

Unmanned Aerial Vehicle

STANDARD NO(S):

NYSLEAP 42.4

NYSSA #

DATE:

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REFER TO:

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I. **OBJECTIVE:**

To establish guidelines for personnel who are assigned responsibilities associated with the deployment and use of unmanned aerial vehicles owned by the Seneca County Sheriff's Office.

II. **POLICY:**

The Seneca County Sheriff's Office has established guidelines on the deployment of unmanned aerial vehicles when such deployment is appropriate in the performance of their official duties.

III. **DETAILS:**

A. **Definitions:**

1. Unmanned Aerial Vehicle (UAV) or Unmanned Aircraft (UA) - An aircraft that is intended to navigate in the air without an on-board pilot. Also alternatively called Remotely Piloted Aircraft (RPA), Remotely Operated Vehicle (ROV), or Drone.
2. Unmanned Aircraft System (UAS) - A system that includes the necessary equipment, network, and personnel to control an unmanned aircraft.
3. Authorized Agency Personnel - Personnel assigned by the Sheriff or his designee to operate UAVs or any portion of a UAS who have shown competency in the operation of UAVs and who meets all the requirements of the COA issued by the FAA.
4. Certificate of Authorization (COA) or Certificate of Waiver (COW) - Prior to usage of a UAV, all government agencies, including law enforcement, must register the specific UAV and all intended uses with the FAA if the UAV weighs more than .55 pounds and obtain a Certificate of Authorization (COA) permitting them to use a UAV within a certain area of space, to be determined by the FAA in consultation with the applying agency.

5. Emergency COA – An agency can request that the FAA issue an Emergency COA when:
 - a. A situation exists in which there is distress or urgency and there is an extreme possibility of a loss of life;
 - b. The requesting agency has determined that manned flight operations cannot be conducted efficiently;
 - c. The proposed UAS is operating under a current, approved COA for a different purpose or location.
6. Defined Incident Perimeter – A location with a defined perimeter to be determined based on the scope of the operation with a defined operational ceiling at or below 400 feet above ground level (AGL) or 400 feet above a feature/structure that is within the scope of the UAV operations.
7. Digital Multimedia Evidence (DME) – Digital recording of images, sounds, and associated data captured by a UAV or UAS.
8. Remote Pilot in Command (PIC) – a person who holds a remote pilot certificate with a sUAS rating and who has the final authority and responsibility for flight operations, equipment, the person manipulating the controls, and all other flight operations personnel.
9. Aeronautical Decision Making (ADM) - A systematic approach to the mental process used by pilots to consistently determine the best course of action in response to a given set of circumstances.
10. Crew Resource Management (CRM) – A component of ADM where the pilot of a sUAS makes effective use of all available resources, including human resources, hardware, and information.
11. Person Manipulating the Controls (PMC) – A person who is controlling the flight of a UAS under the supervision of the PIC and safety of an operation conducted under part 107.

IV. PROCEDURE:

- A. Administration – No deployment of a Sheriff Office's UAS will be conducted without prior authorization from the Sheriff or his designee and all such deployments must conform to a COA and the policy and procedures defined herein. UAVs may be used for, but are not limited to, the following purposes:

1. Situational Awareness – To assist decision makers in understanding the nature, scale or scope of an incident and for planning/coordinating an effective purpose.
2. Search and Rescue – To assist missing person investigations, AMBER alerts, missing child alerts, missing college student alerts, vulnerable adult alerts, and other search and rescue missions.
3. Tactical Deployment – To support the tactical deployment of officers and equipment in emergency situations.
4. Visual Perspective – To provide an aerial perspective to assist officers with directing crowd control, traffic, special circumstances, and temporary perimeter security.
5. Scene Documentation – To document a crime scene, accident scene, or other major incident scene.
6. Agency Assistance – To assist another agency with any of the five purposes listed above.

B. Procedures for use of an Unmanned Aerial Vehicle – All deployments of UAVs should incorporate procedures to assure authorized usage, safe operations, secure storage, and documentation of usage of UAVs. Procedures for the use of UAVs shall include, but are not limited to, the following:

1. Prior to and during deployment of UAVs, the Seneca County Sheriff's Office will obtain and maintain:
 - a. registration and authorization from the FAA
 - b. permit(s) from the controlling agency, if necessary
 - c. a COA or emergency COA, if necessary
2. UAVs will only be operated by Seneca County Sheriff's personnel who have shown competency in the operation of a UAS.
3. Authorized personnel will inspect and test UAVs prior to each deployment to verify maintenance, proper functionality, general airworthiness, mission specific airworthiness, and proper radio frequency.
4. Prior to each flight operation, the PIC will perform the following inspections:
 - a. Crew Fitness: The PIC will ensure that personnel involved with flight operations are not under the influence of drugs or alcohol, are not using any medication that affects their physical dexterity or mental faculties, and are not suffering from any physical or

mental condition that could interfere with safe operations of the UAS or otherwise affect ADM. The PIC will also ensure that such personnel participate in any preflight briefing where they will review the mission, goals, methods, and procedures for the flight, including, but not limited to:

- 1) UAV malfunction/failure procedures
- 2) Reasons for flight termination
- 3) Flight diversion and lost link procedures
- 4) Radio frequency to be used
- 5) Personnel communication procedures
- 6) Take-off and landing site, including alternates
- 7) Defined incident and flight perimeters
- 8) Contents of the COA

b. Aircraft Fitness: The PIC will ensure that all equipment that comprises the UAS is functional and ready for safe use, including:

- 1) All batteries, controllers, display devices, and other peripheral equipment (MiFi, battery pack, etc.) have been charged
- 2) The global positioning system (GPS) is functioning and has good signal strength
- 3) The physical components of the aircraft (props, camera, landing gear, safety lighting, etc.) are properly attached, free from defect/damage, and functional

c. Lighting: Authorized personnel will only deploy UAVs in accordance with a COA or emergency COA which will outline the necessary requirements and UAV capabilities needed for safe operation as well as specifically denote whether day and/or night flight is permitted.

d. Line-of-sight: All flights will be conducted under Visual Flight Rules which require that the PMC keep line-of-sight with the UA throughout the entire flight, including with the use of a visual observer or observers. Authorized personnel will review the incident and flight perimeters to identify potential hazards present within such perimeters prior to each deployment.

- e. Altitude: All UAV flights shall be conducted at less than 400 feet above ground level unless otherwise noted in the COA or approved by FAA in an emergency COA.
- f. Weather: The PIC will check and record the following weather information prior to each deployment of a UA:
 - 1) Temperature : Authorized personnel will only deploy UAVs when the temperature is within the parameters set forth by the operational guidelines of the UAV being deployed. Authorized personnel will adjust UAV battery and flight length as necessary according to temperature.
 - 2) Wind: Authorized personnel will measure wind velocity prior to each deployment and will only deploy UAVs when the wind velocity is within the parameters set forth by the operational guidelines of the UAV being deployed.
 - 3) Precipitation and Other Weather Phenomenon: Prior to deployment of a UAV, authorized personnel will assess the level of risk that precipitation such as rain, snow, and sleet, or other weather phenomenon such as fog, will have on flight operations, including, but not limited to, visibility and overall safety. Authorized personnel may deploy UAVs if precipitation and/or other weather phenomenon do not prevent personnel from adhering to line-of-sight, minimum weather requirements, and the UA's manufacturer's guidelines.
- 5. Authorized personnel will store, maintain, and operate each sUAS in a secure, proper, and careful manner. If any sUAS equipment malfunctions, cease deployment in the safest manner possible, remove the malfunctioning equipment from the sUAS, document the nature of the malfunction on the flight log, and report such malfunction to the Sheriff or his designee as soon as practicable. The Sheriff or his designee may require that a written report documenting the equipment malfunction be completed and submitted.
- 6. Authorized personnel will coordinate maintenance, repairs, and updates of each UAS on an as needed basis and/or per manufacturer's guidelines. Authorized personnel will coordinate with IT on an as needed basis to resolve programmatic/technical issues with any UAS equipment.
- 7. Authorized personnel shall inform local Air Traffic Control upon the issuance of any applicable COA.

8. DME captured or recorded by UAVs shall be the sole property of the Seneca County Sheriff's Office unless otherwise agreed to by the Sheriff or his designee.
9. All UAV flights shall be documented and contain the following information:
 - a. The reason for the flight, as set forth above in Section IV.A.
 - b. Date, time, duration, weather and location of the flight.
 - c. Name of supervisor approving flight.
 - d. List of staff assigned to flight.
 - e. Summary of actions taken, activities, and outcomes from deployment.
 - f. Brief description of captured DME and the storage location of same.
10. The Seneca County Sheriff's Office will work closely with the Seneca County District Attorney's Office regarding DME. The handling of DME will be in accordance with Seneca County Sheriff's Office evidence collection policy and procedures, including the placement of original DME into evidence. Upon proper request, the Investigating Officer can obtain a working copy of DME in evidence.

In the event of an arrest, relevant captured DME will be provided to the Seneca County District Attorney's Office at the time of arrest or as soon as possible thereafter.
11. Authorized personnel shall obtain a search warrant when there is reasonable belief that the flight pattern of a UAV or the collection of DME may intrude upon a place and time when a person has a reasonable expectation of privacy, as defined by New York State Penal Law Section 250.40 Sub. 1.

C. Restricted Use of an Unmanned Aerial Vehicle.

1. Authorized personnel will only deploy UAVs for a public safety purpose as set forth in this policy.
2. Authorized personnel shall not deploy UAVs in an unsafe manner or in violation of FAA rules governing the use of UAVs by governmental agencies.
3. Weapons shall not be affixed to UAVs.

4. Authorized personnel shall not deploy UAVs without permission from the Sheriff or his designee.

D. Digital Multimedia Evidence Storage and Retention.

1. Storage

- a. Authorized personnel shall handle and store captured DME in accordance with existing SCSO procedures for storing digital files and applicable statutes regarding, but not limited to, evidence discovery and disclosure pursuant to the Freedom of Information Law (FOIL). Any requests for DME disclosure should be reviewed by the Sheriff or his designee and in consultation with the Seneca County Attorney.

2. Downloading Procedures

- a. Authorized personnel shall securely download all captured DME at the completion of each mission. Each DME file shall be given a unique number created in SPILLMAN, including but not limited to , date, time, location, involved personnel and other mission identifiers.

3. Permitted Review of DME

- a. Access to captured DME must be approved by authorized personnel and documented.
- b. Review of DME will be authorized under the following terms:
 - 1) The Sheriff or his designee will be permitted to review a copy of the captured DME when:
 - a) investigating alleged misconduct reports or meritorious conduct
 - b) such DME would be beneficial in reviewing the performance of the personnel who captured the DME or who were involved with the incident depicted
 - c) determining whether DME is of value as a training tool
 - 2) The Sheriff and other members of the SCSO will be permitted to review a copy of the captured DME for purposes of:

- a) conducting a criminal investigation
 - b) preparing for courtroom testimony or courtroom presentation
 - c) providing testimony pursuant to an administrative inquiry
 - d) assisting the officer in professional development
 - e) conveying strategy related to the administration of the UAS as set forth in this policy
- 3) When a third party is authorized by the SCSO to capture DME pursuant to a current COA or emergency COA, as an agent of the SCSO, the agent will not be permitted to independently access, edit, alter, erase, duplicate, share, or otherwise distribute a copy of the captured DME without the express written consent of the Sheriff or his designee.
- 4. The Seneca County District Attorney's Office will be notified of DME as set forth in Section IV.B.10 and will be permitted to review a copy of the captured DME as it pertains to their investigation.
 - a. Retaining DME will be stored in accordance with the minimum standards required by the New York State Archives. If records are related to a criminal investigation, they will be retained for a minimum of 6 months. If a determination is made that DME has evidentiary value in an on-going investigation, court proceeding, or appeals process, the data will be retained through the pendency of the case and until directed to do otherwise by the Sheriff or his designee. The established retention schedule can be extended beyond the 6 month minimum as necessary.
 - b. Non-Evidentiary DME not relevant to a criminal investigation, emergency management, or mapping will be retained for a minimum of 6 months.
 - c. If no extension of DME retention is required, the DME and copies thereof may be destroyed in accordance with the SCSO retention procedures.
 - d. If DME is deemed to be useful as a training tool by authorized personnel, DME can be retained for as long as practicable.
- 5. All retained DME, unless exempted, will be open for public inspection. Any and all public disclosure of DME must be consistent

with, but not limited to, evidence discovery and disclosure pursuant to the Freedom of Information Law (FOIL).

- a. The Sheriff or his designee, along with the Seneca County Attorney, will review any request for such data and, where there exists a related criminal investigation or prosecution, will jointly conduct the review in consultation with the Seneca County District Attorney's Office before any such data is shared.
- b. Authorized personnel will not edit, alter, erase, duplicate, share, or otherwise distribute captured DME in any manner externally, without prior written authorization and approval from the Sheriff or his designee.

E. Unmanned Aerial Vehicle Audit Protocol

1. Authorized personnel will regularly audit UAV flight documentation and DME access records and produce a quarterly audit report detailing the results of said audit and any charges or corrections made to the flight time counter, captured DME, and/or DME access records.
2. Authorized personnel will regularly audit the policy and procedures contained herein and make recommendations for any necessary amendments thereto.
3. The Sheriff or his designee is encouraged to consider the regular issuance of a public report detailing the SCSO usage of UAVs when such issuance is practicable and consistent with the SCSO records release policy and applicable statutes regarding, but not limited to, evidence, discovery, and disclosure pursuant to the Freedom of Information Law (FOIL).

F. Training of Authorized Agency Personnel

1. Authorized personnel assigned to operate SCSO owned UAVs must complete an agency approved training program and meet all conditions of the COA issued by the FAA. Authorized personnel assigned to operate UAVs should also receive additional training at regular intervals to ensure continued effective usage, operation, calibration, and performance of each UAS as well as to incorporate changes, updates, revisions, and advances in policies and procedures in the deployment and use of UAVs.
2. All personnel with responsibilities related to the Unmanned Aerial System (UAS) shall be trained in applicable local and federal laws,

regulations, and the policies and procedures defined herein which govern the deployment of UAVs.