



VILLAGE OF OSWEGO DEPARTMENT OF POLICE

GENERAL ORDER: 21-002 SUBJECT: Small Unmanned Aircraft Systems (sUAS)

DATE ISSUED: 05/11/2021 **EFFECTIVE DATE:** 05/11/2021

DISTRIBUTION: All Personnel **REVIEW DATE**: 02/2024

PURPOSE: This order establishes guidelines under which a small unmanned aircraft may be utilized, and the

storage, retrieval and dissemination of images and data captured by such systems.

POLICY: It is the policy of the Oswego Police Department to ensure authorized Department members are

trained on the use of small unmanned aircraft systems, hereinafter referred to as sUAS, 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 the sUAS shall be in strict compliance to relevant statutes, the Illinois Drones as First Responders Act (PA 103-0101), the Illinois Freedom from Drone Surveillance Act (725 ILCS 167/), privacy rights, the Federal Aviation Administration, and 14

CFR 107 requirements. ¹

This General Order shall be comprised of the following sections:

I. Definitions

II. Program Coordinator and Team Supervisor

III. Training

IV. Use of the sUAS

V. Accident Reporting

VI. Restrictions

VII. Privacy Considerations

VIII. Equipment Inspection and Care

IX. Security and Retention of Recordings

X. Information Obtained from Private Drones

XI. Assistance to Other Agencies

XII. Attachments

XIII. Compliance

XIV. Effective Date

I. Definitions ²

- A. **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.
- B. **Information**: As defined in 725 ILCS 167, any evidence, images, sounds, data, or other information gathered by the unmanned aircraft.
- C. **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)
- D. **Remote Pilot in Command (RPIC)**: Person directly responsible for and is the final authority as to the operation of the small unmanned aircraft.
- E. **Routed Event**: A parade, walk, or race that: (1) is hosted by the State of Illinois or a county, municipality, township, or park district; (2) is outdoors and open to the public; and (3) 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)
- F. **Small Unmanned Aircraft System (sUAS)**: A small unmanned aircraft that does not carry a human operator, weighing less than 55 pounds on takeoff, and its associated elements, including communication links and the components that control the aircraft that are required for the safe and efficient operation of the aircraft. Also known as, and referred to in this order, a drone.
- G. **Special Event**: A concert or food festival that: (1) is hosted by the State of Illinois or a county, municipality, township, or park district; (2) is outdoors and open to the public; and (3) has an estimated attendance of: (i) 150 or more people in a unit of local government with a population that is less than 50,000; (ii) 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; (iii) 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 (iv) 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)
- H. **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.
- I. **Department Recording:** Electronic audio, photo, or video record that does not contain private citizens or their property or fall under Section IV. below.

II. Program Coordinator and Team Supervisor ³

- A. The Support Services Deputy Chief is designated as the sUAS Program Coordinator, responsible for the management of the Department's small unmanned aircraft program. The Program Coordinator has the following responsibilities:
 - 1. Supervision of the Team Supervisor in matters related to the sUAS program.
 - 2. Ensure that policies and procedures conform to current laws, regulations, and best practices.
 - 3. Coordinate the FAA Certification of Authorization (COA) and/or the 14 CFR 107 application process; ensure all certifications are current.
 - 4. Ensure authorized remote pilots in command have completed the required Federal Aviation Administration (FAA) and 14 CFR 107 training and Department approved training in the operation, applicable laws, policies and procedures regarding use of the sUAS.
 - 5. Annually, by April 1, report to the Illinois Criminal Justice Information Authority the number of small unmanned aircraft owned by the Department (725 ILCS 167/35(a)).
 - a. The number of drones owned by the Department.
 - b. The number of times a drone was used pursuant to each paragraph of 725 ILCS 167/15, including the date of use, time of use, reason for use, location, whether video was recorded, and whether the video is designated for retention for training purposes.
 - c. The report shall contain a copy of the Department's latest policy concerning drones as of the most recent April 1.
 - 6. Implement and make publicly available on the Department's website the Department's policy governing the operation, use, administration, and oversight of its drone program. (725 ILCS 167/35(c))
- B. A Department supervisor with the rank of Sergeant or above and selected by the Program Coordinator will be the <u>sUAS Team Supervisor</u>. The Team Supervisor assists the Program Coordinator with the management of the program. The Team Supervisor shall have completed the required Federal Aviation Administration (FAA) and 14 CFR 107 training and has the following responsibilities:

- 1. Supervision of officers assigned to the sUAS in matters related to the sUAS program.
- 2. Develop uniform protocol for submission and evaluation of requests to deploy the sUAS, including urgent requests made during on-going or emerging incidents.
- 3. Develop protocol for conducting criminal investigations involving the sUAS, including documentation of time spent monitoring a subject.
- 4. Implement a system for notification to the public and media outlets regarding sUAS deployment when appropriate.
- 5. Develop an operational protocol governing the safe deployment and operation of a sUAS, along with documenting all missions.
- 6. Develop sUAS inspection, maintenance, and record keeping protocols to ensure continuing airworthiness of the sUAS, up to and including its overhaul or life limits.
- 7. Develop protocol to ensure all data intended to be used as evidence is accessed, maintained, stored and retrieved in a manner that ensures its integrity as evidence, including strict adherence to chain of custody requirements, and is submitted into evidence in accordance with Department policy and procedures. 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.
- 8. Develop protocol to ensure retention and purge periods are maintained in accordance with established records retention schedules.
- 9. Facilitate law enforcement access to images and data captured by the sUAS.
- 10. Recommend program enhancements, especially regarding safety and information security.
- 11. Ensure established protocols are followed, including at least quarterly inspections for operational readiness of equipment. (followed by monitoring and providing quarterly program reports to the commander responsible for the program)
- 12. Conduct a documented review of Flight Records, Pilot Training, and Equipment Maintenance on at least an annual basis. (Conduct a documented annual audit of the program and flight documentation)
- 13. Develop training protocol to ensure all RPICs have developed the necessary proficiency to safely and efficiently operate a sUAS in a law enforcement environment. This includes initial training, proficiency training, and advanced training.

III. Training

- A. Prior to authorization to operate a sUAS, assigned Department members must complete mandatory training provided by the Department to obtain an understanding on how to use the sUAS and the procedures outlined in this policy. (Attachment D)
- B. On an annual basis, assigned members will complete refresher training to ensure the safe and efficient operation of sUAS. This training shall include any applicable changes, updates, or other revisions to Federal Regulations, State Regulations, Local Ordinances, and Department Policies and Procedures. (Additional training may be provided at periodic intervals for officers displaying a substandard performance in the use of sUAS equipment.) ⁴
- C. Assigned members will maintain currency on any sUAS prior to performing RPIC responsibilities. If any RPIC is not current on an sUAS, they must demonstrate proficiency by passing a sUAS Currency Check Ride prior to assuming RPIC responsibilities.
- D. An RPIC must satisfactorily complete Night Operation Training prior to conducting any night flight. Night flight is defined as any flight that has any portion of the flight between 30 minutes after sunset and 30 minutes before sunrise.

IV. Use of the sUAS by Law Enforcement 5

- A. The Department must obtain applicable authorizations, permits, or certificates as required by FAA prior to deploying or operating the sUAS, and ensure these documents are current.
- B. Pursuant to 725 ILCS 167/15, the sUAS may not be used by law enforcement to gather information, except during the following types of situations:

- 1. To counter a high risk of a terrorist attack by a specific individual or organization if the United States Department of Homeland Security determines that credible intelligence indicates there is a risk.
- 2. Pursuant to a search warrant based on probable cause under Section 108-3 of the Code of Criminal Procedure of 1963. 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. The Department possesses 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 the sUAS under this paragraph is limited to a period of 48 hours.
 - a. Within 24 hours of the sUAS initiation under this paragraph, the Chief of Police must report its use, in writing, to the local State's Attorney (**Attachment C**).
- 4. If the Department is not undertaking a criminal investigation but is:
 - a. Attempting to locate a missing person;
 - b. Engaging in search and rescue operations; or
 - c. Aiding a person who cannot otherwise be safely reached.
- 5. To obtain crime scene and traffic crash scene photography, in a geographically confined and time-limited manner, to document specific occurrences. Use of the sUAS under this paragraph on private property requires either a search warrant or lawful consent to search. As it relates to lands, highways, roadways or areas belonging to the state, a search warrant or consent to search is not required. Every reasonable attempt shall be made to only photograph the crime scene or traffic crash scene and to avoid other areas.
- 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. There is no requirement for an official declaration of disaster or public health emergency prior to use.
- 7. To conduct an infrastructure inspection of a designated building or structure at the express request of a local government agency. Department members shall make every reasonable attempt to photograph only the building or structure and to avoid other areas.
- 8. 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.
- 9. 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. The Department's Public Safety Answering Point (PSAP) is KenCom.
- 10. If the Department is using a drone at a routed event or special event. The use of a drone under this section requires that:
 - a. 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;
 - b. 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
 - c. The drone is flown in accordance with Federal Aviation Administration safety regulations.
- 11. Under Section B.10 above, the Department may use the drone:
 - a. In advance of an 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; or
 - b. During the event to proactively support public safety personnel by monitoring the event footprint in real time:
 - 1) 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;
 - 2) To evaluate crowd size and density;
 - To identify activity that could present a public safety issue for the crowd as a whole, including crowd movement;

- 4) To assist in the response of public safety personnel to a real-time public safety incident at the event; and
- 5) To assess the traffic and pedestrian flow around the event in real time.
- C. Requests to schedule the sUAS should be made to the Team Supervisor. If there is an immediate need to deploy, the Shift Supervisor will be the approving authority.
- D. When appropriate, notification of the sUAS deployment shall be made to the public and/or media outlets.
- E. At the conclusion of each deployment, all recordings made shall be either submitted into evidence or transferred for Team Supervisor review.
- F. All uses of the sUAS shall be documented through the DroneSense Pilot Application. Use of the drone should be documented in the Officer's CAD notes or Case Report as appropriate. Any use of a different application must have prior approval from the Team Supervisor or Program Coordinator.
- G. Use of the sUAS is authorized to obtain Department Recordings to memorialize events, celebrations, training, and for the creation of marketing materials.

V. Accident Reporting

- A. The remote pilot in command is required to notify the Team Supervisor or Shift Supervisor of all accidents that result in injury or damage to Village property as well as any accident or incident that results in damage to property or injury that could result in a claim against the Village. The incident must be documented as soon as possible and the officer will include a requisition documenting damaged equipment.
- B. The FAA requires notification of certain sUAS accidents. Pursuant to 14 CFR 107 Drone Operation and Certification Regulations, within 10 days after the accident, the remote pilot in command must report accidents to the FAA by using the FAA's DroneZone Portal at: https://faadronezone.faa.gov/#/ in the following situations:
 - 1. Serious injury to any person or loss of consciousness.
 - 2. Damage to any property, other than the sUAS, 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.

VI. Restrictions

- A. The sUAS shall not be used to:
 - 1. Conduct random surveillance activities or requests for information.
 - 2. Target a person based solely on individual characteristics such as, but not limited to race, ethnicity, national origin, religion, disability, gender, or sexual orientation.
 - 3. Harass, intimidate, or discriminate against any individual or group.
 - 4. Conduct personal business of any type.
 - 5. Conduct any flight that would be considered outside the scope of authorized Department use as outlined in this policy.
- B. sUAS deployments by the Department must also adhere to the operating procedures established by the FAA. These rules are outlined below, but are not limited to:
 - 1. Operate the sUAS in accordance with Federal, State, Local Regulations, and Department Policy and Procedures.
 - 2. Operate within the sUAS manufacturer guidelines and limitations. (Attachment B)
 - 3. Conduct a pre-flight check to ensure the sUAS in condition for safe operation.
 - 4. Keep the sUAS in visual line of sight.
 - 5. Fly during day or twilight hours, unless authorized by FAA waiver for night flight.
 - 6. Fly at or below 400 feet above ground level, or as otherwise authorized by the FAA.
 - 7. Fly at or below 100 mph.
 - 8. Yield right of way to manned aircraft.

- 9. Must not fly over people.
- 10. Must not fly from a moving vehicle, except in rural areas.
- 11. During an emergency situation, deviations from policy are permitted as necessary to avoid loss of life and destruction of property and equipment in accordance the principles of Aeronautical Decision-Making.
- D. A Department member shall notify the Team Supervisor 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 sUAS.

VII. Privacy Considerations

- A. Use of the sUAS potentially involves privacy considerations. Absent a warrant or exigent circumstances, operators and visual observers shall adhere to FAA altitude regulations and shall not intentionally record or transmit images of any location where a person would have a reasonable expectation of privacy. Operators and visual observers shall take reasonable precautions to avoid inadvertently recording or transmitting images of areas where there is a reasonable expectation of privacy.
- B. When there are specific and articulable grounds to believe that the sUAS will collect evidence of criminal wrongdoing and/or if the sUAS will be used in a manner that may intrude upon reasonable expectation of privacy, the Department shall obtain a search warrant prior to conducting the flight. (43.1.5)

VIII. Equipment Inspection and Care

- A. The sUAS and related equipment shall be maintained in the state of operational readiness and inspected at least quarterly (**Attachment A**). Assigned officers shall use reasonable care to ensure the proper functioning of the sUAS equipment. Malfunctions and other deficiencies shall be brought to the attention of the Team Supervisor as soon as possible. Extra caution must be taken to ensure the equipment is not stored in extreme temperatures.
- B. Prior to use, the RPIC shall Conduct a physical inspection of the sUAS and its associated components in accordance with the sUAS Preflight Inspection.
- C. The sUAS shall be inspected periodically in accordance with an Inspection Schedule developed by the Team Supervisor. (**Attachment A**)
- D. The sUAS shall be maintained in accordance with the Maintenance Schedule developed by the Team Supervisor. (Attachment A)
- E. Any time a sUAS deficiency is discovered that would impact the safe operation of the sUAS, it shall be grounded until the deficiency is corrected.

IX. Security and Retention of Recordings

- A. Department members should be aware that recordings may contain sensitive information and members 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 relationships with citizens, subject victims to an invasion of privacy, jeopardize prosecutions, and endanger the safety of individuals.
- B. All recordings are considered investigative property of the Oswego Police Department. The utmost care and caution shall be taken to ensure the recordings are not mishandled or misused.
- C. Members shall not edit, alter, erase, duplicate, copy, share, or otherwise distribute in any manner recordings without written authorization by the Team Supervisor. Any violations related to unauthorized edits, alterations, and dissemination of this data shall be cause for disciplinary action
- D. Any non-evidentiary recordings shall be saved for review by the Team Supervisor. Reviews shall be completed at least every 30 days (**Attachment** A). At the completion of the review, any

recordings that are not retained as Department Recordings or in accordance with 725 ILCS 167/20 shall be deleted.

- E. 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.
- F. Pursuant to 725 ILCS 167/20, within thirty (30) days of the recording, the Department shall destroy all information gathered by the sUAS, 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.
 - This section does not apply to written flight records or flight records maintained by DroneSense.
- G. The retention of recordings that are exempt from the thirty (30) day requirement is at the discretion of the Team Supervisor or determined by the completion of the criminal investigation or criminal trial.

X. Information Obtained from Private Drones

- A. The Department may acquire or direct the acquisition of information obtained through the use of a drone owned by a private third party only for the purpose of undertaking the tasks outlined in Section IV.B above. This does not prevent a private third party from voluntarily submitting information acquired by a privately owned drone to law enforcement.
 - a. In the event that law enforcement acquires information from the voluntary submission of that information, whether under a request or on a private drone owner's initiative, the information is subject to Sections IX.E and F above regarding disclosure and retention rules.

XI. Assistance to Other Agencies

A. The sUAS equipment shall not be loaned to other agencies. Requests by other agencies for sUAS assistance require that a Department assigned RPIC respond with the equipment and operate it. Visual Observers can be selected from any suitable personnel that are available, regardless of organization.

XII. ATTACHMENTS

Attachment A: sUAS Maintenance Inspections and Schedules

Attachment B: Mavic Drone Operations Manual **Attachment C**: sUAS State's Attorney Notification

Attachment D: sUAS Training

XIII. COMPLIANCE

It is the responsibility of Officers, Supervisors and Administrative Personnel to comply with all sections of this directive.

XIV. EFFECTIVE DATE

This General Order shall be effective as of: 05/11/2021

Cross Reference:

725 ILCS 5/108-3 Grounds for a Search Warrant725 ILCS 167 Freedom from Drone Surveillance Act14 CFR 107 Drone Operation & Certification Regulations

Chief of Police Jason Bastin Oswego Police Department

¹⁻⁵ Amended 02/2024



Oswego Police Department



Attachment A

SUAS Maintenance Inspections and Schedules *Mavic 2 Enterprise Dual*

Schedules:

Monthly inspection of case, airframe, controller, display, and batteries.

Blades: Replace every 200 flights or anytime blades appear bent or cracked.

Quarterly: Drain and Charge Batteries.

Maintenance Inspection

Case

• Inspect case for damage. Repair or replace any damaged components as soon as practicable.

Drone

- Inspect the outer shell and other components for damage. Contact DJI Support if any damage is spotted.
- Check condition of propellers. Make sure there are no bent blades or cracks. Replace blades every 200 flights, or if bent or cracked.
- Inspect the gimbal for damage and camera lens for dust or dirt. Clean with glass wipe if dusty or dirty.

Battery

- Inspect batteries for damage. Do not charge or use swollen, leaky, or damaged batteries.
- Inspect battery terminals for dirt or corrosion. Clean terminals with a clean, dry cloth.
- *Quarterly: Fully charge and then completely discharge batteries.
- Storage:
 - \circ Battery should be charged to 40 60% for long term storage.
 - o Battery will automatically discharge to below 60% if not used for 10 days.
 - Storing batteries at 40-60% that will not be used for extended periods will greatly extend battery life.
- Temperature for Battery Charging: 41 104 degrees Fahrenheit. Do not charge batteries immediately after flight.
- After charging is complete disconnect your batteries from the charger.



DECEMBER

Oswego Police Department



SUAS Maintenance Inspection Log *Mavic 2 Enterprise Dual*

AIRFRAME & S/N:					
BATTERY S/	N(s):	· · · · · · · · · · · · · · · · · · ·			
			Inspections:		
Month	Date	Initials	Monthly	Flights	Quarterly
JANUARY					
FEBRUARY					
MARCH					
APRIL					
MAY					
JUNE					
JULY					
AUGUST					
SEPTEMBER					
OCTOBER					
NOVEMBER					



Oswego Police Department sUAS Maintenance Log



COMPONENT:			S/N:		
DATE	ITEM	DEFICIENCY	ACTION	INITIALS	



Oswego Police Department sUAS Tracking Log



sUAS	DATE / TIME OUT	INITIALS	DATE / TIME IN	INITIALS



Oswego Police Department



sUAS Electronic Information Review Form

Reviews shall be completed at least every 30 days. At the completion of the review, any recordings that are not retained as Department Recordings or in accordance with 725 ILCS 167/20 shall be deleted.

DATE	RECORDINGS	INITIALS	DATE	RECORDINGS	INITIALS
	DELETED			DELETED	

Attachment B

OSWEGO POLICE DEPARMTENT MAVIC 2 ENTERPRISE DUAL FLIGHT OPERATIONS

WEATHER CHECK

- 500' below cloud bases max altitude 400' AGL (Minimum 900'cloud base)
- 2. 3 miles visibility (and 2000' between clouds if same altitude)
- Max wind 22.3 MPH
- 4. Operating Temperatures 14 to 104 degrees Fahrenheit
- 5. Do not fly in fog, rain, or snow.

OPERATING PARAMETERS

- 1. Maintain visual line of sight.
- 2. No faster than 100 mph.
 - a. 44.7 mph in S-mode (No Obstacle Avoidance)
 - b. 31 mph in P-mode
 - c. 2.2 mph in T-mode
- 3. No overflight of people.
- 4. 30 min before sunrise 30 min after sunset, unless authorized under valid night waiver or Expedited SGI Waiver approved by SOSC.
- Operate outside of controlled airspace unless approval through FAA (via Dronezone or LAANC).
- Max Flight Time 31 min.
- 7. Overall Flight Time 25 min (with 15% remaining battery level).
- 8. PIC must have operational cell phone.

MISSION PROFILE

- DAY or NIGHT W/ WAIVER.
- INDOOR or OUTDOOR Flight.

SENSORS

- 1. Optical
- 2. FLIR

EXTERIOR CASE

- 1. Check condition, identify damaged, missing, worn parts.
- 2. Ensure latches operate properly.

INTERIOR CASE

- 1. Ensure complete, no missing pieces.
- 2. Remove Drone.
- 3. Remove Gimbal Stabilizer.
- 4. Unfold the front arms, then rear arms.
- 5. Mount rotors, and ensure securely tightened.
- 6. Mount strobe, speaker, or light as appropriate.
- 7. Mount rotor guards if appropriate.
- 8. Install battery if not already installed.
- Mount and connect tablet mount and tablet on controller (unless Smart Controller).
- 10. Extend antennas.
- 11. Ensure joysticks are mounted.

UAS INSPECTION

- 1. Inspect fuselage, arms, landing gear, and sensors for serviceability.
- 2. Check all fittings and connections.
- 3. Ensure MicroSD card has been inserted, if necessary.
- 4. Ensure that the sensors for the Obstacle Sensing System are clean.
- 5. Ensure remote controller, Intelligent Flight Battery, and mobile device are fully charged.
- 6. Propellers are mounted correctly and firmly.

IF EXTENDED FLIGHT OPERATIONS

- 1. Ensure chargers operational.
- 2. Verify charge on extra batteries.
- 3. Begin charging if necessary.

SYSTEM RUNUP

- Place aircraft in open, flat area with the Aircraft Status Indicator facing you.
- 2. Ensure camera gimbal free from obstruction.
- 3. Power on remote controller, tablet, and login to DroneSense.
- Power on the sUAS.

DIGITAL COCKPIT EQUIPMENT CHECKS

- 1. Verify battery life.
- Wait until Aircraft Status Indicator blinks green indicating Home Point has been recorded and is safe to fly. If no GPS, fly with extreme caution, and consider canceling mission due to increased risk profile.
- 3. Check gimbal operation, pan and tilt rate.
- 4. Confirm external storage for gathering evidence.
- 5. Configure FLIR settings for mission profile, if applicable.
- 6. Configure RTH, hover, land for mission profile.

RISK ANALYSIS ASSESSMENTAND RISK MITIGATION MEASURES (IF NECESSARY)

- 1. Physical Barriers
- 2. Environmental Conditions
- 3. Ambient Light Conditions
- 4. People
- 5. Vicinity to Airport & other Aircraft

6. Other:	
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SAFETY BRIEFING / PRE-FLIGHT BRIEFING

- 1. Confirmation of Mission Authority
 - a. OPD
 - b. LAANC (AIRMAP / DRONEUP)
 - c. SOSC
- 2. Mission Intent
- 3. Mission Goals
- 4. Methods to achieve Goals
- 5. Handoff Procedures

(Attachment B)

- 6. Current and Forecasted Weather (METAR / TAF)
- 7. TFR(s)
- 8. NOTAM(s)
- 9. Mission Limitations & Safety Barriers
 - a. Battery Charge
 - b. GPS Strength
 - c. Potential for Radio Interference
 - d. Minimum Safe Height (MSH)
 - e. Minimum Obstacle Clearance Altitude (MOCA) for Night Flight.
- 10. Review of Flight Area, Max Ceiling, Min Floor.
- 11. Preferred availability of 2 cell phones, 1 cell phone mandatory.
- 12. Non-interference with LEA mission personnel.
- 13. Emergency Procedures
 - a. Fatal Condition Response
 - b. Lost Visual Contact
 - c. Lost Link
- 14. LZ / Emergency LZ

BEFORE TAKE OFF

- 1. Ensure VO ready and capable of instantaneous communications.
- 2. Ensure T/O area clear (incl. bystanders)
- 3. Joysticks diagonally in and down; release.
- 4. Anti-collision Light on for Night Flight.
- 5. Ensure all systems operating normal.

AFTER TAKE OFF

- 1. Establish 10' Hover.
- 2. Conduct flight control check.
- 3. If FLIR is to be used:
 - a. Select suitable color pallet for FLIR.
 - Select Isotherm only if ambient ground temperature is 15 degrees less than search subject, if applicable.
- 4. Fly safe.

BEFORE LANDING

- 1. Verify LZ clear.
- 2. Identify obstructions.
- 3. Identify people in area.
- 4. Determine approach path.

AFTER LANDING

1. Left joystick down; ensure rotors stop.

SHUTDOWN AND STORAGE

- 1. Press and hold power on Mavic 2 Enterprise Dual.
- 2. Press and hold power button on Controller and Tablet.
- 3. Remove battery. Charge used battery.
- Install Gimbal Stabilizer.
- 5. Check Condition of propellers. Make sure there are no bent blades or cracks.
- Remove blades and store.
- 7 Fold in arms
- 8. Store Mavic 2 Enterprise Dual in Case.
- 9. Remove adapter and tablet from controller.
- 10. Store Controller in case.
- 11. Ensure all items properly stored in case.
- 12. Secure all latches.
- 13. Secure Tablet and Adapter to case exterior.

EMERGENCY PROCEDURES

- 1. Fatal Condition Response (FCR) a sensor failure, motor failure, airframe damage or power failure.
 - a. The PIC will announce the FCR.
 - The PIC will immediately initiate an emergency landing.
 - The visual observer will assist the PIC to avoid persons or property during landing.

- 2. Lost Link loss of communication link between the UAS and the hand controller.
 - a. The PIC will announce the failure to the observer.
 - b. The UAS will enter a fail-safe mode within one second of the condition being detected The UAS will be set to return to the point of departure or "home." After landing, the UAS motors will be powered off.
 - c. In the event of a Lost Link Fly-Away, the PIC will immediately notify the Air Traffic Control. (Aurora Airport Control Tower: 630-466-5617)
- 3. Lost Visual Contact loss of sight of the UAS by the Observer.
 - Visual observer will announce lost sight of UAS.
 - b. PIC will hover until visual observer re-establishes visual contact.
 - If Contact is still lost, the PIC will ascend to reestablish visual contact.
 - d. If unable to re-establish contact, the PIC will return the UAS to home above the Minimum Safe Height (MSH) and land. If sight is re-established by the visual observer, the mission can resume.

Attachment C



VILLAGE OF OSWEGO

DEPARTMENT OF POLICE

3355 Woolley Road ~ Oswego, IL 60543



Jeffrey R. Burgner Chief of Police Emergency: 911 Non-Emergency: (630) 554-3426 Administration: (630) -551-7300 Fax: (630)554-9379

DATE:

TO: KENDALL COUNTY STATE'S ATTORNEY'S OFFICE

FROM: CHIEF JASON BASTIN

SUBJECT: uSAS (DRONE) USE

CC: AS NEEDED

Pursuant to the Illinois Freedom from Drone Surveillance Act 725 ILCS 167/15(3);

(3) If a law enforcement agency 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. The use of a drone under this paragraph (3) is limited to a period of 48 hours. Within 24 hours of the initiation of the use of a drone under this paragraph (3), the chief executive officer of the law enforcement agency must report in writing the use of a drone to the local State's Attorney.

I would like to inform you that this office utilized our DJI Mavic 2 Enterprise Dual in compliance with the above compiled statute. Further information can be obtained through our Report Number .

Thank you,

Chief Jason Bastin Oswego Police Department 3355 Woolley Road Oswego, IL 60543

Attachment D



Oswego Police Department



sUAS Flight Training

Initial Entry RPIC Flight Training and Certification

- A. All employees will receive both ground and flight training through an authorized program prior to taking the FAA Certification Knowledge Test.
- B. All employees must create accounts with the FAA at www.faadronezone.faa.gov and www.faasafety.gov
- C. Employees successfully passing the FAA Certification Knowledge Test must create an account with the FAA at www.iacra.faa.gov and obtain a Remote pilot Certificate with sUAS rating prior to executing RPIC duties.
- D. Every 24 months, RPICs must pass the FAA Recurrent Knowledge Test to maintain currency.
- E. Any pilot without a current sUAS rating will not be allowed to conduct RPIC duties.

sUAS Qualification Course

- A. All RPICs will receive training on the sUAS utilized by the Oswego Police Department. Training will cover sUAS, associated equipment, software, and basic flight tactics, policies, and procedures.
- B. RPICs will demonstrate proficiency in these areas prior to being authorized to perform RPIC duties.

Night Flight Training Course

In accordance with a current Certificate of Waiver for 14 CFR 107.29, Daylight Operations, all RPICs and VOs must pass Night Flight Training prior to performing RPIC / VO duties outside of daylight operation.

Refresher Training

Conducted on an annual basis, this training will include any applicable changes, updates, or their revisions to Federal Regulations, State Regulations, Local Ordinances, and Department policies and Procedures.

Currency & Proficiency Check Ride

- A. All RPICs must pass a Check Ride prior to initially assuming RPIC responsibilities.
- B. Any RPIC who has not conducted flight operations with at least 3 take offs and 3 landings, in the preceding 90 days, must satisfactorily complete a check ride prior to resuming RPIC duties.
- C. A Check ride will consist of 2 parts:
 - a. Part 1: Written Examination on sUAS flight operations.
 - b. Part 2: Training Flight reviewing basic flight operations, to include at least 3 take offs and 3 landings.

Continuing Flight Education

- A. Additional training will be conducted as recommended by the Team Supervisor.
- B. RPICs may be sent to specialty training as recommended by the team supervisor.