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Home Town of Henry Ford

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July 19, 2017

Gus Burns
MLive Detroit
FBURNS@mlive.com

RE : FREEDOM OF INFORMATION ACT REQUEST
June 28, 2017
POLICE RECORDS
Our Control No. A17-0527

Dear Mr. Burns:

Your request for records has been received and reviewed. As a result, please be advised as follows:

1. Your request for an internal investigation and attendant documents is denied. The records are exempt from disclosure pursuant to MCL 15.243(1)(t)(ix) and relevant case decisions.

You have a right to challenge this denial by submitting a written notice of appeal to the Dearborn City Council or by starting a lawsuit to compel disclosure. Should you prevail, you will be entitled to have reasonable attorney fees, costs, and disbursements assessed against the City of Dearborn, as ordered by the court. If the actions of the City of Dearborn have been determined to be arbitrary and capricious, you may be awarded, in addition to actual damages, punitive damages not exceeding \$1000.00.

2. Your request for documents addressing "the status of the video and/or audio related to the pursuit and shooting of Matthews" has been granted. The document is attached.

Very truly yours,

LAURIE M. ELLERBRAKE
Deputy Corporation Counsel
FOIA Coordinator

LME/klf

POLICE DEPARTMENT – INVESTIGATIVE DIVISION



TO: CHIEF RONALD HADDAD *Chief Haddad*
FROM: LIEUTENANT RONALD BEGGS
SUBJECT: L3 SYSTEM – VEHICLE #43
DATE: 08/16/2016

Chief Haddad,

Attached is the memo drafted by Cpl. Urbanik summarizing the efforts at recovering video, diagnosing system failures, and correcting issues related to Dearborn police vehicle #43 which was used by Cpl. Christopher Hampton on 12/23/2015.

After extensive efforts by L3 engineers and Dearborn Police IT personnel to troubleshoot the cause of vehicle #43's L3 system failure it was determined that Cynergy, Dearborn PD's police vehicle upfitting and wiring vendor, improperly wired every Dearborn police vehicle's L3 system, contrary to L3's specifications which resulted in vehicle 43 and numerous other police vehicles experiencing L3 system failures.

Respectfully,

Lt. R. Beggs

Lt. R. Beggs #377

Personnel Named within Memorandum

Cmdr. David Robinson – Commander, Patrol Division

Lt. Stephen Renico – Administrative Lieutenant, Information & Technology Unit

Lt. Ronald Beggs – Officer in Charge, Detective Bureau

Sgt. Joseph Brehler – Officer in Charge, Information & Technology Unit

Sgt. Andrew Zelazny – Building & Fleet Management

Sgt. Andrea Danak – Evidence & Property Management

Cpl. Chris Urbanik – Information & Technology Unit

Cpl. Bradley Barbaza – Information & Technology Unit

Laurie Sabon-Ellerbrake – Deputy Corporation Counsel of Police Matters

D/Sgt. L. Drew – Special Investigation Detective (Michigan State Police)

D/Sgt. William Hart – Detective (Detroit Police Department)

Spencer Stowers – L3 Technical Support Engineer 1 Lead

Tim Russi – L3 Service Manager

Guy Bouakhong – L3 In-Car Engineer

Attachments

Excerpt from Official L3 Installation Guide..... Page 8
- Warning at the bottom of installation guide, page 14, explicitly indicates that L3 MDVR should not be wired to switched power (i.e., through a chargeguard, battery tender, etc.)

Official L3 Trip Report from March 1, 2016 – March 3, 2016 Pages 9-12
- Outlines findings, work performed, conclusions, and resolutions of on-site visit, as determined by L3 in-car engineer Guy Bouakhong

L3 MDVR Log File from Vehicle #43..... Pages 13-24

-12/23/15

Incident occurred.

At approximately 1240hrs, Cpl. Urbanik was contact by Sgt. Brehler and advised to respond to the scene to retrieve the compact flash (CF) card from Cpl. Hampton's patrol vehicle (Department Vehicle #43 – City Vehicle # 037-11). Cpl. Urbanik was told to retrieve the card and bring it back to the IT Unit for upload into the L3 system.

Once at scene, Sgt. Zelazny confirmed with Lt. Renico (per the order of Commander Robinson) that Cpl. Urbanik was to remove the CF card and relinquish custody of the card to Sgt. Danak for evidentiary purposes. At 1258hrs, Cpl. Urbanik removed the CF card (S/N CF207339) from the MDVR vault (S/N FB020754) in vehicle #43, in the presence of Sgt. Zelazny, following standard procedures. Standard procedures utilized for CF removal are as follows: 1) open MDVR vault door utilizing specialty key, 2) wait until warning message 'Don't remove CF yet!' clears from the L3 screen, 3) remove CF card, and 4) relock the MDVR vault. Once removed, the card was turned directly over to Sgt. Danak.

The IT Unit, Cpl. Urbanik and Cpl. Barbaza, worked to assist MSP investigator D/Sgt. Drew in reviewing and burning L3 MDVR footage. While reviewing videos from 12/23/15, the IT Unit observed that Cpl. Hampton's vehicle had successfully recorded and uploaded three videos; however, there was no footage captured after 12h27m00s on 12/23/15. Recognizing the possibility that there was a large influx of videos uploading from several vehicles which could take an unknown amount of time to upload, Sgt. Drew, Sgt. Danak, and Deputy Corporation Counsel Laurie Sabon-Ellerbrake agreed to let the system function overnight to ensure that all footage vital to the incident was ingested into the system. The CF card from vehicle #43 was locked inside the secured IT Unit office, inside the media reader on Cpl. Barbaza's desk, until Cpl. Urbanik took custody of it on the morning of 12/24/15.

-12/24/15

Cpl. Urbanik continued the review of footage from Cpl. Hampton's, and nothing was captured beyond what was revealed in the search on 12/23/15. Due to nothing being captured after 12h27m00s on 12/23/15, Cpl. Urbanik contacted L3 for technical support. L3 assigned technician Spencer Stowers and opened service ticket #001-00-205758.

Stowers asked Cpl. Urbanik to connect the CF card, utilizing an external media reader, to the L3 server in order to remotely diagnose the card's contents. After scanning the file structure, Stowers located a 300MB .QBX file (physical video file) with metadata indicating it was from 12h27m05s. Stowers advised that the possible cause of the error with the data was that the file did not finish writing correctly; therefore, he asked it be placed back into Cpl. Hampton's vehicle. Stowers indicated that if this procedure was done the file may close and wirelessly upload, following the system's automatic upload procedures. Per Lt. Renico, Cpl. Urbanik was authorized to place the card back into the MDVR in vehicle #43. Cpl. Urbanik did so, waiting inside the vehicle until the file uploaded wirelessly, and then removed the card following standard procedures.

Cpl. Urbanik returned to his office with the CF card and continued correspondence with Stowers. In reviewing the upload log, Stowers advised that the file in question was still corrupt, which is technical terminology for a file whose structure is improperly organized to a degree which makes the data inaccessible. He stated the footage finally ingested into the system, but ultimately uploaded a 0kb file (i.e., there was no footage). He advised that common reasons for such an issue are a failing CF card and/or a power spike within the MDVR; therefore, both were determined to be possible causes of the errors within the data. Stowers and other L3 support personnel were to be off until 12/28/15, due to the holiday, but he and Cpl. Urbanik made arrangements to continue recovery efforts on that date. Cpl. Urbanik secured CF card CF207339 in his locked desk drawer until Stowers returned.

-12/28/15

On 12/28/15, prior to talking with Stowers, Cpl. Urbanik was ordered by Lt. Beggs to relinquish custody of the CF card to Detroit Police Sergeant William Hart, and did so at 1050hrs in the presence of Lt. Beggs and Sgt. Brehler.

Since the CF card was released into Detroit PD custody, L3 was no longer able to analyze it. The only troubleshooting method remaining was to view the logs from the MDVR. Stowers was able to deduce from the logs that the MDVR in vehicle #43 suffered a massive failure at 12h27m05s on 12/23/15, which caused a fatal error and rendered the file, or any related footage, irrecoverable. The error within the MDVR lasted until 12h59m03s. Per Stowers, L3 has witnessed such errors before and most often the cause is a power spike. Stowers stated there is no way to determine the actual cause (i.e., determine if it was power related, from a failing memory card, etc.), but if it was a power spike that caused the issue with the MDVR he had no ability to pinpoint the origin of the surge. Stowers provided text file copies of the MDVR logs for vehicle #43, which illustrate the internal failure experienced by the MDVR. At this point, there was no other action Cpl. Urbanik and/or L3 technicians were able to take.

-1/8/2016

Stowers supplied an email outlining the troubleshooting steps attempted regarding the MDVR during the 12/23/15 incident. Within this email he reiterates the steps taken in trying to recover the footage and also notes the possible cause of the massive MDVR failure. He states the following information, which substantiates the possibility of a failing CF card and/or an electrical power spike being the root cause.

“As we started looking into this issue, we found that Car 43(DVRID: 004885) did indeed record logs up until the incident at 12:27PM on 12/23. We examined the logs and found a large string of @ symbols at 12:27 indicating a loss of logs and a potential DVR failure.”

“Our engineer also noted that he saw some CF card errors in the logs even before the incident possibly meaning that the CF card itself is corrupt.”

"Some other notable events in the logs before the incident show voltage drops to 10V meaning that there is a lack of power which can cause un-explainable issues with the DVR such as power loss or potential corruption of videos. Voltage drops can either indicate a dying car battery or potentially even the weather as we notice voltage drops with many northern departments when winter starts and the weather cool."

"Another possibility is that the CF card could be old and corrupted causing the video issue. This would also explain why we were not able to copy the video file off the card without error."

In his email, Stowers also provided proof to support that the removal of the CF card on the scene was not the cause of the loss of data.

"Theoretically, if a CF card were removed during recording, it absolutely could corrupt the video file, but it should not affect anything with logging. Logs are stored locally on the DVR and are independent of the CF card. This means that the error in logging was caused by the DVR and could not have been caused by the removal of the CF card, but, if the CF card was removed during the absence of logs when the DVR error occurred, it could potentially cause video corruption."

Lastly, Stowers outlines an additional possibility for data recovery:

"It is possible that we might be able to recover the video, but we would need to bring the CF card in house to our Maitland, FL office so that our engineers can attempt to recover and/or repair the video. Even with this done, since there was never a complete file or an actual triggered recording that we know about, the chances of recovering the video are very slim."

1/12/16 & 1/15/2016

While performing review of the L3 system, the IT Unit discovered several recording errors being reported from several different MDVRs. Many errors were found to be occurring with newly installed L3 Flashback 3 MDVRs. Due to the errors from newly installed devices, the IT Unit contacted L3 support for technical assistance.

L3 technical support advised that the issues may be with faulty SD memory cards which needed to be formatted before use; therefore, new cards were placed into the MDVRs. The IT Unit continued to monitor MDVR performance.

-1/25/2016

L3's Maitland, FL office received the CF card from Detroit PD and attempted data recovery using the physical card. Per Stowers, the CF card from vehicle #43 was given to a Tier 3 Engineer who copied the files from the CF card to a local machine, so the original data files would be preserved. Data recovery was performed; however, no footage was able to be recovered as playing a "300MB" file resulted in failure every time. L3 indicated that the file

finally ingested into their system, but was less than a kilobyte in size which indicates that nothing was recorded after the MDVR suffered the massive failure.

-1/26/16 -2/12/16

An audit of the L3 system revealed widespread issues with FB3 MDVRs. It was noted that between 2/1/16 - 2/7/16 there were 202 recording errors from 19 different MDVRs. A service ticket was pulled with L3, which was ultimately escalated to a higher tier engineer. His findings indicate that our vehicle outfitter may be wiring the systems improperly, as the logs from several of the problem vehicles were showing insufficient voltage and/or voltage spikes/drops. L3 Service Manager Tim Russi stated the following: "We highly recommend having the installer(s) come out to investigate the fleet as it appears that most issues reside around faulty wiring or insufficient power to the devices."

-2/15/16

In an attempt to gain expert insight into the MDVR problems, Cpl. Urbanik made a request of L3 to have an on-site visit from an L3 installation technician.

-2/17/16

L3 authorized an on-site visit for 3/1/16 – 3/3/16, requesting that our fleet installer (Cynergy) be present so they can explain their wiring methods and assist in troubleshoot any possible installation discrepancies.

-3/1/16 – 3/3/16

L3 sent an in-car installation specialist (Guy Bouakhong) to work on-site to remediate the MDVR issues. During the session Bouakhong thoroughly inspected the wiring configuration (trunk trays, fuse harnesses, etc.) and the physical condition (power pins/harness attached to rear of MDVR, leads/diodes from vehicle power sources, etc.) of all L3 components within each vehicle.

Throughout his 3 day visit, Bouakhong worked in tandem with our garage personnel (Charles Duncan) and installer personnel (Cynergy) to inspect 37 of our 50 fleet vehicles while on-site. Bouakhong made it priority to inspect all of the 19 vehicles listed in the original service ticket.

Bouakhong determined that every one of the 37 vehicles he inspected was wired incorrectly (MDVR power was wired contrary to the specifications of the official L3 installation guide), which posed potential threat to the integrity of the L3 recording data. Bouakhong instructed that we make the following change to all vehicles immediately in order to prevent future recording errors. Rewire the MDVR and get all L3 components away from the chargeguard. The switch power of the MDVR needs to be rewired, away from the chargeguard and onto a vehicle ignition source. When configured in such a manner, the MDVR will know the state of the vehicle [on/off], how to draw power, and when to initiate its designed shutdown processes. This wiring

arrangement is necessary to prevent data loss/errors (QBX failures, power failures and interrupted recordings), and to preserve the life of the MDVR and vehicle battery.

During this 3-day period, Bouakhong, Charles, and Cynergy personnel were able to rewire 24 MDVRs.

3/4/16 – 3/25/16

Cynergy personnel (Bill and Erich) rewired the remaining MDVRs, except for #43 which is being preserved as evidence.

3/5/16 – 3/18/16

Following the rewiring of the 24 vehicles, an exhaustive audit of the L3 system was conducted by the IT Unit. The audit revealed only 17 errors, all stemming from vehicles which had yet to be rewired.