Drone Pilot Job Description



Department:HealthPosition:Career ServiceGrade:722Supervisory:NoReports to:Mosquito Abatement Manager

Summary

Under general guidance and direction of the Mosquito Abatement Manager, oversees and coordinates aircraft aerial larval spray operations. Operates and maintains equipment for aerial spray operations, including unmanned aircraft systems (UAS). Provides field instruction and guidance to seasonal employees. Assists with laboratory functions, as needed. Incumbents serving in this classification may provide related support to multiple County departments during the off season.

Essential Functions

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- 1. Coordinate unmanned aerial vehicle (UAV) mosquito larval control applications; operate drones; transport and set up equipment, as needed; load and unload materials for UAV applications for larval and adult mosquito control.
- 2. Ensure safe execution of missions; verify airspace regulations in target treatment sites; assist with obtaining a public aircraft operations waiver through the oversee aircrew members.
- 3. Ensure equipment and related systems are operating properly; perform pre-flight and post-flight inspections; monitor flight instruments during operations to ensure appropriate functions; calibrate multiple components of drones and spray equipment; charge and discharge lithium polymer batteries safety and appropriately; conduct simple maintenance and repairs; submit additional maintenance and repair requests, as authorized.
- 4. Prepare and submit maps for UAS application; coordinate with Geographic Information Systems (GIS) division to update maps; import and export GIS data, as needed.
- 5. Coordinate property access with landowners, as needed.
- 6. Coordinate inspection and control of higher risk marsh and wet-lands areas.
- 7. Respond to requests for aircraft services for mosquito control; collect necessary information and coordinate appropriate aircraft responses; ensure effective and safe aerial spray services.
- 8. Prepare annual reports, as directed.

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- 9. Assist with instructing seasonal employees in duties related to field inspection and spraying in a safe manner.
- 10. Assist Mosquito Abatement Field Supervisor and seasonal staff with duties related to mosquito control, as needed; conduct field inspections, ULV spraying, and laboratory work.
- 11. Assist laboratory personnel with trapping, identifying, and conducting qPCR testing of mosquito population.
- 12. May assist other County departments with UAS requests.
- 13. Respond to public health emergencies as required by Department or Division administration; carry mobile phone or other emergency communication devices during all work hours and at other times when unavailable by phone.

Knowledge, Skills, and Abilities

- Knowledge of the CFR Part 107 regulations, airspace, and low altitude authorization and notification ability (LAANC) systems
- Knowledge of third party UAS applications
- Knowledge of lithium-polymer batteries and direct circuit battery theory added
- Knowledge of insecticide administration
- Knowledge of proper and effective operation of hazardous material spray equipment
- Knowledge of safe-handling practices for various vector control pesticides
- Knowledge of ecological principles
- Knowledge of proper laboratory procedures
- Knowledge of relative geography and the position of cities, roads, and other landmarks in Utah County
- Knowledge of Geographic Information Systems and basic mapmaking
- Highly skilled in operating unmanned aerial systems and related equipment
- Skilled in UAS field troubleshooting
- Skilled in utilizing mission exports from aircraft
- Skilled in operating pesticide-spraying equipment
- Skilled in record keeping procedures
- Skilled in utilizing technology specific to mosquito abatement and vector control operations
- Ability to interpret aerial photography for vector producing sources
- Ability to coordinate the work of others, as needed
- Ability to communicate effectively verbally and in writing
- Ability to maintain and compile records and prepare reports
- Ability to maintain cooperative relationships with those contacted in the course of work activities

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Supervisory Responsibility

This position has no direct supervisory responsibility but does serve as a coach and mentor for other positions in the department.

Work Environment

Work is regularly performed for sustained periods outdoors and occasionally in hot, cold, or inclement weather, but is also performed in an office or other environmentally controlled rooms. Work exposes the employee to hazardous chemicals which may be injurious or deadly to the employee and others if mishandled. Work exposes the employee to possible bodily injury from pesticide exposure. Work requires use of protective devices such as masks, goggles, and gloves. The employee will be required to drive Utah County owned vehicles in the course of conducting County business and must abide by the Utah County Vehicle Policy.

Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is required to use a high degree of manual dexterity to handle, feel, and operate objects, tools and controls, and reach with hands and arms. The employee regularly walks, stands, or stoops and works for sustained periods of time maintaining concentrated attention to detail. The employee is regularly required lift or otherwise move objects weighing up to forty (40) pounds and occasionally lift or otherwise move objects weighing up to sixty (60) pounds. The employee regularly drives a motor vehicle.

Position Type / Expected Hours of Work

Incumbent must work forty (40) hours each week to maintain full-time status. There may be availability to work out a flex schedule ahead of time that works for both the County and the employee. Occasional evening and weekend work may be required as job duties demand.

Travel

Travel is primarily local during the business day, although some out-of-area and overnight travel may be expected, up to five (5) percent.

Required Education and Experience

- 1. High school diploma or equivalent.
- 2. Two (2) years of experience working in mosquito abatement, agriculture, pesticide application, or a related field.
- 3. Two (2) years of experience in drone operations.
- 4. Demonstrated competence in operating unmanned aircraft systems.

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5. Equivalent combinations of education and experience may also be considered, but education may not substitute for experience in drone operations.

Preferred Education and Experience

1. Preference may be given to applicants with an associate degree in a related field.

Additional Eligibility Qualifications

- Applicants must possess a Remote Pilot Certificate under the Federal Aviation Administration's Small UAS Rule (Part 107) with a minimum of fifty (50) hours of logged and verifiable flight records.
- Selected applicants must possess or obtain a Utah Aerial Applicators License and a Pesticide Applicators License issued by the Utah State Department of Agriculture in the appropriate subcategories within the probationary period for new hires or trial period for promoted County employees.
- 3. Selected applicants must complete the Leading Edge Aerial Technologies Aerial Application Course or its equivalent within the probationary period for new hires or trial period for promoted County employees.
- 4. Incumbents must maintain all certifications and licenses, including completing all ongoing continuing education requirements for license/certification renewal.
- 5. Applicants must possess a valid driver's license and obtain a valid State of Utah driver's license within sixty (60) days of employment.
- 6. Selected applicants will be required to submit to a pre-employment drug screen and background check.
- 7. Selected applicants shall be strongly encouraged to receive immunizations according to the Center for Disease Control and/or County Health Department Policy.

AAP/EEO Statement

It is the policy of Utah County Government to assure equal employment opportunity to its employees and applicants for employment without regard to race, color, religion, national origin, disability, age, sex, sexual orientation, genetic status or gender identity.

Other Duties

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee of this job. Duties, responsibilities, and activities may change at any time.

Utah County Government is a drug-free workplace.

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Acknowledgement below to be completed after an offer has been extended and accepted.

This job description has been approved by the Office of Human Resource Management in consultation with the Department Head.

Signature below constitutes an understanding of the requirements, essential functions and duties of the position.

Candidate / Employee	Date	

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