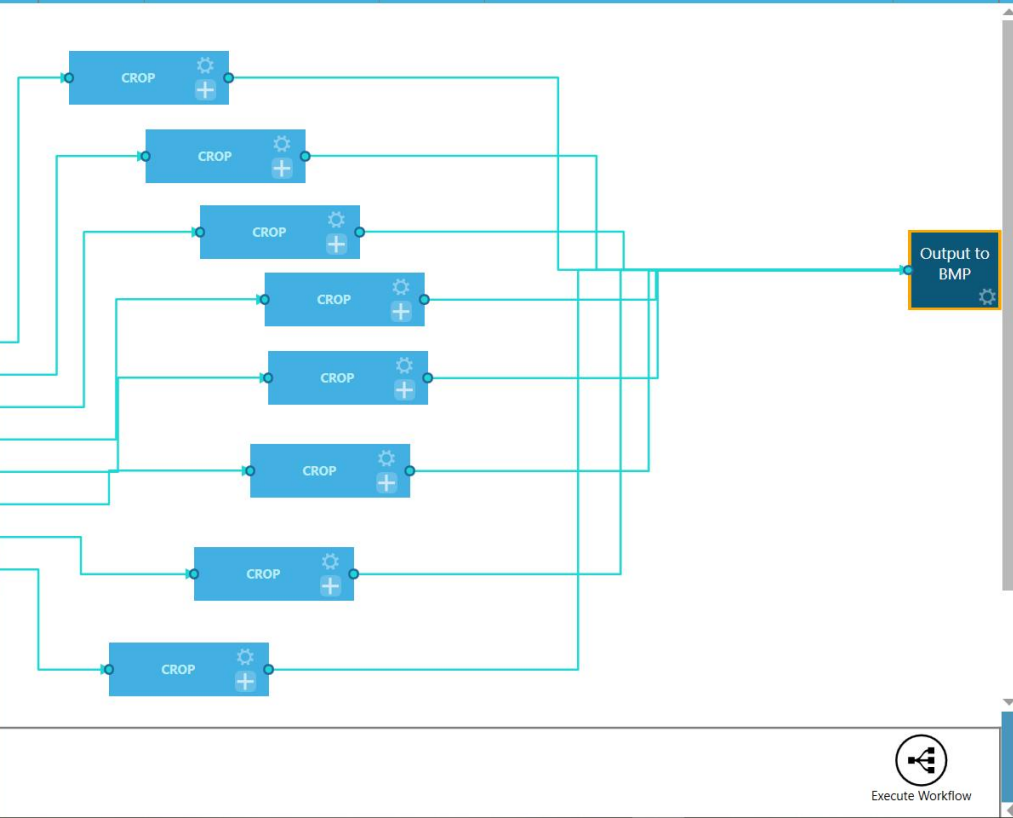
Interrogate

Workflow

Tools

Settings

- F2013 - 00-01-02-03 - Video Pres...
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FORMAT

VIDEO

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Integration

Basic

Advanced

Execute Workflow