
Unmanned Aircraft Systems

709.1 PURPOSE:

The purpose of this policy is to establish guidelines under which a small, unmanned aircraft may be utilized and the storage, retrieval and dissemination of images and data captured by such systems.

709.2 POLICY

It is the policy of this department to ensure authorized personnel are trained on the use of unmanned aircraft systems, hereinafter referred to as UAS, to enhance the Department's mission of protecting lives and property by improving law enforcement operations. While doing so, the Department will exercise care to preserve the privacy and civil liberties of the public while also adhering to relevant statutes and the Federal Aviation Administration (FAA) guidelines and regulations.

709.3 DEFINITIONS

Disaster: As defined in 20 ILCS 3305, the Illinois Emergency Management Agency Act, means an occurrence of threat of widespread or severe damage, injury or loss of life or property resulting from any natural, technological, or human cause, including but not limited to fire, flood, earthquake, wind, storm, hazardous materials spill or other water contamination requiring emergency action to avert danger or damage, epidemic, air contamination, drought, infestation, critical shortages of essential fuels and energy, explosion, riot, hostile military or paramilitary action, public health emergencies, cyber incidents, or acts of domestic terrorism.

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 reentry of commercial space vehicles.

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

Notice to Airmen (NOTAM): A notice filed with an aviation authority to alert aircraft pilots of potential hazards along a flight route or at a location that could affect the safety of the flight.

Parade: A march, procession or other similar activity consisting of persons, animals, vehicles or things, or any combination thereof, upon a public street, sidewalk, alley or other public place, which requires a street closing or otherwise requires stopping or rerouting vehicular traffic because the parade will not or cannot comply with normal and usual traffic regulations or controls. Parade does not include a political protest, march, demonstration or other assembly protected by the First Amendment. (725 ILCS 167/5)

Remote Pilot in Command (PIC): Person directly responsible for, and is the final authority as to the operation of, the unmanned aircraft.

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

Routed Event: A parade, walk or race that:

- Is hosted by the State of Illinois or a county, municipality, township or park district;
- Is outdoors and open to the public; and
- Has an estimated attendance of more than 50 people.

Routed Event does not include any political protest, march, demonstration or other assembly protected by the First Amendment. (725 ILCS 167/5)

Special Event: A concert or food festival that:

- Is hosted by the State of Illinois or a county, municipality, township or park district;
- Is outdoors and open to the public; and
- Has an estimated attendance of:
 - 150 or more people in a unit of local government with a population that is less than 50,000;
 - 250 or more people in a unit of local government with a population that is greater than or equal to 50,000 but less than 100,000;
 - 350 or more people in a unit of local government with a population that is greater than or equal to 100,000 but less than 500,000; or
 - 500 or more people in a unit of local government with a population that is 500,000 or more.

Special Event does not include any political protest, march, demonstration or other assembly protected by the First Amendment. (725 ILCS 167/5)

Unmanned Aircraft (UA): Any aerial vehicle that does not carry a human operator and operates without the possibility of direct human intervention from within or on the aircraft; also referred to as a drone.

Unmanned Aircraft System (UAS): An unmanned aircraft that can be controlled remotely. Commonly referred to as a drone.

UAS Team: A team of trained officers including at least one sworn supervisor authorized to pilot the department's UA(s).

UAS Team Supervisor: Selected Sergeant that is trained to pilot UAS and assists the UAS Coordinator with assigned responsibilities.

Visual Observer: The person designated by the Remote Pilot in Command to assist them to see and avoid other air traffic or objects aloft or on the ground.

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

709.4 PRIVACY AND PROHIBITED USES

Privacy: The use of a UAS may involve privacy considerations. Absent a warrant signed by a judge or exigent circumstances, pilots and observers shall adhere to FAA regulations and shall not purposefully transmit or record images of any location where a person would have a reasonable expectation of privacy. Pilots and observers shall take reasonable precautions to avoid inadvertently transmitting or recording images of areas where there is a reasonable expectation of privacy.

Prohibited Uses: The UAS shall not be used to:

- Conduct random surveillance activities.
- Target a person or group of people solely based on characteristics such as but not limited to race, ethnicity, national origin, religion, disability, gender, or sexual orientation.
- Harass, intimidate, or discriminate against any individual or group of individuals.
- Conduct private and/or personal business.
- Use of any onboard facial recognition software that works in facial recognition software that works in conjunction with the drone. Employees are prohibited from using any information gathered by a drone with any facial recognition software, unless either:
 - The Department is using a drone to counter a high risk of a terrorist attack by a specific individual or organization and the United States Secretary of Homeland Security has determined that credible intelligence indicates that there is such a risk; or
 - The Department possesses reasonable suspicion that, under particular circumstances, swift action is needed to prevent imminent harm to life or to forestall the imminent escape of a suspect or the destruction of evidence. (725 ILCS 167/17)
- Be weaponized.

709.5 UAS PROGRAM COORDINATOR (UPC) AND TEAM SUPERVISOR

The Chief of Police or their designee will appoint a UAS Program Coordinator (UPC). The UPC will be responsible for the overall management of the UAS program and will work in connection with the UAS Team Supervisor. The UPC will ensure that the Department's UAS policies and procedures conform to the current laws, regulations, and best practices. The UPC will also have additional responsibilities that include but are not limited to:

- Maintaining a record of authorized employees in the Department's UAS Program who have a valid FAA Part 107 Commercial Pilots License and coordinated with the Training Coordinator to ensure that licenses are renewed prior to expiration.
- Ensuring that all authorized operators have completed current Department-approved training in UAS operation, applicable laws and policies.

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

- 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. Facilitating law enforcement access to images and data captured by the UAS.
- Developing operational protocols, such as, but not limited to, maintenance, pre-deployment information requirements, flight log requirements and after-action documentation.
- Ensuring that established protocols are followed by monitoring UAS use and providing periodic program reports to the Chief of Police or their designee.
- Implement a system for notification to the public and media outlets of UAS deployment, when appropriate.
- Ensuring proper retention and destruction of all information collected from the UAS.
- Prohibiting the disclosure of information gathered by the UAS, 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).
- Reporting annually, by April 1, to the Illinois Criminal Justice Information Authority all information required by statute, including but not limited to the number of UAS's and usage statistics (725 ILCS 167/35).
- Recommending enhancements regarding safety, information security, current technology and equipment.

709.6 SELECTION OF UAS TEAM PILOTS

Interested sworn personnel, who are off probation, shall submit an interest request to the appropriate UAS Coordinator. Recommendations for appointments to the team will be forwarded to the Chief of Police or their designee for consideration and eventual assignment.

709.7 USE OF UAS

Only authorized operators who have completed the required Department authorized training in the use and application of the UAS shall be permitted to operate the UAS. All UAS flight missions must be in strict accordance with current FAA regulations and guidelines.

The UAS, or images and data produced by its use, shall not be used for personal business of any type. Any use of the UAS that is not specifically related to the operation or mission of the Department shall require the express authorization of the Chief of Police or their authorized designee.

The Department may not utilize the UAS to gather information except as authorized in (725 ILCS 167). Authorized uses include:

- 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.

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

- 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.
- 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 or their authorized designee must report its use, in writing, to the State's Attorney.
- 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.
- If the Department is not undertaking a criminal investigation but is
 - Attempting to locate a missing person;
 - Engaging in a search and rescue operation; or
 - Aiding a person who cannot otherwise be safely reached
- Use during a disaster or public health emergency. May be used in order to see if a disaster or health emergency should be declared, to monitor weather or emergency and to survey damage or otherwise coordinate response and recovery efforts.
- To conduct an infrastructure inspection of a designated building or structure at the express request of a local government agency. Department employees shall make every reasonable attempt to photograph only the building or structure and to avoid other areas.
- To demonstrate the capabilities and functionality of a police drone for public relations purposes, provided that no information is collected or recorded by the drone during such demonstration.
- In response to Public Safety Answering Point (PSAP) dispatched calls for service, when the sole purpose for using a drone is for one or more first responders to locate victims, to assist with immediate victim health or safety needs, or to coordinate the response of emergency vehicles and personnel to an emergency.
- During a Routed Event or a Special Event, as defined above, and within specified parameters described below under deployment procedures.

709.8 DEPLOYMENT PROCEDURES

Requests to deploy a UAS flight shall be submitted to the on-duty supervisor. During an emergency situation where an official written request was not submitted, a memorandum outlining the reason for use of the UAS shall be submitted to the program coordinator; this shall be completed as soon as practicable.

Once a flight mission is initiated, procedures including but not limited to the following shall be followed:

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

- A PIC for the authorized flight mission shall be established;
- A preflight briefing shall be completed by the PIC or their designee;
- A preflight inspection of the UAS shall be completed by the PIC or their designee;
- As soon as feasible, SEECOM personnel shall be notified of the location of the anticipated flight mission by the PIC or their designee via the police radio;
- As soon as feasible, SEECOM personnel shall be notified via the police radio by the PIC or their designee once the UAS has taken flight;
- As soon as feasible, SEECOM personnel shall be notified via the police radio by the PIC or their designee once the UAS flight mission has been terminated; and
- At the conclusion of each UAS flight mission, the PIC or their designee shall make proper notification of the flight mission to the UAS Program Coordinator and submit a UAS flight report. When applicable, the PIC shall also complete a case supplemental report.

709.9 DEPLOYMENT PROCEDURES FOR SPECIAL OR ROUTED EVENTS:

The UAS may be used in advance of the event, before event participants have begun to assemble, for the sole purpose of creating maps and determining appropriate access routes, staging areas, and traffic routes, provided that no personal identifying information is recorded and provided further that no recorded information is used in any criminal prosecution.

Additionally, the UAS may be used during the event to proactively support public safety personnel by monitoring the event footprint in real time to:

- Detect a breach of event space, including a breach by an unauthorized vehicle, an interruption of a parade route, or a breach of an event barricade or fencing;
- Evaluate crowd size and density;
- Identify activity that could present a public safety issue for the crowd as a whole, including crowd movement;
- Assist in the response of public safety personnel to a real-time public safety incident at the event; and
- Assess the traffic and pedestrian flow around the event in real time.

The use of a drone at a routed event or special event requires that:

- Notice is posted at the event location for at least twenty-four (24) hours before the event and clearly communicates that drones may be used at the upcoming event for the purpose of real-time monitoring of participant safety;
- Notice is posted, if practical, at major entry points to the event clearly informing the attendees that a drone may be used for the purpose of real-time monitoring of participant safety; and
- The drone is flown in accordance with Federal Aviation Administration safety regulations.

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

709.10 UAS ACCIDENT REPORTING

The FAA requires notification of certain UAS accidents. Pursuant to 14 CFR 107 Drone Operation & Certification Regulations, within 10 days after the accident, the PIC must report accidents to the FAA in the following situations:

- Serious injury to any person or loss of consciousness.
- Damage to any property, other than the UAS, unless one of the following conditions is satisfied
 - the cost of repair including materials and labor does not exceed \$500.00
 - the fair market value of the property does not exceed \$500.00 in the event of a total loss.

The PIC is required to initiate a police report for any accident involving the UAS. The police report shall include the following information

- Name and contact information for operators and witnesses
- Type of operation
- Type of device and registration number/certificate
- Event location and incident details
- Evidence collection such as photos, video, and device confiscation, if necessary. (Note: search warrants may be required to download the recorded or still footage from the UAS.)

709.11 INSPECTION AND CARE OF EQUIPMENT

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 UAS 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.

709.12 SECURITY OF RECORDINGS

Personnel should be aware that recordings may contain sensitive information and are responsible for ensuring compliance to the requirements in this policy. A breach in security, careless handling of the recording, and/or intentional release of recordings to non-authorized individuals may jeopardize relationships with citizens, subject victims to an invasion of privacy, jeopardize prosecutions, and endanger the safety of individuals.

All recordings are considered investigative property of the Crystal Lake Police Department. The utmost care and caution shall be taken to ensure the recordings are not mishandled or misused.

Employees shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner recordings without written authorization by the program coordinator.

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

Any violations related to unauthorized edits, alterations, and dissemination of this data shall be cause for disciplinary action.

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.

709.13 INFORMATION RETENTION

Pursuant to 725 ILCS 167/20(a), the Department shall destroy all information gathered by the UAS within the timeframes outlined under 725 ILCS 167/15 (1-10).

Notwithstanding 725 ILCS 167/20(a) and the timeframes mentioned above, a department supervisor may retain particular information if:

- There is reasonable suspicion that the information contains evidence of criminal activity;
- The information is relevant to an ongoing investigation or pending criminal trial;
- The supervisor deems that the information will be used exclusively for training purposes, provided that any such information shall not contain any personally identifiable information; or
- The information consists of only flight path data, metadata, or telemetry information of the drone. (725 ILCS 167/20(b))

When the recording does not fall under the statutory exemptions, documentation pertaining to use of the UAS, such as location, date, time, scope of the mission, is not subject to being destroyed within the timeframes listed in 725 ILCS 167/20.

The retention of recordings that are exempt from the statutory destruction requirement is at the discretion of the Program Coordinator or determined by the completion of the criminal investigation or criminal trial.

709.14 INFORMATION FROM PRIVATELY FLOWN UAS

The Department may utilize or direct the acquisition of information from private UAS only for the purpose of undertaking the tasks outlined the Uses of UAS, above.

Private parties may voluntarily submit information acquired by a privately owned UAS to the police Department.

The Department shall not disclose any information gathered by the private drone. However, a supervisor may disclose information to another government agency when there is reasonable suspicion that the information contains evidence of criminal activity or the information is relevant to an on-going investigation or pending criminal trial.

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

709.15 ASSISTANCE TO OTHER AGENCIES

The UAS equipment shall not be loaned to other agencies. Requests by other agencies for UAS assistance require that a Department assigned operator respond with the equipment and operate it. All assists shall be documented in an Incident Report and a copy provided to the Team Supervisor.

709.16 TRAINING

Prior to authorization to operate a UAS, assigned personnel must complete mandatory training provided by the Department to obtain an understanding on how to use the UAS and the procedures outlined in this policy. At least annually, assigned officers will undergo refresher training on the equipment to ensure continued effective use, operation of the equipment and to incorporate changes, updates or other revisions to the FAA and/or 14 CFR 107 requirements, statutes or Department policy. Additional training may be provided at periodic intervals for personnel displaying a substandard performance in the use of UAS equipment.

709.17 VIOLATIONS OF STATE STATUTE AND POLICY

Per 725 ILCS 167/45, if the Department learns of violations of State Statute or this policy, the Department shall immediately take actions to prevent future violations through any one or more of the following means:

- Training
- Discipline, including progressive discipline for repeat violations
- Other means that will prevent repeated violations of State Statute or this policy by personnel.

If the Department learns of willful and wanton violations of the Drone Act, the Department shall immediately remove the pilot from its drone program and take action to prevent future willful and wanton violations of the Drone Act.

The Attorney General shall have authority to conduct investigations into patterns and practices of violations of this Act. The Attorney General may:

- Require a law enforcement agency, law enforcement official, or any other person or entity to file a statement or report in writing under oath or otherwise, as to all information the Attorney General may consider necessary;
- Examine under oath any law enforcement official or any other person alleged to have participated in or with knowledge of the alleged violation; or
- Issue subpoenas, obtain records, conduct hearings, or take any other actions in aid of any investigation. If a law enforcement agency, law enforcement official, or other person or entity fails to comply, in whole or in part, with a subpoena or other investigative request issued, the Attorney General may compel compliance through an action in the circuit court.
- Following completion of an investigation, the Attorney General may, upon their own information or upon the complaint of any person, maintain an action for declaratory,

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

injunctive, or any other equitable relief in the circuit court against any law enforcement agency, law enforcement official, or other person or entity who violates any provision of the Drone Act. These remedies are in addition to, and not in substitution for, other available remedies, penalties, or disciplinary action.

- Upon entry of an adverse judgment under the Drone as First Responders Act demonstrating a pattern or practice of violations of the Act, a law enforcement agency shall forfeit its ability to use drones for not less than six months for a first adverse judgment and up to one year for a second adverse judgment demonstrating a pattern or practice of violating the act.

709.18 EMERGENCY PROCEDURES

- (a) If PIC identifies any emergency during flight, the operator will perform necessary maneuvers to mitigate the emergency and then attempt to return aircraft to home/launch point as soon as it is safe to do so.
- (b) Loss of Power to Engine - In the event of a loss of power to the engine, the UAS will be required to make an emergency landing or controlled ditch. The PIC will announce to the crew the aircraft has lost power. Spotters will aid in identifying appropriate emergency landing areas if the UAS is not capable of reaching the intended landing area. The spotters will also help alert any public to the situation.
- (c) Aircraft Battery Failure - If the aircraft battery fails, the PIC will continue control inputs until the aircraft contacts the ground. The PIC will advise the crew of the battery failure. Spotters will aid in identifying appropriate emergency landing areas if the UAS is not capable of reaching the intended landing area. The visual observers will also help alert any nearby members of the public to the situation. The operator shall monitor battery level frequently and should alert the PIC to potential problems. Upon reaching an aircraft battery charge of 25% the operator should return the UAS to its launch/landing site as soon as possible. Upon reaching an aircraft battery charge of 10% the operator shall return the UAS to its launch/landing site immediately.
- (d) Transmitter Failure - As soon as signal to the transmitter is lost, the UAS will return to land at the landing/take off area automatically.
- (e) Loss of Control Frequency - The UAS auto-landing system will automatically use the pre-set GPS coordinates to return to land at the launch/landing area.
- (f) Malicious or Accidental Interference with Control Frequency – Visual Observer will attempt to locate the source of interference. PIC will attempt to move away from interference and attempt to land the UAS back at the launch/landing area as soon as possible.
- (g) Pilot Incapacitation – The spotter will immediately press the Return to Home button on the control unit so that the UAS returns to land at the landing/take off area automatically.
- (h) Fly Away – The PIC will immediately reduce the throttle to attempt a landing or 'controlled crash'. The PIC will announce to the crew when the aircraft stops responding. The crew will follow the aircraft (if possible) to try and maintain visual contact. Throughout this process, the PIC will continually try and regain control as

Crystal Lake Police Department

City of Crystal Lake PD Policy Manual

Unmanned Aircraft Systems

well as pressing the RTH button at regular intervals. If the craft continues to fly away towards controlled airspace, ATC shall be notified of the last position, altitude, heading, and of the approximate flight time remaining.

- (i) Aircraft Incursion - If any other aircraft makes an incursion in the operational area of the UAS, the PIC will immediately descend to ensure maximum separation is maintained between the drone and the infringing aircraft. If any observed aircraft looks likely to encroach on the operational area, the PIC should immediately consider safe evasive action.
- (j) Ground Incursion - If a person, vehicle, or animal encroaches within operational area, the pilot will cease all flight operations to assess the threat. The pilot will immediately move the UAS away from the threat to maintain separation until the third party is clear. If the encroachment continues, the pilot will continue to move the UAS away from the incursion and then attempt to land at the nearest safe location.
- (k) Lost Visual Contact - When the observer loses sight of the aircraft, they will announce to the PIC they lost sight. The PIC will hover until the observer re-establishes visual contact. If contact is still lost, the PIC will ascend to try and re-establish contact. If contact is still lost, the PIC will return the aircraft home.
- (l) Battery fire procedure - Smoke and/or fire coming from aircraft. Land at nearest available safe location, turn engines/aircraft off if possible, clear area, request assistance, extinguish fire (use CO2 or powder extinguisher, disconnect battery, leave to cool, safely dispose of battery).
- (m) Recovery - All reasonable efforts shall be made by the flight crew to recover lost aircraft, with crew safety a priority.