Surveillance Impact Report

Avalex DVR & FLIR 380 HDc
San Diego Police Department

DESCRIPTION

The Avalex DVR is a helicopter-mounted device used to provide the department's Air Support Unit (ASU) the ability to record and playback audio, which includes police radio traffic, aircraft tower traffic, and internal communication between crewmembers (ICS), and imagery produced from the helicopter-mounted forward-looking infrared (FLIR) sensor during police-related incidents. The FLIR 380 HDc sensor is an externally mounted camera system that produces infrared and color images.

PURPOSE

The San Diego Police Department's Air Support Unit utilizes the Avalex DVR and FLIR 380 HDc on every patrol flight. The police helicopter responds to police-related incidents by either being requested via dispatchers, field personnel or can volunteer as available. The Tactical Flight Officer (TFO) operates the camera and recorder during the flight. The Avalex DVR records the image produced by the FLIR sensor. The Avalex DVR does not continuously record and must be manually turned on by the TFO while responding to a call.

The following events should be digitally recorded:

- Incidents that are of possible evidentiary value in criminal cases
- Special events, as requested by members of the department
- Any incident that will enhance the operation of the Police Department or contribute to future department training

LOCATION

The Avalex DVR and FLIR 380 HDc are mounted on SDPD aircraft. Only assigned crewmembers have access to operate the equipment during flight. The Air Support Unit operates out of ABLE Base at Montgomery Field. Only crewmembers assigned to the ASU have access to collected data via the Avalex DVR and FLIR 380 HDc sensor. Stored videos can only be accessed by crewmembers assigned to the ASU using a specific, password-protected department external drive located in a locked police facility not open to the public.

IMPACT

The use of both devices on police helicopters has a significant impact on law enforcement operations. The FLIR sensor allows police officers to detect and monitor color images and heat signatures from the air, which can be particularly useful in identifying suspects, finding missing persons and detecting criminal activity. The image seen can then be recorded via the Avalex DVR.

The use of both devices enhances law enforcement operations by providing officers with improved situational awareness, increased detection capabilities, and enhanced safety for both officers and the public. Both technologies are used in compliance with applicable laws and department policies, including those related to privacy and civil liberties.

MITIGATIONS

The collection, use, retention, or dissemination of collected imagery shall not be used to violate the Constitutional rights of any person or in any manner that would discriminate against any person based upon their ethnicity, race, gender, natural origin, religion, sexual orientation, or gender identity.

ASU crews do not record activity when not assigned to an incident and do not record everyday activity on the ground.

DATA TYPES AND SOURCES

The FLIR 380 HDc is turned on at aircraft start-up and will remain running during the flight. The Avalex DVR only records data in the "REC" position. Recorded videos are imagery created by the FLIR 380 HDc sensor and displayed on the monitor in front of the TFO. The Avalex DVR recorder is only activated when assigned to a police-related incident.

DATA SECURITY

All Digital Media Evidence (DME) or videos are regularly uploaded from the aircraft's SD card and stored on secured, password-protected external hard drives. The external hard drives are stored in a locked cabinet at ASU. Impounded videos are assigned an ABLE video recording number and stored on a secured, password-protected external hard drive. The video can only be accessed by utilizing a unique password. ASU is a locked police facility and not open to the public.

If an Avalex DVR needs repair, the internal drive will be cleared of any data before being sent to an outside vendor. The FLIR 380 HDc sensor does not have the ability to record or store any data.

FISCAL COST

ASU has four FLIR 380 HDc sensors. All were purchased with federal grant money. The newest FLIR 380 HDc sensor was purchased through UASI grant funds for $662,467. This unit is under warranty, and the other three are covered with a Service Maintenance Agreement (SMA) through Teledyne FLIR and paid for by the Police Department. The agreement cost is $44,000.00 per year per unit. The Department no longer retains information regarding the initial grant-funded purchase price of the older FLIR sensors.

The Avalex DVR has no yearly costs except when service or maintenance is required. Currently, SDPD has five Avalex DVRs. The newest Avalex DVR was purchased in 2014 for $6,125. The Department no longer retains information regarding the purchase price of the older DVRs.

THIRD PARTY DEPENDENCE

ASU is dependent on Teledyne FLIR for all service and repairs, including software and firmware updates. These are all covered under the SMA. As the manufacturer, they are the sole source for any service needed for the unit.

ALTERNATIVES

There are limited alternatives for the FLIR sensor and the Avalex DVR. ASU regularly evaluates new and upgraded equipment in the aviation industry. We have found that both technologies integrate well with each other, with SDPD aircraft, and with SDPD operational needs. Any changes in technologies often require extensive overhauling, re-cabling of aircraft and costly upgrades. Uniformity and standardization enhance safety and help mitigate risks associated with law enforcement aviation.

TRACK RECORD

The SDPD ASU is a leader in the law enforcement community nationwide. The technologies utilized by SDPD crews enhance both officer safety and public safety. ASU provides valuable assistance to first responders throughout the region. As one of only two manned aircraft units in San Diego County, the use of the police helicopter is crucial in covering the County of San Diego's 4300 square miles. Historically, we are first on scene approximately 50 % of the time, providing crucial, real-time information for officers below. The use of a police helicopter with the listed devices enhances the Department's response capabilities by providing the airborne perspective with timely updates from veteran police officers as crewmembers.

The imagery created by these surveillance technologies can be impounded and then used in criminal cases. Video proof of criminal activity, suspect behavior, or critical incidents is often crucial to successful prosecution.

PUBLIC ENGAGEMENT AND COMMENTS

On November 8, 2023, at 1800 hours, there was a publicly held meeting in all nine council districts in the City of San Diego. The following surveillance technologies were presented by the San Diego Police Department:

1. Avalex DRV and FLIR-HDc
2. WHOOSTER
3. MSABs Raven Mobile Triage Tool
4. MSABs XRY Mobile Forensic Data Recovery Software
5. National ICAC Data Systems
6. PENLiNK
7. Vigilant
8. Unmanned Aircraft Systems

There were five attendees in District 1. There were zero attendees in District 2. There were zero attendees in District 3. There were zero attendees in District 4. There were zero attendees in District 5. There were zero attendees in District 6. There were two attendees in District 7. There were two attendees in District 8. There were zero attendees in District 9. There was a total of one comment and two questions out of the nine attendees. There was one comment submitted to an online public comment form.

Comment #1:

These are all technologies that provide advanced safety to each and every citizen of our city. What I am not in favor of is the requirement that these presentations be held in nine locations throughout the City. Staffing so many locations with SDPD and San Diego Fire and Rescue personnel takes these critical First Responders away from their far more important jobs of keeping the City's citizens of San Diego safe. Our police and fire departments are already understaffed. This is a blatant misuse of our resources. Thank you.

Online Comment #1:

The policy is vague in which instances the deployment of aerial surveillance with no safeguards to prevent misuse of this technology. Without addressing these shortcomings, I cannot support the use of DJI Avata by San Diego PD.

Question #1:

Is the license plate reader data looking for specific cases and/or are all plates looked at to see if they fit a specific case?

Answer:

License plate readers can look for specific plates if they are involved in an active investigation. An investigator can upload license plate information into the license plate reader operating system and set an alert to notify the San Diego Police Department when the license plate is read. Investigators may upload license plate information into the license plate reader because the plate may be associated with a crime, a missing person, or an identified suspect. The SDPD Communications Division may dispatch officers to investigate a hit on a license plate reader entry. Dispatched officers will confirm that the license plate was identified by the reader correctly before any action is initiated.

Question #2:

I think it is very important that San Diego advances in technology but is also aware of some of the issues that come from having so many technologies. The questions that I have are in three phases. One has to do with lobbying from technology companies to government agencies. I sometimes have concerns over technology companies going to conferences and lobbying Fire Chiefs, Police Chiefs and many other officials during those conferences. How does the City protect itself through accountability on that?

The second is data analytics. I worked in data analytics before and one of the things that I do see is sometimes data analytics has missing information. How do we account for that through the data information that we are gathering that way we can make proper information when citizens don't report crimes that don't add up to the statistics?

The third is, what's going to happen next with all this technology?

Answer:

In terms of lobbying, there are a couple of different processes now in place. The Police Department had a process before the Privacy Advisory Board and a process that took place after. Each technology that goes forward is evaluated by Commanding Officers and personnel to see what need it fits or what mission it serves within the Police Department, Fire Department or whichever Department looks to that technology to solve a problem.

As that solution is suggested, there really is a robust process that begins with discussions throughout the various units and continues on. We look toward guidance and have an established technology process. We have significant in-house experts and a STAC Committee, Strategic Technology Alliance Committee, who look at how technology fits into the overarching goals of the City and ask questions like about their alignment. Are they repetitive in nature? How can we create efficiency and effectiveness? Then we move on and look at funding sources, purchasing and contracting, request for proposal, and what contracting needs to take place. An assessment

by Risk Management and an evaluation by the City Attorney's office is done. This process is to ensure that the technology serves the Department and ultimately the City as a whole. That then goes to our City Council members for a vote, depending on the dollar amount.

Overlapping that process is our Surveillance Ordinance process. In addition to the already established process we now notify the Privacy Advisory Board, complete community outreach, and complete Use Reports and Impact Reports.

People can lobby but Commanding officers are not making any decisions based on that lobbying group due to the established process.

There is a push being made by law enforcement, and with other City departments, to use data to make informed decisions. The office of the City auditor has stressed the need for the City to use data to make more informed decisions, and that is what we are consistently striving for and implementing.

The next part of this process calls for the Police Department to hear from the community. Each one of the technologies presented has a Use Report to accompany it. After these meetings, we take the Impact Reports along with any community feedback and forward them to the Privacy Advisory Board. The Privacy Advisory Board will assess the technologies, roundtable them, form subcommittees, and make recommendations to the City Council to consider.