

# Remotely-Piloted Aircraft System Guidelines

Pierce County, WA

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*Fiscal-IT/Spatial Services* 1 | 27 | 2021

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## Purpose

This document provides guidelines to Pierce County departments and employees on the purchase, registration, and safe, efficient, lawful use of remotely-piloted aircraft systems (RPAS). Remotely-piloted aircraft systems can be utilized in circumstances that protect life and property, save time, enhance data collection, and detect possible dangers or liabilities that could not otherwise be observed. It is essential that privacy be respected so every remotely-piloted aircraft system operator must make a reasonable effort to not invade a person's reasonable expectation of privacy throughout the flight and data operations.

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## Definitions

**RPAS** (Remotely-Piloted Aircraft System, also known as UAS - Unmanned Aircraft System) — An aircraft and its associated elements required for the safe and efficient use, operated without the possibility of direct human intervention from within or on the aircraft. A RPAS is capable of sustaining directed flight whether preprogrammed or remotely controlled. For the purposes of this document, RPAS for Pierce County are “small unmanned aircraft” defined by the FAA. Unless otherwise specified or authorized, any RPAS utilized will weigh less than 55 pounds on takeoff, including everything on board or otherwise attached to the aircraft in conformance with the legal definition of “small unmanned aircraft.”

**UAV** – Unmanned Aerial Vehicle – the hardware deployed into the air

**NAS** National airspace system - The airspace, navigation facilities, and airports of the United States along with their associated information, services, rules, regulations, policies, procedures, personnel and equipment.

**Remote Pilot** – Is a holder of a remote pilot certificate issued by FAA.

**RPAS Operator** – Is a person who flies remotely using a wireless controlling device for the RPAS.

**Visual Observer** – Is a person designated by the department to assist the RPAS operator in maintaining visual contact and avoiding other air traffic, objects aloft, or hazards on the ground.

**Part 107** – Refers to Federal Aviation Regulation Part 107 (from Title 14 Code of Federal Regulations), which governs the operations of UAS/RPAS.

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## Applications

Pierce County will operate RPAS for the collection of aerial photography, videography, or other remote sensing techniques in support of government missions according to procedures set by Pierce County and within the legal boundaries set by existing laws, regulations, and FAA requirements. Pierce County will periodically update these procedures to maintain compliance with the laws, regulations and FAA requirements. Data collected will be made available to Pierce County Risk Management upon request.

The expected missions fall into the general categories of public safety, emergency management, County property/infrastructure management, site investigation, mapping, and communications.

*(See Exhibit A for a current mission list which is subject to change as emerging needs are added)*

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## Privacy

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The use of RPAS involves privacy considerations. Pierce County Code, Chapter 1.30, *Freedom from Unwanted Surveillance* addresses this concern.

<http://www.codepublishing.com/WA/PierceCounty/#!/html/PierceCounty01/PierceCounty0130.html>

Similar to the practices and procedures in use by other governmental jurisdictions, absent a warrant or exigent circumstances, operators and observers will:

Adhere to FAA altitude rules;

Not intentionally record or transmit images, of any location where a person would have a reasonable expectation of privacy (e.g., residence, yard);

Take reasonable precautions to avoid areas where there is a reasonable expectation of privacy by taking precautions such as deactivation or programming of imaging devices, and/or image reduction during data processing to minimize or avoid such areas and persons that are not material to the purpose for which RPAS is used.

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## Program Coordination

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Program coordination will occur in IT similar to other well-established programs like Global Positioning Systems in Pierce County. This will ensure that County guidelines maintain conformance with laws, regulations, and best practices. The coordinator will:

- Be responsible for training coordination, certification confirmation, and currency of the RPAS pilots for insurance purposes;
- Develop and maintain local procedures for RPAS operations in the National Airspace System;
- Develop and implement an RPAS maintenance program based on manufacturer recommendations and certified maintenance providers;
- Maintain records relating to RPAS pilot training and aircraft maintenance;
- Ensure that established guidelines are followed by monitoring and providing periodic reports on the program to Pierce County leadership;
- Periodically reviews state and local laws, FAA requirements and other regulations and draft updates to guidelines that conform with changes;
- Be responsible for approval of hardware and software purchases;
- Coordinate FAA waivers for special flight requirements as needed.

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## Acquisition and Use of RPAS

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## Purchasing

As with other technology acquisitions, purchase/procurement of RPAS hardware or software will be coordinated through the Finance Department-IT Division and will be done through the IT purchasing and acquisition process. The RPAS coordinator or a delegate, will provide purchasing guidance based on needs and review and approve all RPAS-related purchases.

## Registration

All RPAS hardware platforms will be registered to Pierce County Departments and tracked in the Finance Department-IT Division asset management system. RPAS hardware platforms can only be loaned to other County Departments for the support of other County work so long as that work falls within these guidelines. All RPAS will be registered with the FAA as required for business use.

## Remote Pilot Certification

Upon selection, a RPAS operator will acquire the training and experience needed to obtain an FAA Remote Pilot Certificate.

Upon the issuance of FAA Remote Pilot Certificate, the remote pilot must submit a copy of the certificate to the Program Coordinator for record keeping purposes.

## Flight Training

RPAS flight training or practice will be conducted only directly above Pierce County property without people below the flight zone. Park spaces or pit sites should be preferred training areas and time of day and day of week considered to minimize conflict with other scheduled activities on site.

Internal training will include both classroom and in-field instruction on hardware and software specific to Pierce County operation requirements.

## Flight Safety

Certified RPAS operators will conduct preflight inspections, including specific aircraft and control station system checks, to ensure the RPAS is ready for safe operation.

Remote pilots will adhere to laws, rules, protocols and the department policy, but may deviate from these requirements in response to an in-flight emergency. RPAS operators will not operate in a careless or reckless manner.

RPAS operators must report to the FAA within 10 days of any operation that results in serious injury, loss of consciousness, or property damage of over \$500, not including damage to the drone itself.

## Flight logging

Flights will be logged in accordance with Pierce County RPAS logging standards within 24 hours of takeoff.

## Data Handling

Image or other data gathered using RPAS will be transferred, processed, and stored according to the standard procedures established or allowed by IT and the RPAS coordinator. Spatial data for use within Pierce County enterprise applications will adhere to established standards of format, metadata, and retention.

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## Prohibited Use

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Any flight parameters prohibited by FAA part 107 rules are prohibited unless waivers through the FAA have been acquired.

The UAS video or photo data shall not be used:

- To conduct random surveillance on citizens;
- To harass or intimidate any individuals or groups;
- To conduct personal business of any type.

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## Insurance Requirement

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Current RPAS hardware and RPAS operator reports including pilot name, age, hours, certificate #, UAV flown, UAV FAA Reg #, FAA Reg expiration date, Serial #, Manufacturer, Model #/name, Weight, Date of Manufacture

- FAA along with any changes will be regularly provided to Risk Management by the program coordinator to maintain currency of coverage.
- If an operator has no hours but has a current FAA certificate, it is recommended that another experienced operator on that UAV accompany the operator as pilot in command.

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## Retention of Data

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Data collected using a RPAS shall be retained as prescribed in the established Pierce County records retention schedule. A four-year period is required for flight, pilot, and equipment records while image data shall be retained until no longer needed for agency business. Image data used for mapping will be retained for reference like other GIS aerial image data.