SPECIAL OPERATIONS

UNMANNED AIRCRAFT SYSTEM

_Purpose:_ The purpose of this policy is to establish procedures for the safe operation of small Unmanned Aircraft System(s) within the city of North Little Rock.

_Policy Statement:_ The Department has implemented the operation of small Unmanned Aircraft System(s), sUAS, to assist during special events, emergencies, and special operations in order to provide increased situational awareness and enhance officer safety. They will also be implemented to help combat increases in crimes in specific, identifiable areas. This policy sets forth the guidelines for aircraft operation during specified missions along with guidelines to minimize the risk to people, property, and aircraft while continuing to safeguard the right to privacy of all persons.

_Summary of Changes:_ New policy

_Definitions:_

**Small Unmanned Aircraft System (sUAS):** A remote piloted aircraft weighing less than 55 pounds.

**UAS Administrator:** The UAS Administrator has full oversight responsibility of all logistical and administrative elements of sUAS operations. The Administrator is responsible for reviewing and approving operational missions.

**Team Commander:** The individual responsible for assisting the UAS Administrator with administrative functions related to the sUAS program. The Team Commander is also responsible for the operational readiness, oversight of maintenance of all aircraft, and approval of operational missions.

**Assistant Team Commander:** The individual responsible for assisting the Team Commander in his duties.

**Pilot in Command (PIC):** The individual responsible for the overall flight operations of a specific mission.

**Visual Observer (VO):** The individual trained to maintain the line-of-sight and 360-degree hazard awareness around the sUAS at all times and assist the Pilot in Command in carrying out all duties required for the safe operation of the aircraft.

**Camera Operator (if used):** The individual responsible for the operation of all camera functions during sUAS operations.

**Defined Incident Perimeter:** A location identified with a defined perimeter to be determined based on the scope of the operation and a defined operational ceiling at or below 400 feet Above Ground Level (AGL).

**Public COA:** A Certificate of Authorization (COA) issued by the FAA that allows governmental operations of sUAS within the National Airspace System, within the boundaries of a public aircraft not for hire or compensation. All personnel involved in sUAS flight operations must read and comply with the contents of the COA and its provisions.

_Procedure:_

1. **Aircraft**
   1.1 General Airworthiness – The Team Commander shall be responsible for ensuring that all sUAS utilized by the Department are maintained and flight ready according to the manufacturer’s recommendations and related industry standards. The aircraft will be operated in compliance with all documents and provisions referenced in the COA.
   1.2 Software and hardware changes - All changes shall be documented in the aircraft logbooks. Test flights must be conducted and documented after major changes in the hardware or software.
   1.3 The PIC shall be responsible for ensuring that the aircraft is airworthy prior to each mission. The PIC may rely upon the inspection and reports provided by the Team Commander. The PIC and/or Observer shall perform a pre-flight and post-flight inspection of the aircraft. Any equipment issues shall be entered in the aircraft’s log and reported to the Team Commander in a timely manner via Department email. It shall be the responsibility of the Team Commander to determine whether the reported issues need to be corrected prior to the next flight, which will then be documented in the aircraft’s log.
   1.4 Storage for Transport. The aircraft shall be stored in a secure manner to limit possible damage to the unit while in transit. Any damage occurring during transport should be reported to the Team Commander for inspection.
1.5 Battery Charge. Any components necessitating a charged battery shall be charged in accordance with manufacturer’s recommendations. Batteries should be inspected on a regular basis for signs of damage, such as swelling, and immediately removed from use if damage is discovered.

2 Pilots

2.1 The Pilot in Command (PIC) is the person who has final authority and responsibility for the operation and safety of flight. The PIC can be designated before or during the flight. Only personnel trained and licensed in the operation of the aircraft will be authorized to conduct flight operations. The PIC position may rotate duties as necessary with equally qualified pilots. The individual designated as PIC may change during flight however the PIC can only command one aircraft at a time.

2.2 All pilots who will be flying Department aircraft shall be properly trained and hold an FAA Unmanned Aerial System pilot certification. Initial training for this certification will be conducted through an NLRPD internal training program to include a working knowledge of the airspace intended for operations, Air Traffic Control communication requirements, and the ability to obtain and interpret weather data.

2.3 Upon successful completion of the FAA Remote Pilot exam, pilots will be trained in mission specific operations along with the systems and roles involved in conducting a mission in accordance with the COA.

2.3.1 All pilots must have a minimum of three qualifying flights on each model of sUAS owned by the Department, to include three manual take-offs and landings in the last 60 days, and be current with their flight log entries, to be eligible to fly a mission. Flight log entries will contain aircraft number, date, duration of flight, location, and conditions (i.e. day, night, etc.).

2.3.2 Recurrent training is not limited to actual pilot/observer skills, but includes knowledge of all pertinent sUAS and aviation matters and crew resource management.

2.3.3 All members of the unit shall read the current COA and maintain proficiency in their operator/observer abilities.

2.3.4 Failure to maintain or prove proficiency may result in removal from the UAS unit.

2.4 Unit training will be conducted on a monthly basis or as needed.

3 Visual Observers

3.1 A Visual Observer (VO) is required for all mission flights of the sUAS.

3.2 The role of the VO is to see and avoid other aircraft and the ability to identify position for purposes of relaying reports to the PIC.

3.3 Visual Observers will participate in all pre-flight briefings.

4 Camera Operator

4.1 The Camera Operator will receive specific training on camera equipment operations, including recording and storing digital data for evidentiary purposes prior to assisting with mission flights. All photo or video recordings shall be stored according to Departmental evidence handling procedures.

4.2 Camera Operators will participate in all pre-flight briefings.

5 Flight Conditions

5.1 The PIC is responsible for obtaining a current weather report from Aeroweather.com

5.2 All flights shall be conducted at or below 400 feet Above Ground Level (AGL), unless otherwise noted in the COA, approved by the LR ATC, or in accordance with the attached reference map (attachment 2), based upon grid location.

5.3 All aircraft operations shall 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.

5.4 Flight operations shall be conducted during daylight unless the necessity of the mission requires flying at night. Night flight is authorized in the NLRPD COA when the aircraft is equipped with additional lighting.

5.5 The aircraft will not be operated in sustained winds greater than 21 knots (24 mph), or in adverse weather that would affect the line of sight and VFR weather minimum requirements.
6 Mission Requirements

6.1 Requests for sUAS support for a scheduled or emergency mission shall be forwarded to the UAS Administrator, Team Commander, or Assistant Team Commander.

6.2 Once the mission has been approved, the PIC, VO, and Camera Operator if applicable will be designated.

6.3 A pre-flight briefing will be held prior to aircraft launch and will cover the following:

6.3.1 Review of mission goals and methods to achieve goals, including handoff procedures;
6.3.2 Review of current and forecasted weather conditions and weather limitations;
6.3.3 Contents of the applicable COA;
6.3.4 Review of current Notice to Airmen (NOTAMs) and Temporary Flight Restrictions (TFRs) that have been issued for the proposed flight area;
6.3.5 Radio frequencies to be used;
6.3.6 Identification any mission limitations and safety issues such as radio or microwave interference;
6.3.7 Review of proposed flight grid, including maximum ceiling as determined by air space location as shown on the attached reference map (Attachment 2);
6.3.8 Review of communication procedures between PIC, Observer, Camera Operator, and other ground support, including the availability of two cell phones to communicate with Air Traffic Control in the event of a fly-away or other flight emergency;
6.3.9 Review of emergency/contingency procedures including aircraft system failure, flight termination, and lost link procedures;
6.3.10 Review of required video or digital images;
6.3.11 Execution of the pre-flight check following the approved checklist.

7 Flight Operation Requirements

7.1 All operations will be on a case by case basis.

7.2 Prior to operations the PIC or designee must notify Little Rock ATC at (501) 379-2908 and provide the following:

7.2.1 Agency Name,
7.2.2 Name of Pilot in Command and contact number,
7.2.3 The defined operations area grid as designated on the reference map (Attachment 2) along with the Mean Sea Level altitude for the selected grid.
7.2.4 Additionally, the PIC will notify Little Rock ATC within 15 minutes of the end of the flight.

7.3 UAS operations will not be conducted within a 1/2 mile radius of non-controlled airports or heliports, without attempting to notify landing or departing air traffic in the area via UNICOM frequencies.

7.4 If a review of NOTAMs during preflight briefings reveals another agency UAS operating in all, or part, of the intended operating area, the North Little Rock Police Department must de-conflict the intended operating area from the active operating area by contacting that agency. Contact information may be obtained from the affected air traffic control facility, if not otherwise known.

7.5 Notice to Airmen (NOTAM) Requirement - A distance (D) Notice to Airmen shall be issued 48 to 72 hours prior to normal unmanned aircraft operations being conducted. Due to the immediacy of some tactical operations, the NOTAM may be filed 30 minutes prior to operations. In the event the necessary use of the aircraft is immediate, the NOTAM does not have to be filed but the circumstances justifying the reason for not filing the NOTAM must be documented.

8 Communication Requirements

8.1 The primary communication method preferred by LR ATC with the PIC is via cell phone. In the event LR ATC needs to move or suspend sUAS operations, the responsible authority will relay instructions directly to the PIC. An additional cell phone must be available as a backup along with an aviation radio tuned to the LR ATC frequency (118.7) that will be monitored during each sUAS operation.

8.2 LR ATC must be immediately notified in the event of any emergency that would impact safety or operations.
9. Night Operations

UAS night operations are those operations that occur between the end of evening civil twilight and the beginning of morning civil twilight, as published in the American Air Almanac, converted to local time. (Note: this is equal to approximately 30 minutes after sunset until 30 minutes before sunrise).

9.1 Observers will be positioned in appropriate locations during all flight operations.

9.2 Binoculars, night vision devices, etc., may not be used as the primary means for visual observation duties. Such devices are permitted ONLY for augmentation of the observer’s visual capability. Visual observers must use caution to ensure the aircraft remains within normal visual line-of-sight.

10. Data Reporting

10.1 Documentation of all operations associated with sUAS activities is required monthly and will consist of data as listed in Section D 1 and 2 of the attached COA for the NLRPD. The Team Commander is responsible for the monthly report being completed.

10.2 The PIC will complete a NLRPD UAS Mission Report (Attachment 3) for each scheduled or emergency mission. The NLRPD UAS Mission Report will be forwarded to the Team Commander upon completion.

11. Incident/Accident/Mishap Reporting

11.1 Any incident, accident, or mishap will be reported as set forth in section D 3 of the attached COA for the NLRPD.

12. Aircraft Maintenance and Pilot Log Books

12.1 Each pilot performing a flight operation with any Department aircraft shall be required to record the following information in their pilot log book:

12.1.1 Aircraft name and identification number, piloting time, conditions and location of flight, and description of mission.

12.1.2 Aircraft and/or component maintenance shall be documented in the aircraft maintenance log book to include monthly inspections.

12.2 Maintenance log books shall be stored with the aircraft, and inspected to ensure compliance.

13. Prohibited Acts

13.1 Department aircraft shall not be operated in violation of the Arkansas 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 magistrate is obtained.

13.2 Department aircraft are to be used only for mission specific duties.

13.3 Department aircraft shall not be flown in conditions that exceed the manufacturer’s recommended limitations, including range, ceiling, wind strength, and battery charge.

13.4 Department aircraft shall not be flown for any mission where the Team Commander or the PIC determines the risk of flying the aircraft outweighs the benefit to the mission. The Team Commander cannot countermand a PIC’s determination to not fly a mission. However, the Team Commander can countermand a PIC’s determination to fly a mission. The PIC has sole accountability for the aircraft during flight operations.

13.5 No Department aircraft will be flown for personal reasons or for hire by any person or entity.

13.6 Spraying or dropping anything from the aircraft is prohibited.

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Mike Davis
Chief of Police
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Prior to any approved NLRPD sUAS mission, the P.I.C. will complete the following checklist prior to takeoff:

1. Obtain a full briefing from the Division Commander or scene supervisor(s) to develop a clear and detailed mission parameter and objectives.
2. Prior to arriving at the scene, the P.I.C. will contact LIT ATCT at 501-379-2908 to obtain airspace clearance by providing the following information:
   
   **Mandatory**
   
   - Department Name, and if requested ***[redacted]***
   - P.I.C. name and cell phone number
   - COA grid map co-ordinates the mission will be operated in (See page 2)
   - Maximum mission altitude in MSL (Ground altitude + mission altitude)
   - Approximate mission time
3. The P.I.C. will perform a full preflight on the sUAS prior to mission start ensuring batteries, control station, and all aspects of the UAS is in airworthy condition further ensuring video streaming is available if it is mission essential.
4. The P.I.C. will brief both the co-pilot /gimbal operator (if required) and the V.O. of all mission details prior to mission start.
5. The P.I.C. will advise Communications prior to mission start and monitor Class C airspace radio traffic (when required) to ensure good aircraft separation and mission success.

**Post Mission**

1. Preform a post flight inspection of the UAS to ensure no damage or anomalies occurred during the flight.
2. Contact LIT ATCT at 501-379-2908 to close the mission request.
3. The P.I.C. will complete a NLRPD Drone Mission Report as well as log the flight noting any training issues as well as mechanical issues with the UAS.