### NORTHAMPTON POLICE DEPARTMENT

# **Administration & Operations Manual**



## **Policy: Small Unmanned Aircraft Systems**

**AOM: 0-506** 

Massachusetts Police Accreditation Standards Referenced:

**Issuing Authority** 

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### I. Purpose

This policy is intended to provide authorized officers assigned responsibilities associated with the deployment and use of small unmanned aircraft systems (sUAS) with instructions on when and how this technology and the information it provides may be used for law enforcement and public safety purposes in accordance with law.

### **II. Policy**

It is the policy of this department that duly trained and authorized agency personnel may deploy the sUAS when such use is appropriate in the performance of their official duties, and where deployment use, the collection, and use of any audio/video recordings or other

data originating from or generated by the sUAS, comport with the policy provisions provided herein and applicable law.

#### III. Definitions

- A. Digital Multimedia Evidence (DME): Digital recording of images, sounds, and associated data.
- B. Model Aircraft: A remote controlled aircraft used by hobbyists that is built, produced, manufactured, and operated for the purposes of public safety, sport, recreation, and/or competition.
- C. Unmanned Aircraft (UA) or Unmanned Aerial Vehicle (UAV): An aircraft that is intended to navigate in the air without an on-board pilot. Also alternatively called Remotely Piloted Aircraft (RPA), Remotely Operated Vehicle (ROV), or Drone.
- D. Unmanned Aircraft System (UAS): A system that includes the necessary equipment, network, and personnel to control an unmanned aircraft.
- E. Small Unmanned Aircraft Systems (sUAS): UAS system that utilize UAV's weighing more than .55 pounds and less than 55 pounds and are consistent with the Federal Aviation Administration (FAA) regulations governing model aircraft.
- F. UAS Flight Crewmember: A pilot, visual observer, payload operator, maintenance technician or the person assigned duties for a UAS for the purpose of flight training exercises.
- G. Unmanned Aircraft Pilot: A person who exercises control over a UA/UAVG/UAS during flight.
- H. Night Time Flight: A deployment which occurs in time between the end of evening civil twilight and the beginning of morning civil twilight
- I. Aircraft Lighting: The sUAS is equipped with a white strobe light that is visible 360 degrees for a minimum of 3 statute miles at night. This light is mounted directly to the top of the sUAS and is powered by an independent battery system. The sUAS is equipped with navigation light system with red LED lights observable from the front of the sUAS and green LED lights observable from the rear to allow the PIC to maintain orientation while in flight. A flashing status light is also visible from the rear of the sUAS providing information on the aircraft positioning status and battery level status. In addition to the manufacturer installed lighting system, the sUAS will also be equipped with a red LED strobe on the left side of the sUAS, a green LED strobe light on the right side of the sUAS, and a white LED strobe light on the rear of the sUAS. These strobes have been shown to meet the requirement of 3 statute miles referenced in 14 CFR part 107.29 and provide effective orientation lighting.

#### IV. Procedures

All deployments of sUAS must be specifically authorized by the OIC or sUAS Supervisor. The Northampton Police has adopted the uses of sUAS to provide an aerial visual perspective in responding to emergency situations and exigent circumstances, and for the following objectives:

- A. Situational Awareness: To assist Incident Command in understanding the nature, scale, and scope of an incident and/or for planning and coordinating an effective response.
- B. Search and Rescue: To assist missing person investigations, Amber alerts, and other search and rescue missions.
- C. Tactical Deployment: To support the tactical deployment of officers and equipment in emergency situations (e.g., Incident involving hostages and barricades, support for large tactical operations, and 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, and temporary perimeter security.
- E. Scene Documentation: To document a crime scene, accident scene, or other major scene (e.g., disaster managing, incident response, large scale forensic investigation).

#### V. Procedures of sUAS Use:

The Northampton Police must obtain applicable authorizations, permits, or certificates required by the Federal Aviation Administration prior to deploying or operating the sUAS, and these authorizations, permits, and certifications shall be maintained and current.

- A. The sUAS will be operated only by personnel (pilots and crewmembers) who have been trained and certified in the operation of the system.
- B. The sUAS pilot in command shall follow flight notification procedures in accordance with the FAA waiver assigned to the department.
- C. The sUAS pilot shall notify Northampton Airport (7B2) prior to the deployment of the sUAS and describe the area of deployment and approximate flight time. The date/time and representative at the FBO (Fixed Base Operator) shall be recorded by the sUAS pilot. Upon the conclusion of sUAS operations, the sUAS pilot shall again notify Northampton Airport and advise that sUAS operation has been terminated.
- D. All sUAS certified personnel shall inspect and test sUAS equipment prior to deployment to verify the proper functioning of all equipment and airworthiness of the devices.

- E. The sUAS equipment is the responsibility of the assigned officer(s) and will be used with reasonable care to ensure proper functioning. Equipment malfunctions shall be brought to the attention of the sUAS Supervisor.
- F. The sUAS equipment and all data, images, video, and metadata captured, recorded, or otherwise produced by the equipment is the sole property of the Northampton Police Department.
- G. All flights will be documented on a form or database designed for that purpose, and all flight time shall be accurately recorded. In addition, each deployment of the sUAS shall include information regarding the reason for the flight; time, date, and location of the flight; the name of the supervisor approving the deployment and the staff assigned; and a summary of the activities covered, actions taken, or outcomes from the deployment.
- H. Except for those instances where officer safety or investigation could be jeopardized and where reasonably possible and practical, agencies should consider notifying the public.
- I. Where there are specific and articulable grounds that the sUAS will collect evidence of criminal wrong doing and/or if the sUAS will be used in a manner that may intrude upon reasonable expectations of privacy, the agency will obtain a search warrant prior to conducting the flight.
- J. Where the deployment is conducted at night, the landing pad will include lighting that allows the pilot to locate the landing area using the sUAS camera and orient for a safe descent to landing. This includes 1 steady amber light indicating takeoff direction orientation and three flashing red lights for landing pad identification. The takeoff/landing area will be dimly lit so as to not degrade flight crew night vision. All flight crew members will wear high visibility vests in the vicinity of the takeoff/landing area for easy identification during the flight operation.
- K. The primary takeoff/landing area will have a perimeter marked with four (4) illuminated orange cones in a perimeter of 30 feet surrounding the illuminated landing pad. No persons are to be inside of the perimeter without authorization of the PIC. No takeoff, approach, or landing will be conducted if any person enters the 30-foot perimeter around the takeoff/landing pad. This area will be constantly monitored by the PIC or assigned ground support personnel.

### VI. DME Retention and Management:

- A. All DME (Digital Multimedia Evidence) shall be handled in accordance with existing policy on data and records retention. (AOM S-200).
- B. All DME shall be securely downloaded at the completion of each mission. The sUAS certified operators will record information on the file that shall include the date, time,

- location, and case reference numbers or other identifiers and identity of the sUAS personnel involved in the mission.
- C. Officers shall not edit, alter, erase, duplicate, share, or otherwise distribute any sUAS DME without prior authorization and approval of the sUAS Supervisor.
- D. All access to the sUAS DME must be specifically authorized by the sUAS Supervisor or their designee and all access is to be audited to ensure that only authorized users are accessing the data for legitimate and authorized purposes.
- E. Files shall be securely stored in accordance with department policy and retention laws.

### VII. Supervision and Reporting

- A. The sUAS supervisor shall manage all deployments and uses of the sUAS to ensure that officer(s) equipped with sUAS devices utilize them in accordance with policy and procedure defined herein.
- B. An authorized sUAS supervisor or administrator will audit flight documentation and maintenance.
- C. The sUAS supervisor or their designee shall publish an annual report documenting the agency's deployment and use of the sUAS device.
- D. The sUAS Pilot in Command shall be responsible for immediately reporting to the FAA in compliance with the FAA, Part 107, any crashes or collisions involving the aircraft and shall also immediately notify the OIC who shall notify the sUAS supervisor and Captain of Operations. The Pilot in Command and any sUAS crew member(s) present during the crash shall complete an incident report and forward it to the sUAS supervisor.

### VIII. Restricting sUAS use:

- A. The sUAS shall not be operated in an unsafe manner or in violation of Federal Aviation Administration (FAA) regulations.
- B. The sUAS shall not be equipped with any weapons.

### IX. Qualifications and Training

A. Police personnel who are assigned to deploy the sUAS must complete an agency approved training program to ensure proper use and operation.

- B. Additional training may be required at periodic intervals to ensure the continued effective use, operation, proper calibration, and performance of the equipment to incorporate changes.
- C. All agency personnel with sUAS responsibility, including command, shall also be trained in local and federal laws and regulations, as well and this policy governing the use of sUAS.
- D. sUAS Flight Crew Member selection will be accordance with existing policy AOM A-112 (Specialized Assignments).
- E. Any persons utilized as a required flight crew member for night operations will be required to successfully pass a 10 question, multiple choice test regarding these night illusions prior to being authorized to act as a PIC, or VO, for night operations.

### X. Storage

The sUAS shall be stored in a locked hard case in the Incident/Training Room (209). Access to the case will be to all agency personnel assigned to the sUAS Unit.

### XI. Maintenance

The sUAS shall have a regular maintenance schedule in place that is in accordance with the recommendations set forth by the sUAS manufacture for the specific aircraft, payload, intelligent batteries, and firmware. Maintenance to the sUAS and accessories shall be recorded in a digital maintenance log with restricted access to sUAS personnel and the Chief or their designee.

The sUAS supervisor shall oversee the maintenance of the sUAS and conduct monthly audits of maintenance records. The sUAS supervisor shall assign a Maintenance Technician within the sUAS special assignment to conduct all maintenance associated with the sUAS and record keeping of maintenance conducted on the sUAS.