



OFFICE OF RISK SERVICES—
ASSOCIATE VICE PRESIDENT & CHIEF RISK OFFICER

OFFICE OF THE PRESIDENT
1111 Franklin Avenue, 10th Floor
Oakland, California 94607-5200

January 17, 2017

CHANCELLORS
LBNL DIRECTOR WITHERELL
ACADEMIC COUNCIL CHAIR CHALFANT
ANR VICE PRESIDENT HUMISTON

Re: Draft Presidential Unmanned Aircraft System Policy – Systemwide Review

Dear Colleagues:

Enclosed for your review is a draft Presidential Unmanned Aircraft System (UAS) Policy.

The use of Unmanned Aircraft Systems (UAS), also referred to as drones and model aircraft, on University locations has increased as they become more popular. Over 200 separate UAS have been registered by the University of California Systemwide Designated UAS Authority on UAS Safety since July 1, 2016 and account for over 300 flights within the same time period. The University recognizes that both the number of aircraft and number of activities will continue to grow as the use of UAS as tools for research, educational functions, recreational, and business pursuits expands. With the expanded use of UAS, there are liability exposures to the University, ranging from regulatory liability for violations to aviation regulations to physical damage liability should a UAS damage property or injure people.

For these reasons, a new policy has been drafted and is submitted for your review. When it is finalized, the policy will provide minimum standards for the safe use and operation of UAS, including drones and model aircraft, on any University location or at any authorized University activity. Attached to this letter is a summary document providing justification for the policy.

This policy requires that all UAS operations are performed in a manner that mitigates risks to safety, security, and privacy, and ensures compliance with all applicable laws. Anyone who seeks to operate a UAS at any University location or for any authorized University activity must comply with the following:

- Apply for and obtain approval from the appropriate aviation agency (for example, the Federal Aviation Administration (FAA) in the United States), if applicable, and operate in compliance with all applicable regulations and rulings.
- Receive approval in advance from the Systemwide Designated UAS Authority or the Designated Local Authority at a specific University location.
- Operate in a manner that ensures public safety, right to privacy, civil rights and civil liberties.
- Remain in compliance with all applicable laws and regulations, and follow best practices.
- Operate in compliance with the provisions provided in the policy document. Some exemptions to the provisions in the policy may be made on a case by case basis after review and approval by the UAS Advisory Board.

The policy also addresses:

- General procedures for all faculty, other academic appointees, staff, graduate students, student employees, students, volunteers, vendors and invited visitors seeking to operate a UAS at a University location.
- Procedures for recreational or Non-University business UAS use.
- Procedures for University business UAS use, including research activities.

Individual University locations have the option to either designate a local authority to develop and implement campus-specific UAS procedures or rely on the Systemwide Designated UAS Authority to act on behalf of University faculty and staff.

Systemwide Review is a public review distributed to the Chancellors, the Director of the Lawrence Berkeley National Laboratory, and the Vice President of Agriculture and Natural Resources, requesting that they inform affected employees and the general University community about policy proposals. Systemwide Review includes full Academic Senate review. Employees should be afforded the opportunity to review and comment on the draft policy. Attached is a Model Communication which may be used to inform non-exclusively represented employees about the draft Policy. The Labor Relations Office at the Office of the President is responsible for informing bargaining units representing union membership about policy proposals.

We would appreciate your review and comments on the draft policy. The systemwide review period is 90 days; please submit your comments along with any questions you may have by April 21, 2017 to Brandon Stark, the Systemwide Designated UAS Authority, at bstark2@ucmerced.edu.

Sincerely,



Cheryl Lloyd
Associate Vice-President & Chief Risk Officer

Enclosures: Draft Presidential Unmanned Aircraft System Policy
Justification for UAS Systemwide Policy
Model Communication

cc: President Napolitano
Provost Dorr
Executive Vice Chancellors/Provosts
Executive Vice President Brostrom
Executive Vice President Nava
Vice President Duckett
Vice President Ellis
Vice Provost Gullatt
Vice President Robin Holmes-Sullivan
Chief of Staff Grossman
Vice Chancellors of Research
Vice Provosts/Vice Chancellors of Academic Personnel/Academic Affairs
Deputy/UCOP Compliance Officer Lane
Executive Director Baxter
Executive Director Smith
Interim Executive Director Lee
Director Chester
Director Henderson

cc: Director Lockwood
Manager Donnelly
Academic HR Manager Jordan
Human Resources Policy Analyst Bello
Deputy to the Vice President, Student Affairs Jerlena Griffin-Desta



Unmanned Aircraft System (Drone) Policy

Responsible Officer:	Chief Risk Officer
Responsible Office:	RK - Risk / EH&S
Issuance Date:	TBD
Effective Date:	TBD
Last Review Date:	New Policy
Scope:	Includes all University of California locations and at all University-authorized activities and events. Policy covers all Faculty, Staff, Administrators and other academic appointees.

Contact:	Ken Smith
Title:	EHS Executive Director
Email:	Ken.Smith@ucop.edu
Phone #:	(510) 987-0170

I. POLICY SUMMARY

The purpose of this Unmanned Aircraft System (UAS) Policy (Policy) is to establish minimum standards for the safe use and operation of UAS and Small Unmanned Aircraft Systems (SUAS), including drones and model aircraft, on any University Location or at any Authorized University Activity.

This policy requires that all UAS operations are performed in a manner that mitigates risks to safety, security, and privacy, and ensures compliance with the Federal Aviation Administration (FAA) Modernization and Reform Act of 2012 (Public Law 112–95) as codified in 14 Code of Federal Regulations (CFR) Part 101 (for hobby or recreational purposes) and 14 CFR Part 107 (for commercial purposes) and all applicable laws.

Unmanned Aircraft System Policy

Anyone who seeks to operate a UAS at any University Location or for any Authorized University Activity must receive written approval in advance in accordance with this Policy. This includes recreational and non-recreational aircraft.

TABLE OF CONTENTS

I. POLICY SUMMARY	1
II. DEFINITIONS	2
III. POLICY STATEMENT	3
IV. COMPLIANCE / RESPONSIBILITIES	5
V. REQUIRED PROCEDURES	7
VI. RELATED INFORMATION	9
I. FREQUENTLY ASKED QUESTIONS	9
II. REVISION HISTORY	9

II. DEFINITIONS

Authorized University Activity – University-approved event, including but not limited to field research, historical monitoring, and promotional videography.

Campus - For purposes of this policy, the term “Campus” includes UC’s Agriculture and Natural Resources (UC ANR), and the authorities and responsibilities delegated to the Chancellors under this policy are delegated to the UC Vice President—Agriculture and Natural Resources, as appropriate and applicable.

Certificate of Waiver or Authorization (COA) – An authorization issued by the Air Traffic Organization, a division of the Federal Aviation Administration (FAA), for UAS operations.

Federal Aviation Administration – A division of the Department of Transportation that inspects and rates civilian aircraft and pilots, enforces the rules of air safety, and installs and maintains air-navigation and traffic-control facilities.

Designated Local Authority – A single-point of contact or committee appointed by the Chancellor, Vice Chancellors, or Deans at an individual University Location to oversee the development, implementation, and enforcement of any University Location-specific UAS related policies and procedures.

Model Aircraft – The term “model aircraft” means an unmanned aircraft that is capable of sustained flight in the atmosphere, flown within visual line of sight of the person operating the aircraft, and flown for hobby or recreational purposes. FAA registration

Unmanned Aircraft System Policy

and appropriate marking may be required prior to any model aircraft flight operation depending on weight.

Recreational Use – Use of a SUAS for non-business purposes as a hobby or as part of a non-commercial community-based organization.

Section 333 Exemption – The portion of the Modernization and Reform Act of 2012 which grants an individual or entity the ability to operate a UAS for commercial activities.

Unmanned Aircraft System (UAS) – The term “unmanned aircraft system” means an unmanned aircraft and associated elements (including communication links and the components that control the unmanned aircraft) that are required for the pilot in command to operate safely and efficiently in the national airspace system.

Small Unmanned Aircraft System (SUAS) – The term “small unmanned aircraft system” means an unmanned aircraft weighing less than 55 lbs. and associated elements that are required to operate safely and efficiently in the national airspace system.

Systemwide Designated UAS Authority – Provides expertise, support, and training for regulatory compliance, risk management and the safe operation of UAS and SUAS across the University of California system. It also grants certain forms of approval for UAS operations in the US.

University Business – The official activities of a University that contribute to any one of the University’s major functions of teaching, research, patient care, or public service, or to any other non-recreational University purpose.

University Location – Any property or building that is owned or leased by the University where University business or activities take place.

III. POLICY STATEMENT

The University recognizes that UAS and SUAS offer great potential as tools for research and other educational functions as well as providing opportunities for recreational use and business pursuits across a diverse array of users and industries. The University must also take into consideration public safety, privacy, civil rights, and civil liberties issues when providing direction for the use of UAS.

It is the policy of the University that anyone who seeks to operate a UAS on University Locations or at an Authorized University Activity must comply with the following:

- Apply for and obtain approval from the appropriate aviation agency (for example, the Federal Aviation Administration (FAA) in the United States), if applicable, and operate in compliance with all applicable regulations and rulings.
- Receive approval in advance from the Systemwide Designated UAS Authority on UAS Safety or the Designated Local Authority at a specific University Location.
- Operate in a manner that ensures public safety, right to privacy, civil rights and civil liberties.
- Remain in compliance with all applicable laws, regulations, and guidances.

Unmanned Aircraft System Policy

- Operate in compliance with the provisions provided in this Policy document. Some exemptions to the provisions in this Policy may be made on a case-by-case basis after review and approval by the UAS Advisory Board.

DRAFT FOR COMMENT

Unmanned Aircraft System Policy

This Policy applies to all members of the University community, including but not limited to employees, faculty, students, clubs, organizations, vendors and any other individuals who are operating a UAS as part of their employment, for recreational purposes, or as part of any Authorized University Activity. This Policy also applies to any person or entity not affiliated with the University that may operate a UAS on University Locations.

IV. COMPLIANCE / RESPONSIBILITIES

The goal of this policy is to ensure that all UAS activities are conducted in a manner that ensures the protection of students, faculty, staff, visitors, the public, property, and the environment and complies with all applicable laws and regulations.

While achieving this goal is the responsibility of every member of the University, the following University officials, students, staff, and visitors have particular responsibility for implementing the principles and practices of this Policy and for the related conduct of their subordinate staffs.

- A. Campus and Medical Center Executive Officers or their designee are responsible for:
 - Communicating the University’s commitment to individual’s rights safety, privacy, civil rights, and civil liberties.
 - Oversight of the interpretation and effective implementation of this Policy at all University Locations.
 - Adopting procedures to ensure implementation of the UAS Policy.
 - Authorizing the development and implementation of University Location specific UAS policies and procedures, if applicable.
 - Assigning a Designated Local Authority as a point of contact who is responsible for developing, implementing and enforcing University Location-specific requirements, if applicable.

- B. University of California Office of the President (UCOP) Environment, Health & Safety (EH&S) Executive Director is responsible for:
 - Providing policy interpretation and responding to general inquiries regarding UAS activities.
 - Enforcing the provisions of this Policy.
 - Maintaining records of the results and decisions of the Systemwide Designated UAS Authority.
 - Making UAS records publically available as appropriate.

- C. Systemwide Designated UAS Authority is responsible for:
 - Coordinating the development of University UAS policies through task forces/working groups.
 - Developing internal University policies on certification and flight safety training.

Unmanned Aircraft System Policy

- Acting on behalf of University faculty and staff as a point of contact to the applicable aviation authority for UAS registration and flight operations, including COA for UAS used for University business, including research activities.
- Providing assistance with requests for UAS activities consistent with applicable laws and regulations and Policy requirements, unless a Designated Local Authority has been selected and delegated this task for a specific University Location.
- Reviewing and approving applications for operation of UAS on University Locations and at Authorized University Activities.
- Notifying the requestor no later than two weeks if the flight authorization request is approved, denied, or if the flight authorization request will require further information or federal authorization, unless a Designated Local Authority has been selected and delegated this task for a specific University Location.
- Maintaining a record of approval requests and decisions.
- Maintaining a record of all UAS flights at University Locations and by UC affiliates.
- Ensuring UAS Policy compliance with applicable laws and regulations.
- Tracking and managing University response to pending and upcoming UAS legislation, regulations, policies, and guidances.
- Acting as a central repository for all UAS policies including federal, state, and University policies.
- Implementing effective mechanisms for reporting in order to remain in compliance with applicable laws and policies.
- Providing a forum to communicate and share UAS related information and best practices.

D. UAS Advisory Board is responsible for:

- Reviewing exemptions from this Policy on a case-by-case basis.
- Assisting in the development of systemwide UAS policies.
- Reviewing and commenting on proposed policies and long-term goals.
- Evaluating the effectiveness of systemwide UAS policies and safety metrics.
- Ensuring that systemwide UAS policies remain consistent with applicable privacy best practices.

E. Designated Local Authority (if assigned by a specific University Location) is responsible for:

- Developing Location-specific UAS policies that meet or exceed the requirements of this Policy.
- Providing assistance with requests for UAS activities consistent with applicable laws and regulations and University Location-specific requirements.
- Reviewing and approving applications for operation of UAS on a specific University Location.

Unmanned Aircraft System Policy

- Notifying the applicant if the flight authorization request is approved, denied, or if the flight authorization request will require further information or appropriate aviation agency authorization.
- Maintaining a record of approval requests and decisions and submitted to Systemwide Designated UAS Authority upon request.
- Maintaining a record of all UAS flights at specific University Location and submitted to Systemwide Designated UAS Authority upon request.

F. Operators of UAS are responsible for:

- Requesting and obtaining all proper approvals prior to operating a UAS on any University Location or at any Authorized University Activity.
- Following the requirements of this Policy and all applicable laws and regulations.
- Signing a written hold harmless agreement and attesting to the minimum amount of coverage specified in the insurance policy, if UAS is used for business purposes not affiliated with the University.
- Following any applicable requirements specified in the export control policy.
- Observing and practicing all manufacturer's specified safety precautions.
- Following applicable University UAS privacy best practices. A link to the UAS privacy best practice is included in Section VI below.
- Not using a UAS for any unlawful purpose.

V. REQUIRED PROCEDURES

This Policy sets minimum systemwide requirements for operating UAS. The requirements below must be addressed by all University Locations. Individual University Locations, through their respective Designated Local Authorities, may also develop policies and procedures as long as they meet or exceed the requirements of this Policy standard.

The operation of UAS by emergency first responders may be exempt from this Policy based on determination of emergency needs. During such operations the emergency responders will follow their internal department protocols.

A. General Procedures

- All faculty, staff, graduate students, student employees, students, volunteers, vendors and invited visitors seeking to operate a UAS or SUAS on University Locations or for Authorized University Activities must first submit a completed UAS Request Form to the Systemwide Designated UAS Authority or Designated Local Authority in advance of operation.
- The Systemwide Designated UAS Authority or Designated Local Authority will review and process the request and notify the applicant if the request is approved, denied, or will require further information. Operation of any UAS or SUAS on any University Location or at any Authorized University Activity is

Unmanned Aircraft System Policy

- prohibited unless first approved by the Systemwide Designated UAS Authority or Designated Local Authority.
- Once approved, operator must follow the requirements of this Policy and all applicable laws and regulations.
 - A copy of the approval must be in the possession of the operator at all times during the activity and must be presented to any University official or representative with jurisdiction over the activity upon request.
 - The operator must follow University privacy best practices at all times, including but not limited to:
 - UAS may not be used to monitor or record activities where there is a reasonable expectation of privacy.
 - UAS must not be used for unapproved recordings of any campus events or performances, or for any unlawful purpose.
 - Any requests for exemptions from this Policy (except in the case of emergency first responders as described elsewhere in this Policy) must be submitted and approved in advance by the UAS Advisory Board.
- B. Recreational or Non-University Business UAS Use**
- In addition to the requirement provided in Section A – General Procedures above, Recreational or Non-University Business UAS/SUAS Users must also follow the procedures in this section.
 - Any requests by Non-University Business UAS users must include appropriate proof of insurance, including a written agreement which holds the University harmless from any resulting claims or harm to individuals and damage to University property.
 - Recreational users, in lieu of proof of insurance, must show affiliation with a nationwide community-based organization that has an approved set of safety guidelines and membership insurance.
 - All non-recreational UAS flights conducted on University Locations must be reported to the Systemwide Designated UAS Authority or Designated Local Authority.
- C. University Business UAS Use**
- In addition to the requirements provided in Section A – General Procedures above, UAS users for University Business, including research activities, must also follow the procedures in this section.
 - University Business UAS will be operated under the authorization of the appropriate aviation authority. In the United States, this authorization could take the form of a Section 333 Exemption or a Certificate of Waiver or Authorization (COA) issued by the FAA.
 - The Systemwide Designated UAS Authority will act as point of contact to the appropriate aviation authority on behalf of University faculty and staff for University Business UAS.
 - The applicant must file a flight authorization request with the Systemwide Designated UAS Authority or Designated Local Authority prior to flight. The

Unmanned Aircraft System Policy

flight authorization request must contain all relevant information regarding the proposed flight operations. The Systemwide Designated UAS Authority or Designated Local Authority must grant prior authorization for any University Business UAS use.

- UAS Operator must report UAS activity to the Systemwide Designated UAS Authority or Designated Local Authority within two days of any flight.

VI. RELATED INFORMATION

FAA Section 333:

https://www.faa.gov/uas/legislative_programs/section_333/

FAA Model Aircraft rules:

www.faa.gov/uas/media/model_aircraft_spec_rule.pdf

UAS Request Form (found on or made available by Designated Local Authority):

<http://ucop.edu/enterprise-risk-management/resources/centers-of-excellence/unmanned-aircraft-systems-safety.html>

UAS Website:

<http://ucop.edu/enterprise-risk-management/resources/centers-of-excellence/unmanned-aircraft-systems-safety.html>

UAS Privacy Best Practice:

<http://www.ucop.edu/enterprise-risk-management/resources/centers-of-excellence/unmanned-aircraft-systems-safety.html>

VII. FREQUENTLY ASKED QUESTIONS

An updated list of Frequently Asked Questions can be found at:

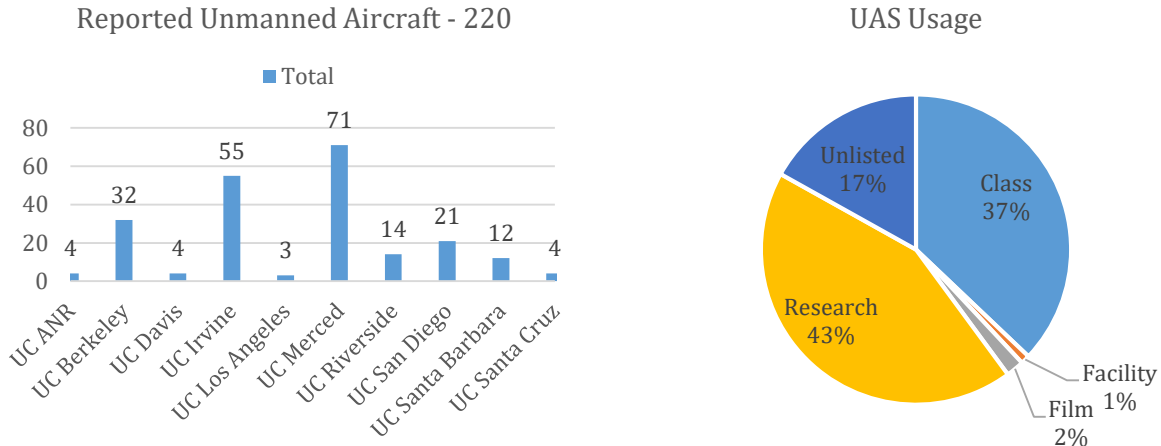
<http://ucop.edu/enterprise-risk-management/resources/centers-of-excellence/unmanned-aircraft-systems-safety.html>

VIII. REVISION HISTORY

This is a new policy.

Justification for Systemwide UAS Policy

UAS ACTIVITY IN THE UC SYSTEM



For more information on the usage of UAS in the UC, please see the draft report on Unmanned Aircraft in the University of California. To request a copy, please submit an e-mail to Brandon Stark at bstark2@ucmerced.edu

SEVERE UNDERREPORTING OF UAS ACTIVITY

In the past 6 months of data capture, the Center of Excellence on UAS Safety has records of 220 UAS and greater than 460 flights since July 1. However, second hand reports have indicated that these numbers are being severely underreported.

SIGNIFICANT LIABILITY EXPOSURES

With both number of aircraft and number of activity being severely underreported, there are significant liability exposures to the University of California.

Exposure from regulatory liability

Within the past year, the FAA has begun to levy significant fines to violators of federal aviation regulations. The terms of all federal regulations stipulate that the owner of the aircrafts are responsible for compliance.

- \$27k Fine - Failure to register a UAS/Incorrect UAS registration
- \$55k Fine - Improper UAS License – Up to \$55k fine
- \$1.9M Fine - One example, SkyPan was fined for improper UAS registration, improper UAS license, and violation of terms of Section 333 exemption.

Exposure from physical damage liability

While most UAS accidents or incidents involve only damage to the aircraft itself, there are many examples of aircraft damaging property or injuring people.

HOW DOES THE POLICY MANAGES LIABILITY EXPOSURE?

There are three major challenges to minimizing liability exposure

- Lack of knowledge of federal regulations
- Lack of oversight of UAS activity by the campuses
- Lack of requirements to implement risk management

The policy establishes a top-down recognition that the UC system has federal obligations to meet and provides the campuses the ability to approve/deny UAS operations as appropriate given the risk and exposure.

MODEL COMMUNICATION

The Office of the President invites comments on a proposed new policy for Unmanned Aircraft Systems (UAS). The Policy is to establish minimum standards for the safe use and operation of UAS and Small Unmanned Aircraft Systems (SUAS), including drones and model aircraft, on any University Location or at any Authorized University Activity. This policy requires that all UAS operations are performed in a manner that mitigates risks to safety, security, and privacy, and ensures compliance with the Federal Aviation Administration (FAA) Modernization and Reform Act of 2012 (Public Law 112–95) and all applicable laws.

If you have any questions or if you wish to comment, please contact _____ at _____, no later than _____ 2017.