NEW SMYRNA BEACH POLICE DEPARTMENT
NEW SMYRNA BEACH, FLORIDA

POLICY AND PROCEDURE DIRECTIVE

TITLE: UNMANNED AIRCRAFT SYSTEMS

NUMBER 32-3

EFFECTIVE: 07/20

REFERENCE:

RESCINDS: NEW

REVISED:

ATTACHMENTS: FAA regulations 14 CFR Part 107
Florida Statutes 934.50
U.S. Code
FAA National Policy regarding UAS Operational Approval.

PURPOSE

The purpose of this directive is to establish guidelines for the safe operation of the New Smyrna Beach Police Department unmanned aircraft systems (UAS).

DISCUSSION

Unmanned aircraft systems provide an aerial viewpoint, as well as the ability to access locations a person cannot access or cannot safely access. These abilities make UAS a valuable tool for inspection, evidence collection, and public safety, such as search and rescue missions and critical incident response.

POLICY

It is the policy of the New Smyrna Beach Police Department to deploy unmanned aircraft systems in a variety of approved missions covering critical incident response, suspicious packages, threat assessments, and other administrative tasks. Unmanned aircraft systems are only operated by personnel meeting FAA qualifications and NSBPD authorization and training requirements. All missions and training flights are flown within U.S. Code, Florida Statutes, and FAA Regulations. No random surveillance will be conducted with unmanned aircraft, pursuant to Florida Statutes.

DEFINITIONS

- **Certificate of Waiver or Authorization (COA)** – FAA waiver or authorization for an agency to self-certify UAS and operators for flights performing governmental functions.
- **Daylight Flight** – Flight of a UAS that occurs one half-hour before sunrise and one half-hour after sunset, which includes civil twilight. The time of sunset and sunrise are determined by the National Oceanic and Atmospheric Administration (NOAA).
- **Defined Incident Perimeter** – A defined perimeter to be determined based on the scope of the operation and

Directive 34.6 Unmanned Aircraft System (pdf)
a defined operational ceiling at or below 400 feet above ground level (AGL) and 500 feet below the clouds.

- **Observer** – Individual trained to maintain the line-of-sight and 360 degree hazard awareness around the UAS at all times and assist the pilot in carrying out all duties required for the safe operation of the UAS.
- **Pilot** – The individual exercising control over the UAS during flight, who either
  - Holds a current FAA remote pilot certificate with small UAS rating
  - Is operating under a FAA certificate of Waiver/Authorization (COA).
  - Is under the direct supervision of an individual holding a current FAA remote pilot certificate.
- **Remote Pilot in Command** – Individual who is directly responsible for and is the final authority as to the operation of the small UAS.
- **Unmanned Aircraft System/Vehicle (UAS)** – An aircraft without a human pilot on board. Its flight is controlled either autonomously by computers in the vehicle or under the remote control of a pilot on the ground or in another vehicle.
- **Notice To Airmen (NOTAM)** – a Notice to Airmen is a notice filed with an aviation authority to alert aircraft pilots of potential hazards along a flight route or at a location that could affect the safety of flight.

## PROCEDURES

### 32.3.1 Generally *(CFA 32-3 A)*

1. All training, testing, and maintenance programs will fall under the oversight of the Support Services Lieutenant
2. UAS Pilots:
   - Pilots of small UAS are considered “pilots”.
   - UAS pilots will comply with all testing and vetting criteria as managed by the Support Services Division.

### 32.3.2 Qualifications

1. The requirements to pilot a NSBPD UAS are:
   - Holder of a current FAA issued remote pilot’s certificate with a small UAS rating.
   - The FAA Part 107 rules require the certificate holder to pass a recurring aeronautical knowledge test every 24 months to remain current.
   - Approval to pilot NSBPD UAS from the Support Services Lieutenant.
   - Are current with the NSBPD required proficiency training outlined below.

### 32.3.3 Pilot Mission Eligibility *(CFA 32-3 A)*

1. All pilots must be able to show proficiency in specific core competencies in all UAS controls and operating systems in accordance with FAA regulations and this general order before being approved to fly missions.
2. All pilots must have a minimum of three qualifying UAS flights, to include take-offs and landings, in the preceding 90 days to be eligible to fly UAS missions.

### 32.3.4 Proficiency Training *(CFA 32-3 B)*

1. In order to maintain proficiency, all pilots shall undergo monthly flight training. This training shall include at least one 15 minute flight with at least one take-off and landing along with a practical exercise as determined by the Support Services Lieutenant or their designee.
2. All training flights shall be documented in the pilot’s training records.
3. Each pilot must attend in-service training once a year, to include updated industry standards.
4. Any pilot that does not have documented training or flight time for 60 days or more is required to be retrained by another UAS pilot who is current.
• This training shall include a minimum of one hour ground instruction and flight time, including making three take-offs and landings to demonstrate proficiency.
• All pilots must complete the required flight time and documentation prior to operational deployment.
• Failure to maintain and prove proficiency will result in removal from UAS operations.

32.3.5 Logbooks

1. Pilots will be required to maintain an active, up-to-date flight logbook.
2. Pilots will forward logbook entries to Support Services Lieutenant.

32.3.6 UAS Observers

1. Initial Training: (CFA 32-3 B)
   • Observers will have a current working knowledge of the airspace intended for operations, Air Traffic Control phraseology and communications requirements, specific UAS aerodynamic factors, and the ability to obtain and interpret weather information.
   • The observer will receive training on their obligation to see and avoid other aircraft and the ability to identify position for purposes of relaying position reports to the RPIC.

32.3.7 UAS Condition and Maintenance

1. The Support Services Lieutenant or their designee is responsible for ensuring UAS are maintained in flyable condition and required maintenance is completed and documented.
2. UAS will be maintained in a safe operating condition at all times.
3. Pilots will comply with all maintenance guidelines as administered by the NSBPD.
4. Maintenance will be conducted per the operational requirements of the UAS manufacturer’s suggested maintenance plan.
5. All maintenance logbooks will be completed and maintained by the member responsible for the completion of the maintenance and will be subject to review by the Support Services Lieutenant or their designee.
6. Prior to each flight, the UAS will undergo a pre-flight inspection by the remote pilot in command of the flight, who shall possess a current certificate designated for that type of aircraft and relevant knowledge of that aircraft’s operating system.

32.3.8 UAS Availability and Storage

1. The availability, control, and authorized conditions of use of UAS equipment shall be determined by the Support Services Lieutenant.
2. The Support Services Lieutenant, their designee, or higher authority is authorized to direct the use of a UAS during a given operation.
3. The use of UASs will be restricted to personnel who have completed the requisite training and have logged the required number of hours. ONLY NSBPD members who have been specifically identified as a NSBPD pilot under the NSBPD UAS program are permitted to operate UASs for official NSBPD purposes. Use of personal UASs by unsanctioned personnel is prohibited. Storage of UASs will be mandated by needs of use but in any case will be controlled by the Support Services Division. (CFA 32-3 F)
4. A log of use and training will be kept by all personnel including maintenance logs, certification logs, and flight proficiency and standards logs.
5. UASs must be properly registered with the Federal Aviation Administration (FAA).
6. Personnel authorized to operate UASs will be determined by the Support Services Lieutenant or above.
GUIDELINES FOR USE

32.3.9 Deployment Criteria

1. UAS equipment will be deployed under specific criteria in compliance with FSS 934.50 which outlines search and seizure usage by UAS equipment, referred to in the statute as “Drones.” (CAF 32-3 C,F)

2. UAS’s will be deployed under the following main criteria: (CFA 32-13 D)
   
   • With reasonable suspicion that under particular circumstances swift action is needed to forestall the imminent escape of a suspect or the destruction of evidence.
   • To conduct crime scene processing and/or documentation with a warrant.
   • To assist the New Smyrna Beach Fire Department with firefighting and/or rescue operations.
   • Upon a lawfully executed search warrant signed by a judge, specifically authorizing the use of a UAS.
   • To achieve other purposes including, but not limited to, facilitating the search for a missing person.
   • To achieve other non-criminal objectives, including, but not limited to, infrastructure documentation, natural disasters, and/or support of other city departments.

FLIGHT OPERATIONS

32.3.10 General Flight Requirements

1. No person may act as a pilot/observer:
   • Within eight hours after the consumption of any alcoholic beverage
   • While under the influence of alcohol, narcotics, or any medication which may negatively affect the officer’s ability to safely conduct the flight

32.3.11 All missions will be flown in accordance with FAA regulations 14 CFR Part 107 and current FAA National Policy regarding UAS Operational Approval or COA. (CFA 32-3 A, B, C, D, F)

OPERATIONAL USE

32.3.12 Operational Use

1. UAS operations (UASOPS) will be conducted by two personnel at all times. One NSBPD member will act as the pilot, the other NSBPD member will act as an observer and safety officer. Responsibility for the safe operation of the aircraft will ultimately fall on the RPIC.

2. The UAS will weigh less than 55 pounds, including any cargo carried by the UAS.

3. All flights with the UAS shall be conducted under VFR conditions and at an altitude below 400 feet above ground level (AGL) and 500 feet below the clouds.
   • VFR for the purpose of UAS use in the Volusia County Area of Operations (AO) will be 3 miles visibility.

4. The UAS will only be operated under visual line of sight. The UAS must remain within the visual line of sight of the pilot or visual observer.

5. The UAS must remain close enough to the pilot or visual observer to be capable of seeing the UAS with vision unaided by any device other than corrective lenses.

6. The UAS should not be operated over anyone not directly involved in the operation.

7. The UAS will yield the right of way to other aircraft manned or unmanned.

8. The UAS operator will follow “see and avoid” procedures. First person camera views will not satisfy this
9. All personnel authorized to operate UAS equipment will do so while minimizing possible danger to civilians or bystanders in the area.
10. The UAS will not exceed the maximum altitude of 400 feet above ground level (AGL), or if higher than 400 feet AGL, remain within 400 feet of a structure, unless otherwise authorized by waiver.
11. The UAS will be allowed to fly in Class B, C, D, and E airspace with the appropriate Air Traffic Control (ATC) clearances or in compliance with COA.
12. Operations in class G airspace will be allowed without ATC permission.
13. Only one pilot per UAS at any one time. Multiple observers are allowed when needed depending on conditions.
14. To the extent possible, prior to a positive change in controls, the UAS will be landed prior to handing over the control unit.

32.3.13 Pre-Flight Briefing

1. A pre-flight briefing is required to be completed prior to all flights, in which both the pilot and observer must participate. The pre-flight briefing will include, but is not limited to the following:

- Mission – A review of the mission’s goal and expected outcomes.
- Weather – A review of current and forecasted weather conditions.
- Pilot/observer duties
- Communication procedures – A review of communication procedures between pilot, observer, and other personnel used to support the mission. Including verifying phone numbers or radio frequencies used to communicate with air traffic control in the event of a fly-away or other flight emergency.
- Danger to non-participants/notification to interested parties
- Notices to Airmen (NOTAMs) checked and filed, if necessary
- Air Traffic Control (ATC) notified, if necessary
- Check for temporary flight restrictions (TFRs)
- Mission parameters area of operations boundaries – A review of the proposed flight area, including maximum ceiling and class of airspace.
- Identification of mission limitations and safety issues – Such as battery charge, GPS strength, and potential for radio interference.
- Emergency procedures – A review of emergency/contingency procedures including aircraft system failure, flight termination, divert, and lost link procedures.
- Class of airspace checked. – The class of airspace determines whether ATC must be contacted for clearance to fly.
- Checking video downlinks.

32.3.14 Pre-Flight Inspection

1. The remote pilot in command is required to complete the pre-flight inspection prior to takeoff.

- The inspection will be documented digitally using the NSBPD approved checklist.
- Any deficiencies found that would affect flight safety must be repaired before flight.
- The remote pilot in command may make any repairs within their training and abilities.
- Any required repairs outside the remote pilot in command’s abilities will be completed by the Support Services Division.
- Any maintenance/repairs made will be documented in the UASs maintenance log.

32.3.15 Flight Video

1. The RPIC for the flight is responsible for ensuring all video from the flight is uploaded prior to ending their work shift.
32.3.16 Flight Records

1. All UAS training and mission flights shall be documented digitally using NSBPD approved software.
2. All flights will be documented in an agency flight log. Each log entry shall include information regarding:
   • Duration of flight time
   • Reason for the flight
   • Time, date, and location of the flight
   • Name of the supervisor approving the deployment
   • Staff assigned
   • Summary of the activities covered, actions taken, and outcomes from the deployment
   • Batteries used
   • NOTAMS issued
   • ATC/System Operations Support Center (SOSC) contact

32.3.17 Accident/Incident Notification and Reporting

1. For all in flight accidents and incidents involving injury to any person, damage to property, other than the UAS, the remote pilot in command shall:
   • Notify the supervisor who authorized deployment of the UAS.
   • If the authority who authorized UAS deployment is not the supervisor over the incident for which the UAS was deployed, the incident supervisor shall be notified of the accident/incident.
   • The Support Services Lieutenant shall be notified of the accident/incident.
   • Complete a NSBPD report detailing the accident/incident.
   • All in flight accidents and incidents involving serious injury to any person or loss of consciousness, or property damage, other than to the UAS, in excess of $500.00 shall be reported to the FAA by the remote pilot in command within 10 calendar days of the event.

32.3.18 Flight Video Administrative Review Process

1. The administrative review process shall be conducted by the command staff.
2. If a recording is accidental in nature, the officer shall notify his supervisor. If the recording does not meet the agency’s requirement for activation and the footage holds no law enforcement or public value for retention, the supervisor shall initiate the administrative review process and recommend an abbreviated retention period.
3. If a recording is related to a court order, citizen’s complaint, or potential/pending legal issue, the recording may be kept for an additional period of time.

32.3.19 Quality Control

1. Monthly, the Support Services Lieutenant or designee shall randomly review 1-3 flight recordings to ensure that the UASs are being used in accordance with policy and shall identify any areas that may require additional training or guidance.

32.3.20 Evidence

1. Physical Evidence
   • Any evidence collected in the form of physical samples, video, audio, biological sampling, or other evidence which may come into contact with the UAS will be deemed to have been collected by the RPIC.
2. Digital Evidence

- Any evidence collected by the UAS will be immediately downloaded at the end of the flight and transferred into evidence. Anyone requesting the evidence collected by the UAS shall submit a public records request.
- Retention, research and disposal of flight video held as evidence shall be in accordance with NSBPD Directives 27-1 Evidence and Property (CFA 32-3 E)

New: RR 07/20

Approved: Signature on File
Chief Mike Coffin