THE RALEIGH POLICE DEPARTMENT

1109-04

UNMANNED AERIAL SYSTEM (UAS) OPERATIONS

<u>PURPOSE</u>

To define and outline the objectives for operation and usage of the Raleigh Police Department Unmanned Aerial System (UAS). This policy shall provide guidelines for authorization of use, including conditions and limitations. Additionally, this policy will outline the qualifications, training and equipment for the UAS program.

VALUES REFLECTED

This directive reflects our values of *Service, Fairness and Integrity*. By following these guidelines, we will serve the public by protecting lives and property when other means and resources are not available, and we will be fair and impartial in protecting the Constitutional right to privacy of all citizens.

UNITS AFFECTED

All Personnel

REFERENCES/FORMS

DOI 1106-01: "Confidentiality and Release of Information" DOI 1109-18: "Body Worn Cameras and Mobile Video Recording" DOI 1103-01: "Officer Reclassification, Lateral Selection Processes for Specialized Assignments, and Promotions" 14 CFR Part 91. General Operating and Flight Rules. 14 CFR Part 107. Small Unmanned Aircraft Systems. N.C.G.S. 15A – 300.1 "Use of Unmanned Aircraft Systems" N.C.G.S. 15A – 300.2 "Regulation of Launch and Recovery Sites" N.C.G.S. 15A – 300.2 "Regulation of Launch and Recovery Sites" N.C.G.S. 15A – 300.3 "Use of an Unmanned Aircraft System near a Confinement or Correctional Facility Prohibited" N.C.G.S. 63-95 "Training Required for Operation of Unmanned Aircraft Systems" N.C.G.S. 63-96 "Permit Required for Commercial Operation of Unmanned Aircraft Systems" R.C.C. 13-2003 "Aircraft; Definition; Stunt Flying; Minimum Altitude; Permits"

May be Released to the Public

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GENERAL POLICIES

Unmanned aerial systems (UAS) have proven to be a valuable law enforcement tool by providing increased situational awareness, enhanced officer safety and act as a force multiplier to improve operational efficiency. This policy sets forth how the UAS program will operate aerial platforms for law enforcement activities in coordination with law enforcement officers conducting a specific law enforcement mission. These law enforcement flight operations will be conducted under 14CFR Part 107 or the Certificate of Authorization (COA) issued by the Federal Aviation Administration (FAA) pursuant to 14 CFR Part 91 (Part 91).¹ This policy also sets forth how the UAS program will operate aerial platforms for non-law enforcement responsibilities, such as flight operations conducted by the Public Information Office. These non-law enforcement flight operations shall be conducted exclusively under 14 CFR Part 107. This policy is designed to minimize risk to people, property, and aircraft during the operation of the UAS while safeguarding constitutional protections and privacy interests of all persons.

DEFINITIONS

Air Traffic Control (ATC) System – The primary purpose of the ATC system is to prevent a collision between aircraft operating in the system and to organize and expedite the flow of traffic.

Certificate of Authorization (COA) – For public law enforcement flight operations, the Federal Aviation Administration issues a Certificate of Authorization or waiver (COA) pursuant to 14 CFR Part 91, the general operating and flight rules for aircraft, manned or unmanned. The COA permits public agencies and organizations to operate a particular UAS for a particular non-commercial, governmental purpose, in a particular area, without having to comply with all of the restrictions of Part 91 or Part 107. The COA allows an operator to secure a defined block of airspace and includes special provisions unique to the proposed operation. COAs usually are issued for a specific period usually up to two years.

Defined Incident Perimeter – The location of an incident should have a defined perimeter based on the scope of the operation and a defined operational ceiling at or below 400 feet above the ground unless otherwise authorized by the COA or Part 107 rules and regulations.

Notice To Airmen (NoTAM) – A notice containing information (not known sufficiently in advance to publicize by other means) concerning the establishment, condition, or change in any component (facility, service, or procedure of, or hazard in the National Airspace System) the timely knowledge of which is essential to personnel concerned with flight operations. A NOTAM is also issued to designate a temporary flight restriction.

Part 107 – 14 CFR Part 107 (Part 107) is the set of FAA rules specifically governing small, unmanned aircraft systems, including rules for UAS pilot licensing, UAS registration, and UAS flight operations. Part 107 is generally more restrictive than the rules set out in a COA. Nevertheless, assuming a given flight operation meets Part 107's requirements, that law enforcement flight operation may be flown either under the COA or under Part 107 (but not both). By contrast, <u>all</u> non-law enforcement flight operations must be flown under Part 107.

¹ Depending on the mission, individual law enforcement flight operations may be conducted in the alternative under 14 CFR Part 107.

Pilot in Command (PIC) – The individual who is responsible for the overall flight operations of a specific mission. The PIC is required for every flight.

Pre-Flight Briefing – A discussion led by the PIC prior to launch of the aircraft which shall include, but not be limited to:

- Review of mission goals and methods to achieve goals, including handoff procedures.
- Review of current and forecasted weather conditions and weather limitations during mission.
- Review of current Notice to Airmen (NoTAMs) and Temporary Flight Restrictions (TFRs) that have been issued for the proposed flight area.
- Identification of mission limitations and safety issues such as battery charge, GPS strength and potential radio interference.
- Review of proposed flight area, including the availability of two cell phones to communicate with ATC in the event of a fly away or other flight emergency.
- Review of emergency/contingency procedures including aircraft system failure, flight termination, divert and lost link procedures.
- Review of required video or digital images.
- Contents of the COA (if applicable).
- Frequencies to be used.
- Execution of a pre-flight check following the approved checklist.

Temporary Flight Restriction (TFR) – A restriction on an area of airspace due to movement of government VIPs, special events, natural disasters, or other unusual events. The TFR will contain the location of the temporary restriction, effective time period, area defined in statute miles, and altitudes affected by the restriction.

Unit Commander – The individual or the individual's designee who is responsible for reviewing and approving the use of the UAS in a law enforcement mission. The unit commander has full oversight responsibility of all logistical and administrative components of Raleigh Police Department UAS operations. The unit commander or designee will also maintain a current list of all equipment (gimbles, FLIR, HD cameras, batteries, remote controls, etc.) associated with UAS operations and maintain administrative records of the flights and UAS team members. The unit commander will assign members of the UAS team to be the following:

- Flight Trainer The team member responsible for setting up simulated flights and training.
- Maintenance Technician The team members in charge of the maintenance of the aircraft system and all the component parts.

- Unmanned Aerial System (UAS) An unmanned aircraft of any type that is capable of sustaining directed flight, whether preprogrammed or remotely controlled (commonly referred to as an unmanned aerial vehicle (UAV) or drone), and all of the supporting or attached systems designed for gathering information through video imaging, video recording or any other means
- Visual Observer (VO) The individual who is trained to maintain the line-of-sight and 360degree hazard awareness around the UAS at all times and to assist the PIC in carrying out all duties required for safe operation of the UAS.

UAS Components

General Airworthiness – The UAS Unit Commander and Maintenance Technician shall be responsible for ensuring that the UAS is maintained and flight ready according to the manufacturer's recommendation and related industry standards. In addition, the UAS Unit Commander and Maintenance Technician may rely upon the testing data and evaluation data provided by other government agencies, the aircraft manufacturer and independent testing facilities

Mission Specific Airworthiness – The PIC shall be responsible for ensuring that the UAS is airworthy prior to each mission. The PIC may rely upon the inspection and reports provided by agency personnel appointed with the responsibility for maintaining the UAS

Radio Frequency – The UAS shall use the assigned radio frequencies and antenna equipment per the manufacturing specification and approved in the most current COA issued by the FAA

Maintenance – The Unit Commander and Maintenance Technician are responsible for the maintenance of the UAS, which shall be performed by manufacturer certified representatives and/or personnel. The PIC and/or the Observer shall perform a pre-flight and post-flight inspection of the UAS. Any equipment issues (otherwise known as squawks) shall be entered in the aircraft's squawk log and immediately reported to the UAS Unit Commander and Maintenance Technician. It shall be the responsibility of the UAS Unit Commander and the Maintenance Technician to determine whether the reported squawks or issues need to be corrected prior to the next flight, which will then be documented in the aircraft's squawk log

Software and Hardware Changes – All changes shall be documented in the unmanned aircraft and ground control station logbooks by a person authorized to conduct UAS maintenance. All previously proven systems, to include payloads, may be installed or removed as required for missions and documented in the appropriate aircraft squawk log. Test flights must be conducted and documented after major changes in the hardware or software. The Maintenance Technician will be in charge of conducting the necessary updates and flight checks

Storage Transport – The aircraft shall be stored in a secure manner to limit the possible damage to the unit while in transit. The UAS should be stored in the assigned aircraft case and all latches secured properly

Battery Charge – Any components necessitating a charged battery shall be charged in accordance with manufacturer's recommendations. To the extent permissible by manufacturer's recommendations, the UAS shall be fully charged when not in use. The Lithium-ion Polymer (LiPo)

batteries should be charged at the recommended amperage and not exceeded. If the LiPo batteries begin smoking or expanding (puffing) they should immediately be isolated for risk of explosion or fire. Never completely discharge LiPo batteries or they will become unable to hold a charge

Check-Out Procedures – The aircraft and all component parts must be checked out by a team member, logged in the logbook, and the team member should provide their cell phone number in the log. The aircraft should be checked back in and returned to the SEU office at Front Street at the end of the team member's shift

PERSONNEL

Selection of UAS personnel – UAS personnel who obtain their pilot's license by April 1, 2021 are approved Pilots in Command (PIC). Future selections will be made under selection procedures defined in D.O.I. 1103-01.

UAS Unit Commander – The Special Enforcement Captain or, in their absence, the Major of the Special Operations Division, will be designated as the UAS Unit Commander. The Unit Commander is responsible for the following:

- Maintains all training, flight and maintenance records for each operator and observer as well as individual airframes
- Maintains contact with the FAA and remain up to date on regulations as they change and recommending policy and procedure modification as necessary
- Evaluates airframes based on mission needs
- Prepares written "After Action Report" for each approved mission when operating under the FAA approved COA

Pilot in Command (PIC)

The Pilot in Command's primary duty is the safe and effective operation of the UAS in accordance with the manufacturer's approved flight manual, FAA regulations and agency policy and procedures. PICs must remain knowledgeable of all FAA regulations, COA restrictions, UAS manufacturer's flight manual and bulletins. Operators must also understand agency policy and procedure.

Visual Observers

Observers must have been provided with sufficient training to communicate clearly to the PIC any turning instructions required to stay clear of conflicting air traffic. An observer's primary duty is to communicate to the PIC any information required to remain clear of conflicting air traffic, terrain, obstructions aloft and on the ground and provide navigational awareness.

The PIC and the visual observer must maintain effective communication with each other at all times.

The PIC must ensure that the visual observer is able to see the unmanned aircraft in the manner specified by Part 107 or outlined in the issued COA.

Minimum Personnel Requirements

Due to the critical nature of an UAS mission, the minimum personnel required on all FAA regulated operations will be the PIC and visual observer. Unless prior approval is obtained by the Unit Commander or Division Commander, the PIC will not attempt a deployment in the absence of a visual observer.

Although training is not considered a mission, an observer shall be used during flight.

OPERATIONAL PROCEDURE

Prior to deploying the UAS, the operator shall obtain a permit pursuant to N.C.G.S. 63-95 and shall ensure that a permit, as required by Raleigh City Code Section 13-2003, has been obtained and is in effect.

The UAS program will operate within all state laws and FAA regulations. When operating the UAS, if required by law, the Unit Commander will ensure that search warrants are applied for and secured. The agency will balance all operations between accomplishing the mission and maintaining public privacy and freedom from intrusion.

All video and still images will be maintained in the strict compliance with N.C. Gen. Stat. 132-1.4A, departmental policies, procedures, and records retention.

The UAS will not be used to conduct random surveillance activities.

The authorized missions or operations for the use of the UAS are the following:

- Video and still images for investigative support.
- Protests and rallies.
- Area searches for missing persons / runaways / K-9 searches.
- Barricaded subjects / hostage situations / active shooter incidents.
- Serious and Fatal traffic collisions.
- Disaster response (floods, tornado / hurricane damage, etc.).
- Bomb threats / suspicious devices.
- Any incident or event to benefit public safety and/or assist in an authorized police function as deemed necessary by the Unit Commander.

North Carolina General Statute § 15A-300.1 (c) allows the following Law Enforcement and Emergency Management Exceptions:

(c) Law Enforcement Exceptions – Notwithstanding the provisions of subsection (b) of this section, the use of unmanned aircraft systems by law enforcement agencies of the State or a political subdivision of the State is not prohibited in the following instances:

- (1) To counter a high risk of a terrorist attack by a specific individual or organization if the United States Secretary of Homeland Security or the Secretary of the North Carolina Department of Public Safety determines that credible intelligence indicates that such a risk exists.
- (2) To conduct surveillance in an area that is within a law enforcement officer's plain view when the officer is in a location the officer has a legal right to be.
- (3) If the law enforcement agency first obtains a search warrant authorizing the use of an unmanned aircraft system.
- (4) If the law enforcement agency possesses reasonable suspicion that, under particular circumstances, swift action is needed to prevent imminent danger to life or serious damage to property, to forestall the imminent escape of a suspect or the destruction of evidence, to conduct pursuit of an escapee or suspect, or to facilitate the search for a missing person.
- (5) To photograph gatherings to which the general public is invited on public or private land.

(c1) Emergency Management Exception – Notwithstanding the provisions of subsection (b) of this section, an emergency management agency, as defined in G.S. 166A-19.3, may use unmanned aircraft systems for all functions and activities related to emergency management, including incident command, area reconnaissance, search and rescue, preliminary damage assessment, hazard risk management, and floodplain mapping.

Mutual Aid – Requests for support from other government agencies within or outside the jurisdiction of this agency will be forwarded to the Special Operations Division Commander for approval. Proper policy and procedure, as well as FAA regulations under Part 107 or approved COA restrictions shall be followed when accepting mutual aid support for the UAS.

Safety – It is the duty of every UAS operator to contribute to the goal of continued safe operations. Any safety hazard whether procedural, operational or maintenance related should be identified as soon as possible and measures utilized to correct the hazard prior to future missions.

All UAS operators are responsible for the following:

- Understand applicable regulatory requirements, standards, and organizational safety policies and procedures.
- Observe and control safety systems by monitoring all operations.

- Review standards and the practices of agency personnel as they impact operational safety.
- Communicate all reported safety-related problems and the corrective action taken. If there were any in-flight problems of learned experiences.
- Read and understand all pertinent manufacturer safety information and emergency bulletins.

Use of the radio, cell phone or other device is strictly prohibited by the UAS Pilot during flight per FAA Part 107 and existing COA.

<u>TRAINING</u>

Pilots – All pilots flying law enforcement missions shall be properly trained. The UAS pilots will meet all conditions of the COA or Part 107 by the FAA. The pilots will have a current working knowledge of the airspace intended for operations, ATC communication requirements, specific UAS aerodynamic factors, and the ability to obtain and interpret weather. All pilots must meet the following flight experience requirements and be current with their flight log entries.

Basic Flight Operations Training – The flight trainer will help to develop a Basic Flight Operations Training Program to test each pilot. Once the pilot has passed the written private pilots (Part 107) exam, all pilots must successfully complete and pass the Basic Flight Operations Training/Curriculum for UAS as approved in consultation with the manufacturer and the flight trainer.

Mission Training – The flight trainer will help to develop a Mission training Program to test the specific skills of each pilot. All pilots must undergo mission training to increase specific core competencies in all UAS operations, systems and roles with conducting a mission in accordance with approved mission training curriculum. This training is in addition to Basic Flight Operations Training.

Proficiency Training – All pilots must have a minimum of three qualifying UAS flights (at least 20 minutes in duration) to include take offs and landings to be eligible to fly UAS missions.

In order to accomplish required proficiency training, pilots shall be given two unannounced scenario flight tests twice a year to include scouting, briefing, take-off, mission and landing

Recurrent training is not limited to actual pilot/observer skills but includes knowledge of all pertinent UAS and aviation matters. Review courses and two unannounced tests a year will be developed and given in order to ensure proficiency. The Flight Trainer will assist the UAS Unit Commander in developing the aeronautical portions of the training program

All members within the UAS unit shall possess a current FAA Part 107 license, read any existing COA, and maintain proficiency in their pilot/observer abilities. Members who do not have documented training or flight time for the preceding 90 days shall demonstrate proficiency before performing pilot duties during a mission

Re-certification training shall be conducted every twenty-four months per FAA guidelines and NC Department of Transportation.

Failure to maintain/prove proficiency can result in removal from UAS operations.

In-Service Training – Each pilot must undergo in-service training every 12 months to include updated industry standards and field exercises, as well as a review of current case law governing the use of aviation assets as designated by the UAS Unit Commander. The in-service training will be developed with the UAS Unit Commander in coordination with the Flight Trainer and Maintenance Technician.

VISUAL OBSERVERS

Initial Training – UAS Observers shall meet all laws, regulations and conditions outlined by the FAA.

Mission Training – Observers will be instructed on the duties of a Visual Observer during a flight mission by the PIC; to include the obligation to see and avoid other aircraft and the ability to identify relay position reports of the UAS to the PIC.

Pre-Flight Briefing – Observers must participate in the pre-flight briefing.

FLIGHT CONDITIONS

Daylight/Night – All UAS operations shall be conducted in accordance with Part 107 day and night regulations. If special conditions exist, flights may be conducted under a FAA approved COA or a FAA approved waiver.

Line-of-Sight – All UAS operations should be conducted within line-of-sight of the PIC or observer such that the pilot or observer may detect and avoid hazards such as aircraft and property, unless specifically authorized by a FAA approved COA or FAA approved waiver to operate not within the line-of-sight of the PIC or observer. Flying indoors is not FAA regulated airspace and does not require visual line of sight.

Altitude – All flights shall be conducted at less than 400 feet Above Ground Level (AGL), unless near a structure and then the maximum altitude shall not be more than 400 feet above the structure (unless otherwise approved by FAA in a COA) or an Emergency situation covered under Part 107 Regulations.

Weather – The PIC shall verify the weather conditions in the immediate area of operations. Local sources of weather information may be utilized such as the internet, phone applications or conditions may be observed on site. Additionally, calling the closest airport with Automated Weather Observation System (AWOS) or Automated Terminal Information System (ATIS) and calling the Flight Service Station (FSS) for a weather report for the area of operations may be utilized.

The UAS will not be flown outside the weather minimums identified by the manufacturer or the approved Certificate of Waiver/Authorization (COA). The PIC shall have final determination of risk due to weather over any mission.

Heat – The operational guidelines for heat are less than 110 degrees Fahrenheit (37.77 degrees Celsius) at ground level. Operation in temperatures over this mark should be noted with the air density as obtained from the pre-flight weather report. The battery and length of flight should be adjusted accordingly based upon high humidity and temperature with air density. These local conditions may warrant the PIC opting to not fly based upon these flight conditions.

Cold – The operational guidelines for cold are greater than 0 degrees Fahrenheit (-17.77 degrees Celsius) at ground level. Operation in temperatures under this mark should be noted with the air density as obtained from the pre-flight weather report. The battery and length of flight should be adjusted accordingly. Also, if the moisture level is high, conditions should be noted for icing on wings and flight surfaces. These conditions may warrant the PIC opting to not fly based upon these flight conditions.

Wind – The UAS will not be operated in sustained winds greater than the manufacturing recommendations. Wind velocity can be obtained from a pre-flight weather check for the general area. General weather information can be obtained from the ATIS and FSS. The PIC may decide that wind conditions at the area of operation are too hazardous and opt to not fly.

Rain, Snow, and Fog – The operational guidelines for these conditions are based upon visibility and operator safety at the local site. The PIC and observer must adhere to the line-of-sight and VFR weather minimum requirements. Certain UAS systems are not weather resistant and should not be flown during situations with precipitation.

UAS REQUESTS

Call-Out Procedure / Use of UAS – All requests for UAS to provide support for a mission shall be forwarded to the UAS Unit Commander or his/her designee. A confirmation email is required. When the UAS Unit Commander receives a mission request, the Unit Commander should consider the following factors when determining whether to utilize the UAS:

- The location of the mission for purposes of ensuring the safety of people and property
- The intended area of operation, for purposes of evaluating the ability to mitigate potential air to air conflicts. Such evaluation will consider the current landing patterns at airports in the vicinity. Whenever the approach path of an airplane to a nearby airport would involve flying over the intended area of operation, such operations shall be coordinated with the appropriate ATC facility as required by the FAA.
- The weather and its potential effect on the aircraft, including the potential to carry the aircraft to an area of air-to-air conflict.
- The proficiency of the PIC and Visual Observer.
- The potential usefulness of the information gathered by the UAS versus information gathered through other means.
- Obstacles that could affect the strength of radio and GPS signal as indicated on the UAS.

Any other relevant risk factors to successfully complete a risk benefit analysis for the use of UAS in the specific mission. Risk factors may include, but are not limited to tree canopy, distance between buildings, smoke, etc.

Personnel Designation – Once the UAS Unit Commander has approved the mission request, the Commander shall identify the PIC. The PIC will identify the Visual Observer and person responsible

for controlling access to take-off and landing site locations and coordinate with individuals requesting the mission.

Pre-Flight Preparation and Scene Review – Before any mission, the PIC must conduct a pre-flight briefing. The PIC and observer are also responsible for identifying any unsafe conditions at the scene. This includes, but is not limited to:

Take-off and landing site – This area should be free of obstructions, items on the ground and debris that may interfere with the rotors. This includes creation of a flight line, from which other law enforcement officers and civilians must remain clear.

Flight perimeter – This site should utilize law enforcement officers and standard protocols to minimize civilian traffic or interference during the operation

Safety view – The PIC should identify trees, bushes, power lines, and other potential obstructions and coordinate the pre-flight briefing accordingly

Interference – The PIC should identify cell towers, TV and microwave sources, which might create interference with the flight equipment. The equipment should be tested on the ground to insure proper communications and operation before the flight

Notice to Airmen (NoTAM) – A distance (D) NoTAM shall be issued for all mission operations through the local NoTAM issuing authority at the nearest controlling ATC facility while flying under the FAA COA

ATC Notification – When flying under a FAA approved COA, the PIC (or designee) shall notify the nearest controlling ATC facility at least 30 minutes prior to operation (when feasible). RDU's ATC should be contacted at 919-380-3125. Such notification should include the following:

- The intended location, time and duration of the flight.
- The maximum altitude of the flight.
- NoTAM number.
- A cell phone number of an individual for emergency contact.
- The PIC (or designee) shall provide flight notification to any other entities required in the COA.
- The PIC shall immediately notify the controlling ATC at the conclusion of the UAS flight.
- The PIC must not accept ATC instructions that require visual separation from the UAS.
- ATC may assign a radio frequency for air traffic during the flight.
- ATC may provide written waiver of two-way communication.

Documentation – A copy of the current COA (if applicable), flight log, squawk log, and pilot certifications must be kept with the UAS at all times. PICs and observers must be in possession of their certificates at all times.

Flight Operations – (Responsibility of the PIC) All flight operations shall be conducted in accordance with the manufacturer's recommendations. The UAS must operate with position/navigation or anticollision lights at all times unless otherwise authorized by a FAA approved COA or waiver.

Launch site selection – Site selection shall be driven by safety first and foremost. Selection of launch sites will be considered based upon the following:

- Ability to maintain adequate buffer zones between UAS and personnel. The PIC shall maintain a reasonable safe distance for the vertical take-off and landing (VTOL) area between the aircraft operations and all non-essential personnel. A designated individual can be identified as a safety officer to ensure the safety of the VTOL and recovery area.
- No launches shall occur until all environmental assessments have been considered. The PIC has the final authority to abort any launch based upon hazards to the environment, themselves, or other personnel in the area.

Primary and Alternate Landing Sites

Primary landing site – Typically the primary landing site shall be the same as the launch site. The PIC has final authority for any approaches to the primary site and may wave off any approach deemed unsafe.

Alternate landing site – The PIC shall designate at least one alternate landing site. In the event that the primary landing site is deemed unsafe, procedures to utilize the secondary site will be invoked.

A reasonable safe area shall be maintained during lift off between UAS and personnel. When the UAS is deployed to meet an approved mission task, it shall be recovered within the same general area if possible.

RTH Programming – Prior to take off, the UAS will be programmed to allow it to "return to home" if the signal is lost from the transmitter. If the mission requires flying under obstacles, the UAS may be programmed to Hover or Land if signal is lost.

Risk to Public – The PIC shall make every effort to ensure that flight operations will not pose undue risk to the public not directly involved with the effort. The PIC shall have final determination of risk to the public and authority over any launch of his/her own aircraft. The PIC will operate in accordance with Part 107 regulations and will not maintain sustained flight over crowds, unless necessary as outlined in a FAA approved COA or waiver.

Risk to Property – The PIC shall make every effort to ensure that flight operations will not pose any undue risk to any property in the area involved with the effort. The PIC shall have final determination of risk to the property and authority over launch of his/her own aircraft. In all cases, the UAS will not be flown over property that is in violation of Part 107 regulations or a FAA approved COA.

Risk to Participating Personnel – The PIC shall make every effort to ensure that flight operations will not pose any undue risk to the personnel directly involved with the effort. The PIC shall have final determination of risk to the public and authority over any launch of his/her aircraft.

UAS Use for Non-Law Enforcement Responsibilities

Non-law enforcement flight operations are beyond the scope of the COA and, therefore, shall be conducted instead pursuant to Part 107.

Primary Use - The Public Information Office will maintain control of a UAS and it will be operated, stored and maintained by the unit.

The Public Information Office's UAS will be used solely for non-law enforcement responsibilities such as marketing, recruiting, and documenting community events. Additionally, the Public Information Office's UAS will be used for production of videos and photographs for use on social media, various publications and the City of Raleigh's website.

As the UAS, under the control of the Public Information Office, will not be used as an investigative tool or for law enforcement responsibilities under any circumstances, it may not be operated under the COA; instead, the Public Information Office use of a UAS will be governed by Part 107, will fall under the FAA regulations, and must abide by all FAA rules and regulations.

Prior to deploying the UAS, the operator shall obtain a permit pursuant to N.C.G.S. 63-95 and shall ensure that a permit, as required by Raleigh City Code Section 13-2003, has been obtained and is in effect.

<u>MAINTENANCE</u>

The UAS will be maintained in a safe operating condition at all times.

Maintenance will be conducted as per the operational requirements of the UAS manufacturer's suggested maintenance plan including any hardware and/or software updates and properly documented in the maintenance log.

Any issues that arise during maintenance that cannot be resolved by routine methods shall be forwarded to the manufacturer for further technical support.

An UAS PIC and visual observer shall conduct a test flight of the aircraft following any hardware/software updates or repairs to ensure air worthiness prior to subsequent missions.

PROHIBITED ACTIONS

Personal Use – The UAS shall not be operated for personal use.

Warrantless Search – The UAS shall not be operated in violation of the North Carolina and United States constitutions, statutes, or regulations. When a search warrant is required by law and no warrant exception exists, flight is prohibited unless a search warrant signed by an authorized judicial official is obtained.

Exceeding Aircraft Limitations – The UAS shall not be flown in conditions that exceed the manufacturer's recommended limitations, including range, ceiling, wind strength and battery charge.

High Risk Missions – The UAS shall not be flown for any mission that the UAS Unit Commander or the PIC determines the risk of flying the UAS outweighs the benefit to the mission. Risks may include hazards to individuals or property on the ground, possible collision hazards with other aircraft, or loss of control of the UAS.

DOCUMENTATION AND REPORTING

Flight Documentation – The PIC shall complete all department UAS flight related documentation including pertinent information about the aircraft, flight conditions, type of mission, and mission parameters within 24 hours. Missions flown under the FAA COA or the documentation of no flights occurred, require monthly reports containing the above information and shall be submitted to the FAA through the COA online system by the Unit Commander authorized by the FAA to submit the documentation.

Evidence Documentation – All UAS video, still images and date evidence that could be related to a criminal prosecution shall be stored in accordance with departmental policy and procedure, State and Federal Law. The PIC will be responsible for ensuring that the download of video information has been completed following each mission. Video and still images collected during training operations will be stored in compliance with departmental policy.

Accident Notification and Investigation – All UAS in flight accidents and incidents involving fatalities, injuries that require hospitalization, property damage in excess of \$500.00 and any fly-away shall be reported to the Unit Commander immediately. The Unit Commander will then make notification to the Duty Major. FAA regulations require the FAA to be notified within 10 days of any such incident through the COA online system. A case report will be completed detailing the accident or incident and all related video or still images securely stored as evidence in accordance with departmental policy and procedure.

The FAA report may be submitted to the appropriate FAA Regional Operations Center (ROC) electronically or by telephone. Electronic reporting can be completed at <u>www.faa.gov/uas/</u>. Reports may also be made to the nearest jurisdictional Flight Standards District Office (FSDO).

The report should include the following information:

- UAS Pilot in Command's name and contact number.
- UAS Pilot in Command's FAA airman certificate number.
- UAS registration number issued to the aircraft by the FAA.
- Location of the accident.
- Date of the accident.
- Time of the accident.
- Person(s) injured and extent of injury (if known).
- Property damaged and extent of damage (if known).
- Description of what occurred detailing the accident.