# 12.227 UNMANNED AIRCRAFT SYSTEMS (UAS)

## <u>References</u>:

Ohio Revised Code 4561.15, Unsafe Operation of Aircraft Procedure 12.106 – University Air Care Helicopter Procedure 12.145 – Critical Incident Response Plan Procedure 12.210 – Traffic Control: Major Thoroughfares Procedure 12.226 – Aircraft Crash Response and Reporting Procedure 12.230 - Fatal or Potentially Fatal Crash Investigation and Placement of **Related Charges** FAA Modernization and Reform Act of 2012, Public Law 112-95 Code of Federal Regulations, Title 14, Chapter III, Sub-Chapter B, Part 405 FAA Extension, Safety, and Security Act of 2016, Public Law 114-190, Sec.2201, Subtitle B 49 U.S.C. Subtitle VII, §44806, §44807, §44809, §44810. 14 C.F.R. Chapter I, Subchapter A & B, Part 1, Part 21.191, Sub-part H, Sections 21.191 and 21.193. Small UAS Rule 107.63 (Part 107) Section 352, 2018 FAA Reauthorization Act CPD Training Bulletin 2022-01, Unmanned Aircraft Systems (UAS) Administrative Regulation No. 71

http://www.faa.gov

http://knowbeforeyoufly.org

## Definitions:

**Aircraft** – Any device invented, used, or designed to navigate or fly in the air, typically flown by an onboard pilot. A UAS is considered an "aircraft" as defined in the Federal Aviation Administration (FAA's) authorizing statutes and is therefore subject to regulation by the FAA.

**Small Unmanned Aircraft Systems (UAS)** – A small UA and its associated elements (including communication links and the components that control the small UA) that are required for the safe and efficient operation of the small UA in the National Airspace System (NAS). Otherwise known as a drone.

**Pilot-in-command (PIC)** – A person who holds a remote pilot certificate with a UAS rating and has the final authority and responsibility for the operation and safety of an UAS operation conducted under Part 107.

**Drone as a First Responder (DFR) –** The use of UAS to proactively respond to calls for police service or assist officers in the field in real time while responding to calls for police service.

**Field Deployed Drone (FDD)** – The use of UAS by personnel based in the field to assist in routine calls for police service or during exigent circumstances.

**Visual Observer (VO)** – A person acting as a flight crew member who assists the UAS remote PIC and the person manipulating the controls to see and avoid other air traffic objects aloft or on the ground. The VO does not need to have completed Part 107.

**Certificate of Authorization (COA)** – COA is an authorization issued by the Federal Aviation Administration to a public operator for a specific UA activity. If necessary, provisions or limitations may be imposed as part of the COA to ensure the UAS can operate safely with other airspace users.

**Low Altitude Authorization and Notification Capability (LAANC)** – collaboration between FAA and Industry. It directly supports UAS integration into the airspace. LAANC provides drone pilots with access to controlled airspace at or below 400 feet, awareness of where pilots can and cannot fly, temporary Flight Restrictions (TFR) information and updates to the Special Use Airspace (SUA) schedule, and Air Traffic Professionals with visibility into where and when drones will operate.

**Visual Line of Sight (VLOS)** – The UAS must remain within VLOS.VLOS will be any flight crewmember capable of seeing the aircraft with vision unaided by any device other than corrective lenses. Visual aids such as binoculars may be used only momentarily to enhance situational awareness. Crewmembers must be able to see the UAS at all times during flight.

**Beyond Visual Line of Sight (BVLOS)** – the drone is flown outside the pilot's direct visual range, typically relying on technology such as cameras, GPS, or sensors to navigate and observe the environment.

**Notices to Air Missions (NOTAMs)** – provide time-critical information on airports and changes that affect NAS. The PIC shall check the NOTAM before each flight to determine if there are any applicable airspace restrictions. They provide the most current information available and can be found by faa.gov or 1800wxbrief.com.

**Temporary Flight Restriction** – Airspace restrictions. They restrict aircraft (including drones) from operating without permission in a certain area for a limited time. You must always check NOTAMs prior to your flight.

**Model Aircraft –** A UAS that is flown for hobby or recreational purposes within visual line of sight of the person operating the aircraft and in compliance with the Federal Aviation Administration's (FAA) rules and regulations.

# <u>Purpose</u>:

To educate officers regarding compliance with the FAA's rules and regulations and any restrictions contained in any Certificate of Waiver or Authorization issued by the FAA to the UAS operator and to provide guidance on reporting violations to the FAA. FAA regulations apply to the operation of all aircraft, whether manned or unmanned, and irrespective of the altitude at which the aircraft is operating.

# Policy:

Unmanned aerial systems may be utilized to enhance the Department's mission of protecting lives and property when legally permissible. Absent a warrant or exigent circumstances, operators and 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.

Only authorized operators who have completed the required training shall be permitted to operate the UAS, unless being done in a training environment under the supervision of an operator who has met all the training requirements absent exigent circumstances or be under the direct supervision of a person who holds such a certificate.

When the drone is being flown pursuant to any authorized use, the onboard cameras will be turned to face away from occupied structures as feasible or the recording function will be turned off to minimize inadvertent video or still images of uninvolved persons. Contact with subjects directly involved in the deployment (suspects, missing/lost persons) shall be recorded whenever possible to document interaction with police personnel operating under DFR guidelines. Every effort should be made to record detentions and arrests without jeopardizing safety.

Any use of a UAS will be in strict accordance with constitutional and **privacy** rights and Federal Aviation Administration (FAA) regulations, State and Local laws. Officers must ensure flights are conducted for authorized purposes only. Data collection, dissemination and retention will follow our Records and Department procedures.

The UAS shall not be weaponized.

#### Information:

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:

- Coordinating the FAA Certificate of Waiver or Authorization (COA) application process and ensuring that the COA is current.
- 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 protocol for submission and evaluation of requests to deploy a UAS, including urgent requests made during ongoing or emerging incidents. Deployment of a UAS shall require authorization by the Chief of Police or the authorized designee, depending on the type of mission
- Recommending program enhancements, particularly 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.
- Developing protocol for conducting criminal investigations involving a UAS.
- Developing an operational protocol 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 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.
- Facilitating law enforcement access to images and data captured by the UAS.

Officers are forbidden from using personally owned UASs while on duty for work related purposes, i.e., looking for a suspect or other call related services.

The Cincinnati Police Department operates its own fleet of UASs.

CPD drones/UAS are available for any City Department should a need be identified.

If a drone operator is not available, and an immediate need for a UAS exists, District/Section/Units Supervisors may request an operator to be recalled through ECC or the CIS desk officer.

The FAA has issued special regulations regarding the use of UAS, and all individuals involved in the operation of UAS are required to be familiar with all FAA regulations pertaining to UAS.

For unit specific UAS operation guidelines see applicable unit's standard operating procedure (SOP).

## Procedure:

- A. Authorized Use of Department UAS
  - 1. Any public safety mission and COA authorized flights.
  - 2. Operating Requirements
    - a. Certified pilots must adhere to current Federal Aviation Authorization operating requirements and current Certificate of Authorization's on file.
      - 1) FAA UAS Operating Requirements
      - 2) Operations Over People Waiver

- a. <u>Operations Over People General Overview | Federal</u> <u>Aviation Administration</u>
- b. Pilot Certification
  - To operate the controls of a drone under Part 107, you need a <u>remote pilot certificate with a small UAS rating</u>, or be under the direct supervision of a person who holds such a certificate.
- 3. Expedited Approval for Law Enforcement Response to Emergencies/Natural Disasters etc.
  - a. The Special Governmental Interest (SGI) process is available under the following conditions:
    - 1) Must be an existing Part 107 Remote Pilot with a current certificate or
    - 2) Must have an existing Certificate of Waiver or Authorization (COA).
  - b. Complete the Emergency Operation Request Form and email it to the FAA's System Operations Support Center (SOSC) at
- 4 Notice to Airmen (NOTAMS)/Flight Advisements/Restrictions
  - a. Regional flight advisements/restrictions govern all aircraft
    - 1) The following NOTAM is in effect for the City of Cincinnati and restricts the use of aircrafts within 3 miles around and 3,000 feet in altitude above the sports venues listed below:
      - a) Paycor Stadium
      - b) Great American Ball Park
      - c) University of Cincinnati, Nippert Stadium
      - d) William Howard Taft National Historic Site
      - e) TQL Stadium
    - Restrictions for a) e) apply 1 hour prior to the scheduled time of the event until 1 hour after the end of the event.
  - b. Operations within restricted areas designated in 14 C.F.R. part 73 (e.g., Presidential movements, select sporting events) are prohibited without permission from the using or controlling agency.
  - c. Requesting Temporary Flight Restrictions (TFR)
    - 1) Temporary Flight Restrictions can be requested by law enforcement for the following reasons:
      - a) Disaster/Hazard areas/Sensitive law enforcement activities
      - b) Aircraft accident/Incident sites

- d. Contact the FAA at (817) 222-5006 to request a TFR.
- 5. The certified pilot will recommend the best tactical application and deployment of the UAS/Drone to the on-scene supervisor.
- B. Prohibited Use
  - 1. The Department protects the civil rights and civil liberties of all citizens. The UAS video surveillance equipment will not be used for the following:
    - a. Data collected will not be used to monitor protected activities such areas where a person would have a reasonable expectation of privacy absent a search warrant or exigent circumstances.
    - b. Data collected will not be used 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.
    - c. To harass, intimidate, or discriminate against any individual or group.
    - d. To conduct personal business of any type.
    - e. Any complaints or allegations of civil rights/civil liberties or violations of privacy will be investigated through proper chain of command.
- C. Calls for Service to UAS Accident / Crashes and Potential Violations
  - 1. Locate the operator of the UAS.
  - 2. Ask for registration, obtain aircraft serial number, and verify markings on the UAS.
  - 3. Ask the operator for the type of operation and to present appropriate documentation.
  - 4. Interview the operator and obtain pertinent information (Name ID; address; registration number; any other documentation e.g., COA; I location; date/time; witnesses; pictures etc.).
  - 5. Refer to local laws and ordinances, if applicable (e.g., criminal damaging, assault).
  - 6. Accident / Crashes
    - a. Must be reported within ten days to the FAA.
    - b. If property damage is over \$500.00.
    - c. Serious injury to any person or any loss of consciousness.
    - d. If an accident occurs involving a moving vehicle, contact the Traffic Unit for guidance.
  - 7. Complete Form 534 Contact/FIR Card and any necessary incident report. Include operator information, UAS Make/Model, and serial number.

- a. Email Form 534 to cpdintel@cincinnati-oh.gov.
- 8. Upon investigation, if no violation occurred, no further action necessary.
  - a. "Terry Stop" rules apply during investigations.
- D. Auditing, Accountability and Retention
  - 1. Auditing
    - a. Each unit supervisor shall audit flight documentation monthly. This audit shall include, at minimum, a summary of the following:
      - 1) number of missions/uses;
      - 2) safety concerns; equipment concerns;
      - 3) flight time, to include a review of flight logs or data from flight time counters.
    - b. The results of the audit shall be documented and submitted to the program coordinator for review and filing for annual review.
  - 2. Accountability
    - a. The program coordinator will audit and have oversight of the UAS program.
    - b. This procedure will guide the rules of conduct for personnel involved in the UAS program.
    - c. The Rules and Regulations will guide the protocols for dealing with misuse and abuse of UAS data.
    - d. The program coordinator must approve any request for data sharing and is responsible for records management.
    - e. A supervisor must approve any Mutual Aid request.
  - 3. Retention
    - a. Any data collected from UAS operations will follow the current retention schedule.
- E. Public Notice & Transparency
  - 1. The ability to notify the public of UAS flights lies within the current program being used by the Department which provides such mandated information. If for some reason the Department has a need to produce such information, the program coordinator will work with the Public Relations Unit to produce the following documentation.
    - a. Public notice about UAS programing.
    - b. Public notice about planned operations.
    - c. Annual public reporting.

- F. Maintenance
  - 1. Each UAS shall be inspected each use prior to first flight.
  - 2. The UAS program shall follow manufacturer's recommendations for maintenance.
  - 3. Any damage found to be reported to the program coordinator.
- G. Roster Recalls
  - 1. The program coordinator will provide an updated recall roster to ECC and CIS desk.