

GENERAL ORDER

DURHAM POLICE DEPARTMENT DURHAM, NC

V	T	ŢŢ	ЛĪ	B	E	R	•
٠,	•	JΙ	VI.	v.		Τ,	•

3008

SMALL UNMANNED AIRCRAFT SYSTEMS

Effective Date: 01/02/2025	Revision Dates:

INTRODUCTION

The Small Unmanned Aircraft System (sUAS) provides a valuable resource for the Durham Police Department and other local agencies upon request. The sUAS offers aerial support for the department's investigative, tactical, and administrative needs at specific incidents or events within the defined parameters where this technology is deemed suitable. The operation of the sUAS shall not infringe upon the statutory or constitutional rights of any individual. Furthermore, the sUAS shall be operated in accordance with Federal Law, State Law, Federal Aviation Administration (FAA) Regulations, and Durham Police Department policies and directives.

DEFINITIONS

Air Boss: The person responsible for mission coordination and local deconfliction if multiple aircraft are required to complete a mission.

Assistant to the Pilot (ATTP): The person designated by the Remote Pilot in Command (RPIC) to help increase safety during complex flight operations.

Certificates of Waiver or Authorization (COA): An authorization issued by the Federal Aviation Administration (FAA) to a public operator or RPIC for a particular Unmanned Aircraft activity.

Chief Pilot: The person who is designated to oversee the operations of the sUAS Team. This includes managing sUAS Team members (monitoring certification, licenses, and training requirements), coordinating sUAS maintenance, scheduling missions, and ensuring compliance with local and federal sUAS laws and regulations. The Chief Pilot must also maintain all certifications, licenses, and training.

Deconfliction: The process of avoiding mutual interference or hazards among entities or elements in the same area of operation, which can be actively managed.

Digital Media: The digital recording of images, sounds, and associated data with probative value, stored or transmitted in binary form.

Flight Team: All officers involved in a specific mission, including but not limited to the RPIC, Visual Observer, and the person manipulating the flight controls (if not the RPIC).

General Order 3008 Page 1 of 10

Line of Sight (LOS): The ability of the Remote Pilot and/or the Visual Observer to see the sUAS under their control during flight, unaided.

Maintenance Program: A system or set of procedures for continuously maintaining sUASs to ensure airworthiness.

Mission: The use of any sUAS by police personnel to conduct police business.

Mission Area of Operations (AOR): A defined perimeter/area to be determined based on the scope and type of the operation, including a defined operational ceiling at or below 400 feet above the ground. The altitude of the sUAS cannot be higher than 400 feet above the ground, unless the sUAS is flown within a 400-foot radius of a structure and does not fly higher than 400 feet above the structure's immediate uppermost limit.

Night Flight: Flight of a sUAS that occurs between one-half hour after sunset and one-half hour before sunrise. The time of sunset and sunrise is determined by the National Oceanic and Atmospheric Administration (NOAA). However, 14 CFR Part 107 allows sUAS operations during civil twilight if the sUAS has lighted anti-collision lighting that is visible for at least three (3) statute miles. The nighttime operation prohibition can be waived through the FAA for Part 107 or as an addendum to approved certificate of waiver to the COA.

Remote Pilot: The individual exercising control over the sUAS during flight. The Remote Pilot need not be 14 CFR 107 certified if under the supervision of a RPIC who is in direct communication and able to control of the sUAS, regardless of certification. Undesignated remote pilots may be student pilots at the controls.

Remote Pilot in Command (RPIC): The mission commander with on-site authority for the sUAS. The person or persons properly qualified to be a remote pilot has the final authority and responsibility for the operation and safety of the current mission. They may act as either Remote Pilot or Visual Observer, but they may not delegate their responsibility. An RPIC may only operate one sUAS at a time. Each sUAS in use shall have its own assigned RPIC.

Small Unmanned Aircraft (sUAS): An unmanned aircraft weighing more than 0.55 lb. (0.25kg) and less than 55 lb. (25 kg), including everything that is on board the aircraft and its associated elements (including communication links, the components that control aircraft, and its batteries) that are required for the safe and efficient operation of the sUAS.

sUAS Team: A group comprised of a sUAS Team Leader, RPICs tasked with flying certain types of missions within the overall sUAS Program, and optional support staff designated at the discretion of the RPIC.

Visual Flight Rules (VFR): All flights with the sUAS shall be conducted under VFR conditions and an altitude below 400 feet AGL (Above Ground Level). VFR is established as a three (3) mile visibility and

General Order 3008 Page 2 of 10

a cloud ceiling of 1000 feet for day operations and five (5) mile visibility with a cloud ceiling of 2000 feet for night operations.

Visual Observer (VO): A person designated by the RPIC to assist the RPIC and the person manipulating the flight controls of the sUAS (if that person is not the RPIC) in seeing and avoiding other air traffic or objects aloft or on the ground. The individual is trained to maintain the line-of-sight and 360-degree hazard awareness around the sUAS at all times and to assist the RPIC in carrying out all duties required for safe operation of the sUAS. Under 14 CFR Part 107, Visual Observers are not crewmembers and have no responsibility or authority over the sUAS operation. Visual Observers may be formally trained and certified for special operations (formal training required for night operations) or chosen and properly briefed by the RPIC (day operations only).

ORGANIZATION AND PROGRAM ADMINISTRATION

The sUAS program will be overseen by a designated Chief Pilot, with individual pilots assigned as additional duty roles. The overall operation of the sUAS falls under the responsibility of the Durham Police Department Organized Crime Division Captain or their designee. Responsibilities include, but are not limited to:

- Approving requests for operating supplies and equipment for the sUAS program
- Review the approved budget
- Coordinating and reviewing requests for training schools and seminars
- Reviewing requests for sUAS demonstrations
- Regularly reviewing and monitoring the sUAS Team's training and field performance
- Annually reviewing Pilot certifications and mandatory records
- Appointing the Chief Pilot

The Durham Police Department shall obtain applicable authorizations, permits, or certificates required by the Federal Aviation Administration (FAA) and the State of North Carolina before deploying or operating a sUAS. The Chief Pilot shall ensure all authorizations, permits, and certificates are maintained and renewed as required by law and/or regulations.

All sUASs will be purchased from recognized manufacturers known for providing reliable and proven aircraft systems. All sUASs owned by the Durham Police Department shall be capable of capturing each flight mission and maintaining a cumulative flight log.

All sUAS operations, including maintenance, flight logs, and mission reports, shall be recorded electronically. All sUASs will be stored at locations designated by the Organized Crime Division Captain or their designee. No sUAS will be stored in a vehicle during off-duty hours.

General Order 3008 Page 3 of 10

sUAS Pilot Selection Criteria and Responsibilities

Becoming a sUAS Pilot is a voluntary specialized assignment. An officer shall meet the following minimum eligibility requirements:

- Must have a minimum of twenty-four (24) months of experience with the Durham Police Department as an officer.
- Must have an overall rating of "Effective" or higher on the most recent performance evaluation.
- Must have no sustained disciplinary actions in the previous year that resulted in the loss of time, pay, or position.

When vacancies are announced, any officer interested in becoming a sUAS Pilot shall follow <u>General Order 1020</u>: <u>Specialized Assignments.</u>

Training

Coordination of sUAS program training is the responsibility of the Chief Pilot. Each Pilot must be deemed "proficient" by the Chief Pilot before conducting non-training missions. To be eligible to pilot a Durham Police Department-owned sUAS, officers must first complete a <u>Part 107</u> training course and obtain their FAA Part 107 certification at a minimum.

Newly licensed pilots must complete initial flight training, which include the following:

- A minimum of five (5) hours of flight time piloting a sUAS.
- A minimum of 15 takeoffs and landings using both manual and automatic modes.
- A minimum of two (2) hours of maneuver training, including basic and advanced maneuvers such as straight-and-level flight, turns, climbs, and descents (this counts towards the 5-hour minimum).
- A minimum of one (1) hour performing abnormal/emergency procedures, such as return-to-home, loss of command link, loss of visual line of sight, fly away, unexpected low battery alert, and loss of GPS (counts towards the 5-hour minimum).
- A minimum of 30 minutes of manual flight with GPS off (counts towards the 5-hour minimum).

To maintain sAUS proficiency and be considered current, all pilots must complete at least three (3) qualifying sUAS flights, as determined by the Chief Pilot, within a rolling 90-day period to remain eligible to fly missions. Pilots will also undergo annual in-service training, which includes updates to industry standards, a review of current statutes and case law governing the use of sUAS, and field exercises. The Chief Pilot will coordinate the annual in-service training. Upon completion, all in-service documentation will be forwarded to the Training Division in-service coordinator. The Chief Pilot may require additional mandatory training as needed.

General Order 3008 Page 4 of 10

Any sUAS pilot who has not conducted at least one flight operation within 90 days or fails to attend mandatory training will be placed on no-flight status. Pilots on no-flight status may attend a scheduled training session and complete a training flight, which will include ground instruction and flight time, including three takeoffs and landings to demonstrate proficiency. Upon satisfactory completion, the Chief Pilot may restore the pilot back to active flight status.

Deployment of the sUAS

The sUAS may be deployed for the following purposes:

- Search and rescue operations
- Locating suspects or missing persons
- Crime scene documentation
- Traffic crash scene reconstruction
- Officer protection/dignitary overwatch during high-risk operations or events
- Intelligence gathering
- HAZMAT scene evaluation
- Public presentations
- Post-disaster assessments
- Tactical situations
- Training
- Any situation deemed appropriate by the Chief of Police or their designee.

OPERATIONAL PROCEDURES

During mission operations, safety takes precedence over all other mission objectives. The following procedures must be adhered to:

- All sUAS owned by the Durham Police Department shall be deployed and used only in accordance with state and federal law to support official law enforcement and public safety missions.
- All sUAS operations shall be conducted in compliance with the departmental sUAS Standard Operating Procedures.
- The sUAS will be operated only by Durham Police Department sUAS personnel who have been trained and certified in the operation of the Durham Police Department sUAS system and who meet the Remote Pilot Requirements. sUAS shall not be handled by any personnel unless under the express direction of a Durham Police Department sUAS pilot.

General Order 3008 Page 5 of 10

• All Durham Police Department sUAS shall operate according to the limitations set forth by the manufacturer.

Request for Deployments

- All requests to deploy a Durham Police Department's sUAS shall be made to the on-duty Remote Pilot in Command (RPIC), either directly or through Emergency Communications. The RPIC will gather all available information relevant to the request and determine if the mission can be flown legally and safely. In making this determination, the RPIC may consult with the Durham Police Department Chief Pilot as needed.
- When not on duty, a sUAS pilot may be called in for service. The Watch Commander will evaluate the circumstances and determine if the use of the sUAS is warranted. The Watch Commander will also notify the Organized Crime Division Captain.
- At the time of the request, the sUAS pilot will be advised of the nature and location of the incident, the specific sUAS service desired, and the name of the investigating officer in charge of the scene.
- For sUAS service requests from outside the agency, the Watch Commander should be notified and briefed on the request. The Watch Commander will contact the on-duty RPIC and provide details on the nature and location of the incident, the specific sUAS service desired, and the name of the investigating officer in charge of the scene. Any request for sUAS support from outside agencies requires a valid mutual aid agreement to be in place.

Mission Deployment

- Upon arrival, the primary investigating officer will provide the sUAS pilot with all available information on the incident's circumstances and any dangerous conditions. Once on scene, the sUAS pilot will oversee all sUAS flight operations
- All flight mission denials will be documented on the Durham Police Department sUAS Flight Mission Report and attached to the requestor's case file.
- The Pilot shall document all flight missions in a Durham Police Department sUAS Flight Mission Report. The Flight Mission Report shall be submitted to the Chief Pilot within ten (10) days of the flight, and a copy shall be provided to the investigating officer to be included in the investigative case file.
- When a Durham Police Department sUAS is deployed and there are reasonable grounds to believe that it will collect evidence of criminal wrongdoing and/or may intrude upon reasonable expectations of privacy, the Durham Police Department investigating officer

General Order 3008 Page 6 of 10

shall obtain a search warrant specifically authorizing sUAS use before conducting the sUAS flight.

- Precautions shall be taken to avoid transitional flight over persons and property that could result in injury or damage whenever possible. Stationary flight over persons and moving vehicles is prohibited without a FAA Waiver.
- The RPIC will be responsible for the following at each flight mission: sUAS setup, preflight inspection, flight operations, post-flight breakdown, proper packaging of sUAS, and all pertinent Durham Police Department reporting paperwork to document the flight mission. The RPIC is also responsible for ensuring that copies of all required documentation, whether in electronic or paper form, including, but not limited to, the Durham Police Department Certificate of Authorization (COA) and/or flight waiver, are on scene for any flight mission. The RPIC shall determine whether a Visual Observer (VO) is needed for each flight mission. The VO is responsible for maintaining the sUAS within their visual line of sight and ensuring officer safety during the mission.
- The RPIC of a flight mission shall have their Part 107 license on their person during each flight mission and training exercise.
- The sUAS shall be programmed to "return to home" (RTH) in the event of a lost link as an onboard safety measure to ensure the sUAS returns to the take-off location. The sUAS will be programmed for its RTH at an altitude to ensure obstacles will not impede a safe and quick return. The RPIC on the scene can change this setting baes on the specific mission and the area to be flown.
- During flight missions, the RPIC shall always be positioned to have a clear visual of the sUAS.
- The sUAS will always have its anti-collision lights turned on unless the mission dictates otherwise for safety reasons or when the benefits of disabling the lights far outweigh the risks.
- The RPIC will periodically check weather updates and remain aware of current and developing weather conditions. The RPIC may assign a support staff member of the sUAS crew to monitor this function.

Emergency Procedures

Emergency procedures stated in the manufacture's operations manual must be followed for all sUAS operations. In the event of an emergency involving the safety of persons or property, the RPIC may deviate from the procedures of this directive regarding aircraft, equipment, and weather minimums to the extent required to address the emergency. This includes, but is not limited to the following situations:

General Order 3008 Page 7 of 10

- Lost Link: A lost link occurs when there is an interruption in command-and-control link with the sUAS, preventing the remote pilot from managing the flight. If control is lost and the sUAS is not operating as planned, lost link procedures shall be initiated. These procedures will automatically cause the sUAS to ascend to its ceiling altitude and return to the launch site. If positive control cannot be reestablished and the sUAS is leaving the operation area or poses a risk to life and/or property, the RPIC will issue a kill engine command.
- Loss of Visual Contact: If visual contact with the sUAS is lost, the RPIC shall command the aircraft into a hover mode while attempting to reestablish visual contact. If visual contact cannot be reestablished within a reasonable time, as determined by the RPIC, then lost link procedure shall be executed.
- Loss of Power (Engine Failure): In the event of a loss of power that prevents the sUAS from maintaining flight, flight team members will immediately attempt to locate the sUAS, assess the scene, and proceed with accident notification and investigation protocols.
- Controlled Flight into Terrain: If all other contingencies have been exhausted, and continued flight poses unacceptable risk, the RPIC may intentionally and deliberately perform a controlled flight into terrain to prevent further hazards.

Accident Notification and Investigation

All flight team members are responsible for immediately reporting any sUAS mishaps. All inflight accidents and incidents involving property damage, injuries, and fatalities shall be investigated, reported to the appropriate city departments, and the RPIC must notify the chain of command as soon as practical. The following procedures shall be adhered to:

- Investigative Reporting: The appropriate personnel will conduct investigative reports following standard reporting protocols. The method of reporting may include Incident Reports (IR) or specific sUAS forms as designated.
- **FAA Reporting Requirements:** The RPIC must report any incident to the FAA within ten (10) days if it results in serious injury, loss of consciousness, or property damage of at least \$500. If FAA regulations require notification within 24 hours, the same reporting protocols apply.
- **Equipment Accountability:** All sUAS equipment is subject to the guidelines of <u>General</u> Order 3003 R-5, Equipment Inventory & Control.

SUAS RECORDINGS AND LIVESTREAM

The Durham Police Department complies with N.C.G.S. § 132-1.4A, which governs the disclosure and

General Order 3008 Page 8 of 10

release of law enforcement agency recordings. Any recordings made during a sUAS flight are subject to General Order 4084: *Release & Disclosure of Law Enforcement Recordings*.

- Recording and Storage: During a sUAS flight, all digital media collected shall be recorded on a memory card or other suitable medium and uploaded into the Department's video management system. If the flight supports an incident in which a report is being generated, the digital media will be attached to that specific incident report number. If no incident report is created, the digital media will be saved under an entry title with sufficient detail to facilitate easy reference and retrieval. Per General Order 4084 Release & Disclosure of Law Enforcement Recordings, any digital media collected and not attached to an incident report must be stored on the departmental server(s) or other appropriate storage medium controlled by the Department for a minimum of thirty (30) calendar days.
- Sharing and Livestreaming: Any team member may share live-streamed sUAS footage with authorized personnel and other sworn law enforcement officers during a deployment if it is deemed appropriate for the mission or directed to do so by a higher-ranking officer.

SUAS MAINTENANCE

The sUAS program shall strictly adhere to the manufacturer's suggested maintenance plan, serving as a record for an internal audits or FAA inspections of the agency's program. This maintenance plan applies not only to the sUAS itself but also to its accessories and software.

The Chief Pilot is responsible for capturing and documenting the following information in the sUAS logbook:

- Overall flight data history
- Individual sUAS information and history
- Individual battery information and history
- Maintenance history
- Firmware updates

If a sUAS becomes inoperable, the Chief Pilot shall arrange for repair by the manufacturer or a designated manufacturer repair service center. Additionally, any self-fulfilled maintenance or repairs provided by a third-party service must be documented by the Chief Pilot.

UNAUTHORIZED USE

Any unauthorized use of Durham Police Department sUAS may result in disciplinary action, as well as potential civil and criminal penalties. The sUAS shall not be flown in violation of agency policy, FAA Part 107 guidelines, or any applicable state laws. Additionally, the sUAS shall not be deployed for any mission where the RPIC or Chief Pilot determines the risk outweighs the benefits. Such risks include, but are not

General Order 3008 Page 9 of 10

limited to, injury to persons, property damage, interference with manned flight, and potential loss or damage to the sUAS due to existing conditions.

PATRICE V. ANDREWS

General Order 3008 Page 10 of 10