Assignment 3

[CCJS 321 6981 Digital Forensics in the C](about:blank)riminal Justice System

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Minimal data can be obtained through a non-military surveillance drone. Most common drones used through local law enforcement can only capture video and photo data and are not set up for audio surveillance. Drones that are used by law enforcement are usually used their drones to survey and track a specific task, from surveilling a border area to keeping a look out for illegal immigrants crossing across the border; with this in mind, some drones also can record and capture inferred images and video when it's too dark to see or even use white hot imagery so that people or things will stand out from the background in a densely forested area with varying temperatures in the area. Images and video are primary data being stored/transmitted from an aerial reconnaissance drone. This information is sent via a data link to a terminal or hub from processing and storage. There are three ways information is processed for crewless aerial vehicles (UAV). The three processes are onboard only, onboard and live streaming, and live streaming only (Hini, 2018). The type of mission the drone crew conducts will dictate the data format, protocol, and storage solution needed for the mission. UAV's also store data that can be accessed for onboard diagnostics. This data would be the flight data recorded through the GPS on board and any flight logs the drone created during flight (if there was a malfunction or issue with any onboard systems). The onboard sensors will also keep records of altitude, air temperature, and other information necessary for the aircraft to operate. However, this information is usually kept onboard the aircraft and is not stored externally (Hini, 2018). From imagery to information logs on the flight and even GPS, data can be recorded by UAVs and stowed internally and externally of the aircraft.

Currently, the general public does not have direct access to drone footage taken by police departments. They are considered what some departments have claimed is a violation of privacy if they release the footage to the general public or allow others unrestricted access to the footage captured by drones. Some groups are fighting it in the courtrooms to have footage released by police drones to access what they are surveilling. There are ways to release drone data to the public by redacting sensitive information or blurring images to protect people's privacy that was not directly involved in the surveillance but happened to be bystanders caught on camera by the drone (Pascoe, 2022). There will come a time when the access will have to come up to lawmakers or the supreme court to decide on whether or not law enforcement drone footage should be available to the general public, but for now, it is a case by case bases depending on the local regulations and policies set forth by the states and local law enforcement agencies. Most departments also have procedures to protect the public's "reasonable expectation of privacy," including private businesses, residential backyards, and other areas considered an area of privacy as outlined in constitutional law. However, if a warrant is granted in these cases, the drone would be able to survey that area that is allowed under the warrant issued to the department (Pascoe, 2022).

In most cases, citizens do not realize they are even being surveilled by a drone and have no idea that their privacy is being recorded. That is why some groups around the United States are fighting to access this recorded information to ensure that people's rights are not violated. This can lead to issues for law enforcement agencies later down the road if they would like to start their own drone program.

Like most evidence, if gathered without a warrant, it would be admissible in court since it was obtained without permission from the courts. There have also been some states that have enacted laws surrounding the collection of data from drones and how they are used to collect data by local law enforcement agencies (McNeal, 2022). Some of the first legislatures were passed in Florida and Idaho, along with a few other states in 2013. This legislature has been passed to restrict the use of drones by the government to gather information via an uncrewed aerial reconnaissance vehicle but still allows other means of collecting private information using similar manned technologies (McNeal, 2022). A drone flying to survive an area usually has a warrant but does the purpose listed on the warrant. However, if that drone was flying a mission following a suspect and happens to catch another crime which is later found when overviewing the captured footage from the drone, the police department cannot use that footage to apprehend those suspects since that information that was collected was not obtained from a warrant (McNeal, 2022). Drone footage captured by law enforcement can also present a liability to the local government. Suppose that drone happened to violate a person's privacy rights. In that case, they could sue the department and the state for violations of their civil rights, which has been advocated by many privacy groups and has made state legislatures pass strict laws around drone use by police departments. There have been some laws passed by state legislators that have also regulated the airspace for the benefit of drones that have restricted and limited law enforcement the access and use of drones for investigations as well but still allow manned aircraft surveillance in the same data collection apparatus as what a drone would have the capabilities to do.

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