OFFICE OF THE DIRECTOR OF POLICE
THE UNIVERSITY OF TEXAS SYSTEM
POLICY AND PROCEDURE MANUAL

Subject			Policy Number
Unmanned Aircraft System (sUAS/Drone)			**747**
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I. PURPOSE.

This policy establishes the operational guidelines for Small Unmanned Aircraft Systems (sUAS) within the University of Texas System Police. The decision to implement an sUAS program at an institution police department will be at the discretion of the institution Chief of Police. This policy provides general guidance and requirements for such programs. The Office of Director of Police (ODOP) may maintain a separate sUAS in Austin and for deployment purposes to support the institution police departments.

This policy is designed to minimize risk to individuals, property, and aircraft during the operation of the UAS while continuing to respect and safeguard the right to privacy of all persons whom such operations may impact. It is the practice of the University of Texas System Police to ensure that Department employees who operate and deploy UAS assets are Remote Pilots in Command (RPIC) as defined by the Federal Aviation Administration (FAA) and have received the required training on the proper and safe operation of unmanned aircraft. This policy will define the training and certifications necessary to operate and deploy unmanned aircraft and establish guidelines and best practices for RPICs to follow to safely deploy UAS assets.

At all times, the Department and its personnel shall comply with Code of Federal Regulations (CFR) Title 14 (Aeronautics and Space) Parts 107 (Small Unmanned Aircraft Systems) plus applicable portions of CFR Title 14 parts 61 (Certification: Pilots, Flight Instructors, and Ground Instructors) and 91 (General Operating Flight Rules), as well as Texas Government Code Title 4, Subtitle B. (Law Enforcement and Public Protection), Chapter 423, (Use of Unmanned Aircraft.) If conflicts exist between FAA regulations, Texas Government Code, Texas Administrative Code, and any part of this policy, the most restrictive will apply.

The University of Texas System Police Unmanned Aircraft Operations can be utilized to provide aerial support to the University of Texas System Police for law enforcement and public safety purposes. This may include but is not limited to search and rescue missions, active shooter events, tactical operations, traffic collision reconstruction, investigations of criminal offenses, and emergency response situations in which the aircraft may provide operational support.

As a matter of operational and training doctrine, every effort shall be made to integrate the Unmanned Aircraft Systems operations of the Office of Director of Police and the programs at the institution police departments so that the respective programs work in a coordinated fashion. Correlative support, shared resources, mutual aid assignments, and open cross-communication are critical elements of this program and the supporting policy. Integrated and regionalized training will be crucial to successful UAS missions.

II. DEFINITIONS

A. Aircraft - A device that is or intended to be used for flight in the air. This includes sUAS.

B. Aircraft Registration - All UAS operated by the University of Texas System Police personnel must be registered in compliance with the current Code of Federal Regulations (CFR) Title 14 (Aeronautics and Space) Parts 107 (Small Unmanned Aircraft Systems). Registration requirements apply to UAS owned and operated by University of Texas System institution police departments and the Office of Director of Police, including any UAS on loan or UAS owned by outside agencies when operated by a UT System Police RPIC.

C. Airworthiness Statement - The Airworthiness of the UAS is self-certified by the Remote Pilot in Command through a preflight inspection prior to the mission or training flight.

D. Area of Deployment – the designated location where aircraft will be launched from for the purpose of mission flight and/or training.

E. Certificate of Authorization (COA) -COA is an authorization issued by the Federal Aviation Administration (FAA) to a public operator for a UAS. After a complete application is submitted, the FAA conducts an operational and technical review. If necessary, provisions or limitations may be imposed as part of the approval to ensure the UAS can operate safely with other airspace users.

F. Crewmember - A person assigned to perform duty while an aircraft is operating

G. Crew Research Management (CRM) - The effective use of all available resources including human, hardware, and information resources and coordination in the use of those resources by the Remote Pilot in Command and Visual Observers.

H. UAS Department Flight Coordinator (DFC) - The individual responsible for assisting in the tactical and administrative functions related to the UAS program at the assigned institution department or Office of Director of Police. This includes maintaining a current list of all certified crew members to include Remote Pilots and Visual Observers. The Departmental Flight Coordinator is responsible for maintaining the training records for crew members and compliance with Texas Government Code, Title 4 (Executive Branch), Subtitle B. (Law Enforcement and Public Protection) Chapter 423 (Use of Unmanned Aircraft) Section 423.008 reporting requirements. The DFC is also responsible for the condition, maintenance, and flight records of the UAS and its associated equipment.

I. First Person View (FPV) - The term used when the Remote Pilot is observing the flight solely through the UAV's camera(s).

J. Flight Team - Any combination of the Remote Pilot in Command (RPIC) and Visual Observer(s) (VO). Only the RPIC meets the FAA definition of a crewmember. Additional support personnel and Visual Observers may be increased to ensure clear airspace, flight paths free of potential hazards, etc. Each individual and their assignment should be documented in flight records.

K. Flight Time - Remote piloting flight time commences when the aircraft moves under its own power for the purpose of flight and ends when the aircraft comes to rest after landing.

L. Image - Means any capturing of sound waves, thermal, infrared, ultraviolet, visible light, or other electromagnetic waves, odor, or other conditions existing on or about real property in this state or an individual located on that property. Imagery may include data of persons, organizations, events, incidents, or objects as well as metadata.

M. Visual Line of Sight (VLOS) - The Remote Pilot and/or the Visual Observer can see, unaided, the UAS under their control during flight.

N. Mission Area of Operations (AOR) - A defined perimeter/parameters to be determined based on the scope and type of the operation and a defined operational ceiling at or below 400 feet above the ground. The altitude of the small, unmanned aircraft cannot be higher than 400 feet above the ground, unless the small, unmanned aircraft is flown within a 400-foot radius of a structure and does not fly higher than 400 feet above the structure's immediate uppermost limit.

O. National Airspace System (NAS) – Defined as airspace inside the continental United States. It is further defined through air navigation facilities, equipment and services, airports, or landing areas, aeronautical rules, regulations, and procedures. There are two types of airspace within the NAS, including controlled and uncontrolled. Operation of a UAS in controlled airspace adds another source and set of responsibilities and requirements that must be met to operate the sUAS.

P. Night Flight - Flight of a UAS that occurs between the hours of one-half hour after sunset and one-half hour before sunrise. The time of sunset and sunrise are determined by the National Oceanic and Atmospheric Administration (NOAA), but Code of Federal Regulations, Title 14 (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems).

    a. Under the Federal Aviation Administration, current Part 107 Certificate holders must complete their aeronautical knowledge exam and complete the new night flying training modules

    b. In order to fly at night on or after March 16, 2021, a pilot must:
        i. Have passed an initial knowledge exam after March 1, 2021, or

ii. Have complete the Code of Federal Regulations (CFR) Title 14 (Aeronautics and Space) Parts 107 (Small Unmanned Aircraft Systems) and recurrent Part 61 pilot's exam and training available online (https://www.faasafety.gov/) after March 1, 2021.

Note: The sUAS shall be equipped with alighted anti-collision light visible at least 3 miles (with a flash rate sufficient to avoid collision).

Q. Remote Pilot - The individual exercising pilot at the controls over the UAS during flight. The Remote Pilot need not be certified under Code of Federal Regulations, Title 14 (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems), if the pilot is under the supervision of a RPIC who is in direct communication and in a position to take over control of the UAS, regardless of certification. Undesignated remote pilots may be student pilots at the controls.

R. Remote Pilot in Command (RPIC) - The mission commander with on-site authority for the UAS. The individual solely responsible for the overall flight operations for a specific mission. The Officer may also act as either Remote Pilot or Visual Observer. Regardless, the Officer may not delegate their responsibility. An RPIC may only operate one UAS at a time. Each UAS in use shall have its own RPIC assigned. All RPICs shall be licensed through Code of Federal Regulations, Title 14 (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems). The RPIC shall be responsible for all aspects of the mission regarding the UAS operation.

S. Unmanned Aircraft System / Vehicle (UAS/UAV) - UAS is the unmanned aircraft system and all of the associated support equipment, control station, data links, telemetry, communications, and navigation equipment, etc., necessary to operate the unmanned aircraft. The aircraft's flight is controlled either autonomously by hardware within the UAS or under the remote control of a Remote Pilot on the ground or in another ground vehicle. For purposes of this program, the Code of Federal Regulations, Title 14 (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems) compliant UAS shall weigh less than 55 pounds fully loaded. Maximum groundspeed is limited to 100 mph (87 knots).

T. Visual Flight Rules (VFR) - All flights with the UAS shall be conducted under VFR conditions and at an altitude below 400' above ground level (AGL). VFR is established as a three (3) mile visibility and a cloud ceiling of at least 1,000 feet for day operations and 5-mile visibility with a cloud ceiling of 2,000 feet for night operations.

U. Visual Observer - Individuals who are trained to maintain the line-of-sight and 360-degree hazard awareness around the UAS at all times and assist the RPIC in carrying out all duties required for the safe operation of the UAS. Under Code of Federal Regulations, Title 14 (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems), Visual Observers are not crewmembers and have no responsibility or authority over the UAS operation. Visual Observers may be formally trained and certified for special operations (formal training is required for night operations), or they may be designated as needed in emergency situations after being properly briefed by the RPIC (day operations only).

III. Organizational Definitions

A. The Director of Police of the University of Texas System Police shall designate a sUAS Program Coordinator for Unmanned Aircraft Operations Program. The UAS Program Coordinator shall:

1. Establish protocols to ensure all operations follow the policy.

2. Ensure that each institution police department that operates a sUAS program fulfills the appropriate UAS reporting requirements under Texas Government Code Title 4, Subtitle B. (Use of Unmanned Aircraft) Chapter 423 (Use of Unmanned Aircraft), Section 423. 008 (Reporting by Law Enforcement Agency) which reads:

"REPORTING BY LAW ENFORCEMENT AGENCY. (a) Not earlier than January 1, and not later than January 15 of each odd-numbered year, each state law enforcement agency and each county or municipal law enforcement agency located in a county or municipality, as applicable, with a population greater than 150,000, that used or operated an unmanned aircraft during the preceding 24 months shall issue a written report to the governor, the lieutenant governor, and each member of the legislature and shall:

(1) retain the report for public viewing; and

(2) post the report on the law enforcement agency's publicly accessible website, if one exists.

(b) The report must include:

(1) the number of times an unmanned aircraft was used, organized by date, time, location, and the types of incidents and types of justification for the use

(2) the number of criminal investigations aided by the use of an unmanned aircraft and a description of how the unmanned aircraft aided each investigation

(3) the number of times an unmanned aircraft was used for a law enforcement operation other than a criminal investigation, the dates and locations of those operations, and a description of how the unmanned aircraft aided each operation

(4) the type of information collected on an individual, residence, property, or area that was not the subject of a law enforcement operation and the frequency of the collection of this information; and

(5) the total cost of acquiring, maintaining, repairing, and operating or otherwise using each unmanned aircraft for the preceding 24 months."

3. Support department programs in development of policy and training.

B. Police Department sUAS Flight Coordinator (DFC)

1. Shall be approved and designated by the institution Chief of Police and shall:

a. Possess a "Remote Pilot Certificate" from the Federal Aviation Administration or be certified under the institution departments "Certificate of Authorization" waiver from the Federal Aviation Administration and be responsible for assisting in the tactical and administrative functions related to the UAS program.

b. Maintain a current list of all certified crewmembers to include Remote Pilots and Visual Observers.

c. Be responsible for the documentation and submission of "Report of sUAS Flight Mission" (See Appendix A) to the sUAS Program Coordinator for any flight missions within seventy-two (72) hours of completion of the mission.

d. Maintain the training records for crewmembers associated with his agency in compliance with Texas Government Code, Chapter 423 (Use of Unmanned Aircraft) reporting requirements

e. Be responsible for the condition, maintenance, and flight records of the UAS and its associated equipment within the data reporting software utilized; and

f. Be responsible for registration and markings of all UAS owned and operated by their agency in accordance with current Federal Aviation Administration regulations, Code of Federal Regulations, Title 14 (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems).

IV. Licensing and Certifications

A. Remote Pilot Certificate

In compliance with the Federal Aviation Administration, federal, state and local government offices may fly small, unmanned aircraft to support specific missions, such as search and rescue, under the Federal Aviation Administration's Small UAS rule, (Part 107) in which pilots obtain their "Remote Pilot" certificate. This certification demonstrates the pilot understands the regulations, operational requirements and procedures for safely operating drones.

B. Certificate of Authorization

A "Certificate of Authorization" or waiver from the Federal Aviation Administration, allows more flexibility which may be prohibited in the Code of Federal Regulations, Title 14, (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems). The Federal Aviation Administration can provide the authority or waiver for some events such as

operational night flights, flying beyond visual line of sight, and conducting flight operations over people. Each institutional police department shall apply for their own Certificate of Authorization from the Federal Aviation Administration.

C. Remote Identification Rule *("Remote ID")*

The Remote ID rule establishes a new Part 89 to Title 14 of the Code of Federal Regulations. The rule was published in the Federal Register on January 15, 2021. With an effective date from March 16, 2021, to April 21, 2021. Operational rules take effect 30 months after the effective date of the final rule (expected to be September of 2023).

Operators will have three options (outlined below) to satisfy this requirement. Note, however, that for UA weighing 0.55 lbs. or less, a Remote ID is only required if the UA is operated under rules that require registration, such as part 107.

1. Standard Remote ID Unmanned Aircraft
   a) Broadcasts remote ID messages directly from the unmanned aircraft via radio frequency broadcast (likely Wi-Fi or Bluetooth technology), compatible with existing personal wireless services.
   b) Standard Remote ID message includes: unmanned aircraft ID (serial number of unmanned aircraft or session ID); latitude/longitude, altitude, and velocity of the unmanned aircraft; latitude/longitude and altitude of Control Station; emergency status; and time mark.
   c) Remote ID messages will be available to most personal wireless devices within range of the broadcast; however, only the FAA (and authorized law enforcement) will have the ability to correlate the serial number or session ID with the registration database.
   d) Range of the Remote ID broadcast may vary, as each unmanned aircraft must be designed to maximize the range at which the broadcast can be received.

2. UA with Remote ID Broadcast Module

   a) A Broadcast Module may be a separate device that is attached to an unmanned aircraft, or a feature built into the aircraft.
   b) It enables retrofit for existing unmanned aircraft, and a Broadcast Module serial number must be entered into the registration record for the unmanned aircraft.
   c) A Broadcast Module Remote ID message shall include serial number of the module; latitude/longitude, altitude, and velocity of the unmanned aircraft; latitude/longitude and altitude of the takeoff location, and time mark.
   d) An unmanned aircraft, remotely identifying with a Broadcast Module, must be operated within visual line of sight at all times. A Broadcast Module to broadcast via radio frequency (likely Wi-Fi or Bluetooth technology).
   e) It will be compatible with personal wireless devices and range of the Remote ID Broadcast Module message similar to Standard Remote ID for the unmanned aircraft.

V. Program Policy

A. Missions

1. All mission flight requests will be proposed to the institution Department Flight Coordinator (DFC), who will have responsibility for determining the necessity of the request and will ensure the requests are within departmental guidelines, needs, and law regarding the operation of an sUAS.

2. All missions will be flown in accordance with FAA regulations, Code of Federal Regulations, Title 14 (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems and/or Certificate of Authorization, applicable portions of Code of Federal Regulations, Title 14, Part 107 (Small Unmanned Aircraft Systems) CFR Parts 61 (Certification: Pilots , Flights Instructors and Ground Instructors) and 91(General Operating and Flight Rules), current FAA National Policy regarding UAS Operational Approval, Texas Government Code Title 4, Subtitle B, Chapter 423 (Use of Unmanned Aircraft) and/or under a Certificate of Authorization issued by the Federal Aviation Administration. University of Texas Police sUAS Programs shall adhere to this policy.

3. Approved Uses/Missions:

   a. Mission flight requests shall be authorized by the institution UAS Department Flight Coordinator or his or her designee (RPIC). Missions that will be considered for approval include but are not limited to aiding in search and rescue operations, crime scene photography, crash reconstruction, hazmat scene deployment, major disaster scenes, storm damage, fire scenes, tactical situations, communications tower inspections, community events, maintenance, and training.

   b. The University of Texas System Rapid Response Team (SRRT) may request sUAS support teams from institutions with the nearest proximity of the planned operation or emergency response. The Department Flight Coordinator will ensure that electronic or verbal communication with the SRRT Command is established with the primary focus of utilizing the aircraft in manner and method that are most efficient for that operation.

4. Pilot at the controls: A person operating a small UAS must either hold a remote pilot airman certificate and be acting as RPIC or be under the direct supervision of the RPIC, who is able to take immediate control of the aircraft.

5. Weather Brief: Weather shall be obtained by the RPIC or his designee for the local area of operation to include Meteorological Aerodrome Reports (METAR) and Terminal Area Forecasts (TAF) from the closest airport reporting weather conditions. 1-800-WX BRIEF will provide a live briefer with access to this data. Review of "Notice to Airmen" (NOTAMS) and Temporary Flight Restrictions

(TFRs) are required prior to launch. Additional weather information should be obtained from the National Oceanic Atmospheric Administration (NOAA) (http://www.aviationweather.gov/adds/), or another site or cell phone application to review the following: weather radar, ceiling/visibility, wind/temperatures, turbulence, Significant Meteorological Information (SIGMET), NOTAM's, "Drone NOTAMS" (DROTAM), TFRs and icing.

6. Pre-Flight Briefing: RPIC, Remote Pilot and Visual Observer and any other flight team members must participate in the pre-flight briefing, led by the RPIC prior to aircraft launch, which includes, but is not limited to:

a) Review of the mission's goals and expected outcomes.

b) Review of current and forecasted weather conditions.

c) Review of current Notice to Airmen (NOTAMs), Drone Notices to Airman (DROTAMs), and Temporary Flight Restrictions (TFRs) that have been issued for the proposed flight area.

d) Identification of mission limitations and safety issues such as battery charge, GPS strength, and potential for radio interference.

e) Review of the proposed flight and Area of Responsibility - flight area, including maximum ceiling and floor, potential obstacles, or terrain issues.

f) Review of communication procedures between RPIC, Visual Observer, and other personnel used to support the mission, including verifying cell phone numbers used to communicate with Air Traffic Control in the event of a fly-away or other flight emergency.

g) Review of emergency/contingency procedures, including aircraft system failure, flight termination, divert, and lost link procedures.

h) Create a designated return to home or take-off/landing point.

i) Execution of a pre-flight check utilizing the approved checklist.

7. Line of Sight: With vision that is unaided by any device other than corrective lenses, the Remote Pilot in Command, the Visual Observer (if one is used), or the person manipulating the flight controller of the small, unmanned aircraft system must be able to physically observe the unmanned aircraft throughout the entire flight. Visual line of sight is required in order to know the unmanned aircraft's location and flight status (attitude, altitude, and direction of flight), observe the airspace for other air traffic or hazards, and to determine that the unmanned aircraft does not endanger the life or property of another. All flight team members essential to the operation of the unmanned aircraft shall always be able to communicate either electronically (voice) or in person.

8. Maintenance: It is critical that all sUAS should be maintained and meet the requirements of operational standards of the sUAS manufacturer with inspections noted in flight operation logs prior to launch. This should include:

a) Visual inspection of outer shell, propellers, gimble and other components for damage

b) Calibrate the compass (if applicable) which determine flight orientation.

c) Ensure intelligent batteries a fully charged and will be operating within temperature guidelines of the manufacturer

d) Accurate UAS maintenance documentation is the responsibility of the Department Flight Coordinator in accordance with the manufacturer recommendations. When maintenance is performed, a test flight shall be conducted and documented in accordance with the manufacturer's instructions. The RPIC will not fly any aircraft that he/she believes does not meet airworthiness requirements following the preflight inspection. Timely maintenance and accurate reporting are required to enhance mission availability and safety.

9. Payloads: Any payload for rescue or delivery on a UAS must be approved by the institution Chief of Police only after evaluation and recommendation of the institution police department UAS Flight Coordinator. The Flight Coordinator will document the weight of the payload, the effect of the payload upon the flight of the aircraft and the overall flight mission. The UAS Flight Coordinator shall document the findings and retain this data for the annual report.

10. Mission Debrief: After changeover or landing, the RPIC shall debrief all missions.

B. Use of Force by sUAS

1. The use of force, including deadly force, can only be authorized by the department Chief of Police. In compliance with the "Texas Penal Code, Title 2. General Principles of criminal Responsibility, Chapter 9. Justification Excluding Criminal Responsibility, Section 9.54, the Chief of Police shall ensure:

a) At the time of the use of force occurred, the actor (Pilot) was employed by a law enforcement agency.
b) The use of force would have been justified under other provisions of Chapter 9 of the Texas Penal Code.
c) Did not involve the use of deadly force by means of an "autonomous" drone or sUAS. The sUAS will be piloted and controlled by a human operator.
d) Deadly force shall not be used against a person whose actions are a threat only to themselves or property.

C. Emergencies

1. Emergency Procedures in the manufacturer's operations manual shall be followed for all UAS operations. In the event of an emergency involving the safety of persons or property, the RPIC may deviate from the procedures of this policy relating to aircraft, equipment, and weather minimums to the extent required to meet the emergency.

2. Lost Link - An interruption or loss of command-and-control link contact with the UAS such that the remote pilot can no longer manage the aircraft's flight and because of the control loss, the sUAS is not operating in a predictable or planned manner.

3. Loss of UAS Flight Control (Lost Link) - The UAS lost link procedures shall be initiated which shall automatically cause the UAS to climb to its pre-determined altitude and return to and land at the designated home location. If positive control of the UAS cannot be maintained and the UAS is leaving the operation area or the UAS poses a risk to life and/or property, the RPIC will issue an Engine Kill command.

4. Loss of GPS Signal - Should the UAS lose GPS signal during autonomous operations, the RPIC must immediately command the UAS into manual mode and land as soon as practical. If positive control of the UAS cannot be maintained and the UAS departs the operation area or the UAS poses a risk to life and/or property, the RPIC will issue an "Engine Kill" command.

5. Loss of Visual Contact - If visual contact with the UAS is lost, the RPIC shall command the aircraft into a hover mode and the RPIC and/or Visual Observer shall try to re-establish visual contact. If visual contact cannot be re-established within a reasonable amount of time determined by the RPIC, then lost link procedures shall be executed.

6. Loss of UAS Power (Engine Failure)/UAS Crash - In case of an engine failure, the UAS will not be able to maintain flight. Flight Team Members will immediately attempt to locate the UAS, assess the scene for injuries, and render first aid if necessary.

7. Flight Termination - The intentional and deliberate process of performing controlled flight into terrain (CFIT). Flight termination must be executed in the event all other contingencies have been exhausted, and further flight of the aircraft cannot be safely achieved, or other potential hazards exist that require immediate discontinuation of flight.

8. Accident Notification and Investigation - The RPIC must report to the FAA within 10 days of any operation that results in serious injury, loss of consciousness, or property damage of at least $500 (not including the unmanned aircraft).

9. The University of Texas System Administration, Office of Risk Management recommends the minimum coverage the insured becomes legally obligated to pay as damages because of bodily injury or property damage. The recommended minimum for "Each Occurrence Limit" (EOL) of $1,000,000; and medical payments of $5,000.00 arising out of ownership, maintenance, or use of a scheduled aircraft.

10. All in flight accidents and incidents involving fatalities, injuries, property damage, and lost link shall be immediately reported to the sUAS Program Coordinator of the Office of Director of Police for appropriate assistance and guidance.

11. Each UT System Police Department Flight Coordinator should also be cognizant of the requirements of "ODOP Policy 728, entitled: Director of Police: Timely Notification Timelines." If FAA regulations require the FAA to be notified within 24-hours the same notification and reporting protocols will be followed as the 10-day notification process.

D. Training and Standardization

1. Remote Pilot in Command (RPIC) training requirements:

a) An RPIC may be authorized to operate more than one type of UAS only if the RPIC is trained and has completed a standard test method for each type of aircraft. The RPIC may only operate or oversee one sUAS at a time.

b) Each pilot shall be required to successfully complete a flight capability test which that quantitatively measures both the system capabilities of the drone and the proficiency of the pilot in carrying out maneuvers. At a minimum, the pilot should be able to complete the following maneuvers:

(1) Accurate takeoff and landing for accuracy
(2) Basic hovering with right and left stick, including forward and aft maneuvers, as well as 180 and 360 yaw rotation in both clockwise and counterclockwise directions
(3) Basic side to side maneuvering
(4) Basic box maneuver with sUAS orientation facing away from the RPIC at all times in both clockwise and counterclockwise directions.
(5) Circle Formation (Direction of travel) keeping the aircraft nose pointed in the direction of travel and able to maintain a consistent altitude – keeping the circle as uniform as possible.
(6) Advanced Circle Formation (Point of Interest). Keeping the aircraft nose pointed towards the center of the circle at all times while maintaining a consistent altitude while keeping the circle as uniform as possible.

c) All department certifications should be documented either by video or in performance documentation retained by the Department Flight Coordinator.

The RPIC shall show proficiency in basic aeronautical knowledge as it relates to the use and operation of UAS assets. The RPIC shall pass an initial aeronautical knowledge test at an FAA-approved knowledge testing center or comply with the Code of Federal Regulations, Title 14 (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems) protocols for a licensed and current Code of Federal Regulations, Title 14(Aeronautics and Space), Part 61 (Certification: Pilots, Flight Instructors and Ground Instructors) pilot. The basic aeronautical knowledge training, at a minimum shall include:

(1) FAA rules pertaining to UAS flight operational limitations

(2) All aspects of Code of Federal Regulations, Title 14 (Aeronautics and Space), Part 107 (Small Unmanned Aircraft Systems)

(3) Knowledge of the rules and responsibilities described in Code of Federal Regulations, Title 14 (Aeronautics and Space) Part 91 (General Operating and Flight Rules).

(4) All aspects of Texas Government Code Texas Government Code Title 4 (Executive Branch), Subtitle B. (Law Enforcement Public Protection), Chapter 423, (Use of Unmanned Aircraft).

(5) Crew Resource Management

(6) Mission planning requirements for establishing the Mission AOR and Perimeter

(7). Mission briefing requirements to include the Program Coordinator approved checklists and manufacturer's recommendations

d) The RPIC shall show proficiency operating the specific UAS model in flight including emergency procedures, technology, and support equipment. The RPIC's proficiency shall be evaluated by Department Flight Coordinator or designee who has mastered aeronautical knowledge and training as it pertains to the use of an unmanned aircraft.

e) The RPIC will be responsible for communication and crew resource management with the flight team members (Visual Observer and Remote Pilot) demonstrating satisfactory communications between team members. The RPIC's communications will be evaluated at all stages of the flight continuum: pre-flight inspection, flight operations, and post flight procedures.

f) RPIC shall demonstrate proficiency in all the technology and support equipment associated with any assigned mission to take advantage of the full capabilities of the UAS.

2. sUAS Observer Training Requirements:

a. Visual Observers are not required under Part 107 (except during night operations); however, this policy requires a UAS Visual Observer to assist the RPIC during all missions for risk mitigation purposes and safety. Due to the potential immediate response to an emergency and operational needs, a Visual Observer may be chosen ad hoc and properly briefed by the RPIC for day operations only. The DFC should document the use of a Visual Observer chosen ad hoc in the mission flight record.

b. UT System Police will only use Visual Observers who have been trained.

c. Night operations require the RPIC and Visual Observer are trained to recognize and overcome visual illusions caused by darkness and understand physiological conditions which may degrade night vision. According to the waiver, the training must be recorded and presented to the FAA Administrator's designee. The Program Coordinator will have a RPIC/VO document that the required training was performed. The RPIC/VO documentation will be held within the individual's departmental UAS training record file.

d. On April 21, 2021, the "Operations over People Rule" became effective for pilots operating under Part 107.39 which allows flight at night and over people and moving vehicles, without a waiver as long as they meet the requirements defined in the rule. Airspace authorization is still required for night operations in controlled airspace under 400 feet.

Additional information may be found at:
https://www.faa.gov/uas/commercial_operators/part_107_waivers/

E. Position Responsibilities and Duties

1. Remote Pilot in Command (RPIC):

a. The RPIC is solely responsible for ensuring all applicable laws, policies and safety precautions are followed during training and every mission flight.

b. Ensuring they Notification of sUAS Flight Mission is completed and submitted to the Institution Flight Coordinator.

c. The RPIC is authorized to refuse any flight request based on current meteorological conditions, physiological conditions, or for any other reason that RPIC believes will affect the safety of the flight. Should the RPIC refuse a flight for any reason, they shall inform the Program Coordinator as soon as possible of such refusal and the reason for refusal. The Program Coordinator will forward this information to the Director of Police for review.

d. While the UAS is in flight, the RPIC is authorized and responsible for making all decisions regarding use of the UAS including, but not limited to, direction of UAS, duration of flight time, capabilities of the UAS, and use of affixed certified equipment.

e. The RPIC is responsible for the safe conduct of all flights, including, but not limited to:

(1) Flight planning and preparation, including pre-flight inspections of UAS, equipment and the reconnaissance of the area of operation, if possible

(2) Weather briefing

(3) Flight operations, including course, air speed, altitude, and duration

(4) Timely reporting of new or previously unknown hazards to safe flight encountered

(5) Post-flight inspection, to include assuring batteries are recharged and to ensure the duty aircraft is ready for the next mission

(6) After each deployment, maintaining and making appropriate entries in UAS logbooks.

2. UAS Visual Observer:

a. Performing assignments assigned by a RPIC.

b. Assisting the RPIC in the safe conduct of all flights, including but not limited to:

(1) The Visual Observer shall assist in see-and-avoid operations of the UAS. The Visual Observer shall remain in contact with the RPIC and communicate any obstacles the aircraft might encounter.

(2) If the flight becomes a hazard to ground personnel or other aircraft, the Visual Observer shall immediately notify the RPIC.

(3) During any phase of flight, if the Visual Observer notices a malfunction with the aircraft, he should immediately notify the RPIC.

F. Agency Reporting Requirements

1. Flight Logs

A flight log shall be completed following every UAS flight including personnel and assigned positions, maintenance checks and training flights. If the situation of the mission does not allow for immediate entry of the flight data, then the information shall be recorded the following workday.

Flight software generated records will be accepted as a record of flight, but Department Flight Coordinator shall insure that personnel and assignments for training and missions are included in or with the documentation.

2. Annual Flight Record Reporting to the Office of Director of Police

Prior to January 5th of each odd-numbered-year, University of Texas System Police Department Program Coordinators will submit an annual report to the UAS Flight Coordinator of the Office of Director of Police. The report shall include the identical information required by Texas Government Code Title 4 (Executive Branch), Subtitle B. (Law Enforcement Public Protection), Chapter 423, Section 423.008 (Reporting by Law Enforcement Agency).

G. State Reporting Requirements for sUAS

1. Legislative Reporting (Usage of sUAS for Law Enforcement Purposes):

a. In compliance with the Texas Government Code Title 4 (Executive Branch), Subtitle B. (Law Enforcement Public Protection), Chapter 423, Section 423.008 (Reporting by Law Enforcement Agency):

(1) No later than January 15th of each odd-numbered year, the designated Department Flight Coordinator for each University of Texas System Police Department will compose a written report to be submitted to the Governor, the Lieutenant Governor, Speaker of the House, and each member of the Texas legislature.

(2) The written report shall include information pertaining to the preceding 24 months:

i. The number of times UAS assets were used, organized by date, time location and types of incidents and types of justification for use

ii. The number of criminal investigations aided by using a sUAS and a description of how the sUAS aided each investigation

iii. The number of times a sUAS was used for a law enforcement operation other than a criminal investigation, the dates and locations of those operations, and a description of how sUAS aided each operation

iv. The type of information collected on an individual, residence, property, or area that was not the subject of a law enforcement operation and the frequency of the collection of this information; and

v. The total cost of acquiring, maintaining, repairing, and operating or otherwise using each UAS.

H. University of Texas System Police Use of Force Policy for Submission to the Texas Commission on Law Enforcement for sUAS

Under the "Texas Code of Criminal Procedure" (Chapter 2, Duties of General Officers, Article 2.33) states that no later than January 1 of each even-numbered year, each law enforcement agency that uses or intends to use a drone for law enforcement purposes shall adopt a written policy regarding the agency's use of force by means of a drone, before the agency first uses a drone and update that policy as necessary. The policy shall be submitted to Texas Commission on Law Enforcement in the manner prescribed by the commission by the University of Texas System Police Flight Coordinator.

I. UAS Flight Video and Photograph Restrictions

1. A sUAS video and photograph equipment shall not be used:

a. To conduct random surveillance activities.

b. To target a person based solely on individual characteristics, such as, but not limited to race, ethnicity, national origin, religion, disability, gender, or sexual orientation.

c. To harass, intimidate or discriminate against any individual or group.

d. To conduct personal business of any type.

J. Temporary Flight Restrictions

A "Temporary Flight Restriction" (TFR) is a regulatory action issued via the United States Notice to Airmen (NOTAM) system to restrict certain aircraft from operating with a defined area, on a temporary basis, to protect persons or property in the air of ground.

Temporary Flight Restrictions may be issued when it is deemed necessary to restrict flight in the vicinity of a disaster or hazard area, aerial demonstrations or major sporting events, areas being visited by the President of the United States or other public figures.

Direct questions or concerns regarding Temporary Flight Restrictions by contacting the Southwest Regional Offices (Texas) or the FAA in Ft. Worth at 817-222-5001 or the Headquarters Airspace and Rules Manager, Office of System Operations and Safety, ATO-r, Washington, D.C. at (202) 267-8783

Michael J. Heidingsfield
Director of Police

sUAS Flight Mission Report Form

(Form ODOP UAS #001)

Date of Submission: _____

On _____ **(DATE),** the _____ **(Institution Department)** sUAS Program, conducted an unmanned aircraft mission _____(*Purpose of mission: i.e., observing ground activities, criminal investigation, search and rescue*) which will be taking place at _____ (*nearest physical address and location*).

The Area of Deployment (AOD) took place from _____ (*Physical location of deployment which may be a ground location or top of building -wherever deployment location is established*).

Event / Location: (*Type of Event and Location*)

Supervisor or Persons Requesting Flight: _____

Area of Operation:

Flights were conducted within a 1-mile radius of GPS coordinates of: _____ (*Example: 30.2720054, -97.7430039*)

Aircraft t utilized:

The following aircraft will be utilized for this mission:

1. _____ (*Description of the aircraft used: I.e., "Matrice 300, FAA Aircraft Registration Number: XXXXXXX*).
2. _____ (*Description of the aircraft used: I.e., "Mavic Zoom, FAA Aircraft Registration Number: XXXXXXX*)

Altitude: (*Highest AGL occurring during mission*)

Weather:

Duration of Mission:

RADIO FREQUENCIES USED AN MONITORED: (*Example: UTSP Radio Channel, DPS AIR VHF / Other agency UAS communication channel*)

Assisting Agencies:

(*Include any outside agency that may be working in conjunction or assisting with the mission.*)

The Remote Pilot and Crewmembers for this mission were:

- RPIC – (*Remote Pilot in Control and cellular telephone number*)
- VO – (*Visual Observer and cellular telephone number*)

NOTAM Submitted: _____ (*Indicate where UAS NOTAM has been filed and can be reviewed. Example: Skyvector.com (be sure to select the DROTAM box under the layer tab*).

Respectfully submitted,

(UTSP Department Flight Coordinator)