

# Waltham Police Department

## sUAS (DRONE)

### CHAPTER 5

*General Order #: GO-06*

*Effective Date: 09/2022, 03/2024*

*Accreditation Standard #'s: 33.6.1, 41.1.3, 82.1.3, 82.2.1*

#### **PURPOSE:**

1. To define the operation of small unmanned aircraft systems (UAS) in the National Airspace System (NAS) within the Department.
2. To establish guidelines for the utilization and activation of UAS.
3. To develop Standard Operating Procedures (SOPs) that shall be created, maintained, and updated, as directed by the Chief of Police, or designee.

#### **POLICY:**

It is the policy of the Waltham Police Department that duly trained and authorized agency personnel may deploy an UAS when such use is appropriate in the performance of their official duties, and where deployment and use, and the collection and use of any audio / video recordings or other data originating from or generated by the UAS, comport with the policy provisions provided herein and applicable law.

#### **1. DEFINITIONS:**

- a. **SMALL UNMANNED AIRCRAFT (UA):** An UA weighing less than 55 pounds, including everything that is onboard or otherwise attached to the aircraft, and can be flown without the possibility of direct human intervention from within or on the aircraft.
- b. **SMALL UNMANNED AIRCRAFT SYSTEM (sUAS):** A small UA and its associated elements (including communication links and the components that control the small UA) that are required for the safe and efficient operation of the small UA in the national airspace.
- c. **REMOTE PILOT-IN-COMMAND (REMOTE PIC):** A person who holds a remote pilot certificate with an UAS rating and has final authority and responsibility for the operation and safety of an UAS operation conducted under 14 CFR 107.

- d. **VISUAL OBSERVER (VO):** A person acting as a flight crew member who assists the small UA Remote PIC to see and avoid other air traffic or objects aloft or on the ground.
- e. **REMOTE PILOT CERTIFICATE:** A person acting as a Remote PIC of an UAS in the national Airspace under 14 CFR 107 must obtain a remote pilot certificate with an UAS rating issued by the Federal Aviation Administration (FAA) prior to UAS operation. The Remote PIC must have this certificate easily accessible during flight operations.
- f. **CERTIFICATE OF WAIVER OR AUTHORIZATION (COA):** COA is an authorization issued by the FAA to a verified public entity for a specific UA activity. The FAA conducts a comprehensive operational and technical review of the submitted COA application and the approval is based on the safe operation of the UAS within national airspace.

## 2. ADMINISTRATION:

All deployments of an UAS must be specifically authorized by the Chief of Police or authorized supervisory personnel. This Department has adopted the use of UAS to provide an aerial visual perspective in responding to emergency situations and exigent circumstances, and for the following objectives: **[41.1.5-3A]**

- a. **SEARCH AND RESCUE:** To assist missing person investigations, AMBER Alerts, Silver Alerts, and other search and rescue missions. **[46.2.5-B]**
- b. **SITUATIONAL AWARENESS:** To assist decision makers (e.g., incident command staff; first responders; city, county, and state officials) in understanding the nature, scale, and scope of an incident—and for planning and coordinating an effective response.
- c. **TACTICAL DEPLOYMENT:** To support the tactical deployment of officers and equipment in emergency situations (e.g., incidents involving hostages and barricades, support for large-scale tactical operations, and other temporary perimeter security situations).
- d. **VISUAL PERSPECTIVE:** To provide an aerial visual perspective to assist officers in providing direction for crowd control, traffic incident management, special circumstances, fire support services, criminal investigations, crime scene mapping, and temporary perimeter security.
- e. **SCENE DOCUMENTATION:** To document a crime scene, accident scene, or other major incident scene (e.g., disaster management, incident response, large-scale forensic scene investigation).

### **3. USE OF UAS:**

- a.** The Department must obtain applicable authorizations, permits, or certificates required by the Federal Aviation Administration (FAA) prior to deploying or operating the UAS, and these authorizations, permits, and certificates shall be maintained and current. **[41.1.3-A, D], [41.1.5-3D]**
- b.** The UAS will be operated only by personnel who have been designated a Remote PIC, and who holds a Remote Pilot Certificate with an UAS rating issued by the FAA under 14 CFR 107. **[41.1.3-D], [41.1.5-3B]**
- c.** The Department will ensure that all UAS are registered with the FAA as required by 14 CFR 107. UAS owned by and registered, or on loan, to the Department shall be authorized for use by members of the Department and/or for Department use.
- d.** The UAS mission requests shall be authorized by the Chief of Police, or authorized supervisory personnel. The Chief of Police, or authorized supervisory personnel, shall **[41.1.5-3C]**:
  - 1.** Assign a Remote PIC to the mission once the mission is approved; and
  - 2.** When possible, assign an additional pilot, or when an additional pilot is not available, a Visual Observer (VO) to the mission; and
  - 3.** Ensure all missions are flown in accordance with FAA regulations including, but not limited, to 14 CFR 107.
- e.** All UAS missions will be flown in strict compliance with all FAA Regulations including but not limited to 14 CFR 107. The Remote PIC has final authority and responsibility for the operation and safety of an UAS operation conducted under 14 CFR 107. **[41.1.3-D]**
- f.** All missions will be flown with a Remote PIC and whenever possible, at least one (1) additional pilot or Visual Observer (VO). An additional pilot or visual observer is mandatory when the UAS leaves the line of sight of the person manipulating the controls as well as daylight waiver operations (night flying). **[41.1.3-D]**
- g.** The Remote PIC assigned to the mission shall inspect and test the UAS equipment prior to each deployment to verify the proper functioning of all equipment and the airworthiness of the device. **[41.1.3-E]**
- h.** The UAS equipment is the responsibility of Remote PIC operating the UAS and will be used with reasonable care to ensure proper functioning. Equipment malfunctions shall be documented and brought to the attention of the supervisor in charge of the sUAS unit as soon as possible so that an appropriate repair can be made or a replacement unit can be procured. **[41.1.3-1]**

- i. When engaged in UAS operations, missions, and/or training, the command and control concerning deployment and operational tactics utilized shall be determined by the Chief of Police, authorized supervisory personnel in conjunction with the pilot in command. [41.1.3-C]
- j. The UAS equipment and all data, images, video, and metadata captured, recorded, or otherwise produced by the equipment is the sole property of the Department.
- k. All flights will be documented in an incident report [41.1.5-3I] designed for that purpose, and all flight time shall be accurately recorded. In addition, each deployment of the UAS shall include information regarding the reason for the flight; the time, date, and location of the flight; the drones utilized and the staff assigned; and a summary of the activities covered, actions taken, and outcomes from the deployment. [82.2.1]
- l. Drone maintenance and inspection occur every drone use and are reflected in each report. [41.1.5- 3G, 4C]
- m. Except for those instances where officer safety or investigation could be jeopardized—and where reasonably possible and practical, the Department should consider notifying the public of the deployment.
- n. Where there are specific and articulable grounds to believe that the UAS will collect evidence of criminal wrongdoing and/or if the UAS will be used in a manner that may intrude upon reasonable expectations of privacy, the Department will obtain a search warrant prior to conducting the flight.

**4. RESTRICTIONS ON USE [41.1.3-B, C] [41.1.5-3B]:**

- a. The UAS shall be deployed and used only to support official law enforcement and public safety missions.
- b. The UAS shall not be operated in an unsafe manner or in violation of FAA rules.
- c. The UAS shall not be equipped with weapons or dispersal payloads of any kind (with exception for life saving or communications equipment).
- d. The UAS can be deployed during training missions, assist other city departments, and community events.

**5. UAS SUPERVISION AND REPORTING [41.1.5-3C, 3I]:**

- a.** UAS supervisory personnel shall manage all deployments and uses of UAS to ensure that the UAS is utilized in accordance with this policy and procedure, other applicable policies and procedures, and the law.
- b.** An authorized UAS supervisor will audit flight documentation at regular intervals. **[41.1.5-3K]**
- c.** The Chief of Police, or designee, shall publish an annual report documenting the Department's deployment and use of UAS devices.

**6. TRAINING [41.1.3-D], [41.1.5-3E], [33.6.1]:**

- a.** Department members selected to be Remote PICs shall:
  - 1.** Be properly trained and licensed as required by 14 CFR 107.
  - 2.** Satisfy and maintain all the conditions of the COA issued by the FAA, if applicable.
  - 3.** Have a working knowledge of the airspace intended for operations and Air Traffic Control communication requirements.
  - 4.** Have the ability to obtain and interpret weather information.
- b.** Department Members selected to be Visual Observers (VO) shall:
  - 1.** Be properly trained in the requirements of 14 CFR 107, and such other current FAA regulatory requirements, if any.
  - 2.** Satisfy and maintain all the conditions of the COA issued by the FAA, if applicable.
- c.** All UAS supervisory personnel shall be trained in the local and federal laws and regulations, as well as the policies and procedures governing the deployment and use of UAS.
- d.** All training deployments are documented in CAD and an incident number is generated. **[41.1.5-4B]**

7. **ACCIDENT NOTIFICATION AND INVESTIGATION [41.1.5-3J]:**

In the event of a crash/incident involving fatalities, injuries, property damage, damage to the UAS or UAS fly-away, the Remote PIC shall:

- a. Report the crash/incident immediately to the officer's supervisor. [41.1.5-3I]
- b. When applicable, notify the FAA in compliance with 14 CFR 107.
- c. Complete and submit an incident report to the Chief of Police, or designee, within forty-eight (48) hours.

8. **DIGITAL DATA PRESERVATION [41.1.5-3H]:**

- a. All digital data including, but not limited, to photographs, video, flight logs, including GIS data, shall be processed and maintained according to existing Department policies and preservation of evidence procedures. All evidence related data shall be stored in WPD Share digital photo log. Any additional data shall be stored in WPD Share/drone evidentiary photo log.
- b. All digital data shall be securely downloaded at the completion of each mission. The Remote PIC will record information for each file that shall include the date, time, location, and case reference numbers or other mission identifiers, and identify the UAS personnel involved in the mission. [82.2.1]
- c. Officers shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner UAS digital data without prior written authorization and approval of the Chief of Police, or designee.
- d. All access to UAS digital data must be specifically authorized by the Chief of Police, or designee, and all access is to be audited [41.1.5-4D] to ensure that only authorized users are accessing the data for legitimate and authorized purposes.
- e. Files should be securely stored in the WPD Share photo in accordance with Department policy and state records retention laws and retained no longer than necessary for purposes of training or for use in an investigation or prosecution. [82.1.3]

9. **DRONE EQUIPMENT [41.1.3-1], [41.1.5-3F]:**

- a. 5 - DJI Mavic 2 Enterprise duals.
- b. 3 - DJI Matrice 210 v 2 drones (one w/ RTK).

- c.** 3 - DJI Zenmuse Z30 cameras.
- d.** 3 - DJI XT2 cameras.
- e.** 1 - RTK ground station.
- f.** 1 - Voltarius rapid battery charger/discharge.
- g.** 1 - Elistair Ligh-T power tether.
- h.** 3 - DJI M30T drones.
- i.** Batteries, cases and accessories for all drones.