



# AGENDA REPORT

**TO:** Edward D. Reiskin  
City Administrator

**FROM:** Susan E. Manheimer  
Interim Chief of Police

**SUBJECT:** Unmanned Aerial Systems (UAS)  
Privacy Policy

**DATE:** November 19, 2020

City Administrator Approval 

Date: Dec 3, 2020

## **RECOMMENDATION**

**Staff Recommends That The City Council Adopt A Resolution Approving The Oakland Police Department (OPD) DGO I-25 Unmanned Aerial System (UAS) Use Policy And Surveillance Impact Report.**

## **EXECUTIVE SUMMARY**

Unmanned Aerial Systems (UAS) commonly known as “drones” offer to significantly improve the effectiveness and safety of police operations, by providing useful aerial situational awareness. This technology has already been used with many law enforcement (LE) agencies to save lives in emergency situations and support criminal investigations, especially where armed individuals may be present. LE agencies have successfully used UAS to locate missing persons, especially in more remote areas. The situational awareness UAS provides has also become an important tool for large events (e.g. sport events, parades, and festivals). Additionally, UAS offer LE a more efficient system for documenting vehicular collision as well as crime scenes.

OPD does have access to Alameda County Sheriff’s Office (ACSO) UAS; however, an OPD UAS program would provide greater value for a variety of conditions officers regularly face. Oakland’s Surveillance Technology Policy, established in Oakland Municipal Code (OMC) 9.64 requires City Council approval for new and existing surveillance technology. OMC 9.64 also requires that city staff shall submit a surveillance impact report (SIR) and surveillance use policy (SUP) to the Privacy Advisory Commission (PAC) for its review. OPD presented its draft versions of the SUP and SIR to the PAC at the January 8, 2020; February 6, 2020; and March 5, 2020 meetings. The PAC commissioners discussed concerns regarding the following topics (discussed in detail in the Analysis and Policy Alternatives Section below):

- *Where would UAS be flown?*
- *What are the basic privacy mitigations for OPD use of UAS?*
- *What are the data storage, access, and security protocols?*
- *For what types of events should OPD be authorized to use UAS?*
- *What are situations where UAS is NOT allowed per UAS Use Policy?*
- *How will OPD document each UAS use?*

City Council  
December 15, 2020

- *What will be OPD's UAS deployment authorization?*
- *Should UAS be allowed at "Large or Special events?"*
- OPD staff and the PAC were able to address these issues and revise the SIR and SUP accordingly; the PAC voted unanimously to recommend OPD's SUP version 7 (**Attachment B**) to Council for adoption at the May 14, 2020 Special Meeting of the PAC. Staff recommends that the City Council adopt the resolution accompanying this report which would accept the OPD's DGO I-25 UAS Surveillance Use Policy (SUP).

## **BACKGROUND / LEGISLATIVE HISTORY**

UAS technology has already proven to enhance both situational awareness as well as officer safety for law enforcement (LE) agencies. UAS have already been adopted by many LE agencies to assist in the safe capture dangerous criminal suspects. UAS can support first responders in hazardous incidents that would benefit from an aerial perspective. Responding to violent crime in Oakland often requires officers to face risks to their safety – in addition to the clear risks faced by members of the public when violent crime occurs.

In 2019 Oakland saw 75 homicides, 3,334 aggravated assaults (284 with firearms), 189 rapes, and 2,789 robberies. OPD relies on policies and procedures to mitigate the possibility of injury to bystanders or officers, when pursuits of criminal suspects occur. Technology such as UAS can play a vital role in further mitigating these omnipresent dangers, by providing a greater view into the immediate surroundings of crime scenes and active pursuits.

Searches for armed and dangerous suspects are more effective and controlled with UAS support; an armed suspect can be hiding in a tree or on a roof. LE can respond accordingly and more safely when provided with this critical information (see SIR **Attachment A**, Section #10 "Alternatives Considered" for more information on how UAS compares to alternatives for situational awareness). More informed responses also lead to less injury and less uses of force.

LE agencies have successfully used UAS to locate missing persons, especially in more remote areas – as well as for rescue missions. UAS is also being used during disasters and during any hazardous material release. The situational awareness UAS provides has also become an important tool for large events (e.g. sport events, parades, and festivals); the aerial view provides information that would otherwise require a much larger deployment of LE personnel to maintain the same level of public safety support. Additionally, UAS offer LE a more efficient system for documenting vehicular collision as well as crime scenes.

Smaller UAS can be equipped with a loud speaker to communicate (e.g. hostage situations/providing verbal commands and directions to the subject). As Bryan Smith, APSA<sup>1</sup> Safety Program Manager explains in "Working Together: Deploying Manned and Unmanned Aircraft Safely and Successfully" in Air Beat<sup>2</sup>-July-August 2019 Issue, "What if we (LE) had the ability to coordinate tasking, splitting the airborne support responsibilities between manned (helicopter) and unmanned crews so one could watch the perimeter while

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<sup>1</sup> APSA = Airborne Public Safety Association

<sup>2</sup> The Official Journal of the Airborne Public Safety Association

another searches below treetop level in the courtyards and windows and a third went head of the entry team?" In the same AirBeat Issue, Charles L. Werner, Chairman, National Council on Public Safety U.S. explains in "Public Safety Drones: The Past, Present, and Future," "Virginia's public safety UAS team in York County used one of its drones to fly into a hostage situation to determine when police could safely enter." The article also details how the Alameda County Sheriff's Office (ACSO) is using its UAS' for traffic incidents, tactical operations, and search and rescue.

## **ANALYSIS AND POLICY ALTERNATIVES**

OPD does have access to ACSO UAS. However, OPD must make a formal request for each use. This approval process can take several hours when situations require immediate action. Circumstances may proceed without any time for advance-planning and conditions may involve individuals believed to be armed and dangerous. With an OPD dedicated UAS Program, OPD can better respond to such dangerous situations where UAS offers useful intelligence while mitigating officer danger and allowing for quicker deployment options – by having a separate UAS program; a standalone OPD UAS program will allow for these much quicker deployment options.

### ***Alternatives to UAS***

The UAS SIR (***Attachment A***), Section #10, "Alternatives Considered," explains that "OPD could continue the status quo by relying on its partnership with the Alameda County Sheriff's Office (ACSO) for UAS access, but that OPD will be able to more efficiently deploy UASs when needed in priority situations, by having its own UAS program.

The Alternatives Section also considers helicopter usage. UAS can never replace the helicopter for missions such as active vehicle pursuits, sustained flight, active observations and communications from the helicopter. However, the much lower costs of UAS means that they can potentially be deployed in more situations where the cost of maintaining helicopters is too prohibitive. UAS can also provide utility in ways beyond the capabilities of much more expensive helicopters:

- Support during fire and emergency operations – UAS can be flown in lower elevation positions such as near fires to locate possible trapped people where helicopters cannot fly; infrared cameras on UAS can also be used to identify heat spots for fire department attention.
- Finding suspects – UAS can be used to find dangerous violent crime suspects, by being flown in locations such as to view roof tops, in trees, or between buildings.
- Crime and vehicle collision scene investigation – UAS can be used to collect evidence that may be difficult to reach from the ground; UAS can easily be used to provide maps and 3D images within minutes using 3rd party software specifically designed to produce such maps and 3D images using photographic data captured by the UAS; this data is also valuable during court testimony.

### ***UAS and Oakland's Surveillance Ordinance***

Oakland's Surveillance Ordinance No.13489 C.M.S., adopted by the City Council on May 15, 2018, adds Chapter 9.64 to the Oakland Municipal Code (OMC) covering policy areas related to surveillance technology. OMC 9.64.030.1.C requires City Council approval for new and existing surveillance technology. Additionally, OMC Section 9.64.020.1 requires that, "Prior to seeking City Council approval for existing city surveillance technology under Section 9.64.030 city staff shall submit a surveillance impact report (SIR) and surveillance use policy (SUP) to the Privacy Advisory Commission (PAC) for its review at a regularly noticed meeting. The SIR and SUP must address the specific subject matter specified for such reports as defined under 9.64.010."

OPD staff first presented a draft UAS Use Policy "Department General Order (DGO) I-25: Unmanned Aerial Systems" and the SIR to the PAC at multiple PAC meetings: January 8, 2020; February 6, 2020; March 5, 2020. The DGO I-25 SUP covers several relevant areas required by OPD as well as the Surveillance Ordinance, including:

- Purpose;
- Authorized Use;
- Data Collection;
- Data Access;
- Data Protection;
- Data Retention;
- Public Access;
- Third Party Data Sharing;
- Training;
- Auditing and Oversight; and
- Maintenance

The SIR covers the following areas as required by the Surveillance Ordinance:

- Information describing the system and how it works;
- Purpose of the technology;
- Locations where, and Situations in which the technology may be used (along with area crime data);
- Privacy Impact of the technology;
- Mitigations to prevent privacy impacts;
- Data Types and Sources;
- Data Security;
- Costs;
- Third Party Dependence;
- Alternatives Considered; and
- Track Record of Other Entities

The PAC commissioners shared several concerns and questions regarding the technology:

***Where would UAS be flown?***

The Federal Aviation Administration (FAA) sets strict flight regulations for all UAS users, including for law enforcement. FAA guidelines allow for OPD be certified as a “public aircraft operator” and to self-certify agency UAS pilots and UAS’. These options allow for OPD to use systems under 55 pounds, for flying at or below 400 feet above ground level. Absent an emergency, law enforcement is restricted from using UAS to fly over or near the following locations: Stadiums and Sporting Events; Near Airports; and (non-Oakland) and Rescue Operations

***What are the basic privacy mitigations for OPD use of UAS?***

Operators and observers shall not intentionally record or transmit images of any location where a person would have a reasonable expectation of privacy (e.g. residence, yard, enclosure). OPD will only use UAS for specific missions rather than operating continuously. When the UAS is being flown, operators will take steps to ensure the camera is focused on the areas necessary to the mission and to minimize the inadvertent collection of data about uninvolved persons or places. Operators and observers shall take reasonable precautions, such as turning imaging devices away, to avoid inadvertently recording or transmitting images of areas where there is a reasonable expectation of privacy.

The PAC also reviewed the data retention policy (five days unless the recording is needed for a criminal investigation, or the recording is related to an Internal Affairs Investigation).

OPD UAS operators shall not intentionally record or transmit images of any location where a person would have a reasonable expectation of privacy (e.g. residence, yard, enclosure, place of worship, medical provider’s office). Operators and observers shall take reasonable precautions, such as turning imaging devices away, to avoid inadvertently recording or transmitting images of areas where there is a reasonable expectation of privacy.

***What are the data storage, access, and security protocols?***

The program coordinator shall develop procedures to ensure that all UAS SD card data intended to be used as evidence are accessed, maintained, stored and retrieved in a manner that ensures its integrity as evidence. These procedures include strict adherence to chain of custody requirements. All UAS SD card data will be secured in a manner (e.g. lockbox) only accessible to ESU personnel. All evidence from UAS SD cards shall be submitted to the OPD Evidence Unit for safe storage.

***For what types of events should OPD be authorized to use UAS?***

The Use Policy explains that UAS may only be used for the following specified situations:

1. Mass casualty incidents (e.g. large structure fires with numerous casualties, mass shootings involving multiple deaths or injuries);
2. Disaster management;
3. Missing or lost persons;
4. Hazardous material releases;

5. Sideshow events where many vehicles and reckless driving is present;
6. Rescue operations;
7. Training;
8. Hazardous situations which present a high risk to officer and/or public safety (DGO I-25 **Attachment B** provides more specific information of these situations).

***What are situations where UAS is NOT allowed per UAS SUP?***

The UAS SUP restricts OPD from using UAS in the following ways:

1. UAS shall not be equipped with any weapon systems.
2. UAS and remote control units shall not transmit any data except to each other. Data shall only be recorded onto removable secure digital (SD) cards.
3. UAS shall not be used for the following activities:
  - a. For any activity not defined by “Authorized Use” Part 3 above.
    - a. Conducting random surveillance not related to an authorized operation;
    - b. Targeting a person based on their individual characteristics, such as but not limited to race, ethnicity, national origin, religion, disability, gender, clothing, tattoos, and/or sexual orientation when not connected to actual information about specific individuals related to criminal investigations.
    - c. For the purpose of harassing, intimidating, or discriminating against any individual or group.
    - d. To conduct personal business of any type.

***How will OPD document each UAS use?***

The Use Policy now explains that OPD, under purview of the Electronic Services Unit (ESU), will record details from each UAS deployment onto a flight log which shall be submitted to ESU, and kept on file for Federal Flight Administration (FAA) records purposes. Flight logs will provide all mission deployment details for each flight.

***What will be OPD’s UAS deployment authorization?***

Deployment of an OPD UAS shall require the authorization of the incident commander, who shall be of the rank of Lieutenant of Police or above. Incident commanders of a lower rank may authorize the use of a UAS during exigent circumstances. In these cases, authorization from a command-level officer shall be sought as soon as is reasonably practical.

***Should UAS be allowed at “Large or Special events?”***

The use of OPD UAS at “large or special events” was the one type of use case where OPD and the PAC could not come to a complete agreement. This type of use is not listed as an authorized use in DGO I-25: Unmanned Aerial Systems – version seven (**Attachment B**) which the PAC voted unanimously to recommend to Council for adoption at the May 14, 2020 Special Meeting of the PAC. OPD still believes that such a use would support OPD operations – staff explained that UAS would only be used during large or special events where there was concern that the events could lead to serious crime or violence. However, the PAC expressed concern that this type of UAS deployment could be used to hinder free speech during large events such as protests. OPD understands the concerns raised by the

PAC and is completely prepared to operate a UAS program that aligns with the SUP recommended by the PAC.

### **FISCAL IMPACT**

The SIR (***Attachment A***) provides detailed information about the costs for a potential OPD purchase of UAS. OPD anticipates an initial purchase of approximately \$50,000 for one large UAS with strong cameras and flight range as well as four smaller systems for more localized use with lesser camera technology.

### **PUBLIC OUTREACH / INTEREST**

No public outreach was conducted other than the required posting on the City's website

### **COORDINATION**

The Office of the City Attorney and Budget Bureau reviewed this report for legality.

### **SUSTAINABLE OPPORTUNITIES**

***Economic:*** There are no economic opportunities associated with this report.

***Environmental:*** There are no environmental opportunities associated with this report.

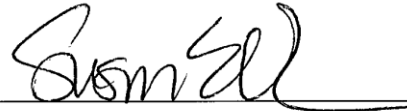
***Race and Equity:*** All Oakland residents and visitors have a right and an expectation of privacy. Additionally, OPD strives to ensure the public safety of all Oakland residents and visitors. OPD has developed its UAS Use Policy and Surveillance Impact Report with the goals of utilizing the technology to provide aerial information so that officers can better respond to a variety of potentially dangerous situations. This technology provides opportunities for less immediate police-public encounters where police use of force may occur, and where the lives of officers and the public may be in danger. All Oakland residents and visitors benefit from these efforts to support public safety and policing while mitigating encounter that endanger lives.

**ACTION REQUESTED OF THE CITY COUNCIL**

Staff Recommends That The City Council Adopt A Resolution Approving The Oakland Police Department (OPD) DGO I-25 Unmanned Aerial System (UAS) Use Policy And Surveillance Impact Report.

For questions regarding this report, please contact Michael Chung, Sergeant, at 510-882-8433.

Respectfully submitted,



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Attachments (2):

**A:** *UAS Surveillance Impact Report*

**B:** *DGO I-25 "Unmanned Aerial System (UAS)" version 7 approved by PAC*