Investigative Activity: DVR Analysis Review
Activity Date: February 23, 2022
Activity Location: BCI - Richfield
Authoring Agent: SA Matthew Armstrong #146

Narrative:

On Friday, January 7, 2022, Ohio Bureau of Criminal Investigation Special Agent (SA) Matt Armstrong (Armstrong) obtained a search warrant through the Summit County Common Pleas Court for a ZOSI Digital Video Recorder, Model: ZR08MM, SN: ASJ20070601991 (Matrix Item #34). It was recovered from the scene of the officer-involved shooting. It was believed to belong to James Williams and contain information relevant to the officer-involved shooting.

On January 7, 2022, at approximately 1242 hours, SA Armstrong executed/served the aforementioned search warrant by submitting the DVR and a copy of the search warrant to the BCI Cyber Crimes Unit (CCU) for analysis.

On February 23, 2022, SA Armstrong received the results of the analysis from CFS Natasha Branam (Branam). A copy of the forensic analysis report has been attached to this report. The data extracted from the device was stored on an external 1 TB hard drive in a folder titled, “Attachment C.” It has been placed in the BCI SIU case file as Reference Item M.

SA Armstrong reviewed the content in the folder titled, “Attachment C,” and noted the following:

It contained the following folders and documents as depicted below:

Each folder contained four additional folders, labeled “CH1, CH2, CH3 and CH4.” These folders represent each camera/channel connected to the DVR system. Within each folder were numerous...
AVI files labeled by date and time. There were 3,724 video files associated with channel 1; 3,326 video files associated with channel 2; 1,765 video files associated with channel 3; and 814 video files associated with channel 4.

SA Armstrong reviewed CFS Branam’s analysis and conducted a cursory review of the video files. CFS Branam determined the date and time recorded on the video files was approximately 12 hours and 50 minutes ahead of actual time. The calculation was based on the known time of the shooting incident which was January 1, 2022, at approximately 0007 hours; however, the timestamp on the video file indicated it was January 1, 2022, at 1257 hours.

A total of 17 videos were identified as being the most relevant to this investigation. They were associated with each camera connected to the DVR and were provided to the Ohio Organized Crime Investigations Commission (OCIC) for additional analysis. The following summary provides details regarding the cameras and the relevant videos. For details regarding a review of the video footage, refer to the report related to the review of the OCIC video production.

**Channel #1**

The video camera labeled “CH1” captured footage of 10th Street in front of the residence. The camera was mounted under the roof of the porch and the lens faced west.

The folder labeled “CH1” contains the following relevant video files:

The videos most relevant are the first video titled, “CH1_2022-01-01_124101_2022-01-01_125507_ID09460,” and the second video titled, “CH1_2022-01-01_125510_2022-01-01_125704_ID09461.”
**Channel #2**

The video camera labeled “CH2” was mounted on the southwest corner of the residence, near the porch roof, and the lens faced west. It captured footage of the driveway on the west side of the residence.

The following video files were determined to be most relevant:

<table>
<thead>
<tr>
<th>Video Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH2_2022-01-01_123107_2022-01-01_125837_ID09466</td>
<td></td>
</tr>
<tr>
<td>CH2_2022-01-01_125840_2022-01-01_130128_ID09467</td>
<td></td>
</tr>
<tr>
<td>CH2_2022-01-01_130128_2022-01-01_134231_ID09468</td>
<td></td>
</tr>
</tbody>
</table>

**Channel #3**

The video camera labeled “CH3” was mounted on the southwest corner of the residence, near the porch roof, and the lens faced east. It captured footage of the front porch area.

The following video files were determined to be most relevant:

<table>
<thead>
<tr>
<th>Video Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH3_2022-01-01_123107_2022-01-01_125837_ID09466</td>
<td></td>
</tr>
<tr>
<td>CH3_2022-01-01_125840_2022-01-01_130128_ID09467</td>
<td></td>
</tr>
</tbody>
</table>
| CH3_2022-01-01_130128_2022-01-01_134231_ID09468 | (6 minutes and 44 seconds) depicts the

**Channel #4**

The video camera labeled “CH4” was mounted on the southwest corner of the residence, near the porch roof, and the lens faced northwest. It captured footage of the fenced-in area on the west side of the residence.
The following video files were determined to be most relevant:

The first video titled, “CH4_2022-01-01_123804_2022-01-01_124922_ID09421,” contains footage of the

Each of the remaining videos contains footage of

The sixth video contains footage of the

Reference Items:

   Item M: 1 TB external hard drive containing data extracted from electronic devices.

Attachments:

   2022-02-19 Analysis of Items 32, 34 & 67 - Cell Phones & DVR
On January 7, 2022, Special Agent Matthew Armstrong of the Ohio Bureau of Criminal Investigation received warrants to search the contents of a mobile phone and a DVR. On January 18, 2022, Special Agent Charles Moran of the Ohio Bureau of Criminal Investigation received a warrant to search the contents of a mobile phone. These items were to be analyzed for evidence relating to the crimes of Having Weapons while Under Disability, Using Weapons while Intoxicated, Unlawful Transaction in Weapons, Tamper with Evidence, Murder, Voluntary Manslaughter, Involuntary Manslaughter, and Reckless Homicide regarding the death of James Williams.

Submitted Items:

032 – Mobile Phone – Apple iPhone 11 Pro Max – A2161
034 – DVR – ZOSI – ZR08MM
067 – Mobile Phone – Samsung Galaxy Note10+ – SM-N975U1

Details:

Item 32: Item 32 is an Apple manufactured mobile phone model A2161 (iPhone 11 Pro Max). The International Mobile Equipment Identity (IMEI) number associated with Item 32 is 352844113136126 and the serial number is G6TD23S5N70G. Item 32 has an advertised internal storage capacity of 64 GB and is not capable of additional storage. Item 32 was already in Airplane mode to suspend wireless communications. Item 32 was connected to a forensic tool capable of obtaining a file system extraction from the device. The extraction was then loaded into Cellebrite Physical Analyzer, a software package that converts the data to an easily readable format.

Item 32a: Item 32a is a T-Mobile branded Subscriber Identity Module (SIM) card bearing
the Integrated Circuit Card Identifier (ICCID) 8901260193797782181.

**Item 34:** Item 34 is a ZOSI manufactured DVR model ZR08MM bearing the serial number ASJ20070601991.

**Item 34a:** Item 34a is a Hitachi manufactured hard disk model HDS721050CLA662 bearing the serial number JP1570HR2SAP3K. Item 34a has a maximum storage capacity of approximately 465.8 GB. The creation of a duplicate bitstream image yielded the MD5 hash value cc5cc673285c8eaafbedd50ddc962c25.

**Item 67:** Item 67 is a Samsung manufactured mobile phone model SM-N975U1 (Galaxy Note10+). The IMEI number associate with Item 67 is 359301100573780 and the serial number is RF8N627L6KN. Item 67 has an advertised internal storage of 256 GB and is capable of additional storage through the use of a micro Secure Digital (SD) card. Item 67 contained a SIM card with the ICCID 8901260191747229774. Item 67 did not have additional storage. Special Agent William Conn extracted the data from Item 67 and provided Computer Forensic Specialist Natasha Branam the extraction files. The extractions were then loaded into Cellebrite Physical Analyzer, a software package that converts the data to an easily readable format.

**Findings:**

**Item 32:** The Apple ID associated with Item 32 is marquettajns@gmail.com. The owner name associated with Item 32 is Marquetta Williams. **Attachment A** contains one (1) Cellebrite UFDR file. In order to view the content of the UFDR file double-click the CellebriteReader.exe and the UFDR will auto populate. Once the Cellebrite Reader open the content can be examined and any additional reports can be generated. **Attachment B** contains one (1) Axiom portable case file for Item 32’s text messages/chats. In order view the content of the Axiom portable case file double click the “OpenCase.bat” file. Once the Axiom portable case is open the content can be examined and any additional reports can be generated.

**Item 32a:** The phone number associated with Item 32a is 330–974–2504.

**Item 34a:** All video files were exported from Item 34a Channels 1–4 with the time frame of December 25, 2021 – January 1, 2022. These video files are appended for review as **Attachment C**. It is necessary to note that Item 34a's date and time appears to be inaccurate. The date and time is approximately twelve (12) hours and fifty (50) minutes ahead based on the time of the incident. The incident occurred on January 1, 2022 at approximately 0007 however the time recorded on Item 34a is January 1, 2022 at approximately 1257.

**Item 67:** The phone number associated with Item 67 is 330–974–5528. **Attachment D** contains one (1) Cellebrite UFDR file. In order to view the content of the UFDR file double-click the CellebriteReader.exe and the UFDR will auto populate. Once the
Cellebrite Reader is open the content can be examined and any additional reports can be generated.

**Conclusion:**

**Attachments A – D** can be found upon the Toshiba portable drive (provided by the agency), provided for further review by the case investigator.

A copy of the Attachments will be maintained in the case file.