



Manatee County Board of County Commissioners Administrative Procedures Manual

Unmanned Aerial Vehicle (UAV) - Drones

Procedure #: 801.000

Date Issued: 02/26/19

Purpose

This procedure regulates the use of unmanned aerial vehicles (UAV), commonly referred to as drones. UAVs are remotely operated aircrafts that do not have a human pilot on board. UAVs are a component of an Unmanned Aircraft System (UAS), which also includes a ground-base controller and communication system. UAS provide Manatee County with the ability to safely and cost-effectively enhance government services, improve efficiency of various tasks and improve the safety of the public and emergency responders. The purpose of a Manatee County UAS is to support and augment the County's ability to efficiently provide for the health, safety and welfare of the public and County staff. This UAS procedure and associated Standard Operating Procedures set forth the terms and conditions for the use of UASs in County operations and are intended to ensure the safe and responsible operation of the County's unmanned aircraft, regardless of the nature of the mission.

Procedure

This procedure applies to all users, including Manatee County administrators, employees, temporary personnel, contractors and their agents. Violation of this procedure may lead to revocation of user privileges and disciplinary action up to and including termination of employment. It is important to maintain personnel licensed and trained in the use UASs and to ensure this resource is deployed lawfully to protect life and property and to support County departments in providing services to Manatee County citizens.

The County UAS Team which includes the Program Manager and Program Coordinators are authorized to utilize the UAS and associated technologies and are expected to implement the County's UAS Program to improve and expedite emergency management, mapping and measuring, damage assessments, and other authorized tasks that can be accomplished more safely and cost-effectively through the use of UAS technology.

Safety and Privacy concerns are priorities in the implementation of the County's UAS Program. This procedure is intended to supplement and does not replace state and federal laws and regulations governing UAS operations, all other applicable County policies and procedures, and aircraft manufacturers' approved flight manuals.

Definitions

CFR: Code of Federal Regulations

COA: Certificate of Waiver or Authorization issued by the FAA, which grants permission to the requesting governmental entity seeking to operate a specific UAS activity as a public aircraft operation.

FAA: Federal Aviation Administration

GCS: Ground Control System – A system of personnel and equipment that controls the UAV flight operation and sends and receives data or media during a UAS Mission.

Non-Participant: Any person who is not involved in the UAS operation or UAS Mission but is located in the area of or directly affected by the UAS flight operation, such as members of the media or by-standers.

PAO: Public Aircraft Operation – A government operation that occur within U.S> airspace as defined by 49 U.S.C. §§ 40102(a)(41) and 40125

(s)UAS: (Small) Unmanned Aircraft System [14 CFR Part 107] – A (s)UAS, including UAV, GCS, flight camera, data and media collection systems, that weighs more than .55 lbs and less than 55 lbs (total weight) in flight.

UAS Flight Team: The group of individuals responsible for the implementation of any UAS Mission authorized by this procedure. A UAS Flight Team, at a minimum, includes one UAV PIC and a minimum of one UAV Visual Observer.

UAS Mission: A flight operation performed by a UAS including planning, pre-flight operations, deployment, operation of the UAV and post-flight operations.

UAS Program: The Manatee County Unmanned Aerial System Program including UAVs, documents such as this procedure, Standard Operating Manual, UAS insurance policies, UAS Projects or UAS Missions, and any other associated activity or equipment.

UAS Program Manager: Employee designed by the County's Director of Property Management, with the concurrence of the County Administrator, to implement the UAS Program.

UAS Program Team: The Manatee County team of employees, consisting of the UAS Program Manager and UAS Project Coordinators.

UAS Project: A written plan for a County Department's use of the UAS Program based on an operational objective, and developed by a UAS Project Coordinator, which is vetted and approved by the UAS Program Team for implementation through one or more UAS Missions.

UAS Project Coordinator (Departmental): Employee designated by a County Department Director to participate on the UAS Program Team and implement the UAS Program for that Department.

UAS Participant: Any person participating in a UAS Mission or under an Incident Command System with an ongoing UAS Mission, including, but not limited to, the UAS Flight Team and persons who are the object of a search and rescue UAS Mission or operation.

UAV: Unmanned Aerial Vehicle, which is also referred to as a drone, flight platform or aircraft.

UAV Equipment Operator: Person participating in a UAS Mission who is responsible for operation of any aerial or ground-based equipment supporting the UAV, other than flight controls.

UAV Visual Observer: Person, acting as safety officer in direct contact with UAV PIC and UAV PMC and maintaining situational awareness of GCS environment and UAV flight environment.

UAV Pilot in Command (PIC): UAV Pilot remotely in control of a County UAV and who is the final authority over UAV operations during a UAS Mission. The UAV PIC is responsible for ensuring that all UAS Missions are conducted in accordance with approved UAS Project guidelines and parameters. A UAV PIC must be in control or able to immediately take manual control of a UAV in flight at all times and must be certified under the Manatee County UAS Program and hold a valid FAA Remote Pilot Certification with a (s)UAS rating.

UAV Person Manipulating Controls (PMC): Person who is certified through Manatee County UAS Program to operate a UAV in flight during a UAS Mission. The UAV PMC must have a valid FAA Remote Pilot Certification with a (s)UAS rating or be under the direct supervision of a UAV PIC.

Compliance

It shall be the responsibility of each County Department Director, as well as the UAS Program Manager, to ensure compliance with this procedure.

General Provisions

The Manatee County UAS Program has been created with the intent and understanding that as an emerging technology, the equipment, capabilities, regulations, acceptance and use of UASs may evolve over time. Manatee County will make the best use of UAS technology through continuing training, education and experience.

UAS Program

County Departments and divisions will have access to the County's UAS technology and may request participation in the UAS Program for County operations to the extent permitted by applicable laws and regulations. Pursuant to Section 934.50, Florida Statutes, the County is prohibited from using UASs for law enforcement purposes, including code enforcement. Priority within the UAS Program will be given to emergency and disaster response support within Manatee County over other operations. Only Manatee County UAV PICs may operate the Manatee County UAVs regardless of jurisdiction or mission location.

The UAS Program will be managed through the Manatee County's Department of Property Management in coordination with Risk Management. A UAS Program Manager will be assigned by the Director of Property Management with the concurrence of the Deputy County Administrator. The Deputy County Administrator will have administrative oversight for the UAS Program. The Public Safety Director will have operational oversight over UAS Projects and UAS Missions involving public safety and emergency responses. For any County Department or division that intends to use the UAS Program, it is the

responsibility of the Department Director to assign a UAS Project Coordinator to participate in the UAS Program Team.

The UAS Program Manager will be responsible for overall management of the UAS Program, implementation of the UAS Program, development of procedures, and ensuring internal and external compliance with the FAA and any other regulatory agencies. The UAS Program Manager will also work with the Department Directors to educate their employees on the uses and benefits of the County's UAS technology and to facilitate participation in the UAS Program.

The UAS Project Coordinators will work closely with one another and the UAS Program Manager to manage and develop the UAS Program through the UAS Project Team. Regular meetings of the UAS Program Team will be held to assess and develop the program at intervals determined by the UAS Project Team. UAS Project Coordinators will be responsible for coordinating their Department's participation in the UAS Program including development of UAS Projects and UAS Missions and implementation of the UAS Program on behalf of their Department.

UAS Program development will be through the UAS Program Team.

All use or implementation of the UAS Program will follow this procedure and the development of UAS Projects and UAS Missions.

Recordkeeping

UAS Project Coordinators, UAV PICs and UAV PMCs will be responsible for maintaining operational records required by the UAS Program, FAA requirements, and the Public Records Act, and for making those records available to the UAS Program Manager. Flight logs must be maintained by UAV PICs.

Any department or division collecting data or records using the County's UAS Program is responsible for compliance with appropriate records retention procedures, chain of custody, and applicable security protocols.

Public Participation

The UAS Program Manager will work with County Administration to educate and inform the public concerning the County's UAS Program to ensure the public has an opportunity to understand its purpose, benefits and proper utilization in each programmatic application.

Privacy

The public's right to privacy and protection of civil liberties will be paramount in UAS Project development and UAS Mission planning. Each UAS Project will describe privacy considerations, applicable privacy laws, and data collection types and methodology, data use, data retention and data dissemination specific to the project objective.

Failure to respect privacy concerns and adhere to Project guidelines and parameters may result in removal from the UAS Program and could result in disciplinary action.

UAS Projects will be reviewed by the UAS Program Team and legal counsel annually through 2020 and every third year thereafter for compliance with applicable privacy and civil liberties practices, regulations or laws. Any member of the UAS Missions or UAS procedures to the UAS Program Team for review at any time to discuss or resolve matters of privacy, safety or efficiency.

Equipment

Manatee County UAS equipment will be managed by the Department of Property Management. The UAS Program Manager will be responsible for ensuring all users of the equipment have appropriate levels of training, verifying licensing, certifications and ensuring UAS equipment is properly maintained and stored. The UAS Program Manager will be responsible for ensuring all UAS equipment is registered with the FAA and that any applicable registration number is affixed to such UAS equipment. All supporting software, equipment registrations, radio licensing or other state and federal requirements will be obtained or monitored by the UAS Program Manager.

The purchase or storage of additional UAS equipment is prohibited unless approved by the UAS Program Manager. The UAS Project Coordinator of any Department purchasing or storing any UAS equipment is responsible for complying with this UAS procedure and the UAS Program, and to coordinate those efforts with the UAS Program Manager.

Any Department that currently owns UAS equipment that is not controlled by the UAS Program Manager is required to provide all information and records relating to such equipment to the UAS Program Manager to ensure compliance with this procedure and SOP.

Training

All members of the Manatee County UAS Program Team are required to complete training outlined in the UAS procedure and SOP and will be required to conduct at least one (1) hour of UAS flight operations every ninety (90) days and to participate in continuing education as required by the County's UAS program. Certain operations have requirements imposed by the FAA that must be fulfilled in order to perform functions such as piloting a UAV or overseeing flight operations during UAS Missions.

All training must be pre-approved in writing by the appropriate Department Director and based on departmental and UAS Program procedures. Documentation of all training must be provided to, and maintained by, the UAS Program Manager.

Certification

The UAS Program Team members must successfully complete an approved UAS training program and maintain FAA certification for the operation of a (s)UAV. The presence of a visual Observer can be waived with the direct permission of the UAV Program Manager for specific types of operations.

Basics UAS Program

The County's Basic UAS Program consists of any UAS operations that can be completed in compliance with the FAA's regulations for civil/commercial UAS operations, set forth in 14 C.F.R. Part 107, referred to as "Part 107." Part 107 contains rules regarding the speeds, distances, and environmental conditions available to create and easily manage operations along with associated FAA training.

Special UAS Services Program

The County's Special UAS Services Program consists of UAS operations that require flexibility beyond the rules set forth in Part 107. The Special UAS Services Program will enable the County to conduct UAS Missions and UAS Projects that promote public safety and in response to emergency situations pursuant to the County's COA as a public aircraft operation. The purpose of the COA is to allow the County to conduct public aircraft operations that cannot be completed in compliance with Part 107.

UAS Project Implementation

The County's UAS operations will be defined through the development of UAS Projects by UAS Project Coordinators to be in accordance with this and other applicable County procedure and state or federal laws and regulations. UAS Projects will be developed under one of five categories: (1) Emergency Response, (2) Public Relations, (3) General Survey, (4) Infrastructure Inspection, (5) Other Uses deemed appropriate by the County. Each category's scope, considerations, project development guidance and associated objectives will be described in the UAS SOP. Each UAS Project must have identifiable objectives that will be achieved through the purpose, scope, data, methodologies, equipment, safety, privacy and authority for the specific purpose of satisfying the objective(s). UAS Projects will undergo a development process overseen by the UAS Program Manager and will be reviewed by the department UAS Project Coordinator of the UAS Program Team. County and external input will be considered in project development. Final project types will be approved the UAS Program Manager.

UAS Mission Implementation

UAS Missions will be performed only if requested by or through a UAS Project Coordinator in accordance with this procedure and if the UAS Mission complies with the UAS SOP. UAS Mission design, approval process and notification must follow the UAS Project parameters.

UAS Operation

County-owned UASs may be operated only by a Manatee County employee who is a certified UAV PIC. A UAS Mission shall only be performed if (i) deemed safe by the UAS Flight Team, (ii) is within the certified limits of the UAV PIC, (iii) complies with either Part 107 or the County's COA as a public aircraft operation, and (iv) is approved either through the UAS Project Team, Deputy County Administrator or the Director of the Public Safety Department. The UAV PIC on site for any and all UAS Missions will have the final right to refuse to fly an operation, if he/she feels it is unsafe, or violates any County, state, or federal law, regulation, or procedure.

The County's UAS may be used for any incidents or activities which are under the responsibility of Manatee County and which are not otherwise prohibited by applicable law, such as code

enforcement or other law enforcement purposes. The UAS may also be used for incidents and activities involving Manatee County as joint responsibility operations or as mutual aid operations in Manatee County and neighboring areas when the UAS is requested by Manatee County and other responsible agency or command entity. When conducting mutual aid operations, an agreement will be entered among all parties setting forth each party's responsibilities and the policies to be followed. Regardless of a such an agreement, however, the agreement will not supersede Manatee County policy, or any state or federal law or regulation. Similarly, regardless of the involvement of outside parties, Manatee County employees will conduct themselves in a manner that complies with the Manatee County Personnel Policy, Rules and Procedures Manual, this procedure, the UAS SOP, and the County's insurance requirements.

The County's UAS may be used across the State of Florida. Requests for UAS support for incidents and activities where Manatee County is not involved directly, does not have responsibility or does not have a Memorandum of Understanding or similar agreement for mutual-aid or use of the UAS, must be made through the UAS Program Manager, through a UAS Project Coordinator or a state Emergency Management official, and will require additional approval from wither the Director of Public Safety Department or his or her designee for, or related operations, or by the Deputy County Administrator for any other operation. Additionally, a County UAV PIC must be available and accept an outside request for UAS Mission assistance. Reimbursement for staff time, travel, UAS equipment usage or other expenses may be charged to a requesting agency by order of the Department Director, Deputy County Administrator or Director of Public Safety Department.

Coordination with Other Agencies

All UAS Missions will be coordinated with other appropriate agencies, Incident Command of an emergency or disaster, or as required by the FAA or other regulatory agency, or as required by Manatee County's UAS Program.

Insurance Requirements

Aviation liability insurance for UASs is required with a minimum limit of one million dollars (\$1,000,000.00) per occurrence for any one claim, and aggregate limit of two million dollars (\$2,000,000.00) for any number of claims arising from one incident.

All County-owned UAS equipment must be registered with the FAA and the registration number affixed to the UAS equipment. The UAS Program Manager is responsible for maintaining records on the FAA registration numbers and make and model information for all County-owned UAS. The UAS Program Manager must annually provide to the Risk Manager all FAA registration numbers and make and model information for all County-owned UAS equipment to ensure proper insurance coverage.

Originator, Title and Department Name

Diana Robinson, Energy Manager, Property Management

Authorization

Cheri Coryea, County Administrator

Authority

14 CFR Part 107

14 CFR Parts 21, 43, 61; Operation and Certification of Small Unmanned Aircraft Systems;
Final Rule

US DOT-FAA Advisory Circular – AC No. 107-2 FDOT

History

None

Forms

Pre-Flight Checklist

Post-Flight Report template

UAS Mission Request Form

UAS Training Request Form

These forms are located on the UAS Drones SharePoint site.

Related Policy

[H.1 Unmanned Aircraft Systems \(UAS\) - Drone Policy](#)

Issued and Sunset Dates

Issue Date: 02/26/19

Sunset Date: 02/26/24