

**ESSEX POLICE DEPARTMENT**  
Department Directive



Date Issued: <p style="text-align: center;">08/30/2024</p>	Number: <p style="text-align: center;">2.7.9</p>
<b>Unmanned Aircraft Systems</b>	<input checked="" type="checkbox"/> New  <input type="checkbox"/> Amends  <input type="checkbox"/> Rescinds
Authorized Signature: <u style="display: inline-block; width: 300px; border-bottom: 1px solid black; vertical-align: middle;">Ron Hoague</u> Chief of Police	
<i>This policy is for internal use only and does not enlarge an employee's civil liability in any way. The policy should not be construed as creating a higher duty of care, in an evidentiary sense, with respect to third party civil claims against employees. A violation of this policy, if proven, can only form the basis of a complaint by this department for non-judicial administrative action in accordance with the laws governing employee discipline.</i>	
Date Implemented: <p style="text-align: center;">09/01/2024</p>	Review Date: <p style="text-align: center;">01/01/2026</p>

1. **Purpose:** A drone's ability to reach inaccessible or dangerous locations has an advantage over manned helicopters because they eliminate the risk to human life. Unmanned Aircraft Systems (UAS) have the potential to help in search and rescue missions by covering more ground and keeping officers safe by providing an eye in the sky in dangerous situations. The UAS will be used to enhance public safety and to assist law enforcement search and rescue operations.
  - 1.1. **Tactical Operations:** The UAS will be used to enhance and support tactical operations should a request for assistance be made and approval authorized. SWAT (Special Weapons and Tactics), narcotics operations, and detectives during the execution of warrants, may utilize UAS to provide real time situational awareness of the target during high risk operations. The ability to provide this aerial view may enhance officer safety and document the movements of officers and civilians.
  - 1.2. **Search and Rescue:** Unmanned systems equipped with a thermal and/or optical camera and multi-sensor navigation systems are designed to find people in rugged outdoor environments. The ability to use this aircraft to search large areas quickly using the attached technology equipment will improve the resolution of search and rescue operations.

- 1.3. Crime and Collision Scene: The UAS may also be used to document and record crime scenes and crash scenes.
  - 1.4. Other Operations: Operations not explicitly described in this policy may be performed with the approval of the Executive Officer or their designee in consultation with the licensed UAS Pilot. Other operations shall be conducted under the restrictions of State and Federal regulations.
2. **Policy:** It is the policy of the Essex Police Department to use UAS in coordination with law enforcement officers and other government entities conducting specific missions as guided by this policy, with an officer who has obtained a Part 107 certification and to comply with Vermont State law, federal regulation, and applicable operational waivers. This policy is designed to minimize risk to persons, property, and aircraft during the operation of the UAS while safeguarding constitutional protections and privacy interests of all persons.
3. **Definitions:**
- 3.1. UAS: Unmanned Aircraft Systems.
  - 3.2. Operator (UA Pilot): The individual responsible for the overall flight operations of a specific mission.
  - 3.3. PIC: Pilot in Command
  - 3.4. Observer: The member who will monitor the flight characteristics of the aircraft while in communication with the operator to ensure proper flight and that the aircraft remains clear of obstacles and low flying air traffic. The individual who may be responsible for the operation of all camera and remote sensing functions during UAS operations.
4. **Vermont Law**
- 4.1. 20 V.S.A. § 4622. Law enforcement use of drones
    - 4.1.1. Except as provided in subsection 4.1.3 of this section, a law enforcement agency shall not use a drone or information acquired through the use of a drone for the purpose of investigating, detecting, or prosecuting crime.
    - 4.1.2. A law enforcement agency shall not use a drone to gather or retain data on private citizens peacefully exercising their constitutional rights of free speech and assembly.
      - 4.1.2.1. This subsection shall not be construed to prohibit a law enforcement agency from using a drone:
        - 4.1.2.1.1. for observational, public safety purposes that do not involve gathering or retaining data; or
        - 4.1.2.1.2. pursuant to a warrant obtained under Rule 41 of the Vermont Rules of Criminal Procedure.

- 4.1.3. A law enforcement agency may use a drone and may disclose or receive information acquired through the operation of a drone if the drone is operated:
  - 4.1.3.1. for a purpose other than the investigation, detection, or prosecution of crime, including search and rescue operations and aerial photography for the assessment of accidents, forest fires and other fire scenes, flood stages, and storm damage; or
  - 4.1.3.2. pursuant to:
    - 4.1.3.2.1. A warrant obtained under Rule 41 of the Vermont Rules of Criminal Procedure; or
    - 4.1.3.2.2. a judicially recognized exception to the warrant requirement.
- 4.1.4. When a drone is used pursuant to subsection 4.1.3, the drone shall be operated in a manner intended to collect data only on the target of the surveillance and to avoid data collection on any other person, home, or area.
  - 4.1.4.1. Facial recognition or any other biometric matching technology shall not be used on any data that a drone collects on any person, home, or area other than the target of the surveillance.
  - 4.1.4.2. If a law enforcement agency uses a drone in exigent circumstances pursuant to subdivision 4.1.3.2.2 of this section, the agency shall obtain a search warrant for the use of the drone within 48 hours after the use commenced.
    - 4.1.4.2.1. If the court denies an application for a warrant filed pursuant to subdivision 4.1.4.2 of this subdivision:
      - 4.1.4.2.1.1. use of the drone shall cease immediately; and
      - 4.1.4.2.1.2. information or evidence gathered through use of the drone shall be destroyed.
- 4.1.5. Information or evidence gathered in violation of this section shall be inadmissible in any judicial or administrative proceeding. (Added 2015, No. 169 (Adj. Sess.), § 2, eff. Oct. 1, 2016.)
- 4.2. 20 V.S.A. § 4624. Reports
  - 4.2.1. On or before September 1 of each year, any law enforcement agency that has used a drone within the previous 12 months shall report the following information to the Department of Public Safety:
    - 4.2.1.1. The number of times the agency used a drone within the previous 12 months. For each use of a drone, the agency shall report the type of incident involved, the nature of the information collected, and the rationale for deployment of the drone.

- 4.2.1.2. The number of criminal investigations aided and arrests made through use of information gained by the use of drones within the previous 12 months, including a description of how the drone aided each investigation or arrest.
- 4.2.1.3. The number of times a drone collected data on any person, home, or area other than the target of the surveillance within the previous 12 months and the type of data collected in each instance.
- 4.2.1.4. The cost of the agency's drone program and the program's source of funding.
- 4.3. The information contained in section 4 of this policy is included solely for reference and shall be superseded by any changes to the current applicable laws set forth by the State of Vermont at the time of the UAS operation.

## 5. Procedures:

- 5.1. When the UAS is being flown, the onboard cameras will be turned so as to be facing away from occupied structures, etc. to minimize inadvertent video or still images of uninvolved persons.
- 5.2. All video and still images will be maintained in strict compliance with department policies and procedures and State of Vermont Records Retention Act.
- 5.3. The UAS unit will not conduct random surveillance activities. The use of the UAS will be tightly controlled and regulated by the Chief of Police or their designee.
- 5.4. The authorized missions for the UAS are:
  - 5.4.1. Video/photographs for investigative support (Homicide Scene, SWAT)
  - 5.4.2. HAZMAT Response
  - 5.4.3. Search and Rescue
  - 5.4.4. Barricaded persons / Hostage situations / Active Shooters
  - 5.4.5. Traffic collisions
  - 5.4.6. Disaster Response (Floods, Tornado Damage, etc.)
  - 5.4.7. Bomb Threats
  - 5.4.8. All other requested uses will be approved by the Chief of Police or their designee prior to deploying the UAS.
  - 5.4.9. If UAS is going to be used over a residential property for an investigation a warrant or written consent shall be obtained unless the UAS Operator can articulate probable cause that exigent circumstances exist. The warrant should be obtained as soon as practical.
- 5.5. The UAS program will operate strictly within the law and regulations. If in doubt, prior to operating the UAS the Chief of Police or their designee will ensure that

warrants are applied for and obtained. The Officer will balance all operations with the need to accomplish the mission while maintaining public privacy and their freedom from intrusion.

## 6. Personnel:

- 6.1. The Chief of Police may designate a sworn employee to be the UAS Unit Commander/Lead. The commander shall report directly to the Chief or their designee. The UAS Commander shall be responsible for the overall direction and performance of the UAS unit.
- 6.2. The UAS Commander is responsible for:
  - 6.2.1. Selection of UAS personnel
  - 6.2.2. Maintaining all training, flight and maintenance records for each operator and observer, as well as individual airframes.
  - 6.2.3. Maintain contact with the FAA and regulations as they change.
  - 6.2.4. Evaluate airframes based on mission needs.
- 6.3. **Operators:**
  - 6.3.1. An operator's primary duty is the safe and effective operation of UAS in accordance with the manufacturers' approved flight manual, FAA regulations and department policy and procedures. Operators must remain knowledgeable of all FAA regulations COA; UAS manufacturer's flight manual and bulletins and Department policy and procedures.
  - 6.3.2. Pilot Rating. Operators are authorized to conduct operations in accordance with FAA Part 107. Currency in a manned aircraft is not required. The PIC must be in general good health and not have any medical condition that could potentially hinder the safe flight of a mission or training exercise.
  - 6.3.3. Operators may be temporarily removed from flight status at any time by the UAS Commander, the Chief of Police, or their designee, for reasons including performance, proficiency, or physical condition. Should this become necessary, the operator will be notified verbally and in writing of the reason, further action to be taken, and expected duration of such removal.
- 6.4. **Observers:** must have been provided with sufficient training to communicate clearly to the operator any turning instructions required to stay clear of conflicting traffic. An observer's primary duty is to operate the UAS's equipment including cameras, FLIR, radio communications with patrol units as well as be an observer for anything that may affect the operator's primary duty (see and avoid).

## 7. **Outside Jurisdiction - Request for Support – Mutual Aid:**

- 7.1. Requests for support from other government agencies within, or outside the jurisdiction of this department, will be forwarded to the UAS Commander or available qualified operator by the Officer in Charge of that duty period, who after consideration will either deny the request outright because the request is clearly outside the policy of the department or forward the request to the Supervisor. Proper policy and procedure, as well as FAA regulations shall be followed when accepting mutual aid support for the UAS.

## 8. **Safety:** The Essex Police Department is committed to having a safe and healthy workplace, including:

- 8.1. The ongoing pursuit of an accident-free workplace, including no harm to people, no damage to equipment, the environment and property.
- 8.2. A culture of open reporting of all safety hazards in which management will not initiate disciplinary action against any personnel who, in good faith, disclose a hazard or safety occurrence due to unintentional conduct.
- 8.3. Support for safety training and awareness programs.
- 8.4. Conducting regular audits of safety policies, procedures and practices
- 8.5. Monitoring the UAS unit to ensure best safety practices are incorporated into the unit.
- 8.6. It is the duty of every member within the UAS unit to contribute to the goal of continued safe operations. This contribution may come in many forms and includes always operating in the safest manner practicable and never taking unnecessary risks. Any safety hazard, whether procedural, operational or maintenance related should be identified as soon as possible after, if not before, an incident occurs. Any suggestions in the interest of safety should be made to the UAS Commander.
- 8.7. If any member observes, or has knowledge, of an unsafe or dangerous act committed by another member, the UAS Commander is to be notified immediately so that corrective action may be taken.
- 8.8. In regards to safety, all members of the UAS unit are responsible for the following:
  - 8.8.1. Ensuring all flight operations personnel understand applicable regulatory requirements, standards and organizational safety policies and procedures.
    - 8.8.1.1. Observe and control safety systems by monitoring all operations.
    - 8.8.1.2. Review standards and the practices of department personnel as they impact operational safety.
    - 8.8.1.3. Communicate all reported safety related problems and the corrective action taken. If there were any in-flight problems (or learned experiences)
    - 8.8.1.4. Reading and understanding all pertinent safety information.
    - 8.8.1.5. Reading and understanding all emergency safety bulletins.
    - 8.8.1.6. It is emphasized again that safety is the responsibility of ALL members of the UAS unit.

## **9. Medical Factors:**

- 9.1. Operators and Observers shall only deploy the UAS when rested and emotionally prepared for the tasks at hand.
- 9.2. Operators shall be fit for duty as prescribed in existing Town and Department policy.
- 9.3. A self-assessment of physical condition shall be made by all members during pre-flight activities.

## **10. Operational Hazard and Occurrence Report (OHOR) and Investigations**

- 10.1. Occurrences are unplanned safety related events, including accidents and incidents that could impact safety.
- 10.2. A hazard is something that has the potential to cause harm. The systematic identification and control of all major hazards is foundational to safety.
- 10.3. The OHOR concept provides a mechanism to report hazards and occurrences, real and perceived, to those responsible for UAS operations.
- 10.4. There is no specific OHOR form. The information provided is what is important. Incidents should be documented without hesitation to report any anticipated, current, or experienced safety hazard, or occurrence. Further, the OHOR can be submitted anonymously, and to whatever level in the chain of command of this department to get the matter proper attention, without fear of reprisal.
- 10.5. Every hazard and/or occurrence will be investigated, with the results and corrective action taken communicated to all affected members. The investigation will be conducted by the UAS Commander and a designee of the Chief of Police who has authority over internal investigations. Due to the technical aspects of the UAS operations, an independent subject matter expert may be necessary in some cases to ensure a thorough and complete investigation.
- 10.6. ALL UAS MEMBERS ARE AUTHORIZED TO TAKE ACTION TO CORRECT A HAZARD if in that member's opinion delay will result in accident or injury. The UAS Unit Commander will be notified immediately in such situations.

## **11. Training:**

- 11.1. The key to continued safe operations is maintaining a professional level of competency. The first step in this process is establishing minimum qualifications for selecting members, and the second step involves training those personnel.
- 11.2. In conjunction with fulfilling all FAA requirements for operator/observer duties, the new member will also become familiar with the department's UAS operation, and its related equipment.

- 11.3. Before a member can fly as an operator, they must complete at least 4 hours of flight training and demonstrate proficiency with department equipment to a qualified operator, the Chief of Police, or their designee. This must be accomplished to show their ability and knowledge of the UAS in compliance with the manufacturer's manual and instructions.

## 12. Call Out Procedures / Use of the UAS:

- 12.1. When feasible, a supervisor will screen all initial requests to use a UAS from patrol or investigation units. All reasonable requests will be forwarded to an available Operator for consideration. In the absence of the supervisor, the dispatcher will forward the request to an available Operator.
- 12.2. The Operator will screen the request using the following factors:
  - 12.2.1. Is the proposed use of UAS within the capabilities of the UAS equipment and personnel to perform?
  - 12.2.2. Does the proposed use of the UAS fall within the FAA and department policies and regulations for UAS usage?
  - 12.2.3. Can the UAS be deployed safely given current weather conditions?
  - 12.2.4. If the UAS deployment requires a warrant has one been requested and approved?
  - 12.2.5. Are sufficient trained and qualified personnel available to safely operate the UAS? If the request is denied the Operator will provide a reason for declining the support request to the requestor. If the Operator accepts the support request they will contact a Supervisor for final authorization or denial.
- 12.3. The UAS operator is responsible for transporting the UAS and all required equipment to the scene. Upon arriving at the requested location, the UAS operator will contact the on-scene Incident Commander and will check in and receive a briefing on the mission requested. The UAS operator will make an on-scene determination of the ability of the UAS to perform the requested mission safely and within department policy, applicable waivers, and FAA regulations.
- 12.4. If the UAS operator determines that the use of the UAS would violate department policy or directives then the UAS operator will inform the Incident Commander of the potential conflict along with recommendations for modifying the requested mission to conform to the department policies and procedures. As soon as possible after the completion of the mission, the UAS operator will make a full report of the operation.

UAS operators will have sole discretion for declaring safety or violation of FAA rules. If the UAS operator determines that a requested mission would violate FAA rules or endanger civilians, then the UAS operator will respectfully inform the Incident Commander of the reasons for refusing to operate the UAS. **The UAS will not be flown in this circumstance and the authority of the UAS**

**operator is absolute.** The Operator will make the final determination on the deployment of the UAS. A supervisor responsible for the overall event may direct that a UAS not be deployed; however, the supervisor shall not and can not order deployment where the Operator determines that such deployment is inappropriate.

12.5. If the UAS operator determines that the requested mission will potentially damage the UAS or its associated equipment the, UAS operator will inform the Incident Commander of their concerns.

12.6. The UAS shall not be used for the purpose of random surveillance.

12.7. If several separate requests for UAS support are received simultaneously, they shall be prioritized. In general terms, requests for UAS support are prioritized as:

12.7.1. Life Safety

12.7.2. Evidence / Documentation

**12.8. Minimum Personnel Requirements:**

12.8.1. Due to the nature of the law enforcement mission, the preferred personnel required for missions should be an operator and observer, however this is not mandatory. An operator may fly a mission solo if after assessment can be flown safely and in compliance with regulations.

**12.8.2. OPEN COMMUNICATION ACHIEVES SAFE OPERATIONS:**

12.8.3. The operator is directly responsible for, and is the final authority over the actual operation of the UAS.

12.8.4. Operators have absolute authority to reject a flight based on personnel safety or violation of FAA regulations. No member of this department, regardless of rank, shall order an operator to make a flight when, in the opinion of the operator, it poses a risk to personnel or is in violation of FAA regulations.

12.8.5. Operators are responsible for compliance with department policy, state law, and FAA regulations.

12.8.6. The operator's main duty during the deployment of the UAS is to operate the UAS safely while accomplishing the goals of the deployment.

12.8.7. Operators shall see-and-avoid any obstacle that will lessen safety during the mission.

12.8.8. Operators shall be responsive to the requests of the observer in order to accomplish the deployment.

12.8.9. Operators shall be responsible for documentation for their mission training and updating of their flight books.

- 12.8.10. Observers shall see-and-avoid any obstacle that will lessen safety during the mission.
- 12.8.11. Observers shall remain alert for suspicious persons or activities on the ground and coordinate response by ground units.
- 12.8.12. Observers shall monitor the radio updates.
- 12.8.13. Observers shall assist the operator in the main objective of safe operations of the UAS.

**12.9. Pre-Flight/Post-Flight Actions:**

- 12.9.1. Operators/Observers are both responsible for a thorough preflight inspection of the UAS.
- 12.9.2. Before and after each deployment (whether an incident or training), the operator and observer shall conduct a thorough inspection of the UAS in accordance with the instructions contained in the manufactures user's manual.
- 12.9.3. Any issues found that will put in jeopardy the safe operation of the UAS shall be documented and resolved immediately prior to flight.
- 12.9.4. It has been recognized that the use of a checklist is a significant method to combat UAS accidents. A pre-flight and post-flight checklist will be conducted in accord with the manufactures instruction and should be utilized prior to each flight.
- 12.9.5. Any physical equipment issue that cannot be resolved on-site, and which have an impact on safety or the mission, will override the deployment. These issues will be resolved before flight.

**12.10. Weather:**

- 12.10.1. Before each deployment, the operator/observer will ensure that he/she gathers enough information to make themselves familiar with the weather situation existing throughout the area of deployment. The operator shall utilize FAA approved weather resources to obtain the latest and most current weather conditions.
- 12.10.2. An anemometer or wind meter can be utilized in order to better estimate the wind speed and determine if it is within the capabilities of the airframe being flown.
- 12.10.3. The operator shall ensure that the flight will occur within FAA VFR (Visual Flight Rules) weather requirements.

### **12.11. Planning:**

- 12.11.1. The operator/observer shall familiarize themselves with all available information concerning the deployment including, but not limited to, the weather conditions, hazards, description of the incident, deployment goals, etc.
- 12.11.2. Operators will ensure that the location for take-off and emergency landing is adequate for a safe deployment.
- 12.11.3. The take-off/landing location should be clearly marked and identifiable.
- 12.11.4. At least one emergency landing area should be identified per deployment.
- 12.11.5. Operators will ensure that they are aware of their surroundings in the event that an emergency landing is necessary. This includes the ability to recover the UAS.

### **12.12. Documentation:**

- 12.12.1. After each flight, the operator will complete a report documenting the UAS operations.
- 12.12.2. After each deployment, all video obtained by the UAS Operation will be submitted to evidence in accordance with Department policy and State of Vermont Records Retention Act.
- 12.12.3. Aerial photography (still or video) shall be stored in accordance with Department policy and procedure and State of Vermont Records Retention Act.
- 12.12.4. The operator of the UAS is responsible for evidence handling as well as writing any supporting documentation for the incident.

### **12.13. Maintenance:**

- 12.13.1. Although there are few parts on the UAS that need servicing, it is necessary that the manufacturer's maintenance schedule is followed and properly documented.
- 12.13.2. Any issues that arise during maintenance that cannot be resolved by routine methods shall be forwarded to the manufacturer for further technical support.