# HUMBOLDT STATE UNIVERSITY

### **Provost and Vice President for Academic Affairs**

# **Humboldt State University Policy on the Use of Unmanned Aircraft Systems** (UAS)

Policy Number: VPAA 20-01 Office of Academic Affairs

Applies to: Faculty, Staff, Students

Supersedes: P15-01

Purpose of the Policy: To provide guidance concerning the appropriate use of Unmanned Aircraft Systems (UASs; http://www.faa.gov/uas/) related to research endeavors at Humboldt State University (HSU).

# **Policy Details:**

Accountability:

The Provost / Vice President for Academic Affairs is responsible for the implementation and enforcement of this policy.

# Applicability:

This policy applies to powered aircraft operated without a human pilot onboard, by HSU faculty, staff, university volunteers, or students, in the course of scholarly endeavors.

Commercial use of these aircraft on and off campus by those who represent HSU during the use of the aircraft is expressly prohibited.

#### **Unmanned Aircraft Systems:**

Unmanned Aircraft Systems used under the provisions of this policy must be public aircraft as defined by the Title 14 Code of Federal Regulations Subchapter 1.1

### **UAS Review Committee:**

The UAS Review Committee is a presidentially-appointed committee composed of a broad representation of HSU, whose members could include the following: the Director of Risk Management (or designee), the Director of Environmental Health & Occupational Safety (or designee), the Dean of Research (or designee), the University Chief of Police (or designee), faculty members from any of the academic colleges, and one member from the campus community who holds a pilot's license. The President or Provost will appoint the Chair of the committee.

The UAS Review Committee is responsible for the review, approval and oversight of UAS operations at HSU. An approval from the UAS Review Committee provides a minimum level of assurance that the operators are aware of the additional permitting requirements (i.e., FAA), and are prepared and capable of operating the UAS safely and responsibly. Only approved UAS Review Committee operations are covered in this policy.

### **Protocol:**

Prior to deployment of any UAS by HSU faculty, staff, students, or volunteers, operators must have an HSU approved Flight Operations Plan. To obtain the Flight Operations Plan, operators submit a Flight Operations Proposal to the UAS Review Committee. The approved Flight Operations Proposal serves as the Flight Operations Plan.

Operating a UAS without a Flight Operations Plan violates this policy and may result in administrative action, including in accordance with the HSU Policy on Research Misconduct.

Application Procedure—The following steps outline the process to gain approval to use UASs for research:

- 1. The Principal Investigator (PI) develops the Flight Operations Proposal (see below) and submits it to the UAS Review Committee for campus approval;
- 2. A certified pilot needs to be part of the proposal.

Flight Operations Proposals— Submission of a Flight Operations Proposal should be the first step in any instructional, research endeavor or other project using UAS (e.g. before submission to Research and Sponsored Programs, Curriculum Committee, IRB, etc.). Similarly, a Flight Operations Proposal must be submitted by the Principal Investigator (PI) to the UAS Review Committee prior to any acceptance of materials or funding for any operations of UASs. The Flight Operations Proposal must be approved by the UAS Review Committee as a Flight Operations Plan before the aircraft can be deployed.

Flight Operations Proposals should minimally address the following elements:

- a) Purpose, nature (research, instruction, other) and goals of the work to be undertaken,
- b) Need for a UAS
- c) Type of vehicle(s)/equipment to be utilized and the manner in which it/they will be operated,
- d) The identity of pilot(s) or other remote operator(s),
- e) Dates/Schedule of activities to be undertaken,
- f) Locale(s) and flight plan for operations,
- g) All forms of data (including imagery) to be collected,
- h) Provisions for security of the equipment, both during and outside of operation, and of any sensitive data collected,
- i) Sources and nature of financial support, if appropriate,
- j) Communications plan for notifying campus police, and local landowners and police agencies, as appropriate, in the overflight radius of planned operations each time a UAS is flown,
- k) Written affirmation that the UAS will be used only for noncommercial, research purposes,
- l) Confirmation that application is under Part 107, and

m) Description of designated campus storage locations, university property tag numbers, and FAA registration number.

Careful consideration should also be given to other issues such as airworthiness, training, and access to requisite personnel, such as qualified visual observers and pilot/operators.

Flight Operations Logs—All PIs must maintain an up-to-date flight operations log while using UASs. Operations logs must include launch and landing dates, flight times, locations, approximate flight paths, altitudes, a brief qualitative description of the data collected, and the names of HSU staff, faculty, student researchers, volunteers, and administrators involved. Pilots must possess the Flight Operation Plan, operation logs, and any documentation that the law may require during the deployment of the UAS. The UAS Review Committee may review this material at any time.

All accidents that result in vehicle repair, property damage or injury must be documented in operations logs for each UAS. Accidents involving injury and/or property damage (excluding the UAS) or major UAS damage must be reported to the UAS Review Committee within 24 hours of the incident.

Summary Report—A summary report as part of an approved UAS Flight Operations Plan must be filed with the UAS Review Committee at the end of each month. UAS operators who fail to file a summary report will not be approved for new Flight Operations Proposals until their summary reports are current.

#### **Data Storage and Use**

The use of UASs will be largely related to research activities such as, but not limited to, flora and fauna inventories and identification; hyperspectral vegetation mapping; tracking mobile telemetry affixed to animals; tracking of anonymous vehicle counts/activity on public lands/waters; geological and geophysical mapping. Only approved research projects may collect data under the auspices of HSU. Furthermore, the UAS, and all data collection instruments installed on each must have university property tags for tracking purposes, and designated campus storage locations identified in the Flight Operations Plan. Data collected using UASs that don't adhere to these guidelines, are in violation of any federal, state, or local law, or that are not approved by the UAS Review Committee cannot be published with an HSU affiliation. Collection of such data without prior approval may be construed as research misconduct. Any data sharing or distribution is the responsibility of the PI or faculty member and should generally be publically available within one year of the data collection flight or termination of the data collection project.

This policy prohibits the unlawful photography and surveillance on public or private property. As such, the PI or faculty member for a project will perform due diligence to ensure proper use of the data as specified by this policy and local, state, and federal regulations. This includes data review by an individual designated by the PI or faculty member to eliminate sensitive, compromising, or otherwise inappropriate material (e.g. attributes that identify individuals such as, but not limited to, recognizable faces, license plate numbers on vehicles, etc.) before data are distributed for analysis, stored on a server with broader access, or made public in any way. When a UAS is operated in conjunction with a

partner agency (e.g., County, State, Federal or NGO), and the agency has first access to the data, the agency will perform the prescribed due diligence.

#### Maintenance and Storage of Equipment and Instrumentation

All UASs must be registered with the Office of Research, Economic, and Community Development.

The physical maintenance, storage and preparation of UASs operated and owned by HSU or the Sponsored Programs Foundation will be conducted by an academic program area. This responsibility rests with the faculty, staff, student researchers, or volunteers, named in the Flight Operations Plan.

Aside from any fixed, onboard systems (i.e., temperature loggers, GPS, barometers, navigation cameras), the maintenance (including calibration) of any sensor instrumentation is the responsibility of the PIs or faculty who filed the Flight Operations Plan.

The Provost or designee may review and modify assignment of responsibilities for the maintenance and storage of UASs and UAS equipment as needed. Any university- owned UAS and related support equipment will be stored in appropriate facilities designated in the approved Flight Operations Plan.

#### Insurance

Prior to beginning operations, appropriate insurance coverage should be obtained for registered UASs. Information on obtaining insurance can be obtained from the Office of Research, Economic, and Community Development.

### Compliance with Applicable Regulations and Law

The UAS Review Committee and UAS operator are responsible for compliance with all relevant FAA regulations. Both the applicant and the campus should ensure that the proposed UAS operations

- Comply with applicable laws, government regulations, and University policies,
- Do not pose a threat to health, safety, privacy, or the environment,
- Include appropriate steps to manage and mitigate associated risks, and
- Serve the mission of the University and interests of the public at large

# Flight Operation Procedures

Prior to commencing flight operations, the UAS operator must have in possession the appropriate procedures and any documentation to ensure safe, legal and appropriate operation. During flight operations of the aircraft, pilots must have in their position documentation that includes but may not be limited to the following:

- a. FAA Remote Pilot Certificate
- b. Current operations logs of all flights and all data files collected
- c. Proof of access to public or private property associated with flight operations

#### History

Issued: 05/2015, Policy Number P15-01

Revised: 04/16/2019

Edited: 12/10/2019 Reviewed: MM/DD/YYYY

Updated: March 8, 2018