

BANGOR POLICE DEPARTMENT  
POLICY  
General Order

**UNMANNED AERIAL SYSTEMS**

This policy is effective October 5, 2025 and amends or supersedes all previous policies on this subject.

**I. POLICY:**

Operations of UAS are mission based and not specifically aircraft based. Small Unmanned Aerial Systems and Small Unmanned Aerial Vehicles are interchangeable in this document. This policy is to be reviewed and revised as needed annually to ensure that all operations and missions have been executed in a manner that meets all internal guidelines and procedures as well as any Federal, State or local laws and guidelines. The policy will be amended to include any changes made to the UAS Team administration, operational procedures or updates/changes made to any Federal, State or local laws. An After-Action Report (AAR) will be done after each mission to document all pertinent details. The AAR's are then reviewed by the Chief of Police and the UAS Lead Pilot and personnel to ensure that each deployment has been conducted properly and in compliance with all governing agencies and laws.

**II. PURPOSE:**

To utilize small unmanned aerial systems (UAS) in support of an emergency incident on behalf of the Bangor Police Department or another local or state agency to provide video, still photography, audio, or some other legal and authorized capability. The UAS is to be flown in accordance with state and federal laws including but not limited to the Federal Aviation Administration (FAA) with safety a priority to protect responders, victims, and the aircraft itself. The Police Department is responsible as the registered owner to ensure the UAS is airworthy and that it is operated and maintained in strict compliance with the manufacturer's operational and maintenance recommendations. These responsibilities as well as all FAA regulations extend to the Pilot in Command (PIC).

### III. DEFINITIONS:

**Law enforcement agency** – Law enforcement agency means any state, county, municipality or other political unit within the territory belonging to the State or any department agency or subdivision of any of the foregoing, or any corporation or other association carrying out the functions of government that employs law enforcement officers.

**Unmanned aerial vehicle** – Unmanned aerial vehicle means an aircraft operated without a physical human presence within or on the aircraft that, in the manner in which the aircraft is used or the manner in which it is equipped is capable of performing audio or visual surveillance.

### IV. PROCEDURES

#### A. Capabilities

1. Live video recording and streaming
2. Still photography
3. Thermal Imagery
4. Communications

#### B. Areas of Operations

1. The primary Area of Operations will be within the boundaries of the City of Bangor which is patrolled by Bangor Police and serviced by Bangor Fire EMS and located in Penobscot County, Maine.
2. Secondary area of operations would include the remainder of the State of Maine as feasible pursuant to the requesting public safety agency. Airspace considerations within the state would include two class “C” airports.
3. The third area of operations encompasses all out of state areas as feasible pursuant to the requesting public safety agency or EMAC agreements. Airspace considerations outside of jurisdiction are evaluated prior to deployment by the team to determine if a UAS can be operated.

#### C. UAS Mission Intent

Small Unmanned Aerial Vehicles shall be used only for the following purposes:

1. Search and rescues
2. Mass casualty search (train derailment, plane crash, terrorism)
3. Fires (locating hotspots, forest fires, urban firefighting)
4. Damage assessments (property, environmental and post-storm)
5. Law enforcement tactical operations & criminal investigations
6. General scene assessment & public safety of mass gatherings

7. Bridge and Dam inspection (flooding, ice jams)
8. HazMat incidents
9. Environmental assessments from significant weather events
10. Flight indoors to minimize risks to first responders.
11. Any time a danger to a first responder can be minimized by UAV
12. Monitor and assess critical infrastructure and emergency incident situational awareness.
13. Environmental surveillance of chemical spills and areas of contamination and post-structure fire analysis to determine origin.
14. Training purposes

#### D. Mission Vetting

1. A request for use of the Department's UAS must specify the purpose of the deployment and be consistent with the Department's overall mission.
2. The requesting agency official must have authorization from their agency to request mutual aid.
3. All missions must be approved by the Bangor Police Chief or the department Lead Pilot in conjunction with the requesting official- e.g., Senior Warden of Maine Department of Inland Fisheries and Wildlife or local chief law enforcement official.

#### E. Unauthorized Uses

1. Invasion of privacy (eavesdropping)
2. Monitoring or video recording of public unless legally authorized.
3. Personal use or in conflict with private sector (i.e.; hobbyist, fun, and recreation)

#### F. Infringement of Civil Rights and Liberties as described below:

1. Respect for civil rights and civil liberties is a core tenet of our democracy. In executing the Department's law enforcement and national security mission, personnel must rigorously support and defend the U.S. Constitution and continue to uphold the laws, regulations, and policies that govern our activities and operations. As with all investigative methods, UAS operations must be consistent with the U.S. Constitution. The Fourth Amendment protects individuals from unreasonable searches and seizures and generally requires law enforcement to seek a warrant in circumstances in which a person has a reasonable expectation of privacy. Moreover, Department personnel are prohibited from using UAS for the collection, use, retention, or dissemination of data in any manner that would violate the First Amendment, or the lawful exercise of other rights secured by the U.S. Constitution and laws of the United States.

2. Department personnel are prohibited from the collection, use, retention or dissemination of UAS data in any manner that would violate the First Amendment or in any manner that would discriminate against persons based upon their ethnicity, race, gender, national origin, religion, sexual orientation, or gender identity, in violation of law.
3. In addition, UAS is only used in connection with properly authorized investigations and activities. Statutory authorities, the Attorney General's Guidelines, and other relevant agency policies and guidance define the scope of authorized investigations and activities and context of these existing safeguards.
4. Further, even within the context of properly authorized activities, personnel often must choose among different investigative methods that are operationally sound, reasonable, and effective, but may be more or less intrusive relative to individuals' privacy and civil liberties. Prior to using UAS, Department personnel must assess the relative intrusiveness of the proposed use of UAS, and balance it against the investigative need.
5. This is both a logical process and an exercise in judgment, but the overall principle remains; in deciding whether to use UAS, Department personnel must consider and, if reasonable based on the facts and circumstances of the investigation, use the least intrusive means to accomplish an operational need.
6. Accordingly, Bangor personnel shall, prior to deployment of new sUAS technology and at least every three years, examine the existing policy and procedures relating to the collection, use, retention, and dissemination of information obtained by sUAS, to ensure that privacy, civil rights, and civil liberties are protected.
7. Any information collected by sUAS is only used to the extent in which is consistent with and relevant to an authorized purpose. Retention of Information collected using a sUAS that may contain personally identifiable information (PII) shall not be retained for more than 180 days unless retention of the information is determined to be necessary to an authorized mission of the retaining agency, is maintained in a system of records covered by the Privacy Act or is required to be retained for a longer period by any other applicable law or regulations.
8. All missions will comply with the Privacy Act of 1974 (5 U.S.C. 552a) in applicable circumstances. All flights will be tracked and recorded by Skydio on a secure system as required by the Privacy Act. Skydio is an American owned company who supports Federal, State and local public safety agencies. All data is archived and access is limited to authorized internal personnel only. All data entries are permanent and cannot be modified post flight. Only limited authorized personnel have access to the Skydio platform and all recorded data.

Authorized personnel are all vetted and must hold proper credentials. This pertains to all data covered under the UAS capabilities.

9. The telemetry data collected by each sUAS is recorded within the sUAS and synched to the Skydio platform for storage on encrypted and secure servers. Video when recorded is saved to a SD card which is then copied to a secure local hard drive and the SD card is subsequently erased. Access to the local hard drive is limited to authorized personnel only.
10. As required by law, data stored on Skydio will be purged or deleted as soon as feasible per investigation or mission requirements. Data obtained by sUAS is only disseminated as required by the mission to internal staff and the requesting agency(s). Data that is not maintained in a system of records covered by the Privacy Act shall not be disseminated outside of the agency unless dissemination is required by law or fulfills an authorized purpose and complies with agency requirements.
11. UAS recorded data will not be collected, disseminated or retained solely for the purpose of monitoring activities protected by the U.S. Constitution, such as the First Amendment's protections of religion, speech, press, assembly, and redress of grievances (e.g., protests, demonstrations).
12. Bangor Police Department will Prohibit the collection, use, retention, or dissemination of data in any manner that would violate the First Amendment or in any manner that would discriminate against persons based upon their ethnicity, race, gender, national origin, religion, sexual orientation, or gender identity, in violation of law.
13. Bangor Police Department shall only collect information using a sUAS, or use sUAS collected information, to the extent that such collection or use is consistent with and relevant to an authorized purpose.

G. Compliance with Maine Law: Title 25 Part 12: Ch 551; Regulation of unmanned aerial vehicles.

1. With respect to § 4501; part 5, the Bangor Police Department has adopted written minimum standards and policies and protocols for use of UAVs on behalf of law enforcement agencies including the following:
2. All persons operating unmanned aerial vehicles will be certified by the FAA and trained for the intended type of flight.
3. Prior authorization from the chief administrative officer of the law enforcement agency seeking the use of the Bangor Police Department unmanned aerial vehicle is required.

4. Approval by the Attorney General or chief prosecuting attorney for the appropriate jurisdiction (signed warrant or valid consent) must be obtained for the deployment of an unmanned aerial vehicle for criminal investigative purposes.
5. Use of visual, thermal, and zoomed imagery are permitted. No facial recognition is permitted, and NO UAV will be equipped with any type of weapon.
6. Flight pre-planning, incident briefings, flights above 200' above ground level at a speed of 5 mph or more will be used to minimize and avoid the inadvertent visual recording of 3rd parties or private spaces not under investigation.
7. Any unnecessary video recordings which are unrelated to the investigation will be erased.
8. The number of UAV's deployed to a single incident or investigation will be managed by the UAV Operations Director.
9. Operators of a UAV will take all precautions available to avoid hazards to persons or property with appropriate take off and recovery sites as well as no flight over people.
10. Annual Unmanned Aerial Vehicle Report will be submitted to the Maine Commissioner of Public Safety on behalf of law enforcement agencies supported by the Bangor Police Department prior to 1 July. [25 M.R.S.A. § 4501(6)]. A Bangor Police Department operator of a UAV who intentionally uses the UAV without proper authorization or in deviation of the standards set forth in this policy shall be subject to disciplinary action.
11. To ensure compliance with State and local laws as well as the Operating Policy, the UAS Operations Chief prepares an After-Action Report (AAR) using department provided software following each operation or mission. The AAR's are then thoroughly reviewed at the monthly team meetings or at a training exercise to verify that the operation or mission was properly executed. An annual audit and assessment will be completed to verify compliance with departmental policies.

#### H. Transparency of Operations

Our agency is committed to transparency in operations. Our public website [www.bangormaine.gov](http://www.bangormaine.gov) will serve as a public notice of operations. This policy, which outlines all procedures the UAS team will be published on the City of Bangor website under the Police Department Section. This will serve as a public notice of policies and procedures. [www.bangormaine.gov/BPDpolicy](http://www.bangormaine.gov/BPDpolicy) Our public website includes access to the department's complaint process to include the formal complaint form.

Due to the nature of some missions not all upcoming operations are scheduled, and some missions will require no public notification, due to sensitivity or scene safety (i.e., criminal investigations, crime scenes, etc.). For scheduled missions that are not sensitive in nature, a notice will be posted to the public website advising of the upcoming operation. The agency requesting UAS resources may also provide public notification of before, during, or after a mission is complete.

For specific public safety operations, a UAS NOTAM (Notice to Air Mission) is filed with the FAA depicting the radius of the area, altitudes to be flown and date/time of the operation within the airspace. This is available to the public as well as pilots and users of the airspace.

A year-end summary of operations, to include missions flown and the number of times this agency assists other agencies will be prepared annually utilizing the data stored in the Drone software platform and then posted to the public website. This report will indicate the total number and type of missions completed as well as training and non-emergency uses over the past year.

## I. Deployment

At a minimum, each deployment shall meet the following minimum requirements:

1. Training and certification requirements provided by State and Federal law.
2. Procedures in place to minimize inadvertent audio or visual recording of private spaces or individuals.
3. Procedure in place for destroying any unnecessary audio or visual recording without further duplication or dissemination.
4. The pilot(s) will follow recommended minimum altitude and speeds at which the UAS may fly to minimize invasion of privacy.
5. Procedure in place to avoid hazards to persons or property on land and in the air.
6. Use methods of tracking and recording the flight of each UAS mission.
7. Compliance with rules and regulations promulgated by the FAA.
8. Obtain a Public Safety Certificate of Waiver or Authorization that permits operation of the UAS in the area of deployment for the intended purpose.

The procedures referenced above shall be developed and implemented prior to deployment of UAS on any approved mission. Once a UAS mission has approval the following procedure will be adhered to for each deployment:

- a. Department officers will activate as necessary
- b. Initiate Incident and or Unified Command if required.
- c. Recommended designated personnel depending on incident:
  - i. Incident Commander (IC)

- ii. Pilot in Command (PIC)
- iii. Police Information Officer (PIO)
- iv. Visual Observer (VO)
- v. Communication Specialist (CS)

## J. Operations

1. Only qualified and certified pilots will launch and fly the UAS (higher restriction than required by the FAA). Aircrews will employ Crew Resource Management (CRM) to optimize effectiveness and safety.
2. Incident Commander will ensure all other organizations are aware of the air operations underway and that coordination is established with supported elements and other supporting units.
3. Air Operations Branch
  - a. De-conflict manned from unmanned aircraft.
  - b. Establish areas of operation and assignments for each sUAS
  - c. Safety is the responsibility of everyone on the team.
4. Logistics
  - a. Ensures that proper resources support all air operations.
  - b. Ensure additional batteries are prepared and charged.
  - c. Maintains connectivity with cellular devices.
  - d. Aircraft Skydio X10
    - i. Color zoom camera
    - ii. Thermal imaging
    - iii. 3D scan software with pic stitch technology
    - iv. Enterprise controller
    - v. Water resistant pelican case

## K. Communications Operations

1. Interoperable communications (radio, phone, satellite up-link, Internet, etc.) established with supported elements and adjacent organizations.
2. ICS forms may be kept to document and report any and all UAS missions.
3. All video recordings will be archived and maintained for evaluating value against cost of the UAS after the video is evaluated for unnecessary recordings which may constitute an invasion of privacy or other content outside the scope of the mission.

## L. Maintenance

1. Aircrafts are to be inspected and maintained in accordance with manufacturer recommendations.
  - a. Batteries, weekly charge for all UAS kits

- b. Inspection of UAS Kits for completeness
- c. Replacement of propellers that have damage.
- d. Placing unsafe batteries out of service when necessary

#### M. Training

- 1. The UAV Team leader will ensure all training missions will be conducted over non-residential areas.
- 2. All UAV air operations missions will be in complete compliance with FAA regulations (Title 14 CFR, Section 21.191 and Section 333 of PL 112.95) and Maine law (LD-25).
- 3. Pilots will receive opportunities to train and develop proficiency under different circumstances.
- 4. Pilot skills, qualifications, and flight hours will be documented.

#### N. Reporting Requirements

- 1. Post incident an After-Action Report (AAR) is to be submitted to the Chief of Police for each operation or mission.
- 2. Documentation of all UAS activities associated with mission operations is required regardless of the airspace in which the UAS operates except those designated as for "training". NOTE: Negative (zero flights) reports are required in accordance with the COA
- 3. Electronic recording of flight data will be captured and made available as required.
- 4. Reports to the FAA will be submitted in accordance with the COA monthly to include UAS flight time, location, damage, incidents, and malfunctions.

#### O. Accidents / Mishaps

All accidents/mishaps involving UAS operations where any of the following occurs:

- 1. Fatal injury, where the operation of a UAS results in a death occurring within 30 days of the accident/mishap.
- 2. Serious injury, where the operation of a UAS results in: Hospitalization for more than 48 hours, commencing within 7 days from the date of the injury occurred.
- 3. A fracture of any bone (except simple fractures of fingers, toes, or nose) Severe hemorrhages, nerve, muscle, or tendon damage
- 4. Involving any internal organ

5. Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.
6. Total unmanned aircraft loss.
7. Substantial damage to the unmanned aircraft system where there is damage to the airframe, power plant, or onboard systems that must be repaired prior to further flight.
8. Damage to property, other than the unmanned aircraft
9. Any incident/mishap that results in an unsafe/abnormal operation including but not limited to:
  - a. A malfunction or failure of the unmanned aircraft's on-board flight control system (including navigation)
  - b. A malfunction or failure of ground control station flight control hardware or software (other than loss of control link)
  - c. A power plant failure or malfunction
  - d. An in-flight fire
  - e. An aircraft collision involving another aircraft
  - f. Any in-flight failure of the unmanned aircraft's electrical system requiring use of alternate or emergency power to complete the flight
  - g. A deviation from any provision contained in the COA
  - h. A deviation from an ATC clearance and/or Letter(s) of Agreement/Procedures
  - i. A lost control link event resulting in: Fly-away
  - j. Execution of a pre-planned/unplanned lost link procedure.
10. Initial reports must contain the information identified in the COA On-Line Accident/Incident Report.
11. Follow-up reports describing the accident/incident/mishap(s) must be submitted by providing copies of proponent aviation accident/incident reports upon completion of safety investigations.
12. Civil operators and Public-use agencies (other than those which are part of the Department of Defense) are advised that the above procedures are not a substitute for separate accident/incident reporting required by the National Transportation Safety Board under 49 CFR Part 830 §830.5.
13. For other than Department of Defense operations, this COA is issued with the provision that the FAA be permitted involvement in the proponent's incident/accident/mishap investigation as prescribed by FAA Order 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting.

P. Preflight, unpacking, set-up and power-up procedures.

1. Open pelican case and verify all components are present.
2. Remove UAS and deploy each motor arm.
3. Inspect condition of each propeller blade for nicks and damage
4. Remove safety cover over gimbal assembly.

5. Insert fully charged battery in drone.
6. Confirm UAS has micro-SD Card installed.
7. Remove controller from pelican case and verify battery level.
8. Install battery to the Skydio X10.
9. Remove and power up the Enterprise Controller
10. Connect controller to the Skydio X10
11. Confirm device calibrations and resolve any alerts.
12. Set the return to home coordinates
13. When the launch area is safe, launch the UAS
14. When mission is completed each component returned to pelican case
15. Remove the SD card for data downloading, archiving or delete as required

#### Q. Mission planning

1. Receive authorization from the Chief of Police or Lead Pilot
2. Notify the public of the intended flight location via social media
3. Identify and document expected results (i.e., video)
4. Analyze area of operation using all available resources to identify safety, airspace, liability, and visibility concerns.
5. Select best location for departure and return of the UAS, ensuring there are no obstructions, wires, or other safety concerns.
6. The pilot in command shall notify the Chief of Police or Lead Pilot with any safety concerns before launching the UAS.

#### R. Execution

1. Conduct Risk Assessment of the mission and make go/no go decision
2. Review airspace requirements and verify no temporary flight restrictions 3.  
Notify any airport authorities or control tower if operating within 5NM
4. Perform pre-flight checklist.
5. Remain at or below 400AGL
6. Brief support team and other participants or agencies as necessary
7. Prosecute objective and avoid distractions and interruptions
8. Monitor changing conditions, incident, weather, and available resources 9.  
Seek feedback from mission specialists and adapt as required

#### S. Completion

1. Safely return aircraft to departure point.
2. Conduct post flight inspection of aircraft
3. Secure UAS for next mission
4. Sign and document flight log
5. Complete debrief as necessary and note lessons learned
6. Provide After Action Report to the Chief of Police

## T. Contingencies

1. Lost-link procedure for command and control are dependent on the Manufacturer's built in auto return feature which will direct the UAS to automatically land at its (POD). Lost comm procedure includes the communication of the Pilot-in-Command (PIC) and Air Traffic Control (ATC) or between the PIC and Visual Observer(s).
2. In any instance when comm is unreliable or inoperable the PIC shall initiate procedures to abort the mission and return the UAS to its (POD) until such time as radio or telephone communication can be reestablished.
3. At any time, safety is compromised for the aircraft or personnel any participant can call "Knock it Off" which is to be strictly observed by the PIC with the return to POD for any safety concerns. Select alternative landing zone (LZ) in the event of damage to aircraft or another incident. Post support team in surrounding locations to view UAS and retrieve if required.

Approved: 9/25/2025

Effective: 10/5/2025

Mark J. Hathaway  
Chief of Police