The City of New York
Department of Investigation

JOCELYN E. STRAUBER
COMMISSIONER

180 MAIDEN LANE
NEW YORK, NY 10038
212-825-5900

Release #49-2024
nyc.gov/doi

FOR IMMEDIATE RELEASE
WEDNESDAY, DECEMBER 18, 2024

CONTACT: DIANE STRUZZI
(212) 825-5931

DOI'S OFFICE OF THE INSPECTOR GENERAL FOR THE NEW YORK CITY POLICE DEPARTMENT ISSUES REPORT ASSESSING NYPD'S COMPLIANCE WITH THE PUBLIC OVERSIGHT OF SURVEILLANCE TECHNOLOGY ACT

The Department of Investigation's ("DOI") Office of the Inspector General for the New York City Police Department ("OIG-NYPD") released today its third Report concerning the New York City Police Department's ("NYPD") compliance with the Public Oversight of Surveillance Technology ("POST") Act. For this Report, OIG-NYPD reviewed NYPD's Impact and Use policies, required by the POST Act, applicable to unmanned aircraft systems ("UAS"), commonly referred to as drones. Based on its review, OIG-NYPD made a number of findings and issued 10 recommendations. A copy of OIG-NYPD's Report is attached to this release and can be found at this link, which also includes OIG-NYPD's previous POST Act reports: https://www.nyc.gov/site/doi/oignypd/web/report.page

DOI Commissioner Jocelyn E. Strauber said, "Drones can be a critical public safety tool capable of enhancing NYPD operations. However, this Report found that NYPD's Impact and Use policies do not fully and accurately describe the Department's unmanned aircraft systems' practices in certain respects and issued key recommendations to achieve that goal."

Inspector General Jeanene L. Barrett said, "NYPD's increase in drone usage in recent years has raised privacy concerns related to how drones are used to conduct police surveillance and monitoring. The recommendations in this Report call on NYPD to enhance its unmanned aircraft systems' impact and use policy by providing additional information about the drone program and drone capabilities, thereby increasing public transparency related to NYPD's use of this technology."

The POST Act requires that NYPD publicly propose an IUP at least 90 days prior to the use of any new surveillance technology. The public then has 45 days to submit comments on the proposed IUP to the Police Commissioner who is then required to consider the public comments and publish a final IUP within 45 days of the close of the public comment period. When NYPD seeks to acquire or acquires enhancements to existing surveillance technology or uses such technology for a purpose or in a manner not previously disclosed in the IUP, the POST Act requires NYPD to provide an addendum to the existing IUP describing the enhancement or additional use. The POST Act further requires that DOI prepare annual audits of surveillance technology IUPs that: (1) assess NYPD's compliance with the terms of the applicable IUP; (2) describe any known or reasonably suspected violations of the IUP; and (3) publish recommendations, if any, relating to revisions of any IUP.

On December 4, 2018, NYPD announced its UAS program, to be implemented by officers assigned to NYPD's Technical Assistance Response Unit ("TARU"), a unit which provides equipment and tactical support to all Bureaus and specializes in audio/visual technology. NYPD's drone usage has steadily

more

increased since 2019, as evidenced by NYPD's publicly available drone deployment data. Media sources reporting on NYPD's increased drone use throughout 2023 cite privacy concerns related to use for purposes of police surveillance and monitoring, especially in predominately Black neighborhoods. Drones are used by NYPD in furtherance of search and rescue missions, disaster responses, documentation of traffic accidents and crime scenes, crowd monitoring, and for situational awareness in active shooter and hostage situations.

The circumstances under which NYPD has used UAS has also increased. For example, NYPD recently announced the Drone as First Responder ("DFR") pilot program commencing in July 2024, involving deploying NYPD UAS to priority public safety calls, such as searches for missing people, ShotSpotter gunshot detection alerts, and reports of robberies and grand larcenies. NYPD drones were reportedly deployed on over 4,000 flight missions in the last year, which include incidents associated with 2,300 priority calls for service.

This Report evaluates whether NYPD complied with the requirements of the POST Act with respect to NYPD's disclosure of information related to drone technology. OIG-NYPD conducted a section-by-section assessment of NYPD's two IUPs applicable to UAS technology; the UAS IUP and Thermographic Cameras IUP. OIG-NYPD also examined Federal Aviation Administration guidelines regulating use of UAS, as well as NYPD policies, procedures, training materials, and practices pertaining to NYPD's UAS operations. OIG-NYPD reviewed records related to NYPD's drone fleet, including operations manuals and procurement documentation and met with NYPD officials.

OIG-NYPD's review found that while the Thermographic Cameras IUP was sufficient with respect to UAS technology, NYPD's UAS IUP does not sufficiently disclose all of the information required by the POST Act and does not provide a complete and accurate picture of all aspects of NYPD UAS operations in practice. The IUP does not sufficiently disclose details related to the capabilities of the technology and the policies and procedures regulating its use.

Based on its review, OIG-NYPD made the following findings:

1) The UAS IUP requires that all UAS deployments are operated and supervised by TARU personnel, but, in fact, multiple units within NYPD have operated their own UAS programs, including the Transit Bureau, the Highway Unit Collision Technician Group, the Emergency Services Unit, the Counterterrorism Division, and the Office of the Chief of Department, and TARU is not involved in the operation or supervision of UAS drone deployments for those units.

2) The Commanding Officer for the newly formed Drone Team, which consolidated UAS operations for the Transit Bureau, the DFR Program, and TARU, reports directly to the Deputy Commissioner of Operations rather than the Chief of Department, contrary to the IUP's requirement that the Commanding Officer of NYPD's drone program should report to the highest-ranking uniformed member of NYPD (Note that, while the Deputy Commissioner of Operations reports directly to the Chief of Department, by placing the Chief of Department at the top of the reporting chain for the Drone Team, there is no direct reporting line between the Commanding Officer for the Drone Team and the Chief of Department).

3) The UAS IUP does not disclose several capabilities of the UAS including features that enable fully autonomous and pre-programed flights, two- and three-dimensional mapping technologies, two-way communication capabilities, and glass breaker attachments (enables forcible entry into windowed structures).

4) The UAS IUP does not disclose any potential health and safety impacts of UAS, including risks related to personal injury, property damage, and the device's lithium-ion batteries.

5) The UAS IUP does not reflect that UAS flight log information is now captured in FORMS, so TARU no longer needs to maintain a log of each flight.

6) OIG-NYPD was unable to assess whether the NYPD's UAS operations were conducted in compliance with its IUPs, as it only provided records related to the Transit Bureau's deployments.

The review made the following 10 recommendations to NYPD based on OIG-NYPD's findings:

1) Update the UAS IUP to reflect that TARU personnel are not the only ones operating and supervising UAS operations and currently all operations are performed independently from TARU.

2) Update the UAS IUP to accurately describe the approval, supervision, and reporting structure for UAS operations.

3) Update the UAS IUP to make clear that the requirement of an FAA remote pilot certificate is applicable to all UAS operators, rather than only TARU personnel.

4) Update the UAS IUP to include all the capabilities of its UAS fleet.

5) Update the UAS IUP to include a reference to the Thermographic Cameras IUP, which contains additional information relevant to this technological capability of UAS.

6) Update the UAS IUP to note that operations involving First-Person View drones require a designated visual observer, as per FAA guidelines, except if there is an active COA waiving this requirement.

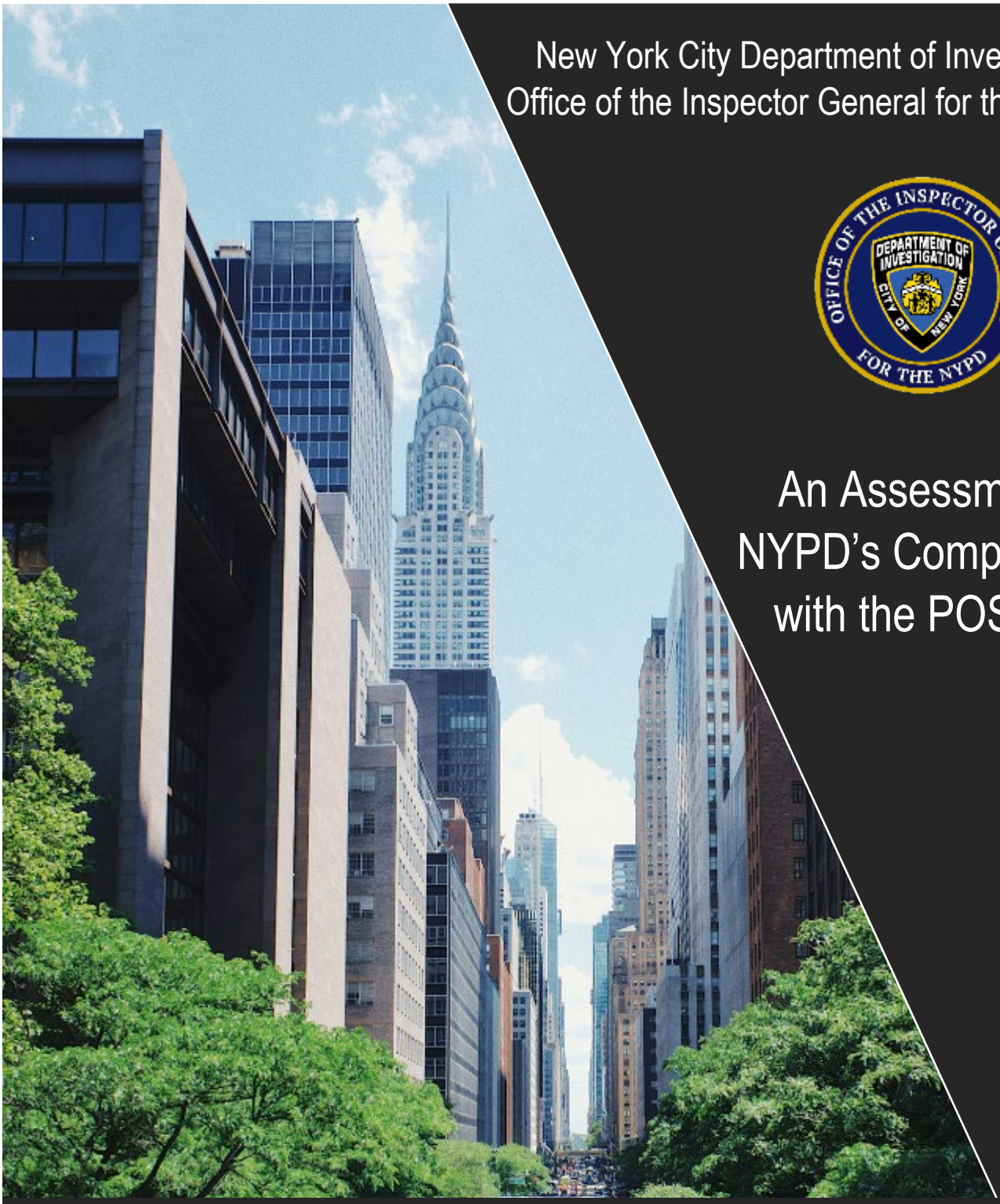
7) Update the UAS IUP to specify whether TARU is the only unit responsible for retaining UAS data, and if not, specify requirements applied to those other units.

8) Update the UAS IUP to reflect that flight log information is automated and should be entered directly into FORMS rather than maintained by TARU.

9) Update the UAS IUP to disclose health and safety impacts related to UAS.

10) While not a requirement of the POST Act, update the UAS IUP to include the potential disparate impacts of the use and deployment of UAS technology itself on protected groups, as NYPD has done for certain, but not all, surveillance technologies.

This report was prepared by DOI's Office of the Inspector General for the NYPD, specifically, Senior Investigative Policy Analyst McKenzie Dean under the guidance of Inspector General Jeanene L. Barrett with the assistance of Investigative Policy Analyst Olivia Sykes, former intern Emma Huber-Donovan, and First Deputy Inspector General Annette B. Almazan, Special Counsel to the Inspectors General Maria Paolillo, and Director of Intergovernmental Affairs and Special Counsel Rebecca Chasan, and was supervised by Deputy Commissioner of Strategic Initiatives Christopher Ryan and Deputy Commissioner/Chief of Investigations Dominick Zarrella.



New York City Department of Investigation
Office of the Inspector General for the NYPD

An Assessment of NYPD's Compliance with the POST Act

December 2024

Jocelyn E. Strauber
Commissioner

Jeanene L. Barrett
Inspector General

I. Executive Summary

The Public Oversight of Surveillance Technology ("POST") Act amended the Administrative Code of the City of New York to require the New York City Police Department ("NYPD" or "the Department") to publicly disclose information concerning its use of surveillance technologies, and its policies with respect to those technologies.[1] NYPD must publicly post its proposed draft Impact and Use Policy ("IUP") ninety days before use of a new surveillance technology. The public then has 45 days to submit comments in relation to the draft, which must be considered by the Department's Commissioner.[2] When NYPD seeks to acquire or acquires enhancements to existing surveillance technology, or to use such technology for a purpose or in a manner not previously disclosed, the Department must publish an addendum to the IUP applicable to that technology.[3]

The POST Act also amended the New York City Charter to require that the New York City Department of Investigation ("DOI") prepare annual audits of surveillance technology IUPs that: (1) assess NYPD's compliance with the terms of the applicable IUP; (2) describe any known or reasonably suspected violations of the IUP; and (3) publish recommendations, if any, relating to revisions of any IUP.[4]

The Office of the Inspector General for the NYPD ("OIG-NYPD" or "the Office") focused this year's POST Act report on NYPD's unmanned aircraft systems ("UAS"), commonly referred to as drones. On December 4, 2018, the Department announced its UAS program, to be implemented by officers assigned to NYPD's Technical Assistance Response Unit ("TARU"), a unit which provides equipment and tactical support to all Bureaus and specializes in audio/visual technology.[5] UAS are defined as aircrafts without a human pilot onboard, which are controlled remotely by an NYPD operator through the use of a transmitter.[6] The program was to be comprised of small unmanned aircraft systems ("sUAS"), defined by the Federal Aviation

* DOI Commissioner Jocelyn E. Strauber and Inspector General Jeanene L. Barrett thank the staff of OIG-NYPD for their efforts in producing this Report, specifically, McKenzie Dean, Senior Investigative Policy Analyst; Olivia Sykes, Investigative Policy Analyst; Emma Huber-Donavan, former OIG-NYPD Intern; Annette B. Almazan, First Deputy Inspector General; and Maria Paolillo, Special Counsel to the Inspectors General. Appreciation is extended to the New York City Police Department and representatives of other organizations for their assistance and cooperation during this investigation.

[1] *See* Appendix A.
[2] *See* N.Y.C. ADMIN. CODE §§ 14-188(b), (e), & (f).
[3] *See* N.Y.C. ADMIN. CODE § 14-188(d).
[4] *See* N.Y.C. CHARTER § 803(c-1).
[5] *See* NYPD Police Dep't, Announcement *"NYPD Unveils New Unmanned Aircraft System Program"* (Dec. 4, 2018), at https://www.nyc.gov/site/nypd/news/p1204a/nypd-new-unmanned-aircraft-system-program#/0 (last accessed Oct. 30, 2024).
[6] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22, 2023), at 2.

Administration ("FAA") as aircrafts weighing less than 55 pounds on takeoff operated without direct human intervention from within or on the aircraft.[7]

According to the IUP, use of UAS enables Department personnel to obtain mission-critical information without putting involved members of service or civilians at risk. The UAS IUP notes "NYPD policy directs that UAS may be used for the following purposes: search and rescue operations, documentation of collision and crimes scenes, evidence searches at large or inaccessible scenes, hazardous material incidents, monitoring vehicular traffic and pedestrian congestion at large scale events, visual assistance at hostage/barricaded suspect situations, rooftop security observations at shootings or large scale events at the direction of the incident commander, public safety, emergency, or other situations with the approval of the Chief of Department or designee, including responding to incidents where there is a risk of physical harm to the public and/or members of the service, pre-warrant execution safety survey and during execution of search warrant, as appropriate, and training and testing, as appropriate, to ensure proficiency and equipment operability."[8]

In response to NYPD's 2018 announcement of its UAS program, privacy advocacy groups and others voiced concerns that (1) UAS would be used by the Department for surveillance purposes, (2) Department policy did not place "meaningful restrictions" on its drone usage, and (3) a lack of regulations created a risk that New Yorkers could be subject to surveillance via technology in a manner that would be impermissible if conducted by a police officer.[9]

NYPD's drone usage has steadily increased since 2019, as evidenced by the Department's publicly available drone deployment data.[10] Media sources reporting on NYPD's increased drone use throughout 2023 cite privacy concerns related to use for purposes of police surveillance and monitoring, especially in predominately Black neighborhoods.[11] In July 2024, a new pilot program, "Drone as First Responder"

---

[7] *See* 14 CFR § 107.3, *Definitions*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-A/section-107.3

[8] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22, 2023), at 4-5.

[9] *See* Vjeran Pavic, *The NYPD has added 14 drones to its arsenal,* THE VERGE (Dec. 14, 2018), https://www.theverge.com/2018/12/4/18125725/nypd-drones-police-new-york-city-advocacy-groups (last accessed Oct. 30, 2024). *See also* Jake Offenhartz, *New York police will use drones to monitor backyard parties this weekend, spurring privacy concerns*, ASSOCIATED PRESS (Aug. 31, 2023), https://apnews.com/article/drones-labor-day-eric-adams-nypd-jouvert-c2787e87bcad8fa87aa8d34b454ee6cf (last accessed Oct. 30, 2024).

[10] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems (UAS) Operations Report*, https://www.nyc.gov/site/nypd/stats/reports-analysis/uas-drones.page (last accessed Nov. 20, 2024).

[11] *See* Bruce Crumley, *New York police drone use skyrockets despite public privacy fears*, DRONEDJ (Nov. 21, 2023), https://dronedj.com/2023/11/21/new-york-police-drone-use-skyrockets-despite-public-privacy-fears/ (last accessed Dec. 2, 2024). *See also* Josiah Bates, *Police drone use in NYC prompts questions about privacy, discrimination*, THE GRIO (Sep. 7, 2023), https://thegrio.com/2023/09/07/drones-labor-day-nypd-surveillance/ (last accessed Dec. 2, 2024).

("DFR"), which involves deploying NYPD UAS to priority public safety calls, was announced for three precincts—one in Brooklyn, the Bronx, and Manhattan.[12] In November 2024, Mayor Adams and then-Interim Police Commissioner Thomas Donlon publicly announced the implementation of NYPD's DFR Program in five commands with two drones each; the 67th, 71st, and 75th police precincts in Brooklyn; the 48th Police Precinct in the Bronx; and the Central Park Precinct in Manhattan. At the time of the announcement, NYPD's drone fleet was comprised of 100 drones, operated by over 110 FAA-qualified drone operators within the Department.[13] NYPD drones were reportedly deployed on over 4,000 flight missions in the last year, which include incidents associated with 2,300 priority calls for service.[14]

This report evaluates whether NYPD complied with the requirements of the POST Act with respect to the Department's disclosure of information related to drone technology. The Office conducted a section-by-section assessment of the Department's two IUPs applicable to UAS technology; the UAS IUP and Thermographic Cameras IUP. The Office also examined FAA guidelines regulating use of UAS, as well as NYPD policies, procedures, training materials, and practices pertaining to the Department's UAS operations. The Office reviewed records related to NYPD's drone fleet, including operations manuals and procurement documentation and met with NYPD officials.

Based on the Office's review of the Department's UAS operations, the applicable IUPs, NYPD records, and relevant Federal guidelines, OIG-NYPD found that while the Thermographic Cameras IUP was sufficient, the UAS IUP does not sufficiently disclose all of the information required by the POST Act, as it does not provide a complete and accurate picture of all aspects of NYPD UAS operations in practice.

OIG-NYPD makes the following findings:

1. The UAS IUP requires that all UAS deployments are operated and supervised by TARU personnel, but, in fact, multiple units within NYPD have operated

[12] *See* N.Y.C. Police Dep't, *Statement of Kaz Daughtry and John Chell, Hearing on "Unmanned Aerial Systems and Emergency Response: The Impact of Drones and Other Emerging Technology on U.S. Law Enforcement* (May 16, 2024), at https://homeland.house.gov/wp-content/uploads/2024/05/2024-05-16-EMTCTI-HRG-Testimony.pdf (last accessed Oct. 30, 2024).
[13] *See* Office of the Mayor Press Conference, *Mayor Adams, Interim Police Commissioner Donlon Announce 'Drone as First Responder' Program to Reduce Response Times and Keep New Yorkers Safe* (Nov. 13, 2024), at https://www.nyc.gov/office-of-the-mayor/news/827-24/mayor-adams-interim-police-commissioner-donlon-drone-first-responder-program-to#/0 (last accessed Nov. 29, 2024).
[14] *See* Office of the Mayor Press Conference, *Mayor Adams, Interim Police Commissioner Donlon Announce 'Drone as First Responder' Program to Reduce Response Times and Keep New Yorkers Safe* (Nov. 13, 2024), at https://www.nyc.gov/office-of-the-mayor/news/827-24/mayor-adams-interim-police-commissioner-donlon-drone-first-responder-program-to#/0 (last accessed Nov. 29, 2024).

their own UAS programs, including the Transit Bureau, the Highway Unit Collision Technician Group, the Emergency Services Unit, the Counterterrorism Division, and the Office of the Chief of Department, and TARU is not involved in the operation or supervision of UAS drone deployments for those units.

2. The Commanding Officer for the newly formed Drone Team, which consolidated UAS operations for the Transit Bureau, the DFR Program, and TARU, reports directly to the Deputy Commissioner of Operations rather than the Chief of Department, contrary to the IUP's requirement that the Commanding Officer of NYPD's drone program should report to the highest-ranking uniformed member of NYPD (Note that, while the Deputy Commissioner of Operations reports directly to the Chief of Department, by placing the Chief of Department at the top of the reporting chain for the Drone Team, there is no direct reporting line between the Commanding Officer for the Drone Team and the Chief of Department).

3. The UAS IUP does not disclose several capabilities of the UAS including features that enable fully autonomous and pre-programed flights, two- and three-dimensional mapping technologies, two-way communication capabilities, and glass breaker attachments (enables forcible entry into windowed structures).

4. The UAS IUP does not disclose any potential health and safety impacts of UAS, including risks related to personal injury, property damage, and the device's lithium-ion batteries.

5. The UAS IUP does not reflect that UAS flight log information is now captured in FORMS, so TARU no longer needs to maintain a log of each flight.

6. OIG-NYPD was unable to assess whether NYPD's UAS operations were conducted in compliance with its IUPs, as it only provided records related to the Transit Bureau's deployments.

Based on the findings, OIG-NYPD makes the following ten recommendations:

1. Update the UAS IUP to reflect that TARU personnel are not the only ones operating and supervising UAS operations and currently all operations are performed independently from TARU.

2. Update the UAS IUP to accurately describe the approval, supervision, and reporting structure for UAS operations.

3. Update the UAS IUP to make clear that the requirement of an FAA remote pilot certificate is applicable to all UAS operators, rather than only TARU personnel.

4. Update the UAS IUP to include all the capabilities of its UAS fleet.

5. Update the UAS IUP to include a reference to the Thermographic Cameras IUP, which contains additional information relevant to this technological capability of UAS.

6. Update the UAS IUP to note that operations involving First-Person View drones require a designated visual observer, as per FAA guidelines, except if there is an active COA waiving this requirement.

7. Update the UAS IUP to specify whether TARU is the only unit responsible for retaining UAS data, and if not, specify requirements applied to those other units.

8. Update the UAS IUP to reflect that flight log information is automated and should be entered directly into FORMS rather than maintained by TARU.

9. Update the UAS IUP to disclose health and safety impacts related to UAS.

10. While not a requirement of the POST Act, update the UAS IUP to include the potential disparate impacts of the use and deployment of UAS technology itself on protected groups, as NYPD has done for certain, but not all, surveillance technologies.

II. Background

A. The Public Oversight of Surveillance Technology ("POST") Act

The POST Act, also referred to as Local Law 65 of 2020, amended the Administrative Code of the City of New York to require the New York City Police Department ("NYPD" or "the Department") to publicly disclose information concerning its use of surveillance technologies, and its policies with respect to those technologies.[15] The

[15] *See* Appendix A.

law stipulates NYPD must publicly post its proposed Impact and Use Policy ("IUP") ninety days before use of a new surveillance technology. The public then has 45 days to comment on the draft IUP, and the Department's Commissioner must consider those comments.[16] When NYPD seeks to acquire or acquires enhancements to existing surveillance technology, or to use such technology for a purpose or in a manner not previously disclosed, the Department must publish an addendum to the IUP for that technology.[17]

The POST Act requires that for "the use of any new surveillance technology"[18] and "[f]or existing surveillance technology as of the effective date of the local law,"[19] NYPD must publish an IUP that includes the following information:

1) a description of the capabilities of the surveillance technology;
2) rules, processes, and guidelines issued by NYPD regulating access to or use of such surveillance technology as well as any prohibitions or restrictions on use;
3) safeguards or security measures designed to protect information collected by such surveillance technology from unauthorized access;
4) policies and/or practices relating to the retention, access, and use of data collected by such surveillance technology;
5) policies and procedures relating to access or use of the data collected through such surveillance technology by members of the public;
6) whether entities outside the department have access to the information and data collected by such surveillance technology, including the type of entity, the type of information and data that may be disclosed, and any safeguards or restrictions imposed by NYPD regarding the use or dissemination of the information collected by such surveillance technology;
7) whether any training is required by NYPD for an individual to use such surveillance technology or access information collected by such surveillance technology;
8) a description of internal audit and oversight mechanisms to ensure compliance with the IUP;
9) any tests or reports regarding the health and safety effects of the surveillance technology; and
10) any potentially disparate impacts of the surveillance technology IUP on any protected groups as defined by the City's Human Rights Law.[20]

[16] *See* N.Y.C. ADMIN. CODE §§ 14-188(b), (e), & (f).
[17] *See* N.Y.C. ADMIN. CODE § 14-188(d).
[18] *See* N.Y.C. ADMIN. CODE § 14-188(b)
[19] *See* N.Y.C. ADMIN. CODE § 14-188(c).
[20] *See* N.Y.C. ADMIN. CODE § 14-188(c).

B. OIG-NYPD's Authority Under the POST Act & Prior POST Act Reports

The POST Act also amended the New York City Charter to require that the New York City Department of Investigation ("DOI") prepare annual audits of surveillance technology IUPs that: (1) assess NYPD's compliance with the terms of the applicable IUP; (2) describe any known or reasonably suspected violations of the IUP; and (3) publish recommendations, if any, relating to revisions of any IUP.[21]

The Office of the Inspector General for the New York City Police Department ("OIG-NYPD" or "the Office")'s first POST Act report, released in November 2022, found that the Department largely complied with the POST Act's requirements with respect to the issuance of IUPs for its existing surveillance technologies. However, the majority of the IUPs were general and generic, in that, similar language was used in many of them, making it more difficult to determine with specificity the nature of the applicable policies and to assess NYPD's compliance with them.[22] The Office also found that NYPD grouped related technologies within a single IUP, an approach which significantly limited the information made available to the public regarding the nature and use of each individual technology relevant to each IUP.[23] OIG-NYPD concluded that the most logical reading of the POST Act's language is that an IUP is required for each distinct surveillance technology, and specifically noted that a separate IUP was needed for the Department's remotely-operated robot dog, Digidog.

The Office's second POST Act report, released May 2024, focused on five surveillance technologies introduced by NYPD in 2023: Digidog, the Knightscope K5 Autonomous Security Robot ("K5"), StarChase GPS tracking technology ("StarChase"), the IDEMIA digital fingerprint scanning application ("IDEMIA"), and an augmented reality application ("AR application"). OIG-NYPD maintained its position from the first report, that the POST Act requires an individual IUP for each distinct surveillance technology and, again, specifically noted this requirement with respect to Digidog. However, the Office acknowledged there are limited circumstances where technologies may be grouped—when the technologies being grouped are substantially similar in capability and manner of use, and when the IUP identifies and specifically names the technologies to which specific information contained therein applies. While

[21] *See* N.Y.C. CHARTER § 803(c-1).
[22] *See* N.Y.C. Dep't of Investigation, AN ASSESSMENT OF NYPD'S RESPONSE TO THE POST ACT (Nov. 2022), page 9, at https://www.nyc.gov/assets/doi/reports/pdf/2022/20PostActRelease_Rpt_11032022.pdf (last accessed Dec. 2, 2024).
[23] See N.Y.C. Dep't of Investigation, AN ASSESSMENT OF NYPD'S RESPONSE TO THE POST ACT (Nov. 2022), page 5, at https://www.nyc.gov/assets/doi/reports/pdf/2022/20PostActRelease_Rpt_11032022.pdf (last accessed Dec. 2, 2024).

OIG-NYPD deemed permissible the grouping of K5, StarChase, IDEMIA, and the AR application into existing IUPs, it also identified areas of the IUPs where updates were necessary to adequately address certain categories of required information, as defined within the POST Act.

III. Scope and Methodology of OIG-NYPD's 2024 Assessment of NYPD's Compliance with the POST Act

OIG-NYPD focused this year's POST Act report on NYPD's unmanned aircraft systems ("UAS"), commonly referred to as drones. NYPD uses small unmanned aircraft systems ("sUAS"), which are defined by the Federal Aviation Administration ("FAA") as "unmanned aircrafts weighing less than 55 pounds on takeoff, including everything that is on board or otherwise attached to the aircraft."[24] UAS, sUAS, and drones will be used interchangeably throughout this Report. The Office assessed the Department's compliance with the disclosure requirements of the POST Act with respect to the IUPs applicable to UAS technology, as well as its compliance with the terms of the IUPs. To conduct this assessment, the Office reviewed the Department's relevant IUPs—the UAS IUP and Thermographic Cameras IUP. The Office also examined FAA guidelines regulating use of UAS, as well as NYPD policies, procedures, training materials, and practices pertaining to the Department's UAS operations. The Office reviewed documentation related to NYPD's drone fleet, including operations manuals and procurement documentation and met with NYPD officials.

IV. NYPD's Use of Unmanned Aircraft Systems

On December 4, 2018, the Department announced its UAS program, to be implemented by officers assigned to NYPD's Technical Assistance Response Unit ("TARU"), which provides equipment and tactical support to all Bureaus within the Department and specializes in audio/visual technology.[25] As noted above, the program was to be comprised of sUAS. NYPD defines UAS as aircrafts without a human pilot onboard, which are controlled remotely by an NYPD operator through the use of a transmitter.[26]

According to the UAS IUP, use of NYPD UAS enables Department personnel to obtain mission-critical information without putting involved members of service or

[24] 14 CFR 107.3, *Definitions,* located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-A/section-107.3

[25] *See* NYPD Police Dep't, *"NYPD Unveils New Unmanned Aircraft System Program"* (Dec. 4, 2018), at https://www.nyc.gov/site/nypd/news/p1204a/nypd-new-unmanned-aircraft-system-program#/0 (last accessed Oct. 30, 2024).

[26] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22, 2023), at 2.

civilians at risk. UAS are used by NYPD in furtherance of search and rescue missions, disaster responses, documentation of traffic accidents and crime scenes, crowd monitoring, and for situational awareness in active shooter and hostage situations.[27]

In response to the 2018 announcement of NYPD's UAS program, privacy advocacy groups and others voiced concerns that (1) UAS would be used by the Department for surveillance purposes, (2) Department policy did not place "meaningful restrictions" on its drone usage, and (3) a lack of regulations created a risk that New Yorkers could be subject to surveillance via technology in a manner that would not be permissible if conducted by a police officer.[28] In compliance with the publishing requirements of the POST Act, NYPD posted its original final UAS IUP on April 11, 2021, followed by an updated version posted on September 22, 2023.[29] Media sources reporting on NYPD's increased drone use throughout 2023 cite privacy concerns related to use for purposes of police surveillance and monitoring, especially in predominately Black neighborhoods.[30]

At the inception of NYPD's UAS program in 2018, the Department stated it had acquired 14 drones.[31] Since then, NYPD has greatly expanded its drone fleet to include new models with advanced capabilities, including thermal imaging, autonomous flight, real-time two- and three-dimensional mapping/modeling technology, night vision, and two-way communication. Some NYPD UAS are equipped with glass breaker attachments, capable of breaking windows to gain access to buildings and structures, and multipurpose droppers, enabling the aircraft to carry and drop objects. Despite having acquired UAS with advanced capabilities, the Department has not updated its IUPs to disclose some of these features.[32]

---

[27] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22, 2023), at 2.

[28] *See* Vjeran Pavic, *The NYPD has added 14 drones to its arsenal,* THE VERGE (Dec. 14, 2018), https://www.theverge.com/2018/12/4/18125725/nypd-drones-police-new-york-city-advocacy-groups (last accessed Oct. 30, 2024). *See also* Michael Sisitzky & Simon McCormack, *New NYPD Drone Policy Represents a Serious Threat to Privacy* (Dec. 7, 2018), at https://www.aclu.org/news/privacy-technology/new-nypd-drone-policy-represents-serious-threat (last accessed Dec. 4, 2024).

[29] N.Y.C. Police Dep't, *Public Oversight of Surveillance Technology (POST) Act Impact and Use Policies*, at https://www.nyc.gov/site/nypd/about/about-nypd/policy/post-act.page (last accessed Oct. 30, 2024).

[30] *See* Bruce Crumley, *New York police drone use skyrockets despite public privacy fears*, DRONEDJ (Nov. 21, 2023), https://dronedj.com/2023/11/21/new-york-police-drone-use-skyrockets-despite-public-privacy-fears/. *See also* Josiah Bates, *Police drone use in NYC prompts questions about privacy, discrimination*, THE GRIO (Sep. 7, 2023), https://thegrio.com/2023/09/07/drones-labor-day-nypd-surveillance/

[31] *See* NYPD Police Dep't Announcement *"NYPD Unveils New Unmanned Aircraft System Program"* (Dec. 4, 2018), at https://www.nyc.gov/site/nypd/news/p1204a/nypd-new-unmanned-aircraft-system-program#/0 (last accessed Oct. 30, 2024).

[32] *See* BRINC, *Lemur 2*, at *Make entry in seconds GLASS BREAKER*, at https://brincdrones.com/lemur-2/ (last accessed Dec. 3, 2024). *See also* BRINC, *Lemur 2*, at *Last inch delivery Multipurpose Dropper*,

A. J'Ouvert and West Indian American Day Carnival ("J'Ouvert")

Mayor Eric Adams has publicly promoted the use of drone technology in furtherance of providing faster, safer, and more affordable city services. In doing so, the Mayor thanked the Department for its role in trying the technology and moving it forward.[33] At an August 31, 2023 press conference, then-Assistant Commissioner and now-Deputy Commissioner of Operations Kaz Daughtry stated that NYPD planned to respond with drones to both "non-priority calls and priority calls" and complaints about large gatherings—including private events—during J'Ouvert over Labor Day weekend.[34] Following the festivities, then-Assistant Commissioner Daughtry stated that the Department used four drone teams, enabling NYPD to having a drone over the location of a shooting within 25 seconds, enabling personnel to make split second decisions with respect to resource allocation on the basis of information gathered by drones.[35]

B. Beach Safety

On February 16, 2024, Deputy Commissioner Daughtry announced NYPD's plan to deploy drones over beaches the following summer for "beach safety," noting that NYPD drones will be flying up and down the beach to keep beachgoers and swimmers safe.[36] The plan included equipping drones with a payload, also referred to as a multi-purpose dropper, enabling the drone operator to drop a flotation device from the aircraft in the event of an emergency in the water.[37]

On October 1, 2024, a multi-agency drill coordinated by the Office of Emergency Management was conducted in Staten Island that simulated a natural disaster at a

---

at https://brincdrones.com/lemur-2/ (last accessed Dec. 3, 2024). *See also* Parrot Anafi AI, *ANAFI Ai, The 4G robotic UAV White Paper V7.4.0.0* (undated), page 44, at https://www.parrot.com/assets/s3fs-public/2022-01/whitepaperanafiai.pdf (last accessed Dec. 2, 2024).

[33] *See* N.Y.C. Mayor's Office, *Transcript of "Mayor Adams Unveils new Guidelines to Allow Responsible Drone Usage in New York City"* (Jul. 21, 2023), at https://www.nyc.gov/office-of-the-mayor/news/532-23/mayor-adams-new-guidelines-allow-responsible-drone-usage-new-york-city#/0 (last accessed Oct. 30, 2024).

[34] *See* N.Y.C. Police Dep't, *Watch live as PC Caban, NYPD executives, & city officials brief the media regarding Labor Day Weekend* (Aug. 31, 2023) at https://www.youtube.com/watch?v=w2rvMqOTxHM&t=5s (last accessed Dec. 2, 2024).

[35] *See* N.Y.C. Mayor's Office, *Transcript of "Mayor Adams Makes Public Safety Announcement"* (Sep. 5, 2023), at https://www.nyc.gov/office-of-the-mayor/news/638-23/transcript-mayor-adams-makes-public-safety-announcement (last accessed Nov. 4, 2024).

[36] *See* X post, NYPD Deputy Commissioner, Operations Kaz Daughtry (Feb. 16, 2024), at https://x.com/NYPDDaughtry/status/1758661258989994214 (last accessed Dec. 2, 2024).

[37] *See* X post, NYPD Deputy Commissioner, Operations Kaz Daughtry (Feb. 16, 2024), at https://x.com/NYPDDaughtry/status/1758661258989994214 (last accessed Dec. 2, 2024).

beach and at a location serving as an abandoned building.[38] During this drill, both a dropper and a glass breaker were used.

C. Drone as First Responder

On May 16, 2024, during a hearing before the U.S. House of Representatives Committee on Homeland Security, Deputy Commissioner Daughtry emphasized the vital role of drones in promoting safety and security across the City and announced NYPD's plans to implement a Drone as First Responder ("DFR") program.[39] This program would involve responding to 911 calls with drones to enable de-escalation prior to the arrival of law enforcement personnel.[40] The Department's intentions in implementing the DFR program were to enhance the situational awareness of responding officers, promote officer safety, and more effectively deploy NYPD resources.[41] The Department announced that the DFR pilot program would take place in three precincts—one in Brooklyn, the Bronx, and Manhattan.[42]

On November 13, 2024, Mayor Adams and then-Interim Police Commissioner Thomas Donlon announced the implementation of NYPD's DFR Program, noting the beginning of operations in five commands, the 67th, 71st, 75th, and 48th Precincts, and the Central Park Precinct in Manhattan.[43] The program involves NYPD's 10 newest drones, which are rooftop-based models (i.e. they are launched from the rooftop of an NYPD building). These drones are deployed to priority public safety calls, such as searches for missing people, ShotSpotter gunshot detection alerts, and reports of

---

[38] *See* N.Y.C. Emergency Management post (Oct. 1, 2024), at https://www.instagram.com/nycemergencymanagement/p/DAmIDbPyUke/?img_index=1 (last accessed Dec. 3, 2024). *See also* Paul Liotta, *Staten Islanders may be saved by drones after future hurricanes: Here's how*, STATEN ISLAND ADVANCE (Oct. 2, 2024), at https://www.silive.com/news/2024/10/nyc-demonstration-shows-how-officials-plan-to-use-drones-after-coastal-storm-like-hurricane-sandy.html (last accessed Dec. 3, 2024).

[39] *See* N.Y.C. Police Dep't, *Statement of Kaz Daughtry and John Chell, Hearing on "Unmanned Aerial Systems and Emergency Response: The Impact of Drones and Other Emerging Technology on U.S. Law Enforcement* (May 16, 2024), at https://homeland.house.gov/wp-content/uploads/2024/05/2024-05-16-EMTCTI-HRG-Testimony.pdf (last accessed Oct. 30, 2024).

[40] https://brincdrones.com/police-drones/

[41] *See* N.Y.C. Police Dep't, *Statement of Kaz Daughtry and John Chell, Hearing on "Unmanned Aerial Systems and Emergency Response: The Impact of Drones and Other Emerging Technology on U.S. Law Enforcement* (May 16, 2024), at https://homeland.house.gov/wp-content/uploads/2024/05/2024-05-16-EMTCTI-HRG-Testimony.pdf (last accessed Oct. 30, 2024).

[42] *See* N.Y.C. Police Dep't, *Statement of Kaz Daughtry and John Chell, Hearing on "Unmanned Aerial Systems and Emergency Response: The Impact of Drones and Other Emerging Technology on U.S. Law Enforcement* (May 16, 2024), at https://homeland.house.gov/wp-content/uploads/2024/05/2024-05-16-EMTCTI-HRG-Testimony.pdf (last accessed Oct. 30, 2024).

[43] *See* Office of the Mayor Press Conference, *Mayor Adams, Interim Police Commissioner Donlon Announce 'Drone as First Responder' Program to Reduce Response Times and Keep New Yorkers Safe* (Nov. 13, 2024), at https://www.nyc.gov/office-of-the-mayor/news/827-24/mayor-adams-interim-police-commissioner-donlon-drone-first-responder-program-to#/0 (last accessed Nov. 29, 2024).

robberies and grand larcenies.[44] The pilots operating the drones are based in Fort Totten, where they operate the aircrafts remotely. There is also a command center at One Police Plaza where the UAS may also be operated. DFR drones only have 30 minutes of flight time, so they must stay near their docking stations. For operation of DFR drones, the Department requires a Visual Observer ("VO"), an officer assigned to the precinct, on the roof to observe the UAS flight. If response is requested for a location outside of the range of NYPD's DFR drones, the Drone Team will send a mobile field team in a vehicle with a handheld drone to the location. Handheld drones can be deployed from any location and may be operated indoors. As of the date of the announcement, NYPD reportedly had 100 drones operated by over 110 FAA-qualified drone operators within the Department.

D. Consolidation of Certain UAS Units

During meetings with NYPD in November, the Office learned that in late August of 2024, NYPD created a Drone Team within the Office of the Chief of Department that combined TARU's UAS operations, the Transit Bureau Special Operations District's UAS operations (which is now called the DCO Transit Drone Team), and the DFR program, which was already operating out of the Chief of Department's Office. The Drone Team operates in teams of two and is responsible for deploying drones to provide situational awareness from an aerial perspective. The pilots across the different units within the Drone Team are interchangeable and permitted to pilot a drone for any of the Team's operations. NYPD's Drone Team conducts both pre-planned operations (i.e. subway surfer program; beach patrols to monitor for sharks and riptides; or large-scale events, such as parades or the United Nations General Assembly meetings) and emergency operations (i.e. wildfires and search and rescue operations).

The Drone Team operates out of Fort Totten. The DFR and Transit components consist of three lieutenants, two sergeants, and approximately 25 to 30 police officers and detectives, and there are approximately 30 TARU pilots. While most drone operations are conducted by the Drone Team, separate drone operations continue in other units of NYPD, namely the Highway Unit Collision Technician Group, Emergency Services Unit, and Counterterrorism Division, which only have one or two UAS.

OIG-NYPD requested deployment records for all of NYPD's UAS operations since the inception of the program which should include records from Units including Transit

[44] *See* Office of the Mayor Press Conference, *Mayor Adams, Interim Police Commissioner Donlon Announce 'Drone as First Responder' Program to Reduce Response Times and Keep New Yorkers Safe* (Nov. 13, 2024), at https://www.nyc.gov/office-of-the-mayor/news/827-24/mayor-adams-interim-police-commissioner-donlon-drone-first-responder-program-to#/0 (last accessed Nov. 29, 2024).

Bureau, Highway Unit Collision Technician Group, Emergency Services Unit and the Counterterrorism Division. However, only records related to the Department's Transit Bureau operations were provided.[45] According to NYPD, initially, the Transit Bureau operated a UAS on-loan from TARU with the involvement of TARU personnel, but in January 2024, the Transit Bureau began operating that drone without supervision from TARU personnel. Transit Bureau's UAS operations primarily consist of operations related to the Department's subway surfing program, which generally operates after school hours, Monday through Friday, from 2 P.M. to 5:30 P.M. These operations may also be conducted during the hours before school as well as after dark. When a subway surfer has been identified atop an above-ground train with a UAS, the train is stopped, and the subway surfer and their parent(s) and/or guardian(s) are shown footage of their child subway surfing. A review of NYPD records also revealed, consistent with what NYPD has advised the Office, that at least since January 2024 members of the Transit Bureau, rather than TARU, were operating this program without the involvement of TARU despite the IUP stating otherwise.

As of July 2024, the Transit Bureau possesses and operates its own drones acquired specifically for their use. Transit Bureau drone operators are now assigned to the DCO Transit Drone Team, which consists of one sergeant and four officers. The team works together to complete pre-flight checks and complete deployment-related paperwork, as well as to develop and decide on UAS deployments.

E. Increased UAS Usage

NYPD has recently increased its use of UAS, and the DFR program contributes significantly to that increase, as evidenced by the Department's publicly available reporting of quarterly UAS Operations Reports dating back to 2019.[46] Each deployment is associated with one of eleven categories: (1) Collision / Crime Scene Documentation, (2) Evidence searches at large or inaccessible scenes, (3) Hazardous material incidents, (4) Monitoring vehicular traffic and pedestrian congestion at large scale events, (5) Public safety, emergency, or other situation with the approval of the Chief of Department, (6) Rooftop security observation at shootings or large scale events at the direction of the Incident Commander, (7) Search and rescue operations, (8) Testing, (9) Training, (10) Visual assistance at hostage/barricaded suspect situations, or (11) Warrant. As of the third quarter of 2023, the categories "Testing"

[45] On May 21, 2024, the Office requested records from NYPD including a list of UAS acquired by the Department and their respective operator manuals, drone deployment records, all active FAA-issued COAs maintained by the Department, and Remote Pilot Certificates held by members of the Department operating UAS. Partial records were received on December 13, 2024, and as of the date of this report, this request remains unfulfilled.

[46] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems (UAS) Operations Report*, https://www.nyc.gov/site/nypd/stats/reports-analysis/uas-drones.page (last accessed Nov. 20, 2024).

and "Training" were combined to create a new category, "Training/Testing," and the category, "Drone as First Responder (DFR)" was added.[47] The Office's review of these reports revealed an overall increase in the Department's drone usage across all five boroughs from 2019 to quarter three of 2024.[48] Between 2019 through the third quarter of 2024, the Department deployed drones on 3,810 instances, with 2,871 of the deployments occurring in 2024.

Table 1: UAS Deployments from 2019 through Third Quarter 2024

Category	2019	2020	2021	2022	2023	2024	*Total by Category*
Drone as First Responder (DFR)	N/A	N/A	N/A	N/A	N/A	1715	***1715***
Public safety, emergency, or other situation with the approval of the Chief of Department.	0	0	0	5	387	817	***1209***
Training	63	37	46	96	79	N/A	***321***
Training/Testing	N/A	N/A	N/A	N/A	24	125	***149***
Visual assistance at hostage/barricaded suspect situations	9	15	6	10	21	36	***97***
Collision / Crime Scene Documentation	16	5	11	8	5	48	***93***
Search and rescue operations	0	1	1	1	12	50	***65***
Warrant	2	0	1	3	9	41	***56***
Monitoring vehicular traffic and pedestrian congestion at large scale events	11	2	3	6	9	16	***47***
Testing	10	11	2	6	8	N/A	***37***
Evidence searches at large or inaccessible scenes	8	7	5	1	2	6	***29***
Rooftop security observation at shootings or large-scale events at the direction of the Incident Commander	0	0	0	0	7	17	***24***
Hazardous material incidents	0	0	0	0	1	0	***1***
Total by Year	***119***	***78***	***75***	***136***	***540***	***2871***	***3810***

[47] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems (UAS) Operations Report*, https://www.nyc.gov/site/nypd/stats/reports-analysis/uas-drones.page (last accessed Nov. 20, 2024).
[48] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems (UAS) Operations Report*, https://www.nyc.gov/site/nypd/stats/reports-analysis/uas-drones.page (last accessed Nov. 20, 2024).

The majority of the 2024 deployments—1,715—were associated with NYPD's DFR program, with the next highest number of deployments (817) categorized as "Public safety, emergency, or other situation with the approval of the Chief of Department." This is a notable increase from 2023 and 2022, which reported 387 and five deployments for the category "Public safety, emergency, or other situation with the approval of the Chief of Department" for each respective year. From 2019 to 2022, "Training" was the category with the most deployments.[49]

V. FAA Guidelines for Use of UAS

The UAS IUP states that NYPD drone operators are subject to all relevant FAA Regulations, as well as all other applicable federal, state, and local laws.[50] The Office's review of government regulations of UAS focused primarily on federal guidelines, outlined by the rules and regulations in Title 14 of the Code of Federal Regulations Part 107, as they preempt any State or local rule, law, or regulation, where there is a conflict between Federal and State or local rules.[51] These guidelines establish operating rules applicable to the use of all civil sUAS, including registration and certification requirements, conditions for safe operation, record retention compliance, and requirements for obtaining a Certificate of Waiver or Authorization ("COA"), which permit deviation from any established regulations.[52] As noted above, technically, NYPD's drones are sUAS as they are under 55 pounds.[53]

A. FAA Waivers

To safely integrate sUAS into the United States' National Airspace System, the FAA's Air Traffic Organization developed the COA web-application system. Through the system, public drone operators—such as government agencies, law enforcement, and public safety entities—can request authorizations for specific sUAS activities or flight operations.[54] These authorizations permit deviation from FAA regulations to the extent specified within the waiver, which could apply to any number of sUAS

[49] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems (UAS) Operations Report*, https://www.nyc.gov/site/nypd/stats/reports-analysis/uas-drones.page (last accessed Nov. 20, 2024).
[50] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 5.
[51] *See* 14 CFR 120.205, *Preemption of State and local laws*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-G/part-120/subpart-F/section-120.205
[52] The relevant FAA guidelines are contained within Title 14 of the Code of Federal Regulations, Part 107, "Small Unmanned Aircraft Systems" located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107
[53] *See* 14 CFR 107.3, *Definitions,* located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-A/section-107.3
[54] U.S. Dep't of Transportation, *Appendix B: Certificate of Authorization (COA) Application in FAADroneZone (CADZ)*, page 1, at https://www.transportation.gov/sites/dot.gov/files/2023-06/Privacy-FAA-CADZ%20%28DroneZone%29%20-%20PIA%20-%20FINAL%20-%202023.pdf (last accessed Dec. 2, 2024).

operations over a specified time period.[55] The process involves submitting the details of a proposed UAS activity for operational and technical review by the FAA.[56] The FAA provides a formal response within 60 days of submission, notifying the operator whether their application was approved or denied. In some cases, the FAA's response will include provisions or limitations as part of the approval of the COA.[57]

Absent specific authorization from a COA, UAS operators are bound by federal regulations which prohibit operation of UAS: (1) beyond the visual line of sight of the operator, (2) from a moving vehicle or aircraft, (3) over moving vehicles, (4) over people in sustained flight, (5) within certain airspace, (6) and at night without visible anti-collision lighting.[58]

In situations where an entity seeks to use UAS in a manner that is prohibited under federal regulations, and outside the scope of an active COA waiver, the designated remote pilot in command ("RPIC") may seek a Special Government Interest ("SGI") COA prior to deployment.[59] This process is an expedited version of the aforementioned COA process, enabling eligible first responders to receive authorization for a specific operation in emergency situations for missions that are not covered by an existing COA waiver.[60] For example, an SGI would be sought if there is an FAA restriction that would impact UAS operations to provide security for the United Nations General Assembly meetings or a Presidential visit.

NYPD currently has the following COAs:

1. *Tactical Beyond Visual Line of Sight (TBVLOS) effective December 28, 2022 to December 27, 2024*

NYPD's TBVLOS COA, which is applicable in extreme emergency situations to safeguard human life, authorizes a waiver from the following FAA requirements: (1) the UAS operator must not operate any higher than 50 feet above or greater than 400

---

[55] 14 CFR 107.200, *Waiver policy and requirements,* located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-E/section-107.200

[56] *See* Federal Aviation Administration, *Certificates of Waiver or Authorization (COA)* https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa#:~:text=COA%20is%20an%20authorization%20issued,for%20a%20specific%20UA%20activity (last accessed Dec. 2, 2024).

[57] *See* Federal Aviation Administration, *Certificates of Waiver or Authorization (COA)* https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/systemops/aaim/organizations/uas/coa#:~:text=COA%20is%20an%20authorization%20issued,for%20a%20specific%20UA%20activity (last accessed Dec. 2, 2024).

[58] *See* 14 CFR 107.205, *List of regulations subject to waiver*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-E/section-107.205

[59] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 5.

[60] Federal Aviation Administration, *Emergency Situations*, at https://www.faa.gov/uas/advanced_operations/emergency_situations (last updated May 2, 2023).

feet laterally of the nearest obstacle, (2) the UAS must remain within 1500 feet from the pilot, and (3) the pilot will return the aircraft to visual line of sight operation as soon as practical or upon termination of the threat.[61]

2. *First Responder Beyond Visual Line of Sight (FR-BVLOS) effective August 18, 2023 to August 17, 2025*

NYPD's FR-BVLOS COA is applicable to public safety operations where the deployment of the UAS is considered a critical component to the success of the missions. This waiver authorizes the Department to operate UAS beyond visual line of sight as long as the pilot and/or visual observer are able to see two miles around the aircraft to remain clear of other aircrafts and the flight track remains clear of highly congested urban and rural areas.[62]

3. Third Active COA effective September 2024

As of December 12, 2024, the Office has not received documentation reflecting the Department's third active COA. Based on this Office's discussions with NYPD officials, this COA is specific to the Department's DFR program and waives the FAA requirement of a visual observer for DFR operations. Prior to the issuance of this waiver, the Department was required to have a member of service assigned to the precinct from which the drone was dispatched to function as a visual observer on the roof of the building during flight. While this COA waives this requirement, Department Officials informed the Office that NYPD continues to use a visual observer at this time.

B. UAS Flight Personnel

The federal regulations pertaining to use of sUAS refers to three members of a sUAS flight crew: (1) RPIC, (2) the person manipulating the controls ("PMC"), and (3) the visual observer ("VO"). FAA guidelines require that a RPIC, with a valid FAA-issued remote pilot license, be designated for every sUAS flight.[63] This crewmember is directly responsible for and has final authority over the operation of the aircraft

[61] *See* NYPD Production – FAA-issued NYPD COA #2022-ESA-10429-COA ["FAA Form 7711-1 2022-ESA-10429 TBVLOS NYPD (1) (1)-F"] at Section C Section C (Dec. 28, 2022). *See also* Federal Aviation Administration, *First Responder Tactical Beyond Visual Line of Sight (TBVLOS) 91.113 Waiver Guide* (undated), at https://www.faa.gov/sites/faa.gov/files/uas/public_safety_gov/public_safety_toolkit/TBVLOS_Waiver_Final.pdf

[62] *See* NYPD Production – FAA-issued NYPD COA #2023-ESA-12699-COA ["2023-ESA-12699 FRBVLOS – F"], at Section C (Aug. 18, 2023). *See also* Federal Aviation Administration, *First Responder Beyond Visual Line of Sight (FR-BVLOS) 91.113 Wavier Guide* (undated), at https://www.faa.gov/uas/public_safety_gov/public_safety_toolkit/FR-BVLOS-91.113-Waiver-Guide

[63] *See* 14 CFR 107.19, *Remote Pilot in Command*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.19

under federal guidelines. Specifically, the RPIC is responsible for ensuring the UAS does not pose a hazard to other people, aircrafts, or property, and that the operation follows all applicable Part 107 regulations.[64] Prior to every flight, assessments of the operating environment must be conducted by the RPIC of the operation, including local weather conditions, local airspace and flight restrictions, the location of persons and property on the surface, and other ground hazards.[65]

The PMC physically operates the drone and can either be the designated RPIC or another crewmember who is either: (1) an FAA-certified sUAS pilot or (2) under the direct supervision of the RPIC, who has the ability to immediately take direct control of the aircraft.[66] The VO is designated by the RPIC to see and avoid other air traffic or obstacles in the air or on the ground during the operation.[67] For operation of sUAS within the line of sight of the pilot, sight of the aircraft must be maintained for the duration of the flight by either the RPIC and the PMC (during flights without a designated VO) or by the VO, if one is designated.[68] Like the PMC, a VO is optional, with the exception of flights involving drone models using a First-Person View or similar technology, where a VO is mandatory.[69] First-Person View drones enable the operator to see from the perspective of the aircraft through goggles rather than observing it on a handheld device.

VI. Analysis of NYPD's UAS Program and its UAS and Thermographic Cameras IUPs

According to NYPD, its UAS IUP and Thermographic Cameras IUP both apply to UAS.[70] As noted above, UAS are aircrafts without a human pilot onboard controlled remotely by NYPD personnel through a transmitter. Use of UAS enables Department personnel to obtain mission-critical information to increase situational awareness without putting involved members of service or civilians at risk.[71] NYPD UAS are capable of collecting video, thermal, and location information and sharing that

[64] *See* 14 CFR 107.19 *Remote Pilot in Command*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.19
[65] *See* 14 CFR 107.49, *Preflight familiarization, inspection, and actions for aircraft operation*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.49
[66] *See* 14 CFR 107.12 *Requirement for a remote pilot certificate with a small UAS rating*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.12
[67] *See* 14 CFR 107.3 *Definitions*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-A/section-107.3
[68] *See* 14 CFR 107.31 *Visual line of sight aircraft operation*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.31
[69] *See* Federal Aviation Administration, *Small Unmanned Aircraft Systems (UAS) Regulations (Part 107)*, at https://www.faa.gov/newsroom/small-unmanned-aircraft-systems-uas-regulations-part-107 (last accessed Dec. 2, 2024).
[70] *See* Appendices B and C.
[71] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 2.

information with Department personnel. UAS are also weather-resistant and equipped with multi-zoom and thermal imaging cameras.[72] As such, NYPD's Thermographic Cameras IUP is also applicable to UAS, which states that the Department's UAS are equipped with thermographic cameras and are integrated into more intricate systems specifically addressed in the UAS IUP.[73] The remainder of this discussion focuses on NYPD's UAS IUP.

A. Description of Capabilities

The UAS IUP states the Department's UAS are capable of collecting and sharing video, thermal, and location information with Department personnel.[74] The policy further states NYPD's UAS do not use video analytics, biometric measurement, or facial recognition technology. However, still images of recorded video captured by UAS may be used as a probe image for facial recognition analysis.[75]

All of the Department's 98 drones are capable of collecting and transmitting photographic and video data, and as noted in the IUP, certain models are equipped with multi-zoom cameras. While the IUP does not include specific details related to the varying resolutions and zoom counts of the different makes and models included in NYPD's drone fleet, the IUP's general disclosure of the capability of collecting photographic and video data is sufficient, as details pertaining to resolution and zoom count are not relevant to the types of data being collected, but rather the quality of the data.

The Office's review of NYPD's drone fleet did reveal that several capabilities of the UAS are not sufficiently disclosed within the UAS IUP. These include features that enable fully autonomous and pre-programed flights; night vision capabilities; two- and three-dimensional mapping technologies; two-way communication capabilities; and glass breaker attachments, which enables forcible entry into windowed structures. The IUP also does not disclose a feature of NYPD UAS referred to as multi-purpose droppers, which enable carrying and dropping of objects during flight. However, this capability would not be used in furtherance of collecting or transmitting data related to surveillance, and, therefore, would not need to be disclosed within the IUP.

[72] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 4.
[73] *See* N.Y.C. Police Dep't, *Thermographic Cameras IUP* (April 11, 2023), at 4.
[74] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 4.
[75] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 2.

According to a list of UAS provided by the Department, NYPD's drone fleet consists of 98 aircrafts from six manufacturers: DJI, Skydio, BRINC, Nightingale, Autel, and Parrot.[76]

Manufacturer	***UAS Count***
DJI	40
Skydio	41
BRINC	6
Nightingale	6
Autel	1
Parrot	4
Total	**98**

The majority of NYPD's drone fleet are DJI drones, classified under one of the following models/model versions—Matrice 350, Matrice 300, Matrice 30T, Mavic 3T, and Avata. NYPD's Skydio drones are either x2 or x10 models. The Department's fleet also includes six BRINC Lemur 2 drones, six Nightingale Blackbird drones, three Parrot Anafi USA drones, one Anafi AI drone, and one Autel Evo II Pro drone.[77]

1. *Thermal Imaging Cameras*

Several models of NYPD drones are equipped with thermal imaging cameras, enabling the collection and transmission of thermographic measurements (i.e. DJI 3T, DJI 30T, BRINC Lemur 2, and Parrot Anafi USA model drones).[78] While the UAS

[76] *See* N.Y.C. Police Dep't, *TARU UAS Standard Operating Procedure.* (March 3, 2023). ["UAS MANUAL F.pdf" page 11]. A May 10, 2019 Grant Disbursement Agreement between the Department from Dormitory Authority of the State of New York (DASNY) and NYPD indicates the Department acquired two Lockheed Martin Indago 2 drones, two FLIR Black Hornet drones, and two DJI (model unspecified) drones. Neither the Indago 2 and Black Hornet models nor their associated manufacturers/vendors (Lockheed Martin and FLIR) are noted in NYPD's list of UAS. It is unclear at this time whether NYPD possesses any Indago 2 or Black Hornet drones. *See also* NYPD Production - ["PURCHASE AND INSTALLATION OF DRONES F"].

[77] NYPD's UAS list does not specify the model/model version of the Department's Nightingale drones, however, procurement documentation indicates the Department has the Blackbird model.

[78] Information related to the capabilities of BRINC Lemur 2 drones was obtained from the vendor website, as there is no publicly available operator manual, and the Department did not provide the Office with a copy of the manual in response to the Office's request for this material as of the date of this report.
See BRINC, *Lemur 2,* at https://brincdrones.com/lemur-2/ (last accessed Dec. 2, 2024). *See also* FLYMOTION, *DJIMAVIC 3 ENTERPRISE SERIES*, at https://www.flymotionus.com/products/dji-

IUP appropriately discloses this feature of some UAS and accurately acknowledges thermal imaging as a biometric measurement, the policy provides limited information regarding this capability. Additional information pertaining to this capability is included in NYPD's Thermographic Cameras IUP, which specifically mentions UAS and includes a footnote directing the reader to the UAS IUP for additional information on NYPD UAS.[79] However, the UAS IUP makes no reference to the Thermographic Cameras IUP. While not explicitly required by the POST Act, the UAS IUP should be updated to include a reference to the Thermographic Cameras IUP to direct the reader to additional information relevant to this technological capability of UAS.

2. *Autonomous Features*

While UAS are accurately defined as aircrafts without a human pilot onboard that are controlled remotely by an NYPD operator, the description does not address the advanced autonomous capabilities of these aircrafts, including that certain UAS can function without remote control. This Office's review of the Department's drone fleet found that several UAS are capable of functioning fully autonomously absent any intervention or remote manual control by a human pilot.[80] Certain features enable the aircrafts to conduct autonomous takeoffs and landings, complete entire flight missions, and perform perimeter security and patrol.[81]

For example, NYPD's Nightingale Blackbirds are capable of completing pre-planned autonomous patrols without intervention. These sUAS are even capable of recharging themselves for 24/7 operational continuity. Nightingale drones can also be pre-programmed to dispatch on their own in response to security alarms and to conduct repeatable autonomous patrol missions according to specified information related to the day, time, path, altitude, camera direction, and hover duration, among other mission details.[82]

---

mavic-3-enterprise-series (last accessed Dec. 3, 2024). *See also* FLYMOTION, DJI MATRICE 30 SERIES, at https://www.flymotionus.com/products/dji-matrice-30-series (last accessed Dec. 3, 2024). *See also* Parrot, ANAFI USA Thermal Camera, at https://www.parrot.com/us/drones/anafi-usa/thermal-camera (last accessed Dec. 3, 2024).

[79] *See* N.Y.C. Police Dep't, *Thermographic Cameras* (April 11, 2023), at 4.

[80] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 4.

[81] *See* BRINC *Lemur 2*, at https://brincdrones.com/lemur-2/ (last accessed Dec. 3, 2024); *See also* Nightingale Security, *Nightingale Security Brochure* (March 22, 2021), page 5, at https://www.nightingalesecurity.com/wp-content/uploads/2021/04/Nightingale_Security_Brochure_22MAR2021.pdf

[82] *See* Nightingale Security, *Nightingale Security Brochure*, page 5, at https://www.nightingalesecurity.com/wp-content/uploads/2021/04/Nightingale_Security_Brochure_22MAR2021.pdf

This Office also found that some of NYPD's DJI Matrice 300 RTKs are equipped with a camera that autonomously identifies and tracks targets, including people, vehicles, and other objects.[83] Upon locking onto a designated target, these drones autonomously rotate their camera to center the target in the middle of the screen and adjusts the camera's focus for tracking and viewing purposes.[84]

While NYPD information and records do not reveal current use of these features, the Department reported future planned use of autonomous features in relation to its DFR program, noting that drones will be deployed remotely and fly autonomously to the exact longitude and latitude of select public safety calls.[85] Despite having acquired UAS with various advanced autonomous capabilities, the UAS IUP makes no mention of these features and should be updated to disclose this information as required by the POST Act.

3. *Night-Vision Cameras*

Several NYPD UAS, including the BRINC Lemur 2 and Autel Evo II v3 drones, are equipped with night vision capabilities, which is not disclosed within the UAS IUP. This feature enables NYPD UAS to capture video data and provide situational awareness to NYPD personnel in low-light conditions. As such, the UAS IUP should be updated to disclose this capability of UAS.

4. *Real-Time Two- and Three-Dimensional Mapping*

While not specified within the UAS IUP, NYPD's UAS fleet consists of several drones capable of photogrammetry—defined as the processing of images collected by the device to create two-dimensional and three-dimensional models.[86] For example, NYPD's Parrot Anafi AI drone includes imbedded sensors capable of capturing and geotagging detailed high-definition images and data related to the elevation, texture, and color of its surroundings for the purpose of generating high density point clouds

---

[83] *See* DJI, *Matrice 300 RTK User Manual v4.0* (May, 2023) page 7, https://dl.djicdn.com/downloads/matrice-300/20230518UM/M300_RTK_User_Manual_EN_v4.0.pdf

[84] *See* DJI, *Matrice 300 RTK User Manual v4.0* (May, 2023) page 77, https://dl.djicdn.com/downloads/matrice-300/20230518UM/M300_RTK_User_Manual_EN_v4.0.pdf. *See also* FLYMOTION, *DJI Mini 3 Pro: Capabilities Review* (Aug. 11, 2022), at https://www.flymotionus.com/posts/dji-mini-3-pro-capabilities-review

[85] *See* N.Y.C. Mayor's Office Announcement, *Mayor Adams, Interim Police Commissioner Donlon Announce 'Drone as First Responder' Program to Reduce Response Times and Keep New Yorkers Safe* (Nov. 13, 2024) https://www.nyc.gov/office-of-the-mayor/news/827-24/mayor-adams-interim-police-commissioner-donlon-drone-first-responder-program-to

[86] *See* Parrot Anafi AI, *ANAFI Ai, The 4G robotic UAV White Paper V7.4.0.0*, page 44, at https://www.parrot.com/assets/s3fs-public/2022-01/whitepaperanafiai.pdf

and reconstructions of the physical environment.[87] In the Department's announcement of its DFR program, it acknowledged using these real-time mapping capabilities, noting that NYPD drones have been deployed to perform tasks including recreating floor plans with 360-degree views.[88] Given that some of its UAS are equipped with these advanced mapping capabilities, and that these features involve the processing of types of data that are not disclosed within the UAS IUP, the IUP should be updated to include this information as required by the POST Act.

5. *Two-Way Communication*

Some of the Department's UAS are also capable of enabling two-way communication between NYPD personnel and individuals within the vicinity of the aircraft. For example, BRINC Lemur 2 drones are advertised for use for communication in high-risk situations, as these models are equipped with a two-way audio system, consisting of a loudspeaker and a microphone affixed to the chassis of the device.[89] The Department acknowledged this capability in its announcement of the DFR program, noting that the remote deployment of Department drones supplies high-definition audio (and video) to officers' department-issued smartphones.[90] NYPD has also reported that this feature of Department UAS has been used to facilitate two-way communication with barricaded individuals.[91] However, the UAS IUP has not been updated to disclose this capability.

6. *Glass Breaker Attachments*

A review of NYPD's drone fleet also revealed that the Department has acquired certain drone models with a unique feature referred to as glass breaker attachment, specifically, NYPD's BRINC Lemur 2 drones. These drones are advertised by their manufacturer as being capable of breaking tempered, automotive, and most

---

[87] *See* Parrot Anafi AI, *ANAFI Ai, The 4G robotic UAV White Paper V7.4.0.0,* page 45*,* at https://www.parrot.com/assets/s3fs-public/2022-01/whitepaperanafiai.pdf

[88] *See* N.Y.C. Mayor's Office Announcement, *Mayor Adams, Interim Police Commissioner Donlon Announce 'Drone as First Responder' Program to Reduce Response Times and Keep New Yorkers Safe* (Nov. 13, 2024) https://www.nyc.gov/office-of-the-mayor/news/827-24/mayor-adams-interim-police-commissioner-donlon-drone-first-responder-program-to

[89] *See* BRINC, *Introducing Responder and Station – A New Era of Response* (May 23, 2024), at https://brincdrones.com/news/dfr-deployments-with-responder-station/

[90] *See* N.Y.C. Mayor's Office Announcement, *Mayor Adams, Interim Police Commissioner Donlon Announce 'Drone as First Responder' Program to Reduce Response Times and Keep New Yorkers Safe* (Nov. 13, 2024), at https://www.nyc.gov/office-of-the-mayor/news/827-24/mayor-adams-interim-police-commissioner-donlon-drone-first-responder-program-to

[91] *See* N.Y.C. Mayor's Office Announcement, *Mayor Adams, Interim Police Commissioner Donlon Announce 'Drone as First Responder' Program to Reduce Response Times and Keep New Yorkers Safe* (Nov. 13, 2024), at https://www.nyc.gov/office-of-the-mayor/news/827-24/mayor-adams-interim-police-commissioner-donlon-drone-first-responder-program-to

residential glass for the purpose of gaining access to structures (i.e. ventilating a building during a fire or making entry during an active shooter situation).[92] The BRINC website states that these drones are "Designed to Enter Dangerous Situations to Keep People Safe" in situations including barricades, HazMat response, explosives operations, search and rescue, de-escalation, negotiations, and hostage rescue.[93]

The UAS IUP notes that in exigent circumstances, UAS may be used for situational awareness purposes in areas where there is a reasonable expectation of privacy (such as inside a building during a pre-warrant execution survey). However, the policy makes no mention of this capability of certain UAS to break into a windowed structure in furtherance of this purpose. This capability allows a UAS to gain access to otherwise inaccessible areas, without obtaining a search warrant (on the basis of exigent circumstances, a legal exception to the search warrant requirement), and enables NYPD to conduct surveillance distinct from what would be visible from the naked eye. As such, the UAS IUP should be updated to disclose this capability.

7. *Multi-Purpose Droppers*

A review of NYPD records found that in 2022, the Department acquired two DJI Matrice RTK Combo drones and a TH4 V2 Drop System—also referred to as a multi-purpose dropper—which is capable of carrying a dead weight of up to 320 grams.[94] NYPD records also revealed that the month after Deputy Commissioner Daughtry's announcement of NYPD's plan to deploy drones to patrol City beaches, the Department acquired 10 DJI Matrice 350 RTK drones and 20 additional FM TH4 V2 Drop Systems.[95] These records also noted the Department's purchase of 25 self-inflating rescue buoys from a vendor called Restube.[96] NYPD has reported additional uses for these multi-purpose droppers in its announcement of the DFR program in 2024, including delivering vital first-aid equipment to emergency scenes (i.e. automated external defibrillators, tourniquets, and naloxone).[97] Despite NYPD having acquired these multi-purpose droppers for a large number of UAS in its drone fleet, the UAS IUP makes no mention of this capability of carrying and dropping

[92] *See* BRINC *Lemur 2*, at https://brincdrones.com/lemur-2/ (last accessed October 17, 2024)
[93] *See* BRINC, *Lemur 2*, at https://brincdrones.com/lemur-2/ (last accessed October 17, 2024).
[94] *See* NYPD Production - FLYMOTION Estimate ["DOITT CONTRACT PURCHASE F"] page 3 (May 24, 2022).
[95] *See* NYPD Production - FLYMOTION Quote, ["Summer Drone-out Program F"] page 4 (March 7, 2024).
[96] *See* NYPD Production - FLYMOTION Quote, ["Summer Drone-out Program F"] page 4 (March 7, 2024).
[97] *See* N.Y.C. Mayor's Office Announcement, *Mayor Adams, Interim Police Commissioner Donlon Announce 'Drone as First Responder' Program to Reduce Response Times and Keep New Yorkers Safe* (Nov. 13, 2024) https://www.nyc.gov/office-of-the-mayor/news/827-24/mayor-adams-interim-police-commissioner-donlon-drone-first-responder-program-to

objects during flight. However, given that this function is not used in furtherance of the collection and transmission of data for surveillance purposes, the IUP was not required to disclose this information.

B. Rules, Processes, and Guidelines Regulating Access and Use

The UAS IUP states that it seeks to balance the public safety benefits of the technology with individual privacy, as consistent with the Constitutions of the United States and New York State, as well as other statutory authority. UAS may be used in the following situations:

> search and rescue operations, documentation of collision and crimes scenes, evidence searches at large or inaccessible scenes, hazardous material incidents, monitoring vehicular traffic and pedestrian congestion at large scale events, visual assistance at hostage/barricaded suspect situations, rooftop security observations at shootings or large scale events [. . . as well as for] responding to incidents where there is a risk of physical harm to the public and/or members of the service, pre-warrant execution safety survey and during execution of search warrant, as appropriate, and training and testing, as appropriate, to ensure proficiency and equipment operability.[98]

The UAS IUP notes several restrictions on the Department's use of drones. NYPD is prohibited from using drones for routine foot patrol, traffic enforcement, and immobilizing a vehicle or suspect. Furthermore, "NYPD UAS will not be used as a weapon or equipped with any weapons" or "equipped with facial recognition software."[99]

1. *UAS Flight Personnel*

As previously discussed, the Federal regulations pertaining to use of sUAS refers to three members of a UAS flight crew: (1) the RPIC, (2) the PMC, and (3) the VO.[100] The PMC, who operates the drone, can either be the designated RPIC or another crewmember who is either (1) an FAA-certified sUAS pilot or (2) under the direct supervision of the RPIC, who has the ability to immediately take direct control of the aircraft.[101]

---

[98] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 4-5.
[99] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 5.
[100] *See* 14 CFR 107.19, *Remote Pilot in Command*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.19
[101] *See* 14 CFR 107.12 *Requirement for a remote pilot certificate with a small UAS rating*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.12

The UAS IUP does not distinguish between the roles of the RPIC and the PMC, noting the involved TARU personnel must have obtained their FAA remote pilot certificates and passed the FAA's "Aeronautical Knowledge Test."[102] Since personnel outside of TARU operate NYPD UAS, the IUP should be updated to make clear that the requirement of an FAA remote pilot certificate is applicable to all UAS operators, rather than only TARU personnel. While FAA guidelines stipulate that a PMC without a pilot certificate is permitted to operate an aircraft in certain circumstances, the UAS IUP is more restrictive, as it requires that either the RPIC or a *certified* PMC operate the aircraft. The UAS Patrol Guide procedure is even more restrictive, as it specifies that the RPIC is to act as the operator of UAS, meaning that the Department requires the RPIC to also be the PMC.

Like the PMC, a VO is optional, with the exception of flights involving UAS models using a First-Person View or similar technology, where a VO is required.[103] According to NYPD records, the Department is in possession of at least one DJI First Person View drone, but the IUP does not include the requirement that flights involving such devices must have a VO, thus, the IUP should be updated to include this requirement. It should be noted that NYPD recently obtained a COA waiving the requirement for a VO in relation to its DFR operations, though it continues to use VOs, and intends to do so until the technology improves.

C. Safeguard & Security Measures Against Unauthorized Access

According to NYPD's UAS IUP, UAS "may only be used and operated by members assigned to [TARU]."[104] Nevertheless, as noted above, the Department's UAS operations have not been solely operated by TARU since at least November 2023 when NYPD's Transit Bureau began operating its own UAS program. Meetings with NYPD personnel revealed that UAS are being operated by other commands, including the Highway Unit Collision Technician Group, Emergency Services Unit, and Counterterrorism Division. The Department's DFR program operates out of the Office of the Chief of Department, and as described above, in August of 2024, a Drone Team within the Office of the Chief of Department consolidated the operations of TARU, the Transit Bureau, and the DFR program, while the others remain independent. Given the IUP's emphasis on the role of TARU personnel in the use of UAS, the UAS IUP must be updated to reflect that TARU is not solely using and

[102] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 5. *See also* Federal Aviation Administration, *Become a Certified Remote Pilot* (undated), at https://www.faa.gov/uas/commercial_operators/become_a_drone_pilot

[103] *See* Federal Aviation Administration, *Small Unmanned Aircraft Systems (UAS) Regulations (Part 107)*, at https://www.faa.gov/newsroom/small-unmanned-aircraft-systems-uas-regulations-part-107 (last accessed Dec. 2, 2024).

[104] See N.Y.C. Police Dep't, Unmanned Aircraft Systems IUP (September 22, 2023), at 5, "Safeguard & Security Measures Against Unauthorized Access."

operating the Department's UAS. Technically, TARU's operations are part of the Drone Team, not TARU.

This section of the IUP also states that TARU personnel must comply with Federal guidelines, COAs, and SGIs. The Department informed the Office that it currently has three active COAs. However, NYPD only provided two of the three waivers.[105] The Office also has not received complete UAS deployment records from the Department, only those related to the Transit Bureau's operations, prior to it being moved into the Drone Team. As a result, OIG-NYPD could not fully assess NYPD's compliance with any of its active COAs.

The Office's review of the Transit Bureau's deployment records revealed that requests for SGI waivers pertaining to subway surfer operations were prepared and submitted by Transit Bureau personnel, not TARU personnel, as required by the IUP.[106] Each request includes a point of contact, including their personal contact information, a pilot, and an observer for the operation related to the request, all of which include members of Transit, not TARU.

Further, the IUP requires that requests to deploy UAS must be made by an NYPD executive—a commanding officer, executive officer, or daily duty captain—to TARU, who will then determine whether the request is appropriate. Meetings with Department officials revealed that UAS deployment requests are not solely made to TARU, but to other units in the Department that have their own UAS operations, and now to the Drone Team. Furthermore, the Office found that not all UAS deployments are in response to a request, as DFR pilots monitor 911 calls and may deploy UAS without any request to do so. Previously, the Transit Bureau UAS team had the agency to determine when and where drones are deployed for subway surfer operations absent requests to, or approvals from, TARU.

The IUP includes a description of NYPD's encryption and access control mechanisms, stating that NYPD UAS are securely stored in NYPD facilities when not in use, that UAS transmit video images to a remote monitor through an encrypted signal on a closed, stand-alone network, that such data is encrypted both on the device and in transit.[107] Therefore, the UAS IUP sufficiently discloses information related to the

[105] *See* NYPD Production – FAA-issued NYPD COA #2023-ESA-12699-COA ["2023-ESA-12699 FRBVLOS – F"] (Aug. 18, 2023). *See also* NYPD Production – FAA-issued NYPD COA #2022-ESA-10429-COA ["FAA Form 7711-1 2022-ESA-10429 TBVLOS NYPD (1) (1)-F"] (Dec. 28, 2022).

[106] This review involved 43 SGI waiver requests and 44 approvals related to Transit Bureau UAS operations from January 2, 2024 to May 29, 2024, provided to the Office by the Department. *See* NYPD Production Folders ["FAA Expedited SGI COA Approvals – F" & "FAA Expedited SGI COA Requests – F"]

[107] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (September 22, 2023), at 6.

Department's measures to protect information collected by NYPD UAS, as the POST Act requires.

D. Policies and Procedures Relating to Retention, Access, & Use of the Data

The UAS IUP states that data obtained from UAS is retained by TARU for 30 days, though that period may be extended if the information is needed for purposes of civil litigation, subpoena production, Freedom of Information Law requests, or legal processes.[108] The Department's Patrol Guide and TARU's UAS Standard Operating Procedures Manual are consistent with the IUP.[109]

However, because TARU personnel are not the only NYPD personnel operating UAS, the IUP should be updated if TARU is not, in fact, the only unit responsible for retaining UAS data, and if the requirements for data retention is not identical across units. Similarly, while the IUP refers to databases where UAS data is stored, the IUP should be updated if TARU is not primarily responsible for the databases and access to the databases. The other units with responsibility should also be identified in the UAS IUP.

E. Training Requirements

The UAS IUP states that TARU personnel operating UAS must obtain and maintain their FAA remote pilot certificate, which involves passing the FAA's "Aeronautical Knowledge Test," and a recurrent knowledge test every two years.[110] These training and certification requirements are consistent with Department policy and FAA guidelines regulating operation of UAS. The IUP further notes the Department provides additional in-service training to certificate holders on FAA regulations and practices flights and simulations, which is corroborated by both NYPD training materials reviewed by the Office during this investigation and meetings with Department personnel.[111] While the IUP discloses the training required to operate UAS, as noted throughout this section, the IUP only contemplates TARU personnel operating UAS and no other members of NYPD, as is actually the case. Thus, the IUP needs to be updated to reflect who in the Department is operating UAS. Additionally, the POST Act requires the IUP to disclose whether training is required for an individual to access information collected by a surveillance technology, which is not

[108] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22, 2023), at 7.
[109] *See* N.Y.C. Police Dep't, *TARU UAS Standard Operating Procedure.* (Mar. 3, 2023). ["UAS MANUAL F.pdf" page 9]. *See also* N.Y.C. Police Dep't Patrol Guide Procedure 212-124 (May 28, 2024).
[110] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22, 2023), at 10.
[111] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22, 2023), at 10. *See also* NYPD Production - NYPD TARU UAS Ops NIST sUAS Testing PowerPoint ["US Ops F"] (undated), page 12.
[111] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22, 2023), page 10-11.

addressed within the UAS IUP, and thus, the IUP should be updated to disclose this information.

F. Internal Audit & Oversight Mechanisms

Similar to other IUPs, this section of the UAS IUP states that all use of NYPD equipment is for official use only and misuse will be investigated by the Internal Affairs Bureau. However, this section is much more detailed with respect to the responsibilities of TARU as it relates to UAS deployments, as well as that of Integrity Control Officers, who are responsible for maintaining the security and integrity of information, in particular NYPD computer systems.[112]

Specifically, the IUP requires the involvement of TARU in every UAS flight. TARU supervisors assess whether requests for use of UAS—which may only come from a uniformed executive (commanding officer, executive officer, or daily duty captain)—are aligned with NYPD policy and with required Federal preflight checks. TARU supervisors are also responsible for the security and proper utilization of UAS equipment. The IUP notes TARU must maintain a flight log for each UAS flight and states that the Commanding Officer of TARU reports directly to the Chief of Department.

However, as noted in several previous sections, this does not reflect NYPD's actual use of UAS. TARU personnel are not involved in the supervision of every UAS deployment. As previously discussed, the formerly standalone Transit Bureau UAS team collectively decided what flights they will operate and assessed whether the operating environment permits such flights, and as part of the Drone Team, the commanding officer of the team, not someone in TARU, makes such decision. This section of the IUP should be updated to reflect which units within the Department are authorized to use UAS and how those deployments are authorized.

Further, the Commanding Officer for the recently created Drone Team operating out of the Office of the Chief of Department reports directly to the Deputy Commissioner of Operations, rather than the Chief of Department, contrary to the requirements of the IUP. The IUP should be updated in this respect as well to accurately reflect current practice.

Also, NYPD's Patrol Guide Procedure 212-124, Use of Department Unmanned Aircraft Systems, was revised in May 2024 to reflect that the Department integrated its UAS deployment paperwork into NYPD's Finest Online Records Management

[112] *See* New York City Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22 2023), at https://www.nyc.gov/assets/nypd/downloads/pdf/public_information/post-final/Unmanned_Aircraft_Systems_UAS_NYPDIUP_Addendum_9.22.23.pdf (last accessed Nov. 29, 2024), at 10-11.

Systems ("FORMS") database. As a result, members of TARU would no longer be required to maintain a UAS Deployment Log, as this data would be captured and maintained in FORMS.[113] However, the UAS IUP has not been updated to reflect this change.

G. Health & Safety Reporting

While NYPD's UAS IUP notes there are no known health and safety issues with UAS operated by the NYPD or its associated equipment, OIG-NYPD's assessment revealed this to be inaccurate.[114] FAA guidelines, vendor-issued operator manuals associated with UAS, and even the IUP itself, emphasize safety precautions and considerations related to use of UAS. These safety risks are also evidenced by FAA and NYPD required testing and trainings, which cover topics related to such risks associated with UAS operations.

1. *Operational Health and Safety Risks*

The U.S. national airspace system has been described by the FAA as the busiest, most complex airspace in the world.[115] The FAA has emphasized safety as its primary mission in the establishment of training requirements and operational specifications for UAS.[116] General safety risks associated with UAS include personal injury and property damage resulting from loss of control of the aircraft due to pilot error, hardware malfunction, obstacle collision, or environmental factors. FAA guidelines specifically prohibit operation of UAS in a careless or reckless manner so as to endanger the life or property of another or allow an object to be dropped from the aircraft in a manner that creates an undue hazard.[117] The FAA highlights several factors to be considered by RPIC prior to every UAS deployment for safe UAS operation, such as UAS limitations, weather, applicable flight rules (groundspeed, altitude, minimum flight visibility, minimum distance from the clouds, and other FAA restrictions), and the mechanical status of the aircraft (adequate battery power, fully operational propellers, and clean camera lenses).[118] These factors are reflected

[113] *See* N.Y.C. Police Dep't, Revision Order No. 33, *Revision to Patrol Guide 212-124, "Use of Department Unmanned Aircraft Systems"* (May 28, 2024).
[114] *See* N.Y.C. Police Dep't, *Unmanned Aircraft Systems IUP* (Sep. 22, 2023), at 11.
[115] *See* Federal Aviation Administration, *Unmanned Aircraft Systems (UAS)*, https://www.faa.gov/newsroom/unmanned-aircraft-systems-uas (Feb. 15, 2015).
[116] *See* Federal Aviation Administration, *Unmanned Aircraft Systems (UAS)*, https://www.faa.gov/newsroom/unmanned-aircraft-systems-uas (Feb. 15, 2015).
[117] *See* 14 CFR 107.23, *Hazardous operation*, at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.23
[118] *See* Federal Aviation Administration, *Section 8. Other Information and Best Practices*, at 11-8-1 (undated), at https://www.faa.gov/air_traffic/publications/atpubs/aim_html/chap11_section_8.html. *See also* 14 CFR 107.51, *Operating limitations for small unmanned aircraft*, at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.51. *See*

in the UAS IUP, though the associated health and safety risks are not disclosed in this section of the IUP. The UAS IUP should be updated to disclose these risks, as required by the POST Act.

Additional safety risks are associated with the UAS hardware itself. For example, vendor-issued user manuals for UAS, such as Skydio models x2 and x10, include warnings cautioning users to avoid the aircraft's sharp propellers while in motion, as this hardware poses risks of serious injury or damage.[119] This Office also identified safety concerns associated with certain payloads, such as the Skydio VT300-L and V100-L sensor packages and the Skydio NightSense attachment, which includes onboard flashlights for visual navigation in low-light environments. The Skydio user manual cautions against staring directly into the sensor package lights at any range for any extended period of time, and further notes that prolonged use may cause the sensor package to be hot to the touch, noting it presents a "serious burn risk."[120] The manual provides similar warnings for potential eye damage and burn risk in relation to the NightSense attachment.[121]

2. *Battery Safety Considerations*

This Office's investigation revealed additional hardware safety risks posed specifically by the lithium-ion batteries used in controllers for some NYPD drones, which are known to be prone to overheating, catching fire, and exploding.[122] In 2021, lithium-ion battery fires caused 10 deaths and 226 injuries in New York City, and in the following year, 18 deaths, making them among the top causes of fire fatalities at that time.[123] Widespread concerns regarding lithium-ion battery fires led to a public

---

also 14 CFR 107.49, *Preflight familiarization, inspection, and actions for aircraft operation*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.49. *See also* 14 CFR 107.41, *Operation in certain airspace*, located at https://www.ecfr.gov/current/title-14/chapter-I/subchapter-F/part-107/subpart-B/section-107.41. *See also Skydio x10 User Manual* (Oct. 9, 2024), at 9.

[119] *See* Skydio x10 User Manual, at 8 ["SkydioX10_OperatorManual_v37.1_Oct_A0381"] (Oct. 9, 2024). *See also* Skydio x2 User Manual, at 63 ["Skydio_X2E_Operator_Manual_24.10_A0118"] (Jul. 2, 2023).

[120] *See* Skydio x10 User Manual, at 109 ["SkydioX10_OperatorManual_v37.1_Oct_A0381"] (Oct. 9, 2024).

[121] *See* Skydio x10 User Manual, at 140 ["SkydioX10_OperatorManual_v37.1_Oct_A0381"] (Oct. 9, 2024).

[122] *See* National Fire Protection Association, *LITHIUM-ION BATTERY SAFETY* (undated), at https://www.nfpa.org/education-and-research/home-fire-safety/lithium-ion-batteries (last accessed Dec. 2, 2024).

[123] *See* N.Y.C. Mayor's Office, *Putting Out Lithium-ion Battery Fires* https://www.nyc.gov/content/getstuffdone/pages/lithium-ion-batteries (last accessed Dec. 2, 2024). *See also* N.Y.C. Mayor's Office, *Mayor Adams Takes New Actions To Prevent Deadly Lithium-Ion Battery Fires, Promote Safe E-Bike Charging And Usage* (Jul. 22, 2024), at https://www.nyc.gov/office-of-the-mayor/news/574-24/mayor-adams-takes-new-actions-prevent-deadly-lithium-ion-battery-fires-promote-safe-e-bike#/0

education campaign run by the FDNY in 2024 to raise awareness of the fire safety risks they pose. The FDNY provides specific instructions and warnings related to the charging and storage of lithium-ion batteries, noting that the public should follow the manufacturer's instructions for their charging, storage, and use.[124] NYPD vendor-issued operator manuals similarly highlight the safety risks associated with lithium-ion batteries.[125] Given the health and safety risks associated with lithium-ion batteries used in some UAS controllers, the UAS IUP should address the safety risks posed by lithium batteries.

Skydio's x2 and x10 UAS manuals also include health-related disclosures required under California law, referred to as California Proposition 65 warnings. Proposition 65 requires California businesses to provide warnings regarding significant exposures to chemicals that cause cancer, birth defects, and other reproductive harm.[126] Skydio manuals include Proposition 65 warnings, noting that such risks are associated with Skydio aircrafts' lithium-ion batteries—which contain cobalt lithium nickel oxide and nickel, its controllers—which contain cadmium, and its chargers—which contain BPA and nickel.[127] User manuals for Nightingale Security's Blackbird drone and Autel's Evo II Pro 3 also note the use of lithium-ion batteries in its aircrafts.[128] While such warnings are not a requirement under New York State law, these disclosures evidence health and safety risks posed by UAS, and thus, the IUP should be updated to include such information.

H. Disparate Impacts of the Impact & Use Policy

NYPD's UAS (and Thermographic Cameras) IUP technically comply with the POST Act with respect to its disclosure of potentially disparate impacts because the Act requires the IUP to address the disparate impact of the Impact and Use Policy itself, rather than the disparate impact of the surveillance technology on protected groups. As such, the Act does not require NYPD to publicly disclose any potentially disparate impact related to NYPD's use of UAS on protected groups. However, consistent with

---

[124] *See* FDNY, *Lithium-Ion Safety* (undated), at 4. https://www.nyc.gov/assets/fdny/downloads/pdf/codes/lithium-ion-batteries-safety.pdf

[125] *See* NYPD Production - ANAFI Ai User Manual (Feb. 3, 2023), at 52 ["ANAFI-USA-user-manual"]; *See also* NYPD Production - ANAFI USA User Manual (Oct. 4, 2024), at 18. *See also* NYPD Production - Nightingale Security Operations Manual ["DS_BLACKBIRDSTARTER_KIT_e994 "] (Sep. 3, 2020), at 109.

[126] *See* CA.gov, *Welcome to the Proposition 65 Warnings Website* (undated), at https://www.p65warnings.ca.gov/ (last accessed Dec. 2, 2024).

[127] *See* Skydio x2 User Manual, at 79 ["Skydio_X2E_Operator_Manual_24.10_A0118"] (Jul. 2, 2023). *See also See* Skydio x10 User Manual, at 203 ["SkydioX10_OperatorManual_v37.1_Oct_A0381"] (Oct. 9, 2024).

[128] *See* NYPD Production - Nightingale Security Operations Manual ["DS_BLACKBIRDSTARTER_KIT_e994 "] (Sep. 3, 2020), at 13. *See also* NYPD Production - Autel EVO II Pro V3 User Manual ["EN_EVO-II-Pro-V3-Aircraft-User-Manual_V2.0.3"] (Aug. 2024), at 88.

both of its prior POST Act reports, OIG-NYPD takes the position that NYPD should include in each IUP the potential disparate impacts of the use and deployment of the surveillance technology itself on protected groups, as NYPD has done for certain, but not all, surveillance technologies.

VII. Findings

Based on the Office's review of the Department's UAS operations, the applicable IUPs, NYPD records, and relevant Federal guidelines, OIG-NYPD found that while the Thermographic Cameras IUP was sufficient, the UAS IUP does not sufficiently disclose all of the information required by the POST Act and does not provide a complete and accurate picture of all aspects of NYPD UAS operations in practice.

OIG-NYPD makes the following findings:

1. The UAS IUP requires that all UAS deployments are operated and supervised by TARU personnel, but, in fact, multiple units within NYPD have operated their own UAS programs, including the Transit Bureau, the Highway Unit Collision Technician Group, the Emergency Services Unit, the Counterterrorism Division, and the Office of the Chief of Department, and TARU is not involved in the operation or supervision of UAS drone deployments for those units.

2. The Commanding Officer for the newly formed Drone Team, which consolidated UAS operations for the Transit Bureau, the DFR Program, and TARU, reports directly to the Deputy Commissioner of Operations rather than the Chief of Department, contrary to the IUP's requirement that the Commanding Officer of NYPD's drone program should report to the highest-ranking uniformed member of NYPD (Note that, while the Deputy Commissioner of Operations reports directly to the Chief of Department, by placing the Chief of Department at the top of the reporting chain for the Drone Team, there is no direct reporting line between the Commanding Officer for the Drone Team and the Chief of Department).

3. The UAS IUP does not disclose several capabilities of the UAS including features that enable fully autonomous and pre-programed flights, two- and three-dimensional mapping technologies, two-way communication capabilities, and glass breaker attachments (enables forcible entry into windowed structures).

4. The UAS IUP does not disclose any potential health and safety impacts of UAS, including risks related to personal injury, property damage, and the device's lithium-ion batteries.

5. The UAS IUP does not reflect that UAS flight log information is now captured in FORMS, so TARU no longer needs to maintain a log of each flight.

6. OIG-NYPD was unable to assess whether NYPD's UAS operations were conducted in compliance with its IUPs, as it only provided records related to the Transit Bureau's deployments.

VIII. Recommendations

Based on the findings, OIG-NYPD makes the following ten recommendations:

1. Update the UAS IUP to reflect that TARU personnel are not the only ones operating and supervising UAS operations and currently all operations are performed independently from TARU.

2. Update the UAS IUP to accurately describe the approval, supervision, and reporting structure for UAS operations.

3. Update the UAS IUP to make clear that the requirement of an FAA remote pilot certificate is applicable to all UAS operators, rather than only TARU personnel.

4. Update the UAS IUP to include all the capabilities of its UAS fleet.

5. Update the UAS IUP to include a reference to the Thermographic Cameras IUP, which contains additional information relevant to this technological capability of UAS.

6. Update the UAS IUP to note that operations involving First-Person View drones require a designated visual observer, as per FAA guidelines, except if there is an active COA waiving this requirement.

7. Update the UAS IUP to specify whether TARU is the only unit responsible for retaining UAS data, and if not, specify requirements applied to those other units.

8. Update the UAS IUP to reflect that flight log information is automated and should be entered directly into FORMS rather than maintained by TARU.

9. Update the UAS IUP to disclose health and safety impacts related to UAS.

10. While not a requirement of the POST Act, update the UAS IUP to include the potential disparate impacts of the use and deployment of UAS technology itself on protected groups, as NYPD has done for certain, but not all, surveillance technologies.

IX. Appendix A: Local Law 65 of 2020

LOCAL LAWS
OF
THE CITY OF NEW YORK
FOR THE YEAR 2020

No. 65

Introduced by Council Members Rosenthal, Levine, Reynoso, Cumbo, Dromm, Kallos, the Public Advocate (Mr. Williams), Chin, Lander, Miller, Lancman, Rivera, Adams, Moya, Levin, Barron, Ayala, Cornegy, Powers, Louis, Brannan, Menchaca, Perkins, Rose, Ampry-Samuel, Treyger, Torres, Van Bramer, Rodriguez, Richards, Gjonaj, Constantinides, Salamanca, Cabrera, Vallone, Cohen and the Speaker (Council Member Johnson).

A LOCAL LAW

To amend the administrative code of the city of New York, in relation to creating comprehensive reporting and oversight of New York city police department surveillance technologies

Be it enacted by the Council as follows:

Section 1. Chapter 1 of title 14 of the administrative code of the city of New York is amended by adding a new section 14-188 to read as follows:

§ 14-188 Annual surveillance reporting and evaluation. a. Definitions. As used in this section, the following terms have the following meanings:

Surveillance technology. The term "surveillance technology" means equipment, software, or systems capable of, or used or designed for, collecting, retaining, processing, or sharing audio, video, location, thermal, biometric, or similar information, that is operated by or at the direction of the department. Surveillance technology does not include:

1. routine office equipment used primarily for departmental administrative purposes;

2. parking ticket devices;

3. technology used primarily for internal department communication; or

4. cameras installed to monitor and protect the physical integrity of city infrastructure.

Surveillance technology impact and use policy. The term "surveillance impact and use policy" means a written document that includes the following information:

1. a description of the capabilities of a surveillance technology;

2. rules, processes and guidelines issued by the department regulating access to or use of such surveillance technology as well as any prohibitions or restrictions on use, including whether the department obtains a court authorization for such use of a surveillance technology, and, if so, the specific type of court authorization sought;

3. safeguards or security measures designed to protect information collected by such surveillance technology from unauthorized access, including but not limited to the existence of encryption and access control mechanisms;

4. policies and/or practices relating to the retention, access, and use of data collected by such surveillance technology;

5. policies and procedures relating to access or use of the data collected through such surveillance technology by members of the public;

6. whether entities outside the department have access to the information and data collected by such surveillance technology, including: (a) whether the entity is a local governmental entity, state governmental entity, federal governmental entity or a private entity, (b) the type of information

2

and data that may be disclosed by such entity, and (c) any safeguards or restrictions imposed by the department on such entity regarding the use or dissemination of the information collected by such surveillance technology;

7. whether any training is required by the department for an individual to use such surveillance technology or access information collected by such surveillance technology;

8. a description of internal audit and oversight mechanisms within the department to ensure compliance with the surveillance technology impact and use policy governing the use of such surveillance technology;

9. any tests or reports regarding the health and safety effects of the surveillance technology; and

10. any potentially disparate impacts of the surveillance technology impact and use policy on any protected groups as defined in the New York city human rights law.

b. Publication of surveillance technology impact and use policy. The department shall propose a surveillance technology impact and use policy and post such proposal on the department's website, at least 90 days prior to the use of any new surveillance technology.

c. Existing surveillance technology. For existing surveillance technology as of the effective date of the local law that added this section, the department shall propose a surveillance technology impact and use policy and post such proposal on the department's website within 180 days of such effective date.

3

d. Addendum to surveillance technology impact and use policies. When the department seeks to acquire or acquires enhancements to surveillance technology or uses such surveillance technology for a purpose or in a manner not previously disclosed through the surveillance technology impact and use policy, the department shall provide an addendum to the existing surveillance technology impact and use policy describing such enhancement or additional use.

e. Upon publication of any proposed surveillance technology impact and use policy, the public shall have 45 days to submit comments on such policy to the commissioner.

f. The commissioner shall consider public comments and provide the final surveillance technology impact and use policy to the speaker and the mayor, and shall post it on the department's website no more than 45 days after the close of the public comment period established by subdivision e of this section.

§ 2. Section 803 of the New York city charter is amended by adding a new subdivision c-1 to read as follows:

c-1. The commissioner shall prepare annual audits of surveillance technology impact and use policies as defined in section 14-188 of the administrative code that shall:

1. assess whether the New York city police department's use of surveillance technology, as defined in section 14-188 of the administrative code, complies with the terms of the applicable surveillance technology impact and use policy;

4

2. describe any known or reasonably suspected violations of the surveillance technology impact and use policy, including but not limited to complaints alleging such violations made by individuals pursuant to paragraph (6) of subdivision c of this section; and

3. publish recommendations, if any, relating to revisions of any surveillance technology impact and use policies.

§ 3. This local law takes effect immediately.

THE CITY OF NEW YORK, OFFICE OF THE CITY CLERK, s.s.:

I hereby certify that the foregoing is a true copy of a local law of The City of New York, passed by the Council on June 18, 2020 and approved by the Mayor on July 15, 2020.

MICHAEL M. McSWEENEY, City Clerk, Clerk of the Council.

CERTIFICATION OF CORPORATION COUNSEL

I hereby certify that the form of the enclosed local law (Local Law No. 65 of 2020, Council Int. No. 487-A of 2018) to be filed with the Secretary of State contains the correct text of the local law passed by the New York City Council and approved by the Mayor.

STEPHEN LOUIS, Acting Corporation Counsel.

5

X. Appendix B: NYPD's Unmanned Aircraft Systems IUP

UNMANNED AIRCRAFT SYSTEMS: IMPACT AND USE POLICY

SEPTEMBER 22, 2023

UNMANNED AIRCRAFT SYSTEMS:
IMPACT & USE POLICY

NYPD

SUMMARY OF CHANGES BETWEEN DRAFT & FINAL POLICY

Update	Description of Update
Removed statement that UAS does not use artificial intelligence and machine learning.	Public comment highlighted a lack of industry-standard definitions for artificial intelligence and machine learning.
Expanded upon UAS capabilities.	Added language regarding how UAS compliment other NYPD technologies.
Expanded upon UAS rules of use.	Added language clarifying UAS rules of use. Added language clarifying UAS use-authorization.
Expanded upon UAS safeguards and security measures.	Added language regarding information security. Added language to reflect the removal of access to UAS when job duties no longer require access.
Expanded upon UAS data retention.	Added language to reflect NYPD obligations under Federal, State and local record retention laws.
Expanded upon UAS external entities section.	Added language to reflect NYPD obligations under the local privacy laws.
Minor grammar changes.	Minor syntax edits were made.

UNMANNED AIRCRAFT SYSTEMS:
IMPACT & USE POLICY

NYPD

UNMANNED AIRCRAFT SYSTEMS ADDENDUM

Date of Addendum	Description of Addendum
September 22, 2023	Section describing the rules, processes and guidelines relating to NYPD use of Unmanned Aircraft Systems updated to reflect change in Department policy. Minor syntax edits were made.

UNMANNED AIRCRAFT SYSTEMS:
IMPACT & USE POLICY

NYPD

ABSTRACT

Unmanned aircraft systems (UAS), commonly referred to as "drones," are used by the New York City Police Department (NYPD) to conduct search and rescue missions, disaster response, documentation of traffic collision and crime scenes, crowd monitoring and provide a bird's eye view in dangerous active shooter and hostage situations. UAS help NYPD personnel gather crucial information as situations unfold without putting officers, civilian bystanders and other involved parties at risk.

The NYPD produced this impact and use policy because NYPD UAS are capable of collecting video, thermal and location information, and sharing that information with NYPD personnel.

CAPABILITIES OF THE TECHNOLOGY

NYPD UAS are composed of aircraft without a human pilot onboard. The devices are controlled remotely by a NYPD operator through the use of a transmitter. UAS used by the NYPD vary in size. They are weather-resistant, and are equipped with multi-zoom cameras and thermal imaging capabilities.

UAS generally serve as a non-invasive compliment to other law enforcement and security measures employed by the NYPD. The mobility and adaptability of UAS allow the NYPD to utilize the technology in numerous ways. For example, at large-scale events, UAS provide an expansive aerial view of a large area and can inform personnel deployments regarding congestion at these sites at a fraction of the cost and resources of other equipment. UAS additionally assist NYPD personnel conducting search and rescue operations, documenting collision and crimes scenes, searching for evidence at large or inaccessible scenes and hazardous material incidents, monitoring of vehicular traffic and pedestrian congestion at large events, providing visual assistance at hostage/barricaded suspect situations, at rooftop security situations during shooting incidents, etc.

NYPD UAS do not use video analytics or biometric measuring technologies beyond the processing of thermal data. NYPD UAS do not use facial recognition technologies and cannot conduct facial recognition analysis. However, a still image can be created from the recorded video images and may be used as a probe image for facial recognition analysis.[1]

RULES, PROCESSES & GUIDELINES RELATING TO USE OF THE TECHNOLOGY

The NYPD's UAS policy seeks to balance the public safety benefits of this technology with individual privacy. UAS must be used in a manner that is consistent with the requirements and protection of the Constitution of the United States, the New York State Constitution, and applicable statutory authorities.

NYPD policy directs that UAS may be used for the following purposes: search and rescue operations, documentation of collision and crimes scenes, evidence searches at large or inaccessible scenes, hazardous material incidents, monitoring vehicular traffic and pedestrian congestion at large scale events, visual assistance at hostage/barricaded suspect situations, rooftop security observations at shootings or large scale events at the direction of the incident commander,

[1] For additional information on facial recognition, please refer to the facial recognition impact and use policy.

public safety, emergency, or other situations with the approval of the Chief of Department or designee, including responding to incidents where there is a risk of physical harm to the public and/or members of the service, pre-warrant execution safety survey and during execution of search warrant, as appropriate, and training and testing, as appropriate, to ensure proficiency and equipment operability.

UAS cannot be used for routine foot patrol by officers; traffic enforcement or immobilizing a vehicle or suspect. Furthermore, consistent with the mission of the Department and privacy considerations for the public, certain restrictions apply to Department use of a UAS. Accordingly, NYPD UAS will not be used as a weapon or equipped with any weapons. Additionally, NYPD UAS will not be equipped with facial recognition software.

In situations where deployment of NYPD UAS has not been foreseen or prescribed in policy, the highest uniformed member of the NYPD, the Chief of Department, will decide if deployment is appropriate and lawful. In accordance with the Public Oversight of Surveillance Technology Act, an addendum to this impact and use policy will be prepared as necessary to describe any additional uses of UAS.

When UAS are used to conduct aerial surveillance of areas exposed to public observation, court authorization is not required prior to their use. Absent exigent circumstances, a UAS will not be used in areas where there is a reasonable expectation of privacy without NYPD personnel first obtaining a search warrant that explicitly authorizes the use of a UAS. After a search warrant is issued, a UAS may be used for a pre-warrant execution safety survey. The warrant will be obtained with the assistance of the prosecutor with jurisdiction over the matter.

NYPD investigations involving political activity are conducted by the Intelligence Bureau, which is the sole entity in the NYPD that may conduct investigations involving political activity pursuant to the *Handschu* Consent Decree.

No person will be the subject of police action solely because of actual or perceived race, color, religion or creed, age, national origin, alienage, citizenship status, gender (including gender identity), sexual orientation, disability, marital status, partnership status, military status, or political affiliation or beliefs.

The misuse of UAS will subject employees to administrative and potentially criminal penalties.

SAFEGUARD & SECURITY MEASURES AGAINST UNAUTHORIZED ACCESS

NYPD UAS may only be used and operated by members assigned to the Technical Assistance Response Unit (TARU). Operation of UAS must follow the guidelines of Title 14 of the Code of Federal Regulations, Part 107, and/or the Certificate of Authorization (COA) issued to the Department by the Federal Aviation Administration (FAA), as well as all other applicable FAA regulations and federal, state, and local laws. Each member of TARU that operates a UAS has obtained their remote pilot certificate from the FAA and has passed the FAA's "Aeronautical Knowledge Test." If use is to take place outside of the NYPD's COA, TARU personnel are instructed to contact FAA and seek a Special Government Interest COA prior to deployment.

The decision of whether to deploy NYPD UAS must be made by an NYPD executive serving as a commanding officer, executive officer, or daily duty captain. Such member must request the UAS presence from TARU, and TARU personnel will then assess whether such use comports with NYPD policy and evaluate weather conditions, airspace restrictions, and safety in determining the appropriateness of use. If there is disagreement concerning the permissible use of a NYPD UAS, conferral with a TARU supervisor will occur. If such disagreement cannot be resolved, the daily duty chief will make the final determination.

When appropriate, TARU personnel make notifications to the NYPD Aviation Unit and Operations Unit of the time, location, and flight path prior to use of UAS in order to avoid any airspace conflict with other aircraft operating in the area. Radio dispatch must also be notified to alert responding NYPD members of a NYPD UAS in the area. TARU is to maintain a log of each UAS flight by date, time, location, purpose, flight time, pilot name, and authorizing member.

UAS are securely stored in NYPD facilities when not in use, in a location that is inaccessible to the public. Additionally, a supervisor must periodically inspect and account for the devices. Access to UAS is limited to NYPD personnel with an articulable need to use the technology in furtherance of a lawful duty. Access to NYPD UAS is removed when access is no longer necessary for NYPD personnel to fulfill their duties (e.g., when personnel are transferred to a command that does not use the technology).

NYPD UAS transmit video images to NYPD personnel reviewing the transmission on a remote monitor through an encrypted signal on a closed, stand-alone network. Data is encrypted both at rest on the device and in transit. The signal can only be decrypted by vendor-provided proprietary software.

Recordings obtained from UAS are retained within a NYPD computer or case management system. Only authorized users have access to these recordings. NYPD personnel utilizing computer and case management systems are authenticated by username and password. Access to case management and computer systems is limited to personnel who have an articulable need to access the system in furtherance of lawful duty. Access rights within NYPD case management and computer systems are further limited based on lawful duty. Authorized users can only access data and perform tasks allocated to them by the system administrator according to their role.

The NYPD has a multifaceted approach to secure data and user accessibility within NYPD systems. The NYPD maintains an enterprise architecture (EA) program, which includes an architecture review process to determine system and security requirements on a case by case basis. System security is one of many pillars incorporated into the EA process. Additionally, all NYPD computer systems are managed by a user permission hierarchy based on rank and role via Active Directory (AD) authentication. Passwords are never stored locally; user authentication is stored within the AD. The AD is managed by a Lightweight Directory Access Protocol (LDAP) to restrict/allow port access. Accessing NYPD computer systems remotely requires dual factor authentication. All data within NYPD computer systems are encrypted both in transit and at rest via Secure Socket Layer (SSL)/Transport Layer Security (TLS) certifications which follow industry best practices.

NYPD personnel must abide by security terms and conditions associated with computer and case management systems of the NYPD, including those governing user passwords and logon procedures. NYPD personnel must maintain confidentiality of information accessed, created, received, disclosed or otherwise maintained during the course of duty and may only disclose information to others, including other members of the NYPD, only as required in the execution of lawful duty.

NYPD personnel are responsible for preventing third parties unauthorized access to information. Failure to adhere to confidentiality policies may subject NYPD personnel to disciplinary and/or criminal action. NYPD personnel must confirm the identity and affiliation of individuals requesting information from the NYPD and determine that the release of information is lawful prior to disclosure.

Unauthorized access of any system will subject employees to administrative and potentially criminal penalties.

POLICIES & PROCEDURES RELATING TO RETENTION, ACCESS & USE OF THE DATA

Information obtained from UAS use will be retained for thirty (30) days by TARU. The NYPD's Legal Bureau may extend the retention period if the images are needed for civil litigation, subpoena production, Freedom of Information Law requests or other legal processes.

TARU personnel distribute recorded information to the NYPD personnel responsible for investigating the matter where the UAS was utilized. The NYPD investigator will store this information in an NYPD computer or case management system.

Recordings may only be used for legitimate law enforcement purposes or other official business of the NYPD, including in furtherance of criminal investigations, civil litigations, and disciplinary proceedings. Recordings will be stored in an appropriate NYPD computer or case management system. NYPD personnel utilizing case management and computer systems are authenticated by username and password. Access to case management and computer systems is limited to personnel who have an articulable need to access the system in furtherance of lawful duty. Access rights within NYPD case management and computer systems are further limited based on lawful duty.

The Retention and Disposition Schedule for New York Local Government Records (the Schedule) establishes the minimum length of time local government agencies must retain their records before the records may be legally disposed.[2] Published annually by the New York State Archives, the Schedule ensures compliance with State and Federal record retention requirements. The NYC Department of Records and Information Services (DORIS) publishes a supplemental records retention and disposition schedule (the Supplemental Schedule) in conjunction with the Law Department specifically for NYC agencies in order to satisfy business, legal, audit and legal requirements.[3]

[2] *See* N.Y. Arts & Cult. Aff. Law § 57.19 - 25, *and* 8 NYCRR Part 185.
[3] *See* NYC Charter 3003.

The retention period of a "case investigation record" depends on the classification of a case investigation record. The classification of case investigation records is based on the final disposition of the case, i.e., what the arrestee is convicted of or pleads to. Further, case investigations are not considered closed unless it results in prosecution and appeals are exhausted, it results in a settlement, it results in no arrest, or when restitution is no longer sought.

Case investigation records classified as a homicide, suicide, arson (first, second or third degree), missing person (until located), aggravated sexual assault (first degree), course of sexual conduct against a child (first degree), active warrant, or stolen or missing firearms (until recovered or destroyed), must be retained permanently. Case investigation records classified as a fourth degree arson or non-fatal (including vehicular accidents) must be retained for a minimum of ten (10) years after the case is closed. Case investigation records classified as any other felony must be retained for a minimum of twenty-five (25) years after the case is closed. Case investigation records classified as a misdemeanor must be retained for a minimum of five (5) years after the case is closed. Case investigation records classified as a violation or traffic infraction must be retained for a minimum of one (1) year after the case is closed. Case investigation records classified as an offense against a child as defined by the Child Victims Act, excluding aggravated sexual assault (first degree), course of sexual conduct against a child (first degree), must be retained until the child attains at least age fifty-five (55). Case investigation records connected to an investigation that reveals no offense has been committed by an adult must be kept for a minimum of five (5) years after the case is closed. Case investigation records connected to an investigation that reveals the individual involved was a juvenile and no arrest was made or no offense was committed must be kept for at least one (1) year after the juvenile attains age eighteen (18).

Personal information data files on criminals and suspects must be retained for at least five (5) years after the death of the criminal or suspect, or ninety (90) years after the criminal or suspect's date of birth as long as there has been no arrest in the last five (5) years, whichever is shorter. Personal information data files on associated persons, such as victims, relatives and witnesses must be retained as long as, or information as part of relevant case investigation record.

The misuse of any recording will subject employees to administrative and potentially criminal penalties.

POLICIES & PROCEDURES RELATING TO PUBLIC ACCESS OR USE OF THE DATA

Members of the public may request recordings obtained from NYPD use of UAS pursuant to the New York State Freedom of Information Law. The NYPD will review and evaluate such requests in accordance with applicable provisions of law and Department policy. Additionally, the NYPD voluntary discloses information related to UAS use on a quarterly basis on its website: (https://www1.nyc.gov/site/nypd/stats/reports-analysis/uas-drones.page).

EXTERNAL ENTITIES

If a UAS obtains data related to a criminal case, the NYPD will turn it over to the prosecutor with jurisdiction over the matter. The prosecutor will provide the data to the defendant(s) in accordance with criminal discovery laws.

Other law enforcement agencies may request information obtained by UAS from the NYPD. Such disclosure by the NYPD is governed by applicable laws and regulations, and NYPD policies. Additionally, the NYPD may provide the information to partnering law enforcement and city agencies pursuant to on-going criminal investigations, civil litigation and disciplinary proceedings. Information is not shared in furtherance of immigration enforcement.

Following the laws of the State and City of New York, as well as NYPD policy, the recording or information related to it may be provided to community leaders, civic organizations and the news media in order to further an investigation, create awareness of an unusual incident, or address a community-concern.

Pursuant to NYPD policy and local law, NYPD personnel may disclose identifying information externally only if:

1. Such disclosure has been authorized in writing by the individual to whom such information pertains to, or if such individual is a minor or is otherwise not legally competent, by such individual's parent or legal guardian and has been approved in writing by the Agency Privacy Officer assigned to the Legal Bureau;
2. Such disclosure is required by law and has been approved in writing by the Agency Privacy Officer assigned to the Legal Bureau;
3. Such disclosure furthers the purpose or mission of the NYPD and has been approved in writing by the Agency Privacy Officer assigned to the Legal Bureau;
4. Such disclosure has been pre-approved as in the best interests of the City by the City Chief Privacy Officer;
5. Such disclosure has been designated as routine by the Agency Privacy Officer assigned to the Legal Bureau;
6. Such disclosure is in connection with an investigation of a crime that has been committed or credible information about an attempted or impending crime;
7. Such disclosure is in connection with an open investigation by a City agency concerning the welfare of a minor or an individual who is otherwise not legally competent.

Government agencies at the local, state, and federal level, including law enforcement agencies other than the NYPD, have limited access to NYPD computer and case management systems. Such access is granted by the NYPD on a case by case basis subject to the terms of written agreements between the NYPD and the agency receiving access to a specified system. The terms of the written agreements also charge these external entities with maintaining the security and confidentiality of information obtained from the NYPD, limiting disclosure of that information without NYPD approval, and notifying the NYPD when the external entity receives a request for that information pursuant to a subpoena, judicial order, or other legal process. Access will not be given to other agencies for purposes of furthering immigration enforcement.

The NYPD purchases UAS and associated equipment or Software as a Service (SaaS)/software from approved vendors. The NYPD emphasizes the importance of and engages with vendors and contractors to maintain the confidentiality, availability, and integrity of NYPD technology systems.

Vendors and contractors may have access to NYPD UAS associated software or data in the performance of contractual duties to the NYPD. Such duties are typically technical or proprietary in nature (e.g., maintenance or failure mitigation). In providing vendors and contractors access to equipment and computer systems, the NYPD follows the principle of least privilege. Vendors and contractors are only allowed access on a "need to know basis" to fulfill contractual obligations and/or agreements.

Vendors and contractors providing equipment and services to the NYPD undergo vendor responsibility determination and integrity reviews. Vendors and contractors providing sensitive equipment and services to the NYPD also undergo background checks.

Vendors and contractors are legally obligated by contracts and/or agreements to maintain the confidentiality of NYPD data and information. Vendors and contractors are subject to criminal and civil penalties for unauthorized use or disclosure of NYPD data or information.

If recordings obtained using NYPD UAS are disclosed in a manner violating the local Identifying Information Law, the NYPD Agency Privacy Officer, upon becoming aware, must report the disclosure to the NYC Chief Privacy Officer as soon as practicable. The NYPD must make reasonable efforts to notify individuals effected by the disclosure in writing when there is potential risk of harm to the individual, when the NYPD determines in consultation with the NYC Chief Privacy Officer and the Law Department that notification should occur, or when legally required to do so by law or regulation. In accordance with the Identifying Information Law, the NYC Chief Privacy Officer submits a quarterly report containing an anonymized compilation or summary of such disclosures by City agencies, including those reported by the NYPD, to the Speaker of the Council and makes the report publically available online.

TRAINING

TARU personnel must obtain their FAA remote pilot certificate from the FAA and pass the FAA's "Aeronautical Knowledge Test" in order to operate a NYPD UAS. The exam covers the following topics: FAA regulations, airspace classifications and requirements, meteorology, emergency operations, aeronautical decision-making, flight inspections, airport operations, and others. Certification is valid for two years, and certificate holders must pass a recurrent knowledge test every two years.

Additionally, the NYPD engages in in-service training which encompasses further understanding of FAA regulations as well as practice flights and simulations. NYPD personnel must operate UAS in compliance with NYPD policies and training.

INTERNAL AUDIT & OVERSIGHT MECHANISMS

The request for use of NYPD UAS may only come from an NYPD uniformed executive serving as a commanding officer, executive officer, or daily duty captain. Prior to use, TARU personnel supervisors will also assess whether such use comports with NYPD policy and evaluate weather conditions, airspace restrictions, and safety in determining the appropriateness of deployment. If there is disagreement concerning the permissible use of a NYPD UAS, conferral with a TARU supervisor will occur. If such disagreement cannot be resolved, the daily duty chief will make the final determination.

TARU must maintain a log of each UAS flight by date, time, location, purpose, flight time, pilot name, and authorizing member. TARU supervisors are responsible for the security and proper utilization of UAS equipment. The Commanding Officer of TARU also directly reports to the Chief of Department, the highest ranking uniformed member of the NYPD.

All NYPD personnel are advised that NYPD computer systems and equipment are intended for the purposes of conducting official business. The misuse of any system or equipment will subject employees to administrative and potentially criminal penalties. Allegations of misuse are internally investigated at the command level or by the Internal Affairs Bureau (IAB).

Supervisors of personnel utilizing NYPD computer and case management systems are responsible for security and property utilization of the technology and associated equipment. Supervisors are directed to inspect all areas containing NYPD computer systems at least once each tour and ensure that all systems are being used within NYPD guidelines.

Integrity Control Officers (ICOs) within each Command are responsible for maintaining the security and integrity of all information in the possession of the NYPD. ICOs must ensure all authorized users of NYPD computer systems in their command understand and comply with computer security guidelines, frequently observe all areas with computer equipment, and ensure security guidelines are complied with, as well as investigating any circumstances or conditions which may indicate abuse of the computer systems.

Requests for focused audits of computer activity from IAB, Commanding Officers, ICOs, Investigations Units, and others, may be made to the Information Technology Bureau.

HEALTH & SAFETY REPORTING

There are no known health and safety issues with UAS operated by the NYPD or its associated equipment.

DISPARATE IMPACTS OF THE IMPACT & USE POLICY

The safeguards and audit protocols built into this impact and use policy for NYPD UAS mitigate the risk of impartial and biased law enforcement. NYPD UAS are not equipped with facial recognition software and cannot conduct facial recognition analysis. Other than the processing of thermal data, NYPD UAS do not contain biometric measuring capabilities.

The NYPD is committed to the impartial enforcement of the law and to the protection of constitutional rights. The NYPD prohibits the use of racial and bias-based profiling in law enforcement actions, which must be based on standards required by the Fourth and Fourteenth Amendments of the U.S. Constitution, Sections 11 and 12 of Article I of the New York State Constitution, Section 14-151 of the New York City Administrative Code, and other applicable laws.

Race, color, ethnicity, or national origin may not be used as a motivating factor for initiating police enforcement action. Should an officer initiates enforcement action against a person, motivated even in part by a person's actual or perceived race, color, ethnicity, or national origin, that

enforcement action violates NYPD policy unless the officer's decision is based on a specific and reliable suspect description that includes not only race, age, and gender, but other identifying characteristics or information.

XI. Appendix C: NYPD's Thermographic Cameras IUP

THERMOGRAPHIC CAMERAS: IMPACT AND USE POLICY

Updated April 11, 2023

THERMOGRAPHIC CAMERAS:
IMPACT & USE POLICY

NYPD

SUMMARY OF CHANGES BETWEEN DRAFT & FINAL POLICY

Update	Description of Update
Removed statement that thermographic cameras do not use artificial intelligence and machine learning.	Public comment highlighted a lack of industry-standard definitions for artificial intelligence and machine learning.
Expanded upon thermographic cameras rules of use.	Added language clarifying thermographic cameras rules of use.
Expanded upon thermographic cameras safeguards and security measures.	Added language regarding information security. Added language to reflect removal of access to the technology when job duties no longer require access.
Minor grammar changes.	Minor syntax edits were made.

THERMOGRAPHIC CAMERAS ADDENDUM

Date of Addendum	Description of Addendum
April 11, 2023	NYPD is utilizing an autonomous security robot during a six-month pilot program that is capable of transmitting infrared thermal images.

THERMOGRAPHIC CAMERAS:
IMPACT & USE POLICY

NYPD

ABSTRACT

Thermographic cameras are used by law enforcement personnel to create images using thermal light, i.e. heat, as opposed to a traditional camera that uses visible light. These specialized cameras enhance visibility during operations such as securing large-scale events, search and rescue, hostage negotiation and/or barricaded individuals and other operations conducted in low-visibility environments. The New York City Police Department (NYPD) uses thermographic cameras to enhance NYPD operations by providing real-time observation of the live or residual heat signature of a person or object.

The NYPD produced this impact and use policy because thermographic cameras have the ability to process thermal data of both people and objects, and share a heat signature video image with NYPD investigators.

CAPABILITIES OF THE TECHNOLOGY

The NYPD utilizes two (2) types of thermographic cameras:

1. Thermal Imaging Cameras; and
2. Infrared Cameras.

All objects, both organic and inorganic, omit infrared light. Infrared light is a type of electromagnetic radiation invisible to the human eye, but it can be felt by humans as heat. Both thermal imaging cameras and infrared cameras measure temperature by capturing different wave frequencies of infrared light being omitted from an object. The cameras process the differences in the measured infrared light, and creates a heat signature video image.

Thermographic cameras allow officers to observe obscured or hazardous containing conditions preventing traditional observation such as darkness, smoke or gas. Thermographic cameras allow for rapid detection of people during a search of a large outdoor location, crime scene monitoring and large-scale disasters. Thermographic cameras are also used during large-scale events to detect heat signature anomalies and during hostage scenarios where officers cannot safely gain access to a location.

Some NYPD handheld thermographic cameras transmit heat signature video images to a monitor directly wired to the device. Others are capable of wireless transmission of heat signature video images to a remote monitor. The NYPD is utilizing an autonomous security robot during a six-month pilot program that is capable of transmitting infrared thermal images. Except for the autonomous security robot, NYPD thermographic cameras do not record, store, or retain any heat signature video images or temperature data.[1]

Thermographic cameras can only process temperature data to create heat signature video images. Thermographic cameras do not use facial recognition technologies and are not capable of conducting facial recognition analysis. Other than the processing of the infrared light emitted by a person or object, the devices do not contain biometric measuring capabilities.

[1] For additional information on the autonomous security robot, please refer to the Situational Awareness Cameras impact and use policy.

Both the NYPD's manned[2] and unmanned[3] aircraft systems are equipped with thermographic cameras. However, the thermographic cameras equipped to manned and unmanned aircraft systems are integrated into a more intricate system. Those systems are each addressed in individual impact and use policies.

RULES, PROCESSES & GUIDELINES RELATING TO USE OF THE TECHNOLOGY

NYPD thermographic camera policy seeks to balance the public safety benefits of this technology with individual privacy. Thermographic cameras must be used in a manner consistent with the requirements and protection of the Constitution of the United States, the New York State Constitution and applicable statutory authorities.

NYPD thermographic cameras may only be used for legitimate law enforcement purposes, and supervisory personnel responsible oversight must authorize use. The underlying facts of each investigation are considered prior to the utilization of the technology, including the safety risks to NYPD personnel, civilians and suspects that may be involved in the operation, as well as the legitimate law enforcement purpose to utilize the technology in a given circumstance.

The NYPD does not seek court authorization prior to use of thermographic cameras. The devices are strictly used during emergencies where exigent circumstances exist or to conduct surveillance of locations exposed to public observation.

In accordance with the Public Oversight of Surveillance Technology Act, an addendum to this impact and use policy will be prepared as necessary to describe any additional uses of thermographic cameras.

No person will be the subject of police action solely because of actual or perceived race, color, religion or creed, age, national origin, alienage, citizenship status, gender (including gender identity), sexual orientation, disability, marital status, partnership status, military status or political affiliation or beliefs.

The misuse of thermographic cameras will subject employees to administrative and potentially criminal penalties.

SAFEGUARDS & SECURITY MEASURES AGAINST UNAUTHORIZED ACCESS

Thermographic cameras are securely stored in NYPD facilities when not in use, in a location that is inaccessible to the public. A supervisor must periodically inspect and account for the equipment. Access to NYPD thermographic cameras is limited to NYPD personnel with an articulable need to use the technology in furtherance of a lawful duty. Access is removed when the technology is no longer necessary for NYPD personnel to fulfill their duties (e.g., when personnel are transferred to a command that does not use the technology).

[2] For additional information on the NYPD's manned aircraft systems, please refer to the manned aircraft systems impact and use policy.
[3] For additional information on the NYPD's unmanned aircraft systems, please refer to the unmanned aircraft systems impact and use policy.

NYPD thermographic cameras capable of wireless remote viewing transmit thermal images and associated data to a remote monitor over an encrypted signal. NYPD handheld thermographic cameras transmit processed images to a monitor through a direct-wired connection.

Unauthorized access of any system will subject employees to administrative and potentially criminal penalties.

POLICIES & PROCEDURES RELATING TO RETENTION, ACCESS & USE OF THE DATA

Except for the autonomous security robot, the NYPD does not record, store, or retain any of the heat signature video images or temperature data processed through the use thermographic cameras. The autonomous security robot data will be retained for thirty (30) days.

Data obtained using the autonomous security robot may only be used for legitimate law enforcement purposes or other official business of the NYPD including in furtherance of criminal investigations, civil litigations and disciplinary proceedings. Data relevant to an investigation are stored in an appropriate NYPD computer or case management system. The data may only be used for legitimate law enforcement purposes. NYPD personnel utilizing computer and case management systems are authenticated by username and password. Access to computer and case management systems is limited to personnel who have an articulable need to access the system in furtherance of lawful duty. Access rights within NYPD case management and computer systems are further limited based on lawful duty.

The Retention and Disposition Schedule for New York Local Government Records (the Schedule) establishes the minimum length of time local government agencies must retain their records before the records may be legally disposed.[4] Published annually by the New York State Archives, the Schedule ensures compliance with State and Federal record retention requirements. The NYC Department of Records and Information Services (DORIS) publishes a supplemental records retention and disposition schedule (the Supplemental Schedule) in conjunction with the Law Department specifically for NYC agencies in order to satisfy business, legal, audit and legal requirements.[5]

The retention period of a "case investigation record" depends on the classification of a case investigation record. The classification of case investigation records is based on the final disposition of the case, i.e., what the arrestee is convicted of or pleads to. Further, case investigations are not considered closed unless it results in prosecution and appeals are exhausted, it results in a settlement, it results in no arrest, or when restitution is no longer sought.

Case investigation records classified as a homicide, suicide, arson (first, second or third degree), missing person (until located), aggravated sexual assault (first degree), course of sexual conduct against a child (first degree), active warrant, or stolen or missing firearms (until recovered or destroyed), must be retained permanently. Case investigation records classified as a fourth degree

[4] *See* N.Y. Arts & Cult. Aff. Law § 57.19 - 25, *and* 8 NYCRR Part 185.
[5] *See* NYC Charter 3003.

arson or non-fatal (including vehicular accidents) must be retained for a minimum of ten (10) years after the case is closed. Case investigation records classified as any other felony must be retained for a minimum of twenty-five (25) years after the case is closed. Case investigation records classified as a misdemeanor must be retained for a minimum of five (5) years after the case is closed. Case investigation records classified as a violation or traffic infraction must be retained for a minimum of one (1) year after the case is closed. Case investigation records classified as an offense against a child as defined by the Child Victims Act, excluding aggravated sexual assault (first degree), course of sexual conduct against a child (first degree), must be retained until the child attains at least age fifty-five (55). Case investigation records connected to an investigation that reveals no offense has been committed by an adult must be kept for a minimum of five (5) years after the case is closed. Case investigation records connected to an investigation that reveals the individual involved was a juvenile and no arrest was made or no offense was committed must be kept for at least one (1) year after the juvenile attains age eighteen (18).

Personal information data files on criminals and suspects must be retained for at least five (5) years after the death of the criminal or suspect, or ninety (90) years after the criminal or suspect's date of birth as long as there has been no arrest in the last five (5) years, whichever is shorter. Personal information data files on associated persons, such as victims, relatives and witnesses must be retained as long as, or information as part of, relevant case investigation record.

The misuse of any data will subject employees to administrative and potentially criminal penalties.

POLICIES & PROCEDURES RELATING TO PUBLIC ACCESS OR USE OF THE DATA

Members of the public may request information related to the NYPD's use of thermographic cameras pursuant to the New York State Freedom of Information Law. The NYPD will review and evaluate such requests in accordance with applicable provisions of law and NYPD policy.

EXTERNAL ENTITIES

Except for the autonomous security robot, the NYPD does not record, store, or retain any of the video or acoustic data processed by thermographic cameras.

If the autonomous security robot captures data related to a criminal case, the NYPD will turn it over to the prosecutorial entity with jurisdiction over the matter. Prosecutors will provide the data to the defendant(s) in accordance with criminal discovery laws.

Other law enforcement agencies may request data contained in NYPD computer or case management systems in accordance with applicable laws, regulations, and New York City and NYPD policies. Additionally, the NYPD may provide data or information related to it to partnering law enforcement and city agencies pursuant to on-going criminal investigations, civil litigation, and disciplinary proceedings. Information is not shared in furtherance of immigration enforcement.

Following the laws of the State and City of New York, as well as NYPD policy, information may be provided to community leaders, civic organizations and the news media in order to further an investigation, create awareness of an unusual incident, or address a community-concern.

Pursuant to NYPD policy and local law, NYPD personnel may disclose identifying information externally only if:

1. Such disclosure has been authorized in writing by the individual to whom such information pertains to, or if such individual is a minor or is otherwise not legally competent, by such individual's parent or legal guardian and has been approved in writing by the Agency Privacy Officer assigned to the Legal Bureau;
2. Such disclosure is required by law and has been approved in writing by the Agency Privacy Officer assigned to the Legal Bureau;
3. Such disclosure furthers the purpose or mission of the NYPD and has been approved in writing by the Agency Privacy Officer assigned to the Legal Bureau;
4. Such disclosure has been pre-approved as in the best interests of the City by the City Chief Privacy Officer;
5. Such disclosure has been designated as routine by the Agency Privacy Officer assigned to the Legal Bureau;
6. Such disclosure is in connection with an investigation of a crime that has been committed or credible information about an attempted or impending crime;
7. Such disclosure is in connection with an open investigation by a City agency concerning the welfare of a minor or an individual who is otherwise not legally competent.

Government agencies at the local, state, and federal level, including law enforcement agencies other than the NYPD, have limited access to NYPD computer and case management systems. Such access is granted by the NYPD on a case-by-case basis subject to the terms of written agreements between the NYPD and the agency receiving access to a specified system. The terms of the written agreements also charge these external entities with maintaining the security and confidentiality of information obtained from the NYPD, limiting disclosure of that information without NYPD approval, and notifying the NYPD when the external entity receives a request for that information pursuant to a subpoena, judicial order, or other legal process. Access will not be given to other agencies for purposes of furthering immigration enforcement.

The NYPD purchases thermographic cameras and associated equipment or Software as a Service (SaaS)/software from approved vendors. The NYPD emphasizes the importance of and engages with vendors and contractors to maintain the confidentiality, availability, and integrity of NYPD technology systems.

Vendors and contractors may have access to NYPD autonomous security robot associated software or data in the performance of contractual duties to the NYPD. Such duties are typically technical or proprietary in nature (e.g., maintenance or failure mitigation). In providing vendors and contractors access to equipment and computer systems, the NYPD follows the principle of least privilege. Vendors and contractors are only allowed access on a "need to know basis" to fulfill contractual obligations and/or agreements.

Vendors and contractors providing equipment and services to the NYPD undergo vendor responsibility determination and integrity reviews. Vendors and contractors providing sensitive equipment and services to the NYPD also undergo background checks.

Vendors and contractors are legally obligated by contracts and/or agreements to maintain the confidentiality of NYPD data and information. Vendors and contractors are subject to criminal and civil penalties for unauthorized use or disclosure of NYPD data or information.

If data obtained using the autonomous security robot is disclosed in a manner violating the local Identifying Information Law, the NYPD Agency Privacy Officer, upon becoming aware, must report the disclosure to the NYC Chief Privacy Officer as soon as practicable. The NYPD must make reasonable efforts to notify individuals effected by the disclosure in writing when there is potential risk of harm to the individual, when the NYPD determines in consultation with the NYC Chief Privacy Officer and the Law Department that notification should occur, or when legally required to do so by law or regulation. In accordance with the Identifying Information Law, the NYC Chief Privacy Officer submits a quarterly report containing an anonymized compilation or summary of such disclosures by City agencies, including those reported by the NYPD, to the Speaker of the Council and makes the report publically available online.

TRAINING

NYPD personnel using thermographic cameras receive command level training on the operation of thermographic cameras and associated equipment. Officers must operate thermographic cameras in compliance with NYPD policies and training.

INTERNAL AUDIT & OVERSIGHT MECHANISMS

The NYPD's use of thermographic cameras is determined by supervisory personnel responsible for the conduct of a given operation. The autonomous security robot will be used to provide additional public safety resources and help deter crime. Supervisors of personnel utilizing thermographic cameras are responsible for security and proper utilization of the technology and associated equipment.

All members of the NYPD, including those utilizing thermographic cameras, are advised that all NYPD equipment is intended for the purposes of conducting official business. Use of NYPD equipment for personal or non-NYPD business matters is strictly prohibited and individuals who are found in violation of this policy are notified that they will be subject to disciplinary action. Reports of unauthorized use of equipment may be made to the Internal Affairs Bureau.

HEALTH & SAFETY REPORTING

There are no known health and safety issues with thermographic cameras or the associated equipment.

DISPARATE IMPACTS OF THE IMPACT & USE POLICY

The safeguards and audit protocols built into this impact and use policy for thermographic cameras mitigate the risk of impartial and biased law enforcement. Thermographic cameras only process the infrared light being omitted by any person or object into heat signature video. The NYPD does not record, store or retain any heat signature video or temperature data created by thermographic cameras. Thermographic cameras do not use facial recognition technologies. Other than the processing of the infrared light emitted by a person or object, the devices do not contain biometric measuring capabilities.

THERMOGRAPHIC CAMERAS:
IMPACT & USE POLICY

The NYPD is committed to the impartial enforcement of the law and to the protection of constitutional rights. The NYPD prohibits the use of racial and bias-based profiling in law enforcement actions, which must be based on standards required by the Fourth and Fourteenth Amendments of the U.S. Constitution, Sections 11 and 12 of Article I of the New York State Constitution, Section 14-151 of the New York City Administrative Code, and other applicable laws.

Race, color, ethnicity, or national origin may not be used as a motivating factor for initiating police enforcement action. Should an officer initiate enforcement action against a person, motivated even in part by a person's actual or perceived race, color, ethnicity, or national origin, that enforcement action violates NYPD policy unless the officer's decision is based on a specific and reliable suspect description that includes not only race, age, and gender, but other identifying characteristics or information.