



MEMORANDUM

TO: Floyd Mitchell,
Chief of Police

FROM: Omar Daza-Quiroz, Lieutenant of Police
OPD, Bureau of Investigations

SUBJECT: Unmanned Aerial System (UAS
or Drone) – 2024 Annual Report

DATE: March 8, 2025

Background

Oakland Municipal Code (OMC) 9.64.040: Surveillance Technology “Oversight following City Council approval” requires that for each approved surveillance technology item, city staff must present a written annual surveillance report for Privacy Advisory Commission (PAC). After review by the PAC, city staff shall submit the annual surveillance report to the City Council. The PAC shall recommend to the City Council that:

- The benefits to the community of the surveillance technology outweigh the costs and that civil liberties and civil rights are safeguarded.
- That use of the surveillance technology cease; or
- Propose modifications to the corresponding surveillance use policy that will resolve the concerns.

The PAC voted unanimously to recommend City Council adoption of OPD’s Departmental General Order (DGO) I-25: Unmanned Aerial System (UAS) Use Policy on May 14, 2020. The City Council adopted Resolution No. 88454 C.M.S. which approved OPD’s DGO I-25. OMC 9.64.040 requires that, after City Council approval, OPD provide an annual report to the Chief of Police, the Privacy Advisory Commission (PAC), and the City Council.

Lieutenant Omar Daza-Quiroz is currently the UAS Program Coordinator and has been since 2022.

2023 Data Points

- A. A description of how the surveillance technology was used, including the type and quantity of data gathered or analyzed by the technology:

From the “Surveillance Impact Use Report for the Unmanned Aerial System (UAS)”

An Unmanned Aerial System (UAS) is an unmanned aircraft of any type that is capable of sustaining directed flight, whether preprogrammed or remotely controlled (commonly referred to as an unmanned aerial vehicle (UAV) or drone, and all of the supporting or attached components designed for gathering information through imaging, recording, or any other means.

UAV are controlled from a remote-control unit (similar to a tablet computer). Wireless connectivity lets pilots view the UAV imagery from a birds-eye perspective. UAV pilots can leverage control unit applications to pre-program specific GPS coordinates and create an automated flight path for the drone. (This is mainly conducted for mapping purposes or known preflight destinations. OPD

has not utilized this feature as it does not have mapping software. Similar to previous years, OPD still does not have a mapping software, but has utilized UAVs to assist in crime scene video documentation. If funding becomes available, OPD would consider and request mapping software to assist in crime scene documentation of large-scale crime scenes (e.g., homicides, shootings, fatal collisions.)

UAV have cameras so the UAS pilot can view the aerial perspective. UAS proposed for use by OPD, and any other outside law enforcement agency, use secure digital (SD) memory cards to record image and video data; SD cards can be removed from UAV after flights to input into a computer for evidence uploading.

Total deployments of UAS technology in previous years, to include 2024 as follows:

<u>Year</u>	<u>Total UAS Deployments</u>
<u>2022</u>	<u>132</u>
<u>2023</u>	<u>220</u>
<u>2024</u>	<u>126</u>
<u>Total</u>	<u>478</u>

In 2024 the OPD, with the assistance of outside law enforcement agencies, deployed UAS technology 126 (one hundred and twenty-six) times. This is a decrease of 94 (ninety-four) deployments and missions from prior year 2023, which saw 220 (two hundred and twenty) deployments and missions. This is almost the same number we saw in 2022. OPD’s UAS Program went live in March of 2022. Of the 126 deployments and missions in 2024, four (4) deployments and missions were conducted by Alameda County Sheriff’s Office (ACSO); there were no other agencies which deployed or assisted OPD in UAS deployments in 2024. As stated in the 2022-2023 Annual Reports, at times ACSO, or neighboring agencies with similar UAS Programs, will offer their services prior to being requested¹, or at times OPD UAS pilots are not on duty, unavailable or have insufficient resources (UAS fleet or personnel) to properly deploy. However, all agencies will only deploy if requested or approved by an OPD commander and if policy requirements are met.

OPD Electronic Services Unit (ESU) created a spreadsheet in 2022 to track and monitor all UAS deployments, including outside agency deployments. In 2022, Lieutenant O. Daza-Quiroz sent a department wide email mandating all commanders who deploy UAS to author documentation, similar to the protocol for use of the Emergency Rescue / Armored Vehicles. The process allowed for appropriate documentation. In 2023, commanders distributed Military Equipment Utilization (MEU) notifications via email when any militarized equipment was utilized, which included UAS deployments from OPD or outside agencies. This made it easy to track any outside agency deployments that ESU was not on scene for. ESU was also directed to manually input their deployments into a Microsoft Teams Excel Spreadsheet in order to keep property documentation.

Table 1 below details OPD, ACSO, and other outside agencies deployments in 2024 and compares it to 2022-2023 deployments.

Table 1: 2023 OPD & Outside Agency UAS Deployments

Incident Type	2022	2023	2024	2024 Outside Agency
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¹ ACSO has access to OPD radio channels and can monitor; ACSO personnel at times can respond to a call for service.

Mass casualty incidents	0	0	0	0
Disaster management	1	0	0	0
Missing or lost persons	3	5	0	0
Hazardous material releases	0	0	0	0
Sideshow events	4	3	5	0
Rescue operations	5	3	0	0
Training	4	15	10	0
Barricaded suspects	23	49	19	1
Hostage situations	2	0	0	0
Armed suicidal persons	0	1	0	0
Arrest of armed and/or dangerous persons	60	70	48	3
Scene documentation for evidentiary or investigation value	2	3	2	0
Operational pre-planning	0	0	0	0
Service of high-risk search and arrest warrants	22	71	38	0
Exigent circumstances	0	0	0	0
Total	132	220	122	4

All four outside agency deployments occurred within the City of Oakland and described below:

- 17Jan24 – 6436 Foothill Blvd; Officers were dispatched to a report of a brandishing of a firearm. Upon their arrival subjects fled into the building and into the yards. ACSO responded with exterior and interior drones and three subjects were detained. No firearms were located. Multiple stolen vehicles were located inside the location and ACRATT was notified.
- 26Jan24 – 9924 D St; Officers responded to a report of a person shooting a firearm. Suspect fled into a nearby residence and Officers located a firearm in the street. ACSO responded and deployed exterior and interior drones, and the suspect surrendered.
- 13Feb24 – 10327 International Blvd; Officers were dispatched to a commercial burglary. Upon arrival 15-20 subjects fled the business and offices detained one suspect who was armed with a firearm. Another suspect pointed a firearm at the officers and fired multiple rounds in the air and fled the scene. ACSO responded and deployed an interior drone to search the business. No other suspects were located.
- 17May24 – Fruitvale Av & International Blvd; Officers responded to a report of a vehicle collision where the suspect fled the scene armed with a firearm. ACSO responded and deployed an exterior drone during a yard search. The suspect was arrested, and a firearm was located.

B. Whether and how often data acquired through the use of the surveillance technology was shared with outside entities, the name of any recipient entity, the type(s) of data disclosed, under what legal standard(s) the information was disclosed, and the justification for the disclosure(s):

Outside Law Enforcement Agencies (ACSO) assisted in four (4) UAS deployments in Oakland in 2024. Because of this, the UAS aircrafts that they used captured and stored data. If requested, these agencies provide OPD with the recordings and the outside agencies stored the information in their logs per their respective policy requirements. No

outside entity made any requests to OPD to share any of OPD’s data acquired using OPDs UAS, nor did OPD share any data acquired through OPDs UAS with outside entities.

- C. Where applicable, a breakdown of what physical objects the surveillance technology hardware was installed upon; using general descriptive terms so as not to reveal the specific location of such hardware; for surveillance technology software, a breakdown of what data sources the surveillance technology was applied to:

The technology was never installed upon fixed objects.

- D. Where applicable, a breakdown of where the surveillance technology was deployed geographically, by each police area in the relevant year

Table 2 below details the Police Areas where UAS were deployed in 2022-2024.

Table 2: OPD UAS Deployment by Police Area

Deployment by Area	Total Deployments in 2022	Total Deployments in 2023	Total Deployments in 2024
Area 1	21	39	24
Area 2	8	11	10
Area 3	21	30	13
Area 4	26	34	13
Area 5	27	39	22
Area 6	24	40	29
Outside City*	5	26	15
Total*	132	219	126

** Deployments outside the city consist of assistance provided by OPD UAS to local agencies, or provided to assist OPD enforcement activities that took place outside the city of Oakland.*

- E. A summary of community complaints or concerns about the surveillance technology, and an analysis of the technology's adopted use policy and whether it is adequate in protecting civil rights and civil liberties. The analysis shall also identify the race of each person that was subject to the technology’s use. The Privacy Advisory Commission may waive this requirement upon making a determination that the probative value in gathering this information to evaluate the technology’s impact on privacy interests is outweighed by the City’s administrative burden in collecting or verifying this information and the potential greater invasiveness in capturing such data. If the Privacy Advisory Commission makes such a determination, written findings in support of the determination shall be included in the annual report submitted for City Council review

No community complaints or concerns were communicated to staff.

Table 3 below provides race data related to 2022-2024 UAS deployments.

Table 3: Race of Detainees Connected to OPD UAS Deployments in 2022

	Race – Female 2022	Race – Female 2023	Race – Female 2024	Race – Male 2022	Race – Male 2023	Race – Male 2024
Black	27	74	30	81	104	84
Hispanic	16	36	14	42	95	35
Asian	0	7	2	13	17	3
White	4	4	1	4	12	6
Other	1	10	3	12	17	7
Total	48	131	50	152	245	135

OPD will know the race of detainees connected to UAS deployments. However, the race of all individuals involved in many UAS deployments is not known (e.g., cases such as armed and dangerous or barricaded suspects, where no suspect is ever discovered or detained). There could also be UAS uses for missing persons where the person’s identity is not entirely known nor discovered (there were zero deployments related to missing persons in 2024). The number of detainees in 2024 are similar to 2022 as the number of deployments were also similar. 2023 had 220 deployments/missions while 2022 had 132 and 126 deployments/missions respectfully.

F. The results of any internal audits, any information about violations or potential violations of the Surveillance Use Policy, and any actions taken in response unless the release of such information is prohibited by law, including but not limited to confidential personnel file information

The OPD Electronic Services Unit (ESU) maintained a list of all UAS deployment logs for record and tracking purposes. This list was reviewed periodically for accuracy and for assessment of any policy violations. All OPD commanders, per policy, were directed to send communications to ESU for any UAS use – similar to OPD protocols for use of Emergency Rescue Vehicles (ERV) / Armored Suburban. No policy violations were found, and no corrective actions were warranted nor needed in 2024. There was also zero in 2022-2023.

G. Information about any data breaches or other unauthorized access to the data collected by the surveillance technology, including information about the scope of the breach and the actions taken in response.

There were no identifiable data breaches or unauthorized access during the year of 2024, similar to that of 2022-2023.

H. Information, including crime statistics, that helps the community assess whether the surveillance technology has been effective at achieving its identified purposes.

Similar to 2022-2023, in reviewing the 2024 data associated with UAS deployments it was apparent that the unit has been effective at achieving safer outcomes for members of the community, officers, and those we have contacted during investigations.

During this review period OPD had a decrease of 94 deployments and or missions from prior year, which totaled 126. Specific records were kept tracking the efficacy of those deployments with the following results:

- Comparative to 2023, during a deployment in 2024, 83% of the time UAS were involved in locating and or detaining a subject as opposed to 70%. This is an increase of 13%. In 2022, OPD UAVs saw a 75% chance.
- Again, similar to previous years, arrest or armed and/or dangerous persons, service of high-risk search and arrest warrants and barricaded suspects saw the highest deployments.
- UAS deployments continue to provide aerial views and interior clearance for police officers, which in turn help mitigate use of force and allow for quicker resolutions. It is this real-time intelligence that allows for negotiation when subjects are located hiding and allows for mitigated use of force incidents. Not all subjects are always hiding when a UAV is overhead or searching an interior dwelling. However, the real time intelligence allows officers to understand the layout of the dwelling or have a clear understanding of subjects emerging from dwellings and surrendering. In 2022, 200 subjects were located by the UAS. In 2023, this number increased to 376 subjects being located. 2024 saw a decrease back down to 185, which is on par with 2022. It is important to note that all subjects captured through UAV deployment cameras were arrested but it highlights the importance of real-time intelligence and providing additional technology to police officers.
- 66 firearms were recovered from the scenes where UAS were deployed. The firearms were either located during a search of the flight path a suspect took, observed being discarded by suspect(s) during surround and callouts in rear yards or located by officers during searches of areas.
- All police areas (Area 1 – Area 6) had UAS deployments. Areas 1, 5 and 6 the most deployments while Areas 2, 3 and 4 had the least number of deployments/missions.
- In 2022 canine deployments decreased by nearly 20% (192 requests and 35 deployments). In 2023, the number decreased by 42% with 157 canine requests and 20 deployments. In 2024, we had 184 canine deployments with 48 deployments (two of those resulting in bites).

As previously discussed in 2022-2023 annual reports, the number of deployments were the highest for persons who were considered armed and/or dangerous. 2024 was no different with these criteria being the number one deployment reason and seeing 48 deployments. Because of the ability to deploy UAS, responding emergency personnel were better able to create an environment of de-escalation. Absent the UAS, officers would typically resort to calling out the Entry Team, deploying a canine, or physically clearing the area with a search team for the subject(s). All these options have potential for chance encounters resulting in the possibility of force escalation. These options decrease safety for everyone involved to include the community, subjects being searched for and the officers.

The number of deployments in each category were similar to that of 2022, which saw a similar total number of deployments across the board. A shortcoming can be the lack of usage for missing persons, sideshow and crime scene documentation. ESU has advised Watch Commanders that UAS can be requested during missing person search, especially during at risk missing persons. Additionally, there existed more than five incidents of sideshow throughout the city of Oakland in all of 2024 and Commanders also understand that UAS can be deployed for such incidents. As far as criminal follow-up investigations as they relate to homicides, shootings and fatal hit and run collisions, investigators have been advised to reach out to their respective commanders if they believe the deployment of a UAV can assist in video recording of the incident through aerial view.

A sample below outlines just a few of the successful UAS deployments that provided officers increased safety and conditions for de-escalation:

1. *OPD VCOC units located a robbery and shooting suspect in the parking lot of 2166 E 27th St. The suspect and his associates attempted to evade police detention. A UAV was deployed, providing real-time visual intelligence that firearms were discarded into nearby yards. The UAV also provided overwatch and cover, aiding officers in apprehending two suspects and recovering three firearms. (RD#24-002525)*
2. *San Leandro Police Department tracked an armed carjacking vehicle from Oakland to the City of Oakland. Four suspects exited the stolen vehicle near High St. and Porter St. and fled in a secondary vehicle. The secondary vehicle was disabled using spike strips, prompting three occupants to flee on foot while one remained inside. Three of the fleeing suspects were later arrested, while the fourth barricaded himself in a backyard. A UAV was deployed, locating the suspect lying on the ground, leading to his apprehension. (RD#24-017688)*
3. *Berkeley Police Department engaged in a pursuit of a vehicle involved in an armed robbery, which fled to Oakland. The suspects crashed near Harrison St. and Pearl St. and fled into a nearby backyard. UAVs were deployed to search for armed suspects and provide overwatch for the search team. One suspect was located and apprehended in connection with the armed robbery. (RD#24-021444)*
4. *Officers located an occupied armed carjacking vehicle, which was covertly followed by plainclothes officers and OPD Air Support (ARGUS). When the driver exited to enter a store, he was detained. Meanwhile, the passenger moved into the driver's seat and fled in the vehicle. Three remaining occupants fled on foot near E 32nd St. and Randolph Ave. One suspect barricaded himself in a nearby yard. UAVs were deployed to locate and apprehend the suspect. (RD#24-032010)*
5. *OPD specialized units executed a high-risk search warrant at an illegal gambling operation near 1400 17th Ave. The occupants were suspected of involvement in multiple recent shootings. A surround-and-call-out operation was conducted, resulting in nine individuals being detained—eight of whom were found barricaded in an attic. UAVs provided aerial intelligence and cover for officers. Interior UAVs and the Avatar ground robot were deployed to search the residence before officers entered. A pole camera was used to survey the attic layout and monitor suspect movements. (RD#24-050408)*
6. *Officers responded to a reported shooting inside a residence near 2200 82nd Ave. The victim reported that their neighbor discharged a firearm following a physical altercation. When officers attempted to negotiate a peaceful surrender, the suspect barricaded himself inside, threatening to kill both himself and officers if police attempted entry. A full tactical operations callout was initiated. UAVs and ground robots were deployed to clear and search the residence. ESU operators located the suspect hiding in a bedroom, leading to his safe apprehension. (RD#24-060405)*
7. *Police specialized units assisted patrol officers in locating an armed carjacking vehicle minutes after the initial dispatch call. Plainclothes officers followed the vehicle from 38th St. and West*

St. to Fairmount Ave. and Frisbie St., where two suspects fled on foot into yards behind the 2900 block of Broadway. A perimeter was quickly established with patrol officers. An exterior UAV detected a heat signature in a creek behind 2900 Broadway. Officers confirmed the heat signature to be one of the suspects, who was safely taken into custody. A firearm was recovered along the suspect's flight path. (RD#24-060835)

8. *OPD Ceasefire officers located a suspect who had previously fired at plainclothes officers. With assistance from the U.S. Marshals, a search and arrest warrant was executed at the suspect's associated residence. UAVs were deployed to search the interior, where the suspect was ultimately located and taken into custody. (RD#24-063749)*

As UAS deployments increase in response to demands from calls for service, the OPD expects continuous positive outcomes from the use of this technology.

- I. Statistics and information about public records act requests regarding the relevant subject surveillance technology, including response rates.

There was one UAS PRR request in 2024. There was one in 2022 and zero in 2023.

- PRR 24-8854 (2024)
- PRR 22-3024 (2022)

- J. Total annual costs for the surveillance technology, including personnel and other ongoing costs, and what source of funding will fund the technology in the coming year

The UAS unit currently has 1 Lieutenant, 2 Sergeants and 17 Officers. These members engage in 240 hours of training annually to ensure compliance with Department policy and FAA regulations. The member's training is conducted during their regular scheduled shifts, when possible, minimizing costs. Offices not assigned to specialized units and working patrol will normally have to backfill for themselves, which can create overtime costs. Adjusting for top rate salary, the training is estimated to cost \$282,621.60 (for 17 top step officers), \$38,361.60 (for 2 sergeants) and \$22,185.60 (for 1 Lieutenant).

- K. Any requested modifications to the Surveillance Use Policy and a detailed basis for the request.

In 2023 there were slight modifications to the DGO I-25 due to Assembly Bill (AB) 481 which required California law enforcement agencies to obtain approval of a Military Equipment Use Policy. City of Oakland Police Commission and OPD reviewed the policy and provided minor edits and additions. The Police Commission and Public Safety approved the changes.

OPD is committed to providing the best services to our community while being transparent and instilling trust through constitutional and procedurally just policing. This report follows these OPD commitments. OPD hopes that this report helps to strengthen our trust within the Oakland community.

Respectfully submitted,

Floyd Mitchell, Chief of Police,
OPD, Office of Chief of Police

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Reviewed by,

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