Surveillance Impact Report

DFR – Drone as First Responder Systems
San Diego Police Department

DESCRIPTION

Drone as First Responder (DFR) is a public safety program where small, unmanned aircraft systems (UASs), also called “drones,” are launched from strategic locations throughout the City to provide real-time situational awareness at an emergency scene before human first responders arrive. The system uses strategically placed, pre-positioned drones that can be dispatched within seconds, arriving on scene quickly and transmitting live video and data to command centers and field personnel. This allows incident commanders to "virtually" arrive first, improving officer and community safety and enabling better informed decisions and situational awareness for first responders.

DFR systems can provide high-definition Electro Optical (EO) video, Forward Looking Infrared (FLIR) spectrum commonly known as “thermal imagery,” the infrared spectrum commonly known as “IR,” “Night Vision,” or “Low-Light,” and Light Detection and Ranging (LIDAR), depending on the camera payload attached to the drone. Other payload options are loudspeakers to broadcast prerecorded or live audio, and lights to illuminate areas/subjects during times of darkness.

PURPOSE

DFR systems will be deployed by SDPD to improve officer and citizen safety, speed up response times, and help first responders and incident commanders make better-informed decisions by providing an aerial perspective and enhanced situational awareness. DFR will also record video while on scene that will be preserved as evidence.

DFR systems deployments will also allow incident commanders to evaluate the need for additional officers or determine that a reduced response from ground units is appropriate to free up valuable human resources.

LOCATION

DFR systems will be deployed throughout the City of San Diego in response to calls for service or requests for assistance from field units or investigative units. The DFR system docks will be installed at various secure City facilities throughout the City of San Diego. Primarily, the DFR system docks will be installed at police facilities. However, the need may arise to select other City facilities to better position the DFR’s for better response times where higher volumes of calls for service exist.

IMPACT

All DFR deployments will be related to a call for service through the Computer-Aided Dispatch (CAD) system.

DFR will only be deployed to specific events in response to a call for service and shall be for legitimate law enforcement purposes only.

Legitimate law enforcement purposes include, but are not limited to:

1. Providing remote aerial camera observation and imagery during dispatched incidents for safety and situational awareness.
2. Search and Rescue support for lost, missing, stranded persons, or suspects.
3. Providing aerial observation and imagery in support of fire response, all-hazard, disaster response and critical incidents.
4. Providing video digital media recordings in support of crime scene evidence collection and

mapping.
5. DFR pilot training.

The DFR Pilot manually controls the DFR camera system and activates the video recorder when the DFR system is on scene, and shall discontinue recording before departing the incident scene. During all operations, the DFR pilot is trained to make every effort to capture only visual imagery of the law enforcement contact or intended target of observation to protect the privacy of nearby uninvolved citizens and their property.

The SDPD's DFR Surveillance Use Policy safeguards civil liberties and civil rights. The uses and deployments of surveillance technology are not based upon discriminatory or viewpoint-based factors. The Department's use of surveillance technology is intended to support and benefit the communities of San Diego while minimizing and mitigating potential impacts on the civil rights and civil liberties of community members.

MITIGATIONS

The collection, use, retention, or dissemination of data 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.

The DFR systems pilot shall not activate the video recording function until the DFR system is on scene and shall discontinue recording before departing the incident scene. During all operations, the DFR pilot is trained to make every effort to capture only visual imagery of the law enforcement contact or intended target of observation to protect the privacy of nearby uninvolved citizens and their property.

DATA TYPES AND SOURCES

DFR systems can collect video in the visual spectrum, Forward Looking Infrared (FLIR) spectrum commonly known as "thermal imagery," and the Infrared spectrum commonly known as "IR," "Night Vision," or "Low-Light." These capabilities are dependent on the camera payload attached to the DFR systems.

While on scene during a law enforcement operation, during observation of a crime or in anticipation of a crime, the DFR pilot will manually activate the video recording capability of the DFR system in a similar manner to how a ground-based officer activates their Body Worn Camera during a contact. This captured video is regarded as Digital Media Evidence (DME) and is treated as evidence throughout the remainder of the operation until the DME is properly impounded and documented by the DFR pilot assigned to the operation.

All Digital Media Evidence (DME) captured on the DFR system is retained onboard the DFR system until it returns to its docking station. Upon arrival at the docking station, the DFR pilot in command of that flight will be responsible for transferring the DME to the Department's DME storage platform (e.g., evidence.com).

The DFR system also collects flight information data, including its own location, altitude, and flight time. This information does not contain any personal identifying information (PII) and is not considered DME. This information is included in the report that the DFR pilot will complete at the conclusion of each flight.

DATA SECURITY

All DME will be retained within the DFR system until the data is removed from the aircraft and uploaded to the Department's DME storage platform (e.g. evidence.com).

Other (non-PII) data that is recorded by the DFR system, including the UAS's location, altitude, and flight times, is remotely accessible only to the DFR pilot and DFR systems manager. Direct access to this information is password-protected and can only be accessed by designated DFR systems personnel. This information does not contain any critically vulnerable data, nor information that would violate an individual's civil rights or infringe upon their privacy. This information is included as part of the post-operation documentation report and is considered publicly accessible information and a layer of transparency documenting every DFR system operation.

Once DME has been impounded, data protection becomes the responsibility of the Property Unit or the Department's DME storage platform manager, and all such evidence is controlled and regulated by SDPD Procedure 3.02 – Impound, Release, and Disposal of Property, Evidence and Articles Missing Identification marks.

FISCAL COSTS

Initial Purchase Cost:

Initial cost estimates will not be available until the Request for Proposal (RFP) process has been completed.

Ongoing Costs

Ongoing cost estimates will not be available until the Request for Proposal (RFP) process has been completed.

Early estimated costs range from $50,000 to $200,000 per drone. However, pricing structures vary depending on whether the technology is purchased or leased, and on maintenance, warranty, and other associated costs (e.g., infrastructure or number needed, ext.), depending on vendor options.

Potential Sources of Funding

- Grant Funds
- Private donation (Managed through the San Diego Police Foundation)
- Special Funds (Asset Forfeiture Program)
- General Funds

THIRD PARTY DEPENDENCE

DFR Systems will require scheduled and unscheduled maintenance by vendor support staff. Prior to maintenance being conducted by the vendor support staff, all DME data will be removed from the DFR system.

ALTERNATIVES

The SDPD Air Support Unit (ABLE) responds to calls for service while on routine patrol and will respond on a call-out basis from their facility in Kearny Mesa at Montgomery-Gibbs Executive Airport. This alternative is expensive. The direct operating costs for an hour of flight time is approximately $800, not

including the personnel wages and fringe benefits for a crew of two (2) individuals. Additionally, staffing shortages and deploying from one centralized location would reduce response times as opposed to dispersed DFR systems locations and centralized control of the DFR systems.

The SDPD Small Unmanned Aircraft Systems (UASs) unit responds to requests for assistance at critical incidents, patrol calls for service and investigative unit requests for evidence collection. The UASs unit deploys from a centralized location in downtown San Diego. The UASs unit also has staffing shortages that limit their ability to respond, and their centralized location will result in extended response times.

TRACK RECORD

Drone as First Responders was pioneered in Chula Vista, CA. The Chula Vista Police Department has flown thousands of missions annually with average response times, often under 2 minutes. DFR has proven to be instrumental in reducing response times, increasing officer safety and situational awareness, and providing real-time information to officers and command staff to assist in making crucial decisions in a timely manner. Drone as a first responder is widely used throughout the country and has become a force multiplier for many agencies, regardless of agency size.

In December 2024, The San Diego Association of Governments (SANDAG) published a Criminal Justice Evaluation Report titled "Chula Vista Community Survey 2024: Drone as a First Responder Addendum." The Executive Summary stated, "The DFR program received strong support, with over 90% of respondents backing all its current activities, despite only 34% being aware of the program."

PUBLIC ENGAGEMENT AND COMMENTS

On July 22, 2026, at 1500 hours, there was a public meeting held in all nine council districts in the City of San Diego. The Community Data Sharing technology was presented by the San Diego Police Department during the meeting.

There were three attendees in District 1. There were zero attendees in District 2. There were zero attendees in District 3. There were thirteen attendees in District 4. There were two attendees in District 5. There were zero attendees in District 6. There were four attendees in District 7. There were zero attendees in District 8. There was one attendee in District 9.

There was a total of 12 comments and questions out of the 23 attendees.

See Attachment A of all comments and questions submitted during the meeting.

Additionally, there were 153 comments submitted to an online public comment form:

- Surveillance Technology Feedback Form For the June 22, 2026 Community Meeting – Results

See Attachment B for all comments submitted online.

The meeting was video recorded and can be viewed at:

- https://www.youtube.com/watch?v=zUmQerbqkk0

The following comments and questions specific to DFR technology were posed by the public during the meeting:

COMMENT #1: I'm concerned about flock technology and I'm almost assuming that this response for

drones is also Flock technology.

QUESTION #1: Is that correct?

RESPONSE: When it comes to Drones as First Responders, no vendors have been identified.

QUESTION #2: We don't know who would be using this. We also don't know whether or not it could be coordinated with what we currently have as cameras on the streets. Correct. The drones could be coordinated with the cameras on the streets if you use Flock technology. What the drone is seeing is reflected back to your headquarters and can be shared with your online system for your cameras.

RESPONSE: Drones would be separate from the cameras that we currently have deployed in the city. The drones would have cameras attached to them that would transmit back to our real-time operation center.

COMMENT #1 CONTINUED: My main concern about this type of camera is that the Department of Homeland Services is pushing this drone technology. And I am afraid that when the elections come, if our president doesn't like the results that he will have an executive order violating all the constitutional laws that we are supposed to be following and that this drone technology could be used.

COMMENT #2: I was really wanting to get an answer to an earlier question regarding smart glasses especially but smart glasses, drones, underwater remote operated vehicles tools. Who are the manufacturers and who is tasked and paid to interpret and analyze all of the massive amounts of data acquired from these including the ALPR cameras.

Our city spends an exorbitant amount of money at the expense of citizens who are now paying to visit Baloa Park and other public places experiencing increased parking costs throughout the city. I have no confidence that the data acquired is not limited to legal police activity. We now know that police can access our social security numbers.

The following comments <u>specific to DFR technology</u> were submitted online:

<u>Entry #68</u> – (Referencing all technologies, except UROV and Smart Glasses)
I live in San Diego and have been the victim of theft. The police wouldn't do anything because they couldn't identify the perpetrator. I would love to see more resources, including technology like drones and APLR systems, deployed to actually stop crime. It's the 21st century, use the tools we have to detect and prevent crime. I wholeheartedly support APLR used to identify get away drivers and drones as first responders to stop crime in progress.

<u>Entry #105</u> - (Referencing all technologies, except UROV)
Our family strongly supports these tech tools for the Police Department to utilize in helping to solve crimes, especially the license plate readers. We've seen them useful in identifying stolen cars, finding kidnappers, burglary suspects, etc. The drones could also help pinpoint the locations of fireworks and lasers being pointed at planes. It's common sense to ask businesses and residents for their camera footage to be used to add to video surveillance sources. We are short on officers and these tools will provide added help in keeping our communities safer.

<u>Entry #19</u> - (Referencing all technologies, except UROV and CDS)
ALPR, DFR, and Smart Glasses open a can of worms into a 24/7 police surveillance state. There's instances across the country of cops misusing FLOCK/License plate reader info to illegally stalk partners, women, and exes.
The same could happen with the DFR program. It sounds nice in theory, but it can be easily abused by police

to surveil whomever they want and even in private homes and businesses.

San Diegans should not have to live with big brother watching from police glasses, cameras scattered across the city tracking every movement, and even drones tracking them.

These technologies would infringe upon San Diegans right to privacy, by placing the entire city under a police surveillance state.

And what is all this technology going to cost the taxpayers when we are already in a deficit?

I do not support the selected technologies.

Entry #36 - (Referencing all technologies)
While new technologies offer exciting possibilities, we must carefully consider their potential impact on privacy, civil liberties, and democratic values. Several emerging technologies raise significant concerns that warrant careful scrutiny and robust public debate:

Automated License Plate Recognition (ALPR) Data: The widespread deployment of ALPR technology raises serious concerns about mass surveillance and the erosion of individual privacy. The constant tracking of individuals' movements creates a chilling effect on freedom of movement and association.

Underwater Remotely Operated Vehicles (ROVs): The deployment of ROVs in our waterways raises serious questions about surveillance and data ownership. Unregulated access to underwater environments could lead to privacy violations and potential misuse of sensitive information.

Smart Glasses: While smart glasses hold potential benefits, their ability to constantly capture visual data presents a significant threat to personal privacy. Who owns this footage, how is it stored and protected, and under what circumstances can it be accessed? Clear guidelines and regulations are crucial to prevent misuse and protect individual autonomy.

Drone as First Responder (DFR): While drones could offer valuable assistance in emergency situations, their use by law enforcement agencies necessitates careful consideration. Lack of transparency and accountability in drone deployment could lead to unwarranted surveillance and escalation of situations, potentially violating civil liberties.

Counter UAS Technology (CUAS): While CUAS systems aim to mitigate the risks posed by unauthorized drones, they raise concerns about who controls these powerful tools and their potential for misuse. Could CUAS be used to suppress dissent or unfairly target specific individuals or groups?

Community Data Sharing (CDS): While data sharing can facilitate community initiatives, it's crucial to define the scope of shared information, its intended use, and safeguards against misuse. Unregulated data sharing could lead to profiling, discrimination, and erosion of privacy.

We must approach these emerging technologies with caution, ensuring they are developed and deployed responsibly. Robust regulations, transparent oversight mechanisms, and strong protections for privacy and civil liberties are essential to mitigate the potential risks and

harness the benefits of these powerful tools. And to date - this city government has not shown the ability to use many technologies responsibly or given actual thought on how it may negatively impact citizens.

Entry #18 - (Referencing all technologies, except UROV and CUAS)
All cameras using AI to track people, their vehicles, and any further motion are a threat to our society and rights. A first responder drone will not help in any meaningful sense or situation. All cameras that use facial recognition are designed to oppress the people.

Entry #19 - (Referencing all technologies, except UROV and CDS)
ALPR, DFR, and Smart Glasses open a can of worms into a 24/7 police surveillance state. There's instances across the country of cops misusing FLOCK/License plate reader info to illegally stalk partners, women, and exes.

The same could happen with the DFR program. It sounds nice in theory, but it can be easily abused by police to surveil whomever they want and even in private homes and businesses.

San Diegans should not have to live with big brother watching from police glasses, cameras scattered across the city tracking every movement, and even drones tracking them.

These technologies would infringe upon San Diegans right to privacy, by placing the entire city under a police surveillance state.

And what is all this technology going to cost the taxpayers when we are already in a deficit?

I do not support the selected technologies.

Entry #37 - (Referencing all technologies, except UROV and CUAS)
Some of these technologies readily enable abuse against law-abiding citizens, with few safeguards in place. Holding mass data on citizens exposes them to personal safety breaches like stalking, both from within the department by rogue officers (it does happen, sadly) and from without by cybercriminals, and the more that these technologies and databases are linked together, the more exposure points there are for a data breach, and the more bad things there are that a data abuser can do to civilians (https://www.eff.org/deeplinks/2025/12/effs-investigations-expose-flock-safetys-surveillance-abuses-2025-review). Thank you for taking the time to listen to my input, I appreciate the difficult work you are doing to keep the city safe.

P.S. If you implement the Drone as First Responder tech, it would be a good idea to make it obvious that it is a first responder drone with a prominent paint job of some sort. It is hard to tell if an unmarked drone is on official duties, or if it is just a rude pilot harassing people by flying too close to them.

Entry #55 - (Referencing DFR, CUAS, and ALPR)
We do not need or want more privately owned autonomous services invading the privacy of san diego residents. computer systems and corporations cannot be adequately held accountable for data leaks and/or misuse of private information, especially in a day and age where these systems are so poorly understood by our geriatric federal government.

Remove Flock and Axom and any other AI, drones, ALPR, or otherwise automated surveillance that should never be used on our citizens.

Entry #108 - (Referencing all technologies, except UROV and DFR)
The expansion of constant surveillance on citizens in public places is absolutely dystopian. We don't know how our data is being used or protected. Furthermore, as I understand it this technology has only helped

advance 361 cases, which means nearly 99% of the collected data was of no relevance. This is shameful to see happening in the United States. The only expansion I would support is to phase out the loud, expensive police helicopter patrols and pursuits and replace them with drones.

Entry #57 - (Referencing DFR, CDS, and ALPR)
This would be an absolute waste of taxpayer money on technology that will serve to violate the rights of every citizen.

Entry #144 - (Referencing Smart Glasses, DFR, and ALPR)
Spending tax dollars on dystopian Big Brother mass surveillance tools instead of housing, libraries, the arts, and community programs is a grevious insult to the people of San Diego.