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| **Unmanned Aircraft System**  **(UAS)** | Related Policies:  |
| *This policy is for internal use only and does not enlarge an employee’s civil liability in any way. The policy should not be construed as creating a higher duty of care, in an evidentiary sense, with respect to third party civil claims against employees. A violation of this policy, if proven, can only for the basis of a complaint by this department for non-judicial administrative action in accordance with the laws governing employee discipline.* |
| * 1. Applicable State Statutes:
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| KACP Standard:  |
| Date Implemented: | Review Date: |

1. **PURPOSE:**
2. An Unmanned Aircraft Systems (UASs) ability to reach inaccessible or dangerous locations has an advantage over manned helicopters because they reduce the risk to human life. UAS have the potential to aid in search and rescue missions by covering more ground and keeping police officers safe by providing an eye in the sky in dangerous situations. The UAS will be used to enhance public safety and in assisting law enforcement search and rescue operations.
3. Tactical Operations: The UAS will be used to enhance and support tactical operations of the agency. SWAT (Special Weapons and Tactics) narcotics operations, and detectives during the execution of warrants, may utilize UAS to provide real time situational awareness of the target during high risk operations. The ability to provide this aerial view may enhance officer safety and document movements of officers and civilians.
4. Search and Rescue: UAS equipped with a thermal / optical camera and multi-sensor navigation systems are designed to find people in rugged outdoor environments. The ability to use UAS to search large areas quickly using the attached technology equipment will improve the resolution of search and rescue operations.
5. Crime and Collision Scene: The UAS can also be used to document and record crime and collision scenes.

**II. POLICY:**

1. It is the policy of this agency to use UAS in coordination with law enforcement officers conducting specific missions in accordance with Federal Aviation Administration (FAA) regulations. This policy is designed to minimize risk to persons, property, and aircraft during the operation of the UAS while safeguarding constitutional protections and privacy interests of all persons.

**III. DEFINITIONS:**

1. **UAS:** Unmanned Aircraft System.
2. **Pilot in Command (PIC):** The individual responsible for the overall flight operations of a specific mission.
3. **Visual Observer (VO):** The individual responsible for the operation of all camera and remote sensing functions during UAS operations. Monitors the flight characteristics of the aircraft while in communication with the PIC to assist the PIC in avoiding obstacles and low flying air traffic.
4. **COA:** For public operation, the FAA issues a Certificate of Authorization (COA) or waiver that permits public agencies and organizations to operate a particular UAS for a particular purpose, in a particular area. The COA allows an operator to use a defined block of airspace and includes special safety provisions unique to the proposed operation. COAs usually are issued for a specific period – up to two years in many cases. A Part 107 authorization may be obtained in addition to or in the alternative of a COA.

**IV. PROCEDURES: The** PIC, VO, and supervisors will ensure operations of the UAS cause no greater intrusion on privacy interests than is necessary to carry out the mission in accordance with the law. To accomplish this primary goal this agency will:

1. Make a reasonable effort when the UAS is being flown to minimize inadvertent recording of uninvolved persons.
2. Maintain video and still images in strict compliance with agency policies and procedures and Commonwealth of Kentucky Records Retention Act.
3. Not conduct random surveillance activities with the UAS. The use of the UAS will be tightly regulated by the Chief or designee.
4. Authorize missions for the UAS including, but not limited to:
	* 1. Video/photographs for investigative support (Crime Scene, SWAT, etc.)
		2. HAZMAT Response
		3. Search and Rescue
		4. Barricaded persons / Hostage situations / Active Shooters
		5. Traffic collisions
		6. Disaster Response (Floods, Tornado Damage, etc.)
		7. Bomb Threats
		8. All other requested uses must be approved by the Chief or their designee prior to deploying the UAS.
		9. If UAS is going to be used over a residential property for an investigation, a warrant shall be obtained unless the UAS Commander can articulate probable cause that exigent circumstances exist.
5. The UAS program will operate strictly within the law and regulations. The agency will balance all operations with the need to accomplish the mission while maintaining public privacy.
6. A committee will be formed and meet at least annually, or when legal or regulatory issues arise, for the purpose of reviewing the existing UAS policy and procedures as well as new technologies and laws and regulations on UAS usage. The committee chaired by the Chief or designee may consist of personnel from UAS unit such as the UAS Unit Commander, Operators and VOs, Professional Standards / Internal Affairs, Special Operations, Detectives and Patrol representatives, civilians who have specialized knowledge of UAS operations such as the manufacturer or FAA representatives. A copy of the policies and procedures (electronic and/or paper) will be issued to every person having UAS responsibilities.

**V. Personnel:**

**A.** The Chief shall be or will designate a command level officer to be the UAS Unit Commander. The commander shall report directly to the Chief or Designee. The UAS Commander shall be responsible for the overall direction and performance of the UAS unit.

**B**. Commander Responsibilities:

**a.** Selection of UAS personnel.

**b.** Maintain all training, flight and maintenance records for each PIC and VO as well as individual airframes.

**c.** Maintain compliance with FAA regulations.

**d.** Call for committee meetings when necessary to maintain up to date policies and procedures.

**e.** Evaluate airframes based on mission needs.

**f.** Proficiency on all UAS operated by the unit.

**g.** Prepare a written “After Action - Mission Report” and brief the Chief or their designee.

**C. PIC:**

**a.** Primary duty is the safe and effective operation of UAS in accordance with the manufacturers' approved flight manual, FAA regulations and agency policy and procedures. PICs must remain knowledgeable of all FAA regulations; UAS manufacturer's flight manuals, bulletins and Agency policy and procedures.

**b.** May be temporarily removed from flight status at any time by the UAS Commander, Chief’s Designee or the Chief for reasons including performance, proficiency, physical condition, etc.

**D. VO:**

Must have sufficient training to communicate clearly to the PIC any turning instructions required to stay clear of conflicting traffic. A VO's primary duty is to operate the UAS's equipment including cameras, FLIR, radio communications with patrol units as well as be an observer for anything that may affect the PICs primary duty.

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

Requests for support from other government agencies within, or outside the jurisdiction of this agency, will be forwarded to the UAS Commander who after consideration will either deny the request outright, because the request is clearly outside the policy of the agency, or forward the request to the Chief or the Designee for approval for use of the UAS. Proper policy and procedure, as well as FAA regulations shall be followed when accepting mutual aid support for the UAS.

1. **Safety:**

If any member observes, or has knowledge of, an unsafe or dangerous act committed by another member, the UAS Commander is to be notified immediately so that corrective action may be taken.

In regard to safety, the PIC of the UAS unit is responsible for the following:

Ensuring all flight operations personnel 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, including any in-flight problems (or learned experiences)

Reading and understanding all pertinent safety information and emergency safety bulletins.

Although the PIC is responsible for the overall safety of the UAS operation, it is also emphasized that safety is a responsibility of ALL members of the UAS unit.

1. **Operational Hazard and Occurrence Report (OHOR) and Investigations:**
2. Occurrences are unplanned safety related events, including accidents and incidents that could impact safety.
3. A hazard is something that has the potential to cause harm. The systematic identification and control of all major hazards is foundational to safety.
4. The OHOR concept provides a mechanism to report hazards and occurrences, real and perceived, to those responsible for UAS operations.
5. There is no specific OHOR form, the information provided is what is important. Incidents should be documented without hesitation to report any anticipated, current, or experienced safety hazard, or occurrence. Further, the OHOR can be submitted anonymously, and to whatever level in the chain of command of this agency to get the matter proper attention, without fear of reprisal.
6. Every hazard and/or occurrence will be investigated, with the results and corrective action taken communicated to all members. The investigation will be conducted by the UAS Commander and a designee of the Chief who has authority over internal investigations. Due to the technical aspects of the UAS operations an independent subject matter expert may be necessary in some cases to assure a thorough and complete investigation.
7. All UAS members are authorized to take action in order to correct a hazard if in that member's opinion delay will result in accident or injury. The UAS Unit Commander will be notified immediately in such situations.
8. **Training:**
9. The key to continued safe operations is maintaining a professional level of competency by establishing minimum qualifications for selecting and training members.
10. In conjunction with fulfilling all FAA requirements for PIC/VO duties, the new member will also become familiar with the agency UAS operations and related equipment.
11. Before a member can fly as a PIC, they must complete at least 8 hours of flight training with the UAS instructors to show proficiency of the flight training exercises and the airframe. This must be accomplished to show their ability and knowledge of the UAS in compliance with the manufacturer’s manual and instructions.
12. **Call Out Procedures / Use of the UAS:**
13. When feasible a supervisor will screen all initial requests to use a UAS from patrol or investigation units. All reasonable requests will be forwarded to the UAS Commander for consideration. In the absence of the supervisor the dispatcher will forward the request to the UAS Commander.
14. UAS Commander will screen the request using the following factors:
15. Is the proposed use of UAS within the capabilities of the UAS equipment and personnel to perform?
16. Does the proposed use of the UAS fall within the FAA and department policies and regulations for UAS usage?
17. Can the UAS be deployed safely given current weather conditions?
18. Does the UAS deployment require a warrant and has one been requested/approved?
19. Are sufficient trained and qualified personnel available to safely operate the UAS?
20. If the Chief or the designee accepts the support request, the UAS Commander will contact a PIC and VO who will be provided all available mission information.
21. The PIC is responsible for transporting the UAS and all required equipment to the scene. Upon arriving at the requested location, the PIC will contact the on scene Incident Commander and will check in and receive a briefing on the mission requested. The PIC will make an on scene determination of the ability of the UAS to perform the requested mission safely and within department and FAA policies and procedures.
22. If the PIC determines that the use of the UAS would violate department policy or directives, the PIC will inform the Incident Commander of the potential conflict along with recommendations for modifying the requested mission to conform to the department policies and procedures. As this is a change from the original approved mission the PIC will contact the UAS Commander for direction on how to proceed.
23. The PIC will have sole discretion for overall mission safety, identifying potential violations of FAA rules, and risks of potential damage to the UAS or its associated equipment. If the PIC makes this determination that any of these issues are present, the PIC will inform the Incident Commander of the reasons for refusing to operate the UAS and contact the UAS Commander immediately. The UAS will not be flown in this circumstance and the authority of the PIC is absolute.
24. The UAS shall not be used for the purpose of random surveillance that is not in the furtherance of a legitimate law enforcement activity.
25. If several separate requests for UAS support are received simultaneously, they shall be prioritized. In general terms, requests for UAS support are prioritized as:
26. Life Safety
27. Evidence / Documentation
28. Flight Boundaries:
29. Although there may be requests for UAS support outside the jurisdiction of this agency the FAA Certificate of Authorization (COA) for the UAS restricts deployment to certain areas. This restriction would not apply under Part 107 authorization.
30. At no time shall UAS support be granted outside this agency’s jurisdiction without first obtaining an emergency FAA COA and approval by the UAS Commander. This restriction would not apply under Part 107 authorization.
31. Maximum altitude shall not be set more than 400 feet per the FAA COA.
32. Line of Sight: All UAS operations shall be conducted within line of sight of the Operator or VO such that the PIC or VO may detect and avoid hazards such as aircraft or property.
33. **Minimum Personnel Requirements:**
34. The minimum personnel required on ALL missions will be a PIC and VO. Under no circumstances will a PIC attempt to complete a deployment alone.
35. A VO shall be used during all training missions.
36. **Personal Equipment:**
37. The PIC/VO shall wear eye protection at all times while the UAS is in flight.
38. Use of the radio, cell phone or other device is strictly prohibited by the operator during flight per the COA. Part 107 authorization allows for remote operation, however.
39. **Pre-Flight/Post-Flight Actions:**
40. The PIC is responsible for a thorough preflight inspection of the UAS.
41. Before and after each deployment (whether an incident or training), the PIC shall conduct a thorough inspection of the UAS in accordance with the instructions contained in the manufactures user's manual
42. It has been recognized that the use of a checklist is a significant method to combat UAS accidents. A pre-flight and post-flight checklist will be conducted in accord with the manufacturer’s instruction and will be utilized prior to each flight.
43. Any physical equipment issues that cannot be resolved on-site, or which have an impact on safety of the mission, will delay the deployment. These issues will be resolved and documented before flight.
44. **Weather:**
45. Before each deployment the PIC will ensure that he/she gathers enough information to make themselves familiar with the weather situation existing throughout the area of deployment. The PIC shall utilize FAA approved weather resources to obtain the latest and most current weather conditions.
46. The operator shall ensure that the flight will occur within FAA VFR (Visual Flight Rules) weather requirements.
47. Inspection and weather conditions will be documented prior to flight within the log book.
48. **Planning:**
49. The PIC/VO shall familiarize themselves with all available information concerning the deployment including, but not limited to, the weather conditions, hazards, description of the incident, deployment goals, etc.
50. The PIC will identify a safe location for take-off and emergency landing.
51. The PIC will ensure they are aware of their surroundings in the event an emergency landing is necessary. This plan includes the ability to recover the UAS.
52. **Documentation:**
53. After each flight, the PIC will document the UAS operations.
54. After each deployment, all video obtained by the UAS Operation will be submitted to evidence in accordance with Agency policy and Commonwealth of Kentucky Records Retention Act.
55. **Maintenance:**
56. Although there are few parts on the UAS that need servicing, it is necessary that the manufacturer's maintenance schedule is followed and properly documented.
57. Any issues that arise during maintenance that cannot be resolved by routine methods shall be forwarded to the manufacturer for further technical support.
58. Maintenance and service records associated with the UAS shall by maintained by the UAV Commander.
59. The PIC and/or Commander of the Unit shall maintain manufacturer’s software updates and/or operating requirements.

**Q.   Accident Reporting:**

No later than 10 calendar days after an operation that meets the criteria of either paragraph (a) or (b) of this section, a remote pilot in command must report to the FAA, in a manner acceptable to the Administrator, any operation of the small unmanned aircraft involving at least:

(a) Serious injury to any person or any loss of consciousness; or

(b) Damage to any property, other than the small unmanned aircraft, unless one of the following conditions is satisfied:

(1) The cost of repair (including materials and labor) does not exceed $500; or

(2) The fair market value of the property does not exceed $500 in the event of total loss.