

# Unmanned Aerial System

## 606.1 PURPOSE AND SCOPE

The purpose of this policy is to establish guidelines for the use of an unmanned aerial system (UAS) and for the storage, retrieval, and dissemination of images and data captured by the UAS.

### 606.1.1 DEFINITIONS

Definitions related to this policy include:

**Federal Aviation Administration (FAA)** – A national authority with powers to regulate all aspects of civil aviation. These include the construction and operation of airports, the management of air traffic, the certification of personnel and aircraft, and the protection of US assets during the launch or re-entry of commercial space vehicles.

**Information** – As defined in 725 ILCS 167, any evidence, images, sounds, data, or other information gathered by the unmanned aircraft.

**Remote Pilot in Command** – Person directly responsible for and is the final authority as to the operation of the small unmanned aircraft.

**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)), and all of the supporting or attached systems designed for gathering information through imaging, recording, or any other means.

**Visual Observer** – The person designated by the remote pilot in command to assist the remote pilot in command and the person manipulating the flight controls of the aircraft to see and avoid other air traffic or objects aloft or on the ground.

## 606.2 POLICY

A UAS may be utilized to enhance the Department's mission of protecting lives and property when other means and resources are not available or are less effective. Any use of a UAS will be in strict accordance with relevant statutes, constitutional and privacy rights, Federal Aviation Administration (FAA) regulations, and 14 CFR 107 requirements.

## 606.3 PRIVACY

- A. The use of the UAS potentially involves privacy considerations. Absent a warrant or exigent circumstances, operators and observers shall not intentionally record or transmit images of any location where a person would have a reasonable expectation of privacy (e.g., residence, yard, enclosure). Operators and observers shall take reasonable precautions to avoid inadvertently recording or transmitting images of areas where there is a reasonable expectation of privacy. Reasonable precautions can include, for example, deactivating or turning imaging devices away from such areas or persons during UAS operations.

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- B. When there are specific and articulable grounds to believe that the UAS will collect evidence of criminal wrongdoing and/or if the UAS will be used in a manner that may intrude upon reasonable expectation of privacy, the department will obtain a search warrant prior to conducting the flight.

### **606.4 PROGRAM COORDINATOR**

The Chief of Police will appoint a program coordinator who will be responsible for the management of the UAS program. The program coordinator will ensure that policies and procedures conform to current laws, regulations, and best practices and will have the following additional responsibilities:

- The Department must obtain applicable authorizations, permits, or certificates as required by FAA prior to deploying or operating the UAS, and ensure these documents are current.
- Coordinating the FAA Certificate of Waiver or Authorization (COA) application process and ensuring that the COA is current, and/or coordinating compliance with FAA Part 107 Remote Pilot Certificate, as appropriate for Department operations.
- Ensuring that all authorized operators and required observers have completed all required FAA and Department-approved training in the operation, applicable laws, policies, and procedures regarding use of the UAS.
- Developing uniform protocols for submission and evaluation of requests to deploy a UAS, including urgent requests made during ongoing or emerging incidents.
- Coordinating the completion of the FAA Emergency Operation Request Form in emergency situations, as applicable (e.g., natural disasters, search and rescue, emergency situations to safeguard human life).
- Developing protocols for conducting criminal investigations involving a UAS, including documentation of time spent monitoring a subject.
- Implementing a system for public notification of UAS deployment.
- Developing operational protocols governing the deployment and operation of a UAS including but not limited to safety oversight, use of visual observers, establishment of lost link procedures, and secure communication with air traffic control facilities.
- Developing a protocol for fully documenting all missions.
- Developing a UAS inspection, maintenance, and record-keeping protocol to ensure continuing airworthiness of a UAS, up to and including its overhaul or life limits.
- Developing protocols to ensure that all data intended to be used as evidence are accessed, maintained, stored, and retrieved in a manner that ensures its integrity as evidence, including strict adherence to chain of custody requirements. Electronic trails, including encryption, authenticity certificates, and date and time stamping, shall be used as appropriate to preserve individual rights and to ensure the authenticity and maintenance of a secure evidentiary chain of custody.
- Developing protocols that ensure retention and purge periods are maintained in accordance with established records retention schedules.

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- Facilitating law enforcement access to images and data captured by the UAS.
- Recommending program enhancements, especially regarding safety and information security.
- Ensuring that established protocols are followed by monitoring and providing periodic reports on the program to the Chief of Police.
- Maintaining familiarity with FAA regulatory standards, state laws and regulations, and local ordinances regarding the operations of a UAS.
- Developing procedures for the use of facial recognition software to evaluate information gathered by a UAS, as permitted by 725 ILCS 167/17.
- Ensuring that the Department's current UAS policy is posted on the Village of Lincolnshire website (725 ILCS 167/35).
- Conduct a documented annual audit of the program and flight documentation.

### **606.5 USE OF UAS**

- A. Only authorized operators who have completed the required training shall be permitted to operate the UAS.
- B. Use of vision enhancement technology (e.g., thermal and other imaging equipment not generally available to the public) is permissible in viewing areas only where there is no protectable privacy interest or when in compliance with a search warrant or court order. In all other instances, legal counsel should be consulted.
- C. UAS operations should only be conducted consistent with FAA regulations.
- D. Requests to deploy the UAS flight shall be made to the program coordinator who will confer with the on-duty supervisor as to the status of the proposed flight.
- E. Whenever possible, if the UAS will be flying within close proximity to a hospital heliport, which could create a hazardous situation for a manned aircraft, notification shall be made to the respective hospital's security office.
- F. When appropriate, notification of the UAS deployment shall be made to the public and/or media outlets.
- G. At the conclusion of each deployment, the recordings shall be securely downloaded and proper evidence procedures shall be followed.
- H. All uses of the UAS will be documented on a form or database. Information shall include the reason for the flight; the date, time and location; the person who approved of the deployment, assigned staff; and a summary of the activities covered, actions taken, and outcome of the deployment.
- I. The Department may not use the UAS to gather information except (725 ILCS 167/15):
  - 1. To counter a high risk of a terrorist attack by a specific individual or organization if the United States Secretary of Homeland Security determines that credible intelligence indicates there is a risk.

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2. Pursuant to a search warrant based on probable cause. The warrant must be limited to a period of 45 days, renewable by a judge upon showing good cause for subsequent periods of 45 days.
  3. Upon reasonable suspicion that under particular circumstances, swift action is needed to prevent imminent harm to life, forestall the imminent escape of a suspect, or prevent the destruction of evidence. The use of a UAS under this paragraph is limited to a period of 48 hours. Within 24 hours of UAS initiation under this paragraph, the Chief of Police must report its use, in writing, to the State's Attorney.
  4. To locate a missing person, engage in search and rescue operations, or aid a person who cannot otherwise be safely reached while not also undertaking a criminal investigation.
  5. To obtain crime scene and traffic crash scene photography in a geographically confined and time-limited manner. The use of the UAS under this paragraph on private property requires either a search warrant or lawful consent to search.
  6. To obtain information necessary for the determination of whether a disaster or public health emergency should be declared, to manage a disaster by monitoring weather or emergency conditions, to survey damage, or to coordinate response and recovery efforts.
  7. To conduct an inspection of the infrastructure of a designated building or structure when requested by a local government agency.
  8. To locate victims, assist with victims' immediate health or safety needs, or coordinate the response of emergency vehicles and personnel, when dispatched to an emergency.
  9. In advance of or during a routed event or special event, as defined in 725 ILCS 167/5, for those uses allowed under 725 ILCS 167/15. The notice for UAS use in these instances should be posted at a time, place, and manner as required by 725 ILCS 167/15.
- J. For additional resources, see [attachment: Illinois State Police Air Support Feb 2022.pdf](#)

#### 606.5.1 PRIVATE UAS OWNERS

This policy and its restrictions apply to the department's directed use of a UAS owned by a private third party and information gathered by a UAS voluntarily submitted to the Department by a private third party (725 ILCS 167/40).

#### 606.5.2 FACIAL RECOGNITION WITH UAS

Facial recognition software onboard a UAS shall not be used during a flight (725 ILCS 167/17). Use of facial recognition software to evaluate information gathered by a UAS is permissible only under those circumstances described in 725 ILCS 167/17.

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### **606.6 PROHIBITED USE**

The UAS video surveillance equipment shall not be used:

- To conduct random surveillance activities.
- To target a person based solely on actual or perceived characteristics such as race, ethnicity, national origin, religion, sex, sexual orientation, gender identity or expression, economic status, age, cultural group, or disability.
- To harass, intimidate, or discriminate against any individual or group.
- To conduct personal business of any type.
- To manage any situations outside what is specified in Section 606.5 (I)

The UAS shall not be weaponized (725 ILCS 167/18).

### **606.7 INSPECTION AND CARE OF THE EQUIPMENT**

- A. The UAS and related equipment shall be maintained in the state of operational readiness. Assigned officers shall use reasonable care to ensure the proper functioning of the sUAS equipment. Malfunctions shall be brought to the attention of the program coordinator as soon as possible. Extra caution must be taken to ensure the equipment is not stored in extreme temperatures.
- B. Prior to use, assigned officers shall:
  1. Using an equipment checklist, inspect the UAS and related equipment to verify proper functioning and ensure the battery is fully charged in accordance to the manufacturer's recommendations.
  2. Inspect the body of the UAS, the charging and camera cables to look for signs of visible damage. Ensure the propellor blades are in flight worthy condition.

### **606.7 RETENTION AND DISCLOSURE OF UAS INFORMATION**

Within 30 days of UAS use, the Program Coordinator or designee shall destroy all information gathered by the UAS except when there is reasonable suspicion that the information contains evidence of criminal activity, or the information is relevant to an ongoing investigation or pending criminal trial (725 ILCS 167/20). This does not include information gathered in Lincolnshire where the UAS was used by a task force operator in a task force operation.

The disclosure of information gathered by the UAS is prohibited except to another government agency when there is reasonable suspicion that the information contains evidence of criminal activity, or the information is relevant to an ongoing investigation or pending criminal trial (725 ILCS 167/25).

### **606.8 SECURITY OF RECORDINGS**

Personnel should be aware that recordings may contain sensitive information and are responsible for ensuring compliance to the information in this policy. A breach in security, careless handling of the recording and/or intentional release of recordings to non-authorized individuals may jeopardize

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relationships with citizens, subject victims to an invasion of privacy, jeopardize prosecutions and endanger the safety of individuals.

- A. All recordings are considered investigative property of the Lincolnshire Police Department. The utmost care and caution shall be taken to ensure the recordings are not mishandled or misused.
- B. Employees shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner recordings without written authorization by the program coordinator.
- C. Any violations related to unauthorized edits, alterations, and dissemination of this data shall be cause for disciplinary action.
- D. Pursuant to 725 ILCS 167/25, the disclosure of information is prohibited, except to another government agency when there is reasonable suspicion that the information contains evidence of criminal activity, or the information is relevant to an ongoing investigation or pending criminal trial.

### **606.9 OPERATING PROCEDURES**

- A. UAS deployments by the police department must also adhere to the operating procedures established by the FAA. These rules are outlined below, but are not limited to:
  - 1. Conduct a pre-flight check to ensure the UAS is in good working condition for safe operation.
  - 2. Keep the UAS in visual line of sight.
  - 3. Fly at or below 400 feet above ground level.
  - 4. Fly at or below 100 mph.
  - 5. Yield right of way to manned aircraft.
  - 6. Must not fly over people, unless:
    - (a) That human being is directly participating in the operation of the UAS.
    - (b) That human being is located under a covered structure or inside a stationary vehicle that can provide reasonable protection from a falling UAS.
  - 7. Must not fly from a moving vehicle, except in rural areas.
  - 8. During an emergency situation, deviations from policy may be permitted.
  - 9. Flight outside of daylight and twilight hours must be done with Anti-Collision lighting that can be seen for 3 Statute Miles. (Dimming of Anti-Collision lighting may only be done when safety is a concern.
- B. The program coordinator shall request a certificate waiver from the FAA which authorizes deviation from specific regulations. The certificate waiver will be granted when the FAA determines that the UAS operation can be safely conducted under the terms of the certificate waiver.

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- C. Personnel shall notify the program coordinator when he/she knows or has reason to know that he/she has a physical or mental condition that would interfere with the safe operation of the UAS.

Procedure for [Unmanned\\_Aerial\\_System\\_\\_UAS\\_\\_.pdf](#)

### **606.11 REPORTING**

The supervisor overseeing the Records Division shall report annually, by April 1, to the Illinois Criminal Justice Information Authority the number of UASs owned by the Department and any other required information to be reported under 725 ILCS 167/35.

The report shall contain a copy of the Departments's current UAS policy (725 ILCS 167/35).

Within 24 hours of utilizing a UAS for circumstances as described under section 606.5(l)(3), the program coordinator or his designee shall notify the Lake County State's Attorney's Office of the use.

#### **606.11.1 ACCIDENT REPORTING**

- A. The FAA requires notification of certain UAS accidents. Pursuant to 14 CFR 107 Drone Operation & Certification Regulations, within 10 days after the accident, the remote pilot in command must report accidents to the FAA in the following situations:
  - 1. Serious injury to any person or loss of consciousness.
  - 2. Damage to any property, other than the UAS, unless one of the following conditions is satisfied:
    - (a) the cost of repair including materials and labor does not exceed \$500.00 or
    - (b) the fair market value of the property does not exceed \$500.00 in the event of a total loss.
- B. The remote pilot in command is required to initiate a police report for any accident involving the UAS. The police report shall include the following information:
  - 1. Name and contact information for operators and witnesses.
  - 2. Type of operation.
  - 3. Type of device and registration number/certificate.
  - 4. Event location and incident details.
  - 5. Evidence collection such as photos, video, and device confiscation, if necessary.
- C. When the accident meets the criteria listed under Section A, the remote pilot in command shall provide notification to the FAA by using the FAA's DroneZone Portal at: [https://www.faa.gov/uas/report\\_accident/](https://www.faa.gov/uas/report_accident/).

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### **606.12 COMPLIANCE WITH THE FREEDOM FROM DRONE SURVEILLANCE ACT**

If a determination is made that a member has violated the Act, the Department shall take prompt and appropriate action (e.g., training, discipline) (725 ILCS 167/45). If a determination is made that a UAS pilot has willfully violated the Act, the Department shall promptly remove the pilot from its UAS program and take other appropriate action (see the Personnel Complaints Policy) (725 ILCS 167/45).

### **606.13 DISCLOSURE OF UAS INFORMATION**

Information gathered during an inspection of the infrastructure of a designated building or structure shall be given, as soon as practicable, to the requesting local government agency before it is destroyed (725 ILCS 167/20).

The disclosure of information gathered by the UAS is prohibited except (725 ILCS 167/25):

- (a) To another government agency when there is reasonable suspicion that the information contains evidence of criminal activity or the information is relevant to an ongoing investigation or pending criminal trial. This includes information obtained from Department-owned UAS, as well as information obtained by the Department from a privately owned UAS.
- (b) Pursuant to a court order or subpoena in connection with a criminal proceeding.
- (c) In regard to a completed traffic crash investigation.

Available records of drone usage (e.g., flight path data, metadata, telemetry information of specific flights) may be disclosed subject to the Freedom of Information Act, 5 ILCS 140/1 et seq., and rules adopted under it (725 ILCS 167/25).

## **Attachments**

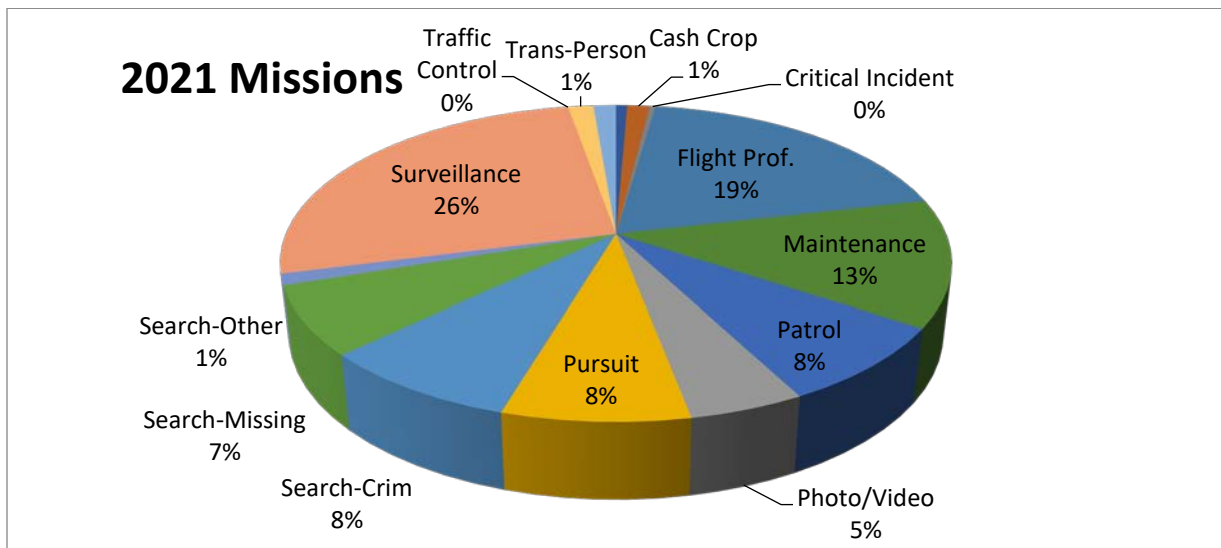
## **Illinois State Police Air Support Feb 2022.pdf**



The Illinois State Police Air Operations Bureau (ISP AOB) is dedicated to providing safe, reliable, professional air support to all local, state, and federal agencies and citizens of the State of Illinois.

In 2021, ISP AOB flew 617 missions totaling 1,244 hours.

Of these 617 missions: 194 missions were flown in support of patrol operations (Airspeed, patrol, pursuit, search-criminal, search-missing person, and traffic). 208 missions were flown in support of investigative operations (Surveillance, cash crop, search-other, photo/video, critical incident, and critical infrastructure protection). 17 missions were flown for transportation of personnel and property. 198 missions were flown for maintenance and flight proficiency.



The majority of the 617 missions were flown for ISP with 460 total flights. 58 missions were flown for federal agencies. 46 missions were flown for county agencies. 32 missions were flown for other state agencies. 21 missions were flown for municipal agencies.

ISP AOB has three office locations with a forward looking infrared (FLIR) camera equipped aircraft at DuPage, Springfield, and Scott/Mid-America airports.



To request assistance from ISP AOB, please call ISP telecommunications at:

**(217) 786-6677**



## ISP UAS Callout Quick Reference

**PLEASE CONTACT THE SPRINGFIELD COMMUNICATION CENTER TO REQUEST UAS FLIGHTS AT 217-786-6677.**

The ISP currently has 33 FAA Part 107 Licensed UAS Pilots available for callout. ISP UAS flights must comply with OPS-086, FAA Part 107 Rules, and the Illinois Freedom from Drone Surveillance Act (IEMA Act: 20 ILCS 3305).

### UAS FLIGHT CRITERIA (must meet at least one):

- Credible high risk of terrorist attack
- Search Warrant
- Imminent harm to life
- Crash Reconstruction
- Crime Scene documentation
- Fugitive/suspect escape
- Imminent Harm to Life
- Missing Person
- Owner Consent

#### Disaster (Natural or Technological)

- Occurrence/threat of:
  1. widespread/severe damage
  2. injury or loss of life
  3. loss of property
- Severe weather/Fire
- Hazmat spill
- Drought
- Infestation
- Explosion
- Riot
- Hostile military/paramilitary action
- Domestic terrorism

#### Public Health Emergency

- Occurrence/threat of illness or health condition caused by:
  1. Bioterrorism
  2. Novel, infectious agent, biological toxin
  3. Natural disaster
  4. Chemical attack/accident
  5. Nuclear attack/accident

### UAS DISTRICT LOCATIONS

#### CSS:

Region 1: 2, 5, 15, 21

Region 2: 1, 2, 7, 8, 14, 16, 17

Region 3: 6, 8, 9, 10, 14, 18, 20, 21

Region 4: 10, 11, 12, 13, 19, 22

Region 5: 11, 18

#### TCRU:

##### North Command:

1, 2, D-Chi, 5, 7, 15, 16, 17, 21

##### Central and South Command:

6, 8, 9, 10, 11, 12, 13, 14, 18, 19, 20, 22



## UAS CAPABILITIES

- SESC Crime Scene: Daylight optics and thermal capability, spotlight, one-way speaker to provide public announcement.
- SESC TCRU: Day and Nighttime Optics with Radiometric thermal capability, 180X Zoom capability, spotlight, and ability to carry object up to 10 pounds and drop item remotely.
- If thermal capabilities are required, they must be specifically requested at time of call.
- Ability to provide scale mapping of terrain, roadways, buildings using Pix4D rendering software.
- SESC Crime Scene: WebEx live feed UAS video and two-way audio with Pilot.
- SESC TCRU: Can livestream to any Apple, Windows, or Android device with a link sent to the requestor. Capability of up to 5 livestreams from 5 different UAS's at a time.
- 30-minute max flight time between battery changes.
- 3-mile max range.
- 400 ft. max altitude above ground, 400ft. max altitude above structures.
- No inclement weather – Most UAS platform operating temps range from 14° - 104° F

\*Exception TCRU Matrice 210V2 can operate in rain and snow (-4° - 113° F).

## FLIGHT LIMITATIONS REQUIRING FAA APPROVAL

- Flights beyond visual line of sight.
- Flights above people (can offset).
- Flights in controlled airspace.

### Webex UAS live stream pointers:

- The Webex meeting host should select the pilot as the presenter by right clicking the pilot's icon and select Make Presenter.
- The host will retain all the meeting commands, including sending out meeting invites, chat, allowing access through the participants section, and other functions.

### Airdata UAS Livestream:

Pilot sends a link to the Airdata streaming server to the requesting agency. They click on the link and enter the password given and can observe the stream from up to 5 different UAS's.

## **Unmanned\_Aerial\_System\_\_UAS\_\_.pdf**

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## Unmanned Aerial System (UAS)

### 114.1 CALL OUT / DEPLOYMENT REQUEST

Agency Content

- A. Upon determining that utilization of a Unmanned Aerial System (UAS) would aid in an investigation, the Sergeant or Officer in Charge (OIC) should request authorization to deploy a UAS. Authorization for UAS deployment can be obtained by contacting:
  - 1. A licensed member of the Lincolnshire Police Department UAS Unit, if on duty.
  - 2. The Program Coordinator of the Lincolnshire Police Department UAS Unit, if no other licensed member is on duty.
- B. In the event no licensed UAS pilot is on shift at the time of a necessary deployment, the UAS Program Coordinator will contact licensed pilots to respond to the scene. The UAS Program Coordinator will contact UAS pilots, considering the following factors:
  - 1. Time sensitivity of the incident and travel time of the licensed pilots,
  - 2. Additional specialties held by licensed pilots
- C. The number of license pilots activated, as well as the number of support staff, will be dictated by the severity of the incident. Shift coverage of staffing shortages created by an activation will be responsibility of the on-duty Sergeant or OIC.

### 114.2 REQUIRED NOTIFICATIONS

Agency Content

- A. The UAS Program Coordinator will be notified of all UAS deployments, including those authorized by an on-duty licensed member of the UAS Unit.
- B. Upon receiving notification of a UAS deployment, the Program Coordinator or his/her designee, shall contact the Commander and provide the following information:
  - 1. Nature of the incident
  - 2. Location of the deployment
  - 3. Personnel involved
  - 4. Any public safety concerns
  - 5. Additional personnel or resources needed
  - 6. Media concerns
  - 7. A primary contact for updates/additional information
- C. In the event that the Commander is unavailable, the secondary contact will be the Deputy Chief and the tertiary contact will be the Chief of Police.

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### **114.3 PRE-FLIGHT PREPARATIONS**

**Agency Content**

- A. Prior to UAS deployment, the Remote Pilot in Command will:
  - 1. Select an appropriate location from which to deploy the UAS.
  - 2. Complete the Lincolnshire Police Department UAS Flight Documentation Report and ensure that all necessary notifications (SAO, Chicago Executive Airport, Condell Hospital, etc..) are made.
  - 3. Document all weather conditions and determine whether or not the conditions exist for safe deployment and operation of the UAS.
  - 4. Complete an inspection of the UAS unit, looking for signs of damage, missing or excessively worn parts or malfunctioning mechanical or electronic components.
  - 5. Notify dispatch of the UAS deployment.
- B. Should the UAS be deployed for the purpose of locating a violent or potentially dangerous offender or if other hazardous conditions exist, additional safety precautions should be taken. Due to the fact that the Remote Pilot in Control's attention will be focused on the operation of the UAS, a minimum of one additional officer should be present to provide security of deployment site, to serve as a spotter for potential hazards and to prevent unauthorized persons from approaching the Remote Pilot in Command.

### **114.4 IN-FLIGHT RECORDINGS**

**Agency Content**

The determination of whether or not a UAS flight is to be recorded will be made on a flight-by-flight basis and will be made by the Remote Pilot in Command. Recordings of flights that will hold no evidentiary value are not required, unless requested by a member of the Lincolnshire Police Department Command Staff or during instances that require a notification to the State's Attorney's Office.

### **114.5 POST-FLIGHT**

**Agency Content**

- A. Upon completing a UAS deployment, the Remote Pilot in Command is to:
  - 1. Inspect the UAS and propellers for any damage.
  - 2. Prepare the UAS for proper storage.
  - 3. Ensure that both the UAS and controller are turned off prior to storage.
  - 4. Make any appropriate notification upon landing (airports, Deerfield Dispatch, etc.).
  - 5. Complete the Lincolnshire Police Department UAS Flight Documentation Report and SAO Notification Form (when necessary).

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- B. The Commander, or the appropriate member of the Police Administration, should be contacted within a reasonable timeframe after the UAS deployment and briefed on the results.