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D.P.D. 568 (rev. 06/21)

**INTER-OFFICE MEMORANDUM
PROFESSIONAL DEVELOPMENT BUREAU**

Date: June 19, 2024

To: Chief of Police James E. White (Through Channels)
Subject: **SUBMISSION OF SPECIFICATION REPORT – SKYDIO UNMANNED AERIAL SYSTEM**
From: Deputy Chief Mark Bliss, Professional Development Bureau

Attached for your review and approval is the Specification Report for the Skydio Unmanned Aerial System. This report is to comply with the Community Input Over Government Surveillance (CIOGS) Ordinance. The Specification Report has been reviewed and approved by Director Robert Millender, of the Department of Innovation and Technology (DoIT) and Director Stephen Lamoreaux of Crime Data Analytics. This report needs approval from the Chief of Police and the Board of Police Commissioners before submission for a public hearing on the matter.

Additionally, once approved, I recommend that Metropolitan Division take over and exercise operational control and authority of the program.

For: Chief Michael A. Chamberlain
MARK BLISS
Deputy Chief
Professional Development Bureau

MB/kv

Attachments:

- 1. Specification Report - Skydio Unmanned Aerial System
- 2. Manual Directive 102.2 - Bias-Based Policing
- 3. Manual Directive 101.11 - Record Retention Schedule
- 4. Manual Directive 101.12 – Data Sharing, Retention and Dissemination

APPROVED
JUN 27 2024
[Signature]

APPROVED
JUN 27 2024
[Signature]
SECOND DEPUTY CHIEF
OFFICE OF LEGAL ADVISOR

APPROVED
JUN 29 2024
[Signature]
CHIEF OF POLICE
OFFICE OF THE CHIEF

RECEIVED BY: DC HA (HAND DELIVERED ON 6-28-24)

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Specification Report – Skydio Unmanned Aerial System (Drone)

Sec. 17-5-453: Surveillance Technology Specification Reports.

- (a) The Police Department certifies that the information contained in this document reflects the complete and accurate proposed use of the surveillance technology.
- (b) This report has been approved by the Chief of Police and received the approval of the Board of Police Commissioners on _____.

(1) **Description:** Information describing the surveillance technology and its capabilities.

- The Detroit Police Department (DPD) seeks Unmanned Aerial Vehicle (UAV) technology that can offer a wide range of services ranging from search and rescue, crime/accident scene investigation, mental health incidents and tactical overhead views of a critical incident scene. The UAV technology will assist officers to collect vital information about critical incidents with the goal of providing situational awareness of incidents. *
- The Skydio X2E drone is a UAV solution for aerial situational awareness to assess and identify areas that may not be visible to the naked eye, for crime/accident scene reconstruction to aid in investigations, as well as search and rescue operations. The X2E is powered by an Artificial Intelligence (AI) driven autonomous flight engine that enables unparalleled 360° obstacle avoidance, autonomous tracking, GPS-denied navigation, and complete workflow automation. Built for first responders, the Skydio X2E is designed and assembled in the USA and is compliant with high standards set by the National Defense Authorization Act (NDAA). Skydio drones are trusted by the US government and the Department of Defense to perform mission critical work in the most challenging environments. *
- The Skydio X2E includes field-tested AI building upon Skydio 2/2+'s groundbreaking technology foundation, 4K 12 megapixel color camera, 320x256 resolution FI,IR Boson thermal camera, GPS night flight capability, up to 35 min flight time, up to 3 mile range, and rucksack portability. * *

(2) **Purpose:** Any specific purpose the surveillance technology is intended to advance:

- Critical Incidents: The Skydio X2E can provide incident commanders with a real time overhead view at large and complex scenes to ensure safe, efficient operations and identify potential hazards. Skydio drones can also provide a “birds-eye view” during search and rescue missions, crime/accident investigations, mental health calls for service, and tactical views of incident locations. The aerial perspective provided by the Skydio X2E drone can be used by incident commanders and investigators to more efficiently direct resources and personnel to areas where it is most needed, saving valuable time.
- Large Scenes: The Skydio X2E can help increase public safety by allowing personnel to monitor critical incident scenes and quickly gain situational awareness. The cutting-edge autonomy and artificial intelligence onboard the Skydio drone allows operators to simply tap on a point of interest on the control screen, which directs the drone to fly to that location and transmit high resolution video back to the controller’s screen, making even distant and minute details visible in just seconds. *
- Accident Scene Reconstruction: The Skydio X2E has the capacity to assist with accident scene investigations by leveraging the Skydio’s autonomous data capture modes to quickly and efficiently capture data from accident scenes to assist in scene reconstruction and documentation.
- Live Streaming to the Real Time Crime Center and/or Command Post: The Skydio X2E will provide a means of monitoring and tracking the progress of critical incidents and identify

1) search & rescue
* 2) crime/accident scene
3) mental health

potential threats via live streaming back to the Real Time Crime Center, Command Post or other locations as determined by the Department.

(3) **Deployment:** If the surveillance technology will not be uniformly deployed or targeted throughout the City, what factors will be used to determine where the technology is deployed or targeted.

Can record or just view!

- The Detroit Police Department will deploy Skydio Unmanned Aerial Systems (UAS) technology when there is a situation as described above, in order to keep the community, its residents, and first responders safe. Additionally, Skydio drones can be used to gain real time situational awareness by viewing the live video and thermal feed on the controller without recording any images. The operator can choose whether or not to capture photos and record video, based on the specific needs of the situation and guided by the standard operating procedures established by the Department. Unlike other forms of fixed and static surveillance technology that remain present 24/7, Skydio UAS will be deployed on a limited basis for the duration of an incident, project or mission.

(4) **Fiscal Impact:** The fiscal impact of the surveillance technology.

NO Fiscal Impact

- The Detroit Fire Department has received grant money that is set to expire on May 31, 2023. This technology deployment will be using grant funds to make this purchase. The Fire Department has agreed to allow two (2) members to participate in the training and deployment of UAVs. The two (2) members identified are from the Crisis Intervention Team (CIT) and the Special Response Team (SRT). This technology will not fiscally impact the Department since it is purchased from the Detroit Fire Department.
- Additionally, by using Skydio Drones at critical incident scenes the Department can reduce personnel hours that it would normally take for real time situational awareness at the scene. This can help incident commanders more efficiently deploy personnel and resources and manage the incident more effectively, thereby potentially achieving cost savings in equipment and personnel duty time hours.

(5) **Civil Rights / Liberties Impacts:** An assessment identifying with specificity;

(a) **Any potential adverse impacts the surveillance technology, if deployed, might have on civil liberties and civil rights; and**

- Like the Detroit Fire Department, DPD will rely on Skydio's years of experience in ensuring UAVs protect civil liberties while also promoting public safety. Skydio understands that civil liberties are at the center of any UAV technology integration. It is important to note that Skydio is an industry leader in promoting the responsible use of drones.
- In 2020, Skydio became the first drone company to release a set of ethical and policy principles. This is known as the Engagement and Responsible Use Principles (SERUP), those principles outline our core values of accountability, transparency, and the protection of privacy and civil liberties. Those principles also reinforce Skydio's commitment to promote best practices on the responsible use of their products.
- Additionally, Skydio worked with DRONERESPONDERS, the world's largest association of public safety agencies dedicated to the use of drones, to develop a set of responsible use principles specific to public safety--the Five C's. The principles begin with Community Engagement and Transparency, by providing best practices to help agencies engage in an ongoing conversation with the communities they serve. For Civil Liberties and Privacy, the principles provide a range of recommendations designed to help agencies to implement best-in-class protections. Common Operating Procedures, Clear Oversight and Accountability and Cybersecurity complete Skydio's principles. Skydio also has access to experience from leaders in the public safety sector, such as:

5-c's

- ✓ ○ Fritz Reber, Skydio's head of public safety integration, formerly served as a Captain at the Chula Vista Police Department, and stood up the Department's world-leading DFR (Drones as First Responder) program.
- ✓ ○ Brendan Groves, Skydio's VP of Regulatory & Policy Affairs, formerly oversaw the US Department of Justice's drone program, laying the foundation for a nationwide expansion of the program and working with Chiefs of Police across the country to develop their own programs.

(b) *What specific, affirmative measures will be implemented to safeguard the public from the potential adverse impacts identified in this section.*

- Skydio will support the Detroit Police Department in creating a UAV program that places privacy and civil liberties as a priority. They will provide assistance developing policies and procedures for responsible use, drawing on the 5 C's. Finally, Skydio will assist in explaining the technology used to implement the UAS program in a manner consistent with privacy and civil liberties. This will result in the support from our community. Finally, within already codified portions of the DPD Manual, DPD makes clear that members may not violate anyone's rights (Bias-Based Policing Policy 102.2).

Bias Based Policing

(6) *Authorized use:* A complete description of the purpose and intended uses of the surveillance technology, including any uses that will be expressly prohibited.

- * Skydio UAS will be operated by trained and supervised members of DPD for the purpose of enhancing public safety and resolving and recording critical incidents within the community. This technology will not be used by unauthorized personnel outside of the scope of public safety. Activities such as random patrol, targeting specific individuals, groups, or areas, or any reason that isn't related to the mission of DPD, are strictly prohibited. DPD has a Data Sharing Policy (101.12) that sets forth the standard the Department must follow when sharing data. DPD will also comply with any constitutional applicable law and Criminal Justice Information System (CJIS) policies.
- * The purpose and intended uses of the proposed technology includes:
 - Realtime situational awareness
 - Critical incident response;
 - Accident reconstruction;
 - Training; and
 - Other legitimate law enforcement purposes.
- The following uses of the technology are expressly prohibited:
 - Traffic enforcement;
 - Enforcement of civil laws, including immigration laws; or
 - Use of this technology for purposes other than legitimate law enforcement activities.

(7) *Data Collection:*

(a) *What types of surveillance data will be collected, captured, recorded, intercepted, or retained by the surveillance technology;*

- Skydio drones will provide visual, GPS, telemetry, and low resolution video data on a location or individual. Visualization is recorded at the discretion of the operator, while other data is retained when available. This data is recorded and retained onboard the drone and can be deleted by the operator or another authorized individual.

2016 - Proposed Policy Homeland Security - Fire Dept. has had it for one year

①? How much equipment being purchased?

② - Cost associated w/ training

③ Nakaley

(b) *What surveillance data may be inadvertently collected during the authorized uses of the surveillance technology, and what measures will be taken to minimize the inadvertent collection of data; and*

Training to minimize *

- After careful consideration, it was found that any unnecessary visuals captured on the Skydio drone's main payload cameras will be minimized through thorough training of operators.
- Any inadvertently collected video data will be deleted within thirty (30) days from the main payload cameras with no copies being created.

(c) *How inadvertently collected surveillance data will be expeditiously identified and deleted.*

✓ The drone operator, or other authorized person, can access all recorded media stored on Skydio drones and can review the images and video via the Skydio Enterprise Controller or by accessing the SD card on any standard desktop/laptop computer. The authorized person can then choose to retain or delete the media according to DPD's established policies and procedures for drone recorded media.

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• In the event protected information is collected through the misuse of the technology, the Police Department will cause for its deletion as soon as feasible.

Good →

• Upon identifying that protected information has been collected through the misuse of technology, DPD will report the following to the Board of Police Commissioners (BOPC) within 15 days of its discovery:

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BOPC

- Type of information collected;
- Date range of the collection;
- Extent of impact (i.e., how many person's information was collected);
- DPD members who had access to the information; and
- Date and method of destruction, once it has been destroyed.

Encryption *

(8) **Data Protection:** What safeguards will be used to protect surveillance data from unauthorized access, including encryption and access control mechanisms.

- DPD will comply with the State of Michigan Criminal Justice Information System (CJIS) regulations and other applicable standards and policy to protect data. Video transmitted from Skydio drones wirelessly to the Skydio Enterprise Controller are encrypted to AES128 standards. This ensures that the data cannot be intercepted or decrypted by unauthorized individuals. The enterprise controller can also be set to require a password to gain access, thereby adding additional security to the data and preventing unauthorized access.

(9) **Data Retention:** Insofar as the privacy of the public can be severely compromised by the long-term storage of mass surveillance data, what rules and procedures will govern the retention of surveillance data, including those governing:

(a) *The limited time period, if any, surveillance data will be retained. Such information shall include a statement explaining why the designated retention period is no greater than that which is absolutely necessary to achieve the specific purpose(s) enumerated in the Surveillance Technology Specification Report;*

State statute

- DPD will adhere to its Data Retention Policy (101.11), which matches the requirements set forth in the corresponding state statute.

(b) *The specific conditions that must be met to retain surveillance data beyond the retention period identified pursuant to Subsection (b)(9)(a) of this section; and*

Retention *

30 day retention period *

- Data will not be retained beyond the retention period except where such information constitutes evidence of a crime related to an open case or a closed case where prosecution and/or appeals remain pending.
- (c) The process utilized to regularly delete surveillance data after the retention period stated in Subsection (b)(9)(a) of this section has elapsed and the auditing procedures that will be implemented to ensure data is not improperly retained.
- DPD's policies and procedures allow for the retention of video recordings for up to 30 days. Recordings that contain evidence of incidents are retained until the case is solved, closed, and litigation ends.

(10) **Surveillance Data Sharing:** If a City department is seeking authorization to share access to surveillance technology or surveillance data with any other governmental agencies, departments, bureaus, divisions, or units, or non-governmental persons or entities in the absence of a judicial warrant or other legal mandate, it shall detail:

(a) Which governmental agencies, departments, bureaus, divisions, or units, or non-governmental persons or entities will be approved for:

- i. Surveillance technology sharing to the governmental agency, department, bureau, division, or unit, or non-governmental person or entity, and
- ii. Surveillance technology sharing from the governmental agency, department, bureau, division, or unit, or non-governmental person or entity, and
- iii. Surveillance data sharing to the governmental agency, department, bureau, division, or unit, or non-governmental person or entity;

(b) Where applicable, the type of information of surveillance data that may be disclosed to the governmental agency, department, bureau, division, or unit, or non-governmental person or entity; and

(c) Where applicable, any safeguards or restrictions that will be imposed on the surveillance technology or data receiving governmental agency, department, bureau, division, or unit, or non-governmental person or entity regarding the use or dissemination of the provided surveillance technology or data;

- DPD has a Data Sharing Policy (101.12) that sets forth the standard the Department must follow when sharing data.
- DPD will also comply with any constitutional applicable law and Criminal Justice Information System (CJIS) policies.

(11) **Demands for Access to Surveillance Data:** What legal standard must be met by government entities or third parties seeking or demanding access to surveillance data.

- DPD will only share information with government entities or third parties in accordance with a duly authorized data sharing agreement. Under no circumstances is a member of DPD authorized to share information for the purpose of assessing immigration status or enforcing immigrations laws.

(12) **Auditing and Oversight:** What mechanisms will be implemented to ensure the Surveillance Technology Specification Report is followed, including what independent persons or entities will be

BOPC

given oversight authority, if and how regular audits will be conducted, and in the case of the Police Department, also how the Board of Police Commissioners will be involved in the auditing and oversight process.

- DPD will include the Skydio done in the annual Surveillance Technology and Surveillance Use Reports. Additionally, a usage report will be sent to BOPC on a weekly basis.

(13) **Training:** Would specialized training be required in connection with the use of the surveillance technology.

- All members will be vetted, CJIS cleared, and trained in all the Skydio drone technology. In addition, members are required to comply with the Record Retention (101.11), Data Sharing (101.12), Bias-Based Policing (102.2), and all other policies as it related to technology and standard of conduct.

Skydio will provide the specialized training for this technology and provides flexible training options with online virtual instructors and in-person hands-on training sessions available, below are the options for the sessions:

- o Self-paced Online
- o Instructor-led Online
- o Blended Training (Self-paced Online + In-person)
- o Instructor-led In-person

(14) **Complaints:** What procedures will allow members of the public to register complaints or concerns, or submit questions about the deployment or use of a specific surveillance technology, and how the City department will ensure each question and complaint is responded to in a timely manner.

- The policies and procedures of DPD require that upon receiving notice of the desire to file a complaint, a member of the Department must involve a supervisor as soon as possible to receive the complaint. In addition, any citizen may lodge a complaint directly with the Office of the Chief Investigator. Questions regarding the technology may be directed to the Office of the Chief of Police.

* Should be required of all surveillance technology

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(3) Ongoing Training
 (4) Does FAA charge for the
 (5) Dumping
 (6) Policies related 2 Law Enforcement
 (7) Is DPD in the marketing?
 (8) B(B) is the support free?
 Does the source come w/ a purchase or does it come w/ a price

Specifications Report → deal w/ it
upfront

Approve for Purchase
Can't Approve for

~~Exam~~

2) Public Hearing Sky

= good idea if sky is used &
who used it & why

3) Surveillance VAN

= NO DOWNLOAD to transfer
data to device

= user capture data & transfer
to a hard drive

= Monitor use → not just dumping