

RESOLUTION NO. 2018 - 02

PEND OREILLE COUNTY DRONE POLICY

IN THE MATTER OF ADOPTING AN UNMANNED AERIAL SYSTEMS (UAS)  
OPERATIONS AND POLICY MANUAL

**WHEREAS**, Unmanned Aerial Systems may provide the county with the ability to improve government services, improve efficiency of various tasks, and improve the safety of the public and county staff; and

**WHEREAS**, we believe it is prudent to use this resource to support Pend Oreille County Public Works in providing services to the citizens; and

**WHEREAS**, this policy is compliant with state and/or federal standards; and

**WHEREAS**, this action is in the best interest of Pend Oreille County and its citizens.


**NOW, THEREFORE, IT IS HEREBY RESOLVED** by this Board that the attached Unmanned Aerial Systems (UAS) Operations and Policy Manual is approved as the Pend Oreille County Drone Policy.

**ADOPTED** this 2nd day of January, 2018.


BOARD OF COMMISSIONERS  
PEND OREILLE COUNTY

  
Stephen Kiss, Chair


  
Mike Manus, Vice-Chair

  
Karen Skoog, Member

ATTEST:

  
Rhonda Cary, Clerk of the Board

APPROVED AS TO FORM:

  
Dolly Hunt, Prosecuting Attorney



# **Pend Oreille County Public Works Unmanned Aerial Systems (UAS) “Drone” Operations and Policy Manual**

## **1. Purpose.**

The purpose of the Pend Oreille County Public Works Unmanned Aerial System (UAS) is to support and augment Pend Oreille County Public Work’s operations, through improved efficiency with aerial equipment and create new opportunities to provide for the health, safety and welfare of the public and Pend Oreille County staff. This UAS Policy and associated procedures are intended to ensure the safe and responsible operation of the County’s unmanned aircraft, regardless of the nature of the mission.

## **2. Policy Statement.**

Unmanned Aerial Systems provide Pend Oreille County Public Works with the ability to safely and cost-effectively augment government services, improve efficiency of various tasks and improve the safety of the public and county staff. We believe it prudent to maintain personnel trained in the use of unmanned aircraft systems and to use this resource to protect life and property and to support Pend Oreille County Public Works department in providing transportation services to Pend Oreille County citizens. Pend Oreille County Public Works staff are authorized to utilize the UAS and associated technologies when it provides cost efficiency, improved data quality, or improved personnel safety over an existing method or process. Examples of permitted uses include, but are not limited to, aerial photography, photogrammetry, bridge inspections, geotechnical field investigations, Light Detection and Ranging (LiDAR) applications, public outreach, mapping construction sites and conditions, and disaster response/training exercises. Nothing in this policy shall be construed as to restrict the safe, rapid deployment of a County-owned or contracted UAS in response to an emergency or exigent situation to protect life and limb, critical transportation and infrastructure. Safety and privacy concerns are priorities in the implementation of the program.

## **3. Definitions**

**AGL:** Above Ground Level.

**COA:** Certificate of Waiver or Authorization issued by the FAA granting permission of the requesting agency operating as public aircraft for a specific UAS activity.

**FAA:** Federal Aviation Administration.

**FARs:** Federal Aviation Regulations. For the purpose of conducting civil (s)UAS operations this is generally 14 CFR Part 107 and Advisory Circular 107-2.

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

**NAS:** National Air Space

**Non-Participant:** A person not involved in the event or operation, however in the area of or directly affected by the UAS flight or operation such as members of the media or by-standers.

**(s)UAS:** (Small) Unmanned Aircraft System [14 CFR Part 107] – UAV, GCS, flight cameras, data and media collection systems. A (s)UAS is greater than .55lbs and less than 55lbs in flight.

**UAS Flight Team:** The group of individuals responsible for the implementation of any UAS Mission authorized by this policy. This includes at minimum one UAV PIC and one UAV Observer. This may also include UAV PMC.

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

**UAS Program Manager:** Person designated by Pend Oreille County Public Works Director to manage and implement the UAS Program.

**UAS Participant:** A person participating in an event under County operations with an ongoing UAS Mission.

**UAV:** Unmanned Aerial Vehicle (a.k.a. Drone).

**UAV Observer:** Visual Observer – Person acting as safety officer in direct contact with UAV PIC and UAV PMC during UAS mission responsible for relaying observations and hazards to the UAV PMC and to maintain situational awareness of GCS environment and UAV flight environment.

**UAV PIC:** Pilot in Command – UAV Pilot remotely in control of a County UAV and is the final authority over UAV operations during a UAS Mission; provided, that all missions will be conducted in accordance with approved 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 Pend Oreille County UAS Program to be a PIC for UAS Missions and hold a valid FAA Remote Pilot Certification with a (s)UAS rating.

**UAV PMC:** Person Manipulating Controls – Person certified through Pend Oreille County UAS Program to operate a UAV in flight during a UAS Mission. The PMC must have a valid FAA Remote Pilot Certification with a (s)UAS rating or be under the direct supervision of a PIC who has the ability to immediately take manual control a UAV in flight at all times.

**Unprocessed UAV Data:** digital data collected by a UAV during UAS missions that is still in its original and unaltered state.

#### **4. Protection of Civil Rights and Privacy.**

UAS Program Manager and all UAS Flight Team members will ensure the protection of civil rights and reasonable expectations of privacy are key components in any decision to deploy the UAV. UAS Program Manager and all UAS Flight Team members will minimize the extent that UAV operations intrude on the citizens of Pend Oreille County.

- a. UAS Program Manager and all UAS Flight Team members will limit operations to the specific approved purpose of the project and shall employ reasonable



precautions to avoid capturing images of the public except those that are incidental to the project.

- b. All videos and still images will be maintained in strict compliance with Pend Oreille County policies and procedures.
- c. The Pend Oreille County Public Works UAS program will operate strictly within the current federal, state and local laws and regulations.
- d. Pend Oreille County Public Works will not share Unprocessed UAV Data with other Pend Oreille County departments, other Local Governments, State agencies or Federal agencies unless such sharing is specified within the original purpose of the UAS mission or if such sharing has been directed by the Pend Oreille County Board of County Commissioners.

## **5. Administration.**

- a. The policies and procedures contained in this document are issued by the authority of the Pend Oreille County Board of County Commissioners.
- b. This manual is considered a supplement to existing Pend Oreille County policy, FAA regulations and policy, Washington State regulations and UAV aircraft manufacturer's flight operations manual.
- c. This manual will be reviewed annually and updated when other rules, regulations or policy require changes or when changes are deemed necessary.

## **6. Organization.**

- a. UAV operated by the Pend Oreille County Public Works Department are considered "Public Aircraft Operations" by the FAA. FAA Regulation 14 CFR Part 107 and Advisory Circular 107-2 and/or the COA issued by the FAA is the authority that grants Pend Oreille County Public Works operating authority in the NAS.
- b. Supervision and command of the Pend Oreille County Public Works UAS program is conducted by the Pend Oreille County Public Works UAS Program Manager. All UAS Flight Team members will be trained in accordance with Pend Oreille County Training Standards and be issued a copy of this UAS Operations and Policy manual.

## **7. Operations.**

- a. UAS missions will operate within the limitations of the FAA Regulation 14 CFR Part 107 and Advisory Circular 107-2 and/or the COA issued by the FAA.
- b. The Pend Oreille County Public Works UAS program will operate strictly within the current laws and regulations.
- c. All UAS missions will consist of a UAS Flight Team. Under no circumstances will a pilot attempt to complete a deployment alone without an observer.
- d. Air Support mission briefings and Risk Assessments will be completed and briefed prior to each flight.

- e. Pre-flight and post-flight inspections of the UAV will be completed by the UAS Flight Team using the manufacturer's operator's manual. Pre-flight inspection and any discrepancies will be logged in the UAV logbook.
- f. Pre-flight, in-flight and post-flight checklists will be developed and used by the UAV PIC.

## **8. Safety.**

- a. Employees involved in County-owned UAS operations shall comply with pertinent Pend Oreille County Safety/Personnel policies and FAA safety regulations.
- b. Employees requiring assistance complying with FAA safety regulations shall consult with the UAS Program Manager.
- c. It is the duty of every member of the UAS Flight Team to contribute to the goal of continued safe operations. This contribution may come in many forms and includes always operating in the safest manner possible and never taking unnecessary risks.

## **9. Training.**

- a. The UAS Program Manager will oversee the UAV Training Program.
- b. All UAS Flight Team members will have a training folder located at the UAS Program Manager's office that includes certificates of training and training documentation.
- c. UAV Observers must complete sufficient training to communicate to the pilot any instructions required to remain clear of conflicting traffic. This will include knowledge of the rules and responsibilities described in 14 CFR 91.111, *Operating Near Other Aircraft*; 14 CFR 91.113, *Right-of-Way Rules; Except Water Operations*; and 14 CFR 91.155, *Basic VFR Weather Minimums*; knowledge of air traffic and radio communications, including the use of approved ATC/pilot phraseology; and knowledge of appropriate sections of *the Aeronautical Information Manual*.
- d. Recurrent Training. UAV PIC and PMC who do not have documented flight time within 180 days will demonstrate proficiency in their duties to the UAS Program Manager or a UAV PIC/PMC who is current and proficient. PIC's must demonstrate three takeoffs and three landings of the specific UAV in the previous 180 days to remain current. Currency flights may be supervised by the UAS Program Manager or another current UAV PIC/PMC. All mission deployments, including practice or training flights, will be documented and counted towards an operator's UAV flight experience. An FAA aeronautical knowledge test must be passed and documented every 24 months.
- e. Crew Resource Management Training (CRM). All UAS Flight Team members will complete the Pend Oreille County Public Works Crew Resource Management initial training and annual CRM training. CRM for UAS Flight Team members will

emphasize situational awareness and effective communication during each UAV flight operation.

#### **10. Equipment**

- a. Pend Oreille County Public Works UAS equipment will be managed under the Engineering Department.
- b. The UAS Program Manager will be responsible for ensuring all users of the equipment have appropriate levels of training, verifying certifications and ensuring the UAS is properly maintained.
- c. All supporting software, equipment registrations, radio licensing or other federal programs and requirements will be obtained or monitored by the UAS Program Manager.
- d. UAS Procurement shall be in accordance with the current Pend Oreille County Purchasing and Procurement Policy.

#### **11. Maintenance**

- a. Pre-flight and post-flight inspections of the UAV will be completed by the UAS Flight Team using the manufacturer's operator's manual.
- b. Pre-flight, in-flight and post-flight checklists will be developed and used by the UAV PIC.
- c. Discrepancies noted during pre-flight or post-flight inspections will be noted in the UAV logbook.
- d. Scheduled and unscheduled maintenance on the UAV will be performed in accordance with the manufacturer's guidelines.

#### **12. Retention and Public Disclosure of Aerial Imaging**

- a. Aerial imaging shall be retained in accordance with the provisions of [RCW 40.14](#).
- b. Public requests for UAS aerial imaging shall be processed in accordance with Pend Oreille County public disclosure policy and the provisions of [RCW 42.56](#) and/or federal guidelines that supersede state law/requirements.
- c. Aerial imaging retention schedules shall be based upon the Washington Secretary of State – Washington State Archives most current Common Records Retention Schedule (CORE).

#### **13. Accident Reporting and Review**

All UAS related accidents that result in deaths, injuries, illnesses; incidents or near-misses will be reported as defined in the Pend Oreille County Safety Program and Policies.

In addition to the above Pend Oreille County requirements, the FAA requires the following:

**§ 107.9 Accident Reporting.** No later than 10 days after an operation that meets the criteria of either paragraph (a) or (b) of this section, a remote pilot in command must report to the Federal Aviation Administration in a manner acceptable to the Administrator, any operation of the small unmanned aircraft involving at least:

- a. Serious injury to any person or any loss of consciousness; or
- b. Damage to any property, other than the small unmanned aircraft, unless one of the following conditions is satisfied:
  - 1. The cost of repair (including materials and labor) does not exceed \$500; or
  - 2. The fair market value of the property does not exceed \$500 in the event of total loss.

The FAA has an online reporting tool for this purpose:

[https://www.faa.gov/uas/report\\_accident/](https://www.faa.gov/uas/report_accident/)