



Williamson County Sheriff's Office

Department Policy: Unmanned Aircraft System	Related Policies: Arrest, Search and Seizure
<i>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 form the basis of a complaint by this agency for non-judicial administrative action in accordance with the laws governing employee discipline.</i>	
Signature of Sheriff	
Date Implemented:	Review Date:

PURPOSE:

A drone's 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 help in Law Enforcement tasks by covering more ground and keeping police officers safe by providing an eye in the sky in potentially dangerous situations. The UAS (Unmanned Aircraft System) will be used to enhance public safety and in assist law enforcement operations.

- A. Tactical Operations:** The UAS will be used to enhance and support tactical operations in areas of Williamson County or neighboring counties, should a request for assistance be made and approval authorized. SRT (Special Response Team) and 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.
- B. Search and Rescue:** Unmanned systems equipped with a thermal / optical camera and multi-sensor navigation systems are designed to find people in rugged outdoor environments. The ability to use this aircraft to search large areas quickly using the attached technology equipment will improve the resolution of search and rescue operations.
- C. Crime and Collision Scene:** The UAS can also be used for crime scene over watch, as well as use to document and record crime scenes and accident scenes.

POLICY:

- A.** It is the policy of this agency to use UAS in coordination with law enforcement officers conducting specific missions as guided by FAA Part 107 standard rules and regulations, the Certificate of Authorization (COA) issued by the Federal Aviation Administration (FAA), the Illinois Freedom from Drone Surveillance Act (725 ILCS 167/), Williamson County Sheriff's Office Department Policies, and any applicable case law. 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.

DEFINITIONS:

- A. UAS:** Unmanned Aircraft Systems.
- B. Remote Pilot in Command:** A Remote Pilot in Command (PIC) will be determined by the flight crew at the beginning of the operation. The PIC has the final authority and responsibility for the overall operation and safety of the flight. To qualify as PIC for an operation you must:
- Be an employee of the Williamson County Sheriff's Office
 - Have completed Part 107 Airman Knowledge Test
 - Possess a FAA Commercial Drone License
 - Be approved by the Williamson County Sheriff

The PIC shall maintain a working knowledge of FAA policies, guidance, and applicable regulations regarding UAV usage in the National Airspace. The PIC is responsible for ensuring that this policy manual is followed anytime an Agency UAV is operated for any mission, including training.

- C. Co-Pilot:** The co-pilot is responsible for operation of the secondary systems (typically the camera) of the UAS. If utilized, the co-pilot is responsible for assisting the pilot in visual observation of the UAS during take-offs, landings, and flight operations. To qualify as a co-pilot in the Agency's aviation program you must complete an agency approved training and be approved by the Williamson County Sheriff.
- D. Visual Observer:** Monitor the flight characteristics of the aircraft while in communication with the operator to ensure proper flight and that the aircraft remains clear of obstacles and low flying air traffic. To qualify as a visual observer, you must complete an agency approved training directed specifically towards the duties and responsibilities of the position and be approved by the Williamson County Sheriff.
- E. Other Flight Crew:** Other personnel may be utilized to assist the pilot in command with basic functions such as charging batteries, managing cables, operating computers or electronic devices not directly related to flight control, or other duties as needed. These personnel shall not fill the role of any crew member list above without first meeting the requirements of that position.

PROCEDURES:

UAS PICs, co-pilots, and supervisors will have the protection of citizens civil rights and reasonable expectations of privacy as a key component of any decision made to deploy the UAS. UAS operators and observers and supervisors will ensure that 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:

- A.** All video and still images will be maintained in strict compliance with Agency policies and the Illinois Freedom from Drone Surveillance Act.
- B.** The UAS unit will not conduct random surveillance activities.
- C.** The authorized missions for the UAS are:
 - 1. Video/photographs for investigative support (Crime Scene, SRT)
 - 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 (after consulting with incident commander regarding electronic interference)
 - 8. Support of Fire Departments emergency response efforts
 - 9. All other requested uses will be approved by the Sheriff or their designee prior to deploying the UAS.
 - 10. 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. The warrant should be obtained as soon as practical.
 - 11. The Pilot-In-Command is responsible for documenting each use of the UAS, whether for training or a mission, with pre- and post-flight forms and any other applicable FAA suggested forms. Each actual mission will also be documented with a Case # and Narrative that explains the use of the UAS.
- D.** The UAS program will operate strictly within the law and regulations. If in doubt, prior to operating the UAS the Sheriff or their designee will ensure that warrants are applied for and obtained.
- E.** A committee will be formed and meet 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 Sheriff or his designee, may consist of personnel from UAS unit such as the UAS Unit Commander, Pilots, Co-Pilots, and Observers, SRT, Investigations, Patrol, and may also include representatives from the State's Attorney's Office and civilians who have specialized knowledge of UAS operations such as the Manufacture or FAA representatives. A copy of the policies and procedures (electronic and/or paper) will be issued to every person having UAS responsibilities.

Personnel:

- A.** The Sheriff will designate FAA certified pilots to be Supervisors of the UAS Unit. The Supervisors shall report directly to the Sheriff. The UAS Supervisors shall be responsible for the overall direction and performance of the UAS unit.

Responsibilities of the UAS Supervisors:

1. Selection of UAS personnel
2. Maintaining all training, flight and maintenance records for each operator and observer as well as individual airframes,
3. Maintain contact with the FAA and regulations as they change, calling for committee meeting when necessary to maintain up to date policies and procedures.
4. Evaluate airframes based on mission needs.

B. Pilot in Command (PIC):

- a.** A PIC's primary duty is the safe and effective operation of UAS in accordance with the manufacturers' approved flight manual, FAA regulations, Illinois Freedom from Drone Surveillance Act, and Williamson County Sheriff's Office policy and procedures.
- b.** Pilot Rating. Operators are authorized to conduct operations in accordance with the FSIMS 8900.1, Volume 16, Chapter 4, Section 1, Pilots. Operators must hold, at a minimum, a FAA Private Pilot Certificate, or FAA Remote Pilot Certificate. Currency in a manned aircraft is not required. The PIC must be in general good health and not have any medical condition that could potentially hinder the safe flight of a mission or training exercise.
- c.** PIC's must remain knowledgeable of all FAA regulations COA; UAS manufacturer's flight manual and bulletins, Illinois Freedom from Drone Surveillance Act, and Williamson County Sheriff's Office policy and procedures.
- d.** PIC's may be temporarily removed from flight status at any time by the UAS Supervisor or the Sheriff for reasons including performance, proficiency, physical condition, etc. Should this become necessary, the operator will be notified verbally and in writing of the reason, further action to be taken and expected duration of such removal.

C. Co-Pilot:

- a.** Co-Pilots must have been provided with sufficient training to communicate clearly to the PIC any turning instructions required to stay clear of conflicting traffic. A Co-Pilot'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 PIC's primary duty (see and avoid).

Outside Jurisdiction - Request for Support – Mutual Aid:

- a. Requests for support from other government agencies within, or outside the jurisdiction of this agency will be forwarded to a UAS Supervisor who will approve or deny the request. Proper policy and procedure, as well as FAA regulations and the Illinois Freedom from Drone Surveillance Act shall be followed when granting mutual aid support using the UAS.

Safety: The Williamson County Sheriff's Office is committed to having a safe and healthy workplace, including:

- a. The ongoing pursuit of an accident free workplace, including no harm to people, no damage to equipment, the environment and property.
- b. A culture of open reporting of all safety hazards in which management will not initiate disciplinary action against any personnel who, in good faith, disclose a hazard or safety occurrence due to unintentional conduct.
- c. Support for training and awareness programs.
- d. Conducting regular audits of policies, procedures and practices.
- e. Monitoring the UAS unit to ensure best safety practices are incorporated into the unit.
- f. It is the duty of every member within the UAS unit to contribute to the goal of continued safe operations. This contribution may come in many forms and includes always operating in the safest manner practicable and never taking unnecessary risks. Any safety hazard, whether procedural, operational or maintenance related should be identified as soon as possible after, if not before, an incident occurs. Any suggestions in the interest of safety should be made to a UAS Supervisor.
- g. If any member observes, or has knowledge, of an unsafe or dangerous act committed by another member, A UAS Supervisor is to be notified immediately so that corrective action may be taken.
- h. In regards to safety, all members of the UAS unit are responsible for the following:
 - 1. Ensuring all flight operations personnel understand applicable regulatory requirements, standards and organizational safety policies and procedures.
 - 2. Observe and control safety systems by monitoring all operations.
 - 3. Review standards and the practices of agency personnel as they impact operational safety.
 - 4. Communicate all reported safety related problems and the corrective action taken. Communicate any in-flight problems (or learned experiences)
 - 5. Reading and understanding all pertinent safety information.
 - 6. Reading and understanding all emergency safety bulletins.
 - 7. It is emphasized again that safety is the responsibility of ALL members of the UAS unit.

Medical Factors

- a. Operator and Observers shall only deploy the UAS when rested and emotionally prepared for the tasks at hand.
- b. Physical illness, exhaustion, emotional problems, etc., can seriously impair judgment, memory and alertness. The safest rule is not to act as an operator or observer when suffering from, any of the above. Members are expected to "stand down" when these problems could reasonably be expected to affect their ability to perform flight duties.
- c. A self-assessment of physical condition shall be made by all members during pre-flight activities.
- d. Performance can be seriously hampered by prescription and over the counter drugs. Many medications cause drowsiness and hamper sound decision making abilities and reaction. If it is determined that the medication being taken could hamper an operator or observer, that member shall be prohibited from the deployment or exercise.
- e. No member shall act as an operator or observer within eight hours after consumption of any alcoholic beverage, or while under the influence of alcohol.

Operational Hazard and Occurrence Report (OHOR) and Investigations

- a. Occurrences are unplanned safety related events, including accidents and incidents that could impact safety.
- b. A hazard is something that has the potential to cause harm. The systematic identification and control of all major hazards is foundational to safety.
- c. The **OHOR** concept provides a mechanism to report hazards and occurrences, real and perceived, to those responsible for UAS operations.
- d. 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.
- e. 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 Sheriff 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.
- f. ALL UAS MEMBERS ARE AUTHORIZED TO TAKE ACTION 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.

Training:

- a. The key to continued safe operations is by maintaining a professional level of competency. The first step in this process is establishing minimum qualifications for selecting members, and the second step involves training those personnel.
- b. In conjunction with fulfilling all FAA requirements for operator/observer duties, the new member will also become familiar with the agency UAS operations, and its related equipment.
- c. Before a member can fly as a PIC, they must be an FAA Certified Private Pilot or Remote Pilot and complete at least 30 minutes of flight training as a PIC and 30 minutes flight time as Co-Pilot and show proficiency in the flight training exercises and the airframe. This must be accomplished to show their ability and knowledge of the UAS.
- d. In order to maintain proficiency, each Pilot must complete at least two hours of training flight using department equipment during each shift-bid period.

Call Out Procedures / Use of the UAS:

- a. If a UAS Pilot is on shift and manpower/call volume allows, that Pilot will be the Point of Contact for flight operations.
- b. If there is no UAS Pilot currently working, requests for flight operations will be made through a UAS Supervisor.
- c. 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 a UAS Supervisor for consideration.
- d. A UAS Supervisor will screen the request using the following factors:
 - 1. Is the proposed use of UAS within the capabilities of the UAS equipment and personnel to perform?
 - 2. Does the proposed use of the UAS fall within the FAA and department policies and regulations for UAS usage?
 - 3. Can the UAS be deployed safely given current weather conditions?
 - 4. If the UAS deployment requires a warrant has one been requested and approved?
 - 5. Are sufficient trained and qualified personnel available to safely operate the UAS?
- e. A UAS Supervisor will either accept or decline the request for UAS support. If the request is denied the UAS Supervisor will provide a reason for declining the support request to the requestor.
- f. The UAS Supervisor will have Dispatch contact a UAS PIC, using the UAS Turnsheet, who will be provided all available mission information.
- g. Upon arriving at the requested location the UAS PIC will contact the on-scene Incident Commander and will check in and receive a briefing on the mission requested. The UAS 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.

- h. If the UAS PIC determines that the use of the UAS would violate department policy or directives, then the UAS 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 UAS PIC will contact the UAS Supervisor for direction on how to proceed. As soon as possible after the completion of the mission, the UAS PIC will make a full report of the circumstances and their concerns to a UAS Supervisor.
- i. UAS PIC will have sole discretion for declaring safety or violation of FAA rules. If the UAS PIC determines that a requested mission would violate FAA rules or endanger civilians, then the UAS PIC will respectfully inform the Incident Commander of the reasons for refusing to operate the UAS and contact a UAS Supervisor immediately. **The UAS will not be flown in this circumstance and the authority of the UAS PIC is absolute.**
- j. If the UAS PIC determines that the requested mission will potentially damage the UAS or its associated equipment the UAS PIC will inform the Incident Commander of their concerns. The UAS PIC will contact a UAS Supervisor as this is a deviation of the originally, approved mission, The UAS PIC will fully document and send a report to a UAS Supervisor for review.
- k. **The UAS shall not be used for the purpose of random surveillance.**
- l. If several separate requests for UAS support are received simultaneously, they shall be prioritized. In general terms, requests for UAS support are prioritized as:
 - i. Life Safety
 - ii. Evidence / Documentation

Flight Boundaries:

- a. All flights will be conducted according to FAA regulations, regarding COAs, Part 107 Waiver, and in accordance with department Policies and Procedures and the Illinois Freedom from Drone Surveillance act.

OPEN COMMUNICATION ACHIEVES SAFE OPERATIONS:

- a. The PIC is directly responsible for, and is the final authority over the actual operation of the UAS.
- b. PICs have absolute authority to reject a flight based on personnel or equipment safety or violation of FAA regulations, the Illinois Freedom from Drone Surveillance Act, or Department Policies and Procedures. No member of this agency, regardless of rank, shall order a PIC to make a flight when, in the opinion of the PIC, it poses a risk to personnel or equipment or is in violation of FAA regulations, the Illinois Freedom from Drone Surveillance Act, or Department Policies and Procedures.
- c. PICs are responsible for compliance with this manual, department policy and procedure, FAA regulations, and the Illinois Freedom from Drone Surveillance Act.
- d. The PICs main duty during the deployment of the UAS is to operate the UAS safely while accomplishing the goals of the deployment.
- e. PICs shall see-and-avoid any obstacle that will lessen safety during the mission.

- f. PICs shall be responsive to the requests of the Co-Pilot in order to accomplish the deployment.
- g. PICs and Co-Pilots shall be responsible for documentation for their mission training and updating of their flight books.
- h. Co-Pilots are responsible for the law enforcement aspect of the deployment.
- i. Co-Pilots shall operate any attachments to the UAS, allowing the operator to maintain complete focus on the operation of the UAS.
- j. Co-Pilots shall remain alert for suspicious persons or activities on the ground and coordinate response by ground units.
- k. Co-Pilots shall monitor the radio updates.
- l. Co-Pilots shall assist the operator in the main objective of safe operations of the UAS.
- m. Co-Pilots shall be responsible for documentation for their mission training and updating of their flight books.

Personal Equipment:

- a. Although there is no specific uniform for the UAS unit or required for proper operation of the UAS, the PIC and Co-Pilot should take necessary measures to deploy in a professional manner. PICs and Co-Pilots shall wear clothing that easily identifies them as members of this agency.
- b. PICs and Co-Pilots will take into consideration the current weather conditions when planning to deploy, and wear appropriate clothing to deploy comfortably.

Pre-Flight/Post-Flight Actions:

- a. PICs and Co-Pilots are both responsible for a thorough preflight inspection of the UAS.
- b. Before and after each deployment (whether a mission or training), the PIC and Co-Pilot shall conduct a thorough inspection of the UAS in accordance with the instructions contained in the manufactures user's manual.
- c. Any issues found that will put in jeopardy the safe operation of the UAS shall be documented and resolved prior to flight.
- d. 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 accordance with the manufactures instruction and will be utilized prior to each flight.
- e. Any physical equipment issue that cannot be resolved on-site, and which will have an impact on safety or the mission, will override the deployment. These issues will be resolved before flight.

Weather:

- a. Before each deployment the PIC and Co-Pilot 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 METAR reports to obtain the latest and most current weather conditions.
- b. The METAR report covering the time period of the mission will be attached to each post-flight report.
- c. The operator shall ensure that the flight will occur within FAA Part 107 weather requirements.

Planning:

- a. The PIC and Co-Pilot 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.
- b. PICs will ensure that the location for take-off and emergency landing is adequate for a safe deployment.
- c. At least one emergency landing area should be identified per deployment.
- d. PICs will ensure that they are aware of their surroundings in the event that an emergency landing is necessary. This includes the ability to recover the UAS.

Documentation:

- a. Each training flight requires a completed Preflight and Postflight Inspection Form. The PIC is responsible for these forms.
- b. Each Mission Flight requires a completed Mission Packet. Each appropriate form in the packet should be completed. An RMS Narrative must also be completed for each Mission Flight. The PIC is responsible for this.
- c. The PIC shall document any maintenance issue, or unexpected contact between the UAV and another object, that might cause flight issues or instability or damage to the vehicle will be documented in a Departmental Memo to a UAS Supervisor.
- d. The PIC shall document in an RMS Narrative and an FAA report within 10 days any accident if it results in at least serious injury to any person or any loss of consciousness, or if it causes damage to any property (other than the UAS) in excess of \$500 to repair or replace the property (whichever is lower).
- e. After each mission, all photography (still or video) obtained by the UAS Operation will be submitted to a UAS Supervisor, with a completed UAS Photography Submission form. The photography will be transferred to an external hard drive that is separate from the department network. The Micro SD card will be returned to the UAS equipment case. The photography will be stored in accordance with the Illinois Freedom From Drone Surveillance Act.

- f. The operator of the UAS is responsible for evidence handling as well as writing any supporting documentation for the incident.

Maintenance:

- a. 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.
- b. Any issues that arise during maintenance that cannot be resolved by routine methods shall be forwarded to the manufacturer for further technical support.
- c. Maintenance and service records associated with the UAS shall be maintained by a UAS Supervisor for UAS of the agency.
- d. Operators and or Supervisors of Unmanned Aircraft Systems (UAS) shall maintain manufactures software updates and or operating requirements.