Office/Contact: Division of Research and Economic Development
Source: Federal Aviation Administration (FAA) UAS Regulations and Policies; SDBOR Policy 1:30; FAA Modernization and Reform Act of 2012 (P.L. 112-95)
Link: https://www.faa.gov/uas/; https://www.sdbor.edu/policy/Documents/1-30.pdf; https://www.gpo.gov/fdsys/pkg/PLAW-112publ95/content-detail.html
Associated Forms: UAS Operations Request Form

SOUTH DAKOTA STATE UNIVERSITY
Policy and Procedure Manual

SUBJECT: Unmanned Aircraft Systems (UAS)
NUMBER: 8:10

1. Purpose

   This policy and its procedures implement SDBOR Policy 1:30 and set forth the appropriate and lawful operation and uses of Unmanned Aircraft Systems ("UAS") at the University.

2. Definitions

   a. Certificate of Authorization ("COA"): Pursuant to Federal Aviation Administration ("FAA") regulations, the COA is an authorization issued by the Air Traffic Organization to a public operator for a specific UAS activity.

   b. Civil Operations: Any UAS operations that are not "public operations" are civil operations. All UAS operations for commercial purposes, including University business, teaching, and research, unless otherwise noted herein, are civil operations.

   c. Institutional Airspace: Includes that portion of the air space between the surface of the ground and 300 feet above the ground or above a building or structure erected on University property.

   d. Institutional UAS Use: Any UAS operation by University employees or students as part of their University employment or as part of a University program.

   e. Model Aircraft: UAS that is (1) flown for hobby or recreational purposes, per section 336(c) of the FAA Modernization and Reform Act of 2012 and any amendments thereto; (2) capable of sustained flight in the atmosphere; and (3) flown within visual line of sight of the aircraft operator. Model aircraft must not exceed 55 pounds and requires FAA registration and appropriate marking prior to any flight operation.

   f. Part 107: FAA final rule on Operation and Certification of Small Unmanned Aircraft Systems, 49 CFR Part 107 and any amendments thereto. This rule governs civil operations of small UAS weighing less than 55 pounds by a Remote Pilot in Command or under the direct supervision of a certified Remote Pilot. Part 107 does not apply to model aircraft.

   g. Private UAS Use: All UAS operation that is not institutional UAS use, which includes model aircraft.

h. Public Operations: Include those aircraft owned and operated by government or public entities for governmental purposes and which are not operated under Part 107.

i. Section 333 Exemption: FAA Exemption from certain approval requirements based on Section 333 of the FAA Modernization and Reform Act of 2012 and any amendments thereto, which grants the Secretary of Transportation the authority to determine whether an airworthiness certificate is required for a UAS to operate safely in the National Airspace System.

j. Unmanned Aircraft Systems ("UAS"): Unmanned aircraft and their associated elements (including communication links and the components that control the unmanned aircraft) that are required for the pilot in command to safely and efficiently operate the unmanned aircraft.

3. Policy

a. Pursuant to SDBOR Policy 1:30, the University permits the use of UAS to support its administrative, research, instructional, and service functions in accordance with FAA regulations.

b. The FAA has jurisdiction over all navigable airspace in the United States. All aircraft, whether manned or unmanned, are subject to FAA rules and regulations. All University employees, students, and visitors are responsible for complying with FAA regulations, state and federal laws, and University policies with respect to private UAS use in institutional airspace or institutional UAS use.

c. The Division of Research and Economic Development, or successor office, is designated as the University's office to assume responsibility for overseeing institutional UAS compliance. The Division of Research and Economic Development's responsibilities include, without limitation, providing oversight and approval of Institutional UAS Use under Part 107, administering requests to pursue a COA or Section 333 exemption on behalf of a University unit, and ensuring compliance of Institutional UAS use operating under a COA or Section 333 exemption.

d. The Division of Research and Economic Development is also responsible for organizing and maintaining a UAS advisory committee, which will consist of and provide advice and feedback on UAS requests.

i. The UAS advisory committee shall consist of no fewer than six (6) individuals including two (2) faculty members, one of whom has a pilot's license, one (1) representative from Facilities and Services, one (1) representative from the Office of Safety & Security, the University Pilot, and the Research Integrity and Compliance Officer, or successor.

e. Institutional UAS Use

i. Institutional UAS Use must be conducted under Part 107 or by obtaining a Section 333 exemption or COA from the FAA. Any Institutional UAS Use permissible under Part 107 shall be considered a Civil Operation and governed by Part 107 unless the Division of Research and Economic Development, or

successor office, determines that a COA or Section 333 exemption is necessary and appropriate.

ii. Prior to granting approval for any Institutional UAS Use, the Division of Research and Economic Development, or successor office, must: (1) ensure the UAS operation is authorized under Part 107, a Section 333 exemption, or a COA; (2) ensure that adequate insurance coverage is obtained (the default coverage limit shall be $1,000,000 minimum coverage per occurrence, unless agreed by University Finance and Business in writing); (3) ensure each person controlling the UAS has received the requisite training, certification, or licensure; and (4) establish and document such additional training, maintenance, logging, and control procedures as may be required under FAA policy and guidance.

f. Institutional UAS Use Pursuant to Part 107

i. Any Institutional UAS Use permissible under Part 107 may be declared a Civil operation and conducted in accordance with Part 107. Authorization to fly may be given by the Division of Research and Economic Development, or successor office, upon completion of the documentation necessary to demonstrate compliance with the provisions of this policy and with the Part 107 pre-flight requirements.

ii. Operators must comply with all Part 107 requirements and restrictions, except to the extent that a waiver has been granted by the FAA and approved by the Division of Research and Economic Development, or successor office. The FAA summary of the Part 107 parameters is set forth in Appendix A to SDBOR Policy 1:30.

g. Institutional UAS Use Pursuant to a COA

i. The FAA may grant permission to the University to operate UAS, so long as their use qualifies as a government function under 49 U.S.C. § 40125 and any amendments thereto. If the University intends to operate UAS for a government function that cannot be conducted under Part 107, the University must apply for and be granted a COA from the FAA.

ii. Government uses for purposes of the COA include research in furtherance of core governmental functions, institutional security, facilities maintenance, institutional relations, and activities provided to the public at no cost incidental to the University's public service mission.

iii. The Division of Research and Economic Development, or successor office, shall be responsible for determining if institutional UAS use conducted outside of Part 107 is necessary and appropriate, and if so, for pursuing a COA for such activity.

iv. COAs are only available to government agencies or public entities for operations that are considered public operations. COAs cannot be granted to the University for education or training since these applications are considered commercial in nature.

v. A COA is granted to the University and not to a specific individual. Data acquired through the use of the UAS belongs to the University and not to an individual.

vi. Due to the potential legal and risk management issues involved in managing a COA, the Division of Research and Economic Development, or successor office, must conduct due diligence, considering the need, any available alternatives and the pros and cons associated therewith, prior to seeking a COA.

h. Institutional UAS Use Pursuant to a Section 333 Exemption

i. If the University wishes to engage in civil operations that are not permissible under Part 107, and no waiver of the Part 107 regulation(s) preventing such operations is possible or the waiver has been rejected by the FAA, it must pursue a Section 333 exemption.

ii. The Division of Research and Economic Development, or successor office, is responsible for determining if Institutional UAS Use conducted outside of Part 107 is necessary and appropriate, and if so, for pursuing a Section 333 exemption for such activity.

i. Private UAS Use within Institutional Airspace

i. All Private UAS Use in Institutional Airspace requires prior approval by the Division of Research and Economic Development, or successor office, and may not interfere with the use of University grounds.

ii. The following restrictions apply to the time, place, and manner of Private UAS Use:

1. Only with prior permission from the Vice President for Research and Economic Development or designee;
2. Only during daylight hours;
3. Within full view and control of operator;
4. Not during outdoor University events;
5. Not over outdoor athletic facilities or any portion of the campus grounds within a 1,320-foot radius of the facility;
6. Not within 300 feet of buildings;
7. Not within 150 feet of persons or animals; and
8. Not in a manner that interferes with ground vehicles or traffic.

iii. Prior to granting approval for any Private UAS Use within Institutional Airspace, the Division of Research and Economic Development, or designee office, must: (1) ensure the UAS operation is authorized under Part 107, a Section 333 exemption, or a COA; (2) ensure that adequate insurance coverage is obtained ; (3) ensure each person controlling the UAS has received the requisite training, certification, or licensure; and (4) establish and document such additional training, maintenance, logging, and control procedures as may be required under FAA policy and guidance.

j. UAS Operations Indoors

i. Approved Institutional UAS Use and approved Registered Student Organization use may occur inside of University facilities to support the University's mission areas. Indoor spaces are not deemed to be navigable airspace by the FAA and therefore do not require FAA regulatory compliance.

ii. UAS may not be operated inside of University controlled facilities without prior written permission of the Vice-president for Research and Economic Development or designee, and may never be operated in ways that interfere with the use of University facilities or operations. The Vice-president for Research and Economic Development or designee, will confer with University Facilities and Services to determine if an indoor space is suitable for UAS operations and with the Division of Technology and Security to determine appropriate safety measures that must be implemented before operations may commence.

iii. Permission to use UAS indoors may be requested through the Division of Research and Economic Development, or successor office.

iv. The following restrictions apply to the time, place, and manner that UAS devices are operated indoors:

1. Only with prior written permission;
2. Only during University-approved hours and dates, at University-approved locations, and adhering to University-authorized flight parameters;
3. Within full visual line of sight and control of the operator, unless for University research purposes as authorized by the Vice President for Research and Economic Development;
4. In classrooms only if the UAS weighs less than 250 grams/.55 pounds;
5. Only for a University programmatic or educational purpose;
6. Only UAS devices of 3 pounds or less may be used, unless for University research purposes as authorized by the Vice President for Research and Economic Development;
7. Not during indoor University events or in areas where public access is not controlled;
8. Only in a manner that ensures human and animal safety;
9. Only with approved observers in the indoor space;
10. Only in a manner that meets or exceeds the standards set in 14 CFR Part 107, Subpart B – Operating Rules, as amended and as applicable, which is incorporated here by reference;
11. Not in a manner that interferes with or damages facilities or their operations; and
12. Adhering to other UAS flight restrictions deemed appropriate by University Facilities and Services and/or the Division of Technology and Security.

v. Private operations of UAS will not generally be permitted indoors in University facilities. Private parties may operate UAS indoors only in partnership with University co-sponsors.

k. This policy and its procedures are to be read in conjunction with University and SDBOR policies regarding conduct while on University grounds and utilizing University resources. Failure to adhere to these policies, produce the application documentation when requested by University personnel, provide accurate information in an application, or operate the UAS safely may result in immediate revocation of UAS use authorization with or without notice.

4. Procedures

a. Institutional UAS Use

i. University employees that intend to conduct Institutional UAS Use must complete a *UAS Operations Request Form*. The form will be routed to the employee's Department Head, Dean, Facilities and Services and the building coordinator if an indoor operation, and finally submitted to the Division of Research and Economic Development, or designee, for review and approval. If the UAS operation is not authorized under Part 107 and no waiver thereof was obtained, the requesting employee must also prepare a COA or Section 333 exemption application to be reviewed by the UAS Advisory Committee prior to routing a UAS Operation Request Form.

ii. The materials provided with application shall include at least the following:

1. Identification of the type of Institutional UAS Use;
2. An explanation and justification of the nature of the University function supported by the use of the UAS, objectives of the work to be undertaken, and other relevant information;
3. Type of UAS to be used, including any applicable FAA registration identification, and the manner in which it will be operated;
4. Type of data collected and plan for collected data;
5. Flight and maneuver plan;
6. Person(s) who will be operating, and as appropriate, observing the UAS and their proof of training and proof of operator and observer training;
7. A description of personal safety equipment that will be used (indoor operations requests must be accompanied by a protocol that is complies with the current SDSU Environment Health and Safety UAS Indoor-use Safety Document);
8. Schedule of the activities to be undertaken;
9. Sources and nature of financial support;
10. A plan for emergency and accident response;
11. The creation and maintenance of logs of all flights and all data files collected;
12. The creation and maintenance of operator file(s) and manuals with proof of training;
13. Copy of FAA approved Part 107 waivers, if and when obtained, and
14. A surety that adequate insurance will be obtained as set forth in this policy.
15. Certification of compliance with applicable law and policies.

iii. The approved form will be returned to the requester and copied to the Vice President for Technology and Security and all approvers.

iv. The Division of Research and Economic Development, or successor, will officially submit all COA and Section 333 exemption applications on behalf of the University and will maintain oversight for the execution of approved waivers held by the University.

v. The Division of Research and Economic Development will maintain a repository of successful COA and Section 333 exemption applications for new applicants to consult and will attempt to answer questions related to the FAA processes and direct University employees to other personnel who may be able to provide additional guidance. However, as noted above, the administrative unit proposing to use the UAS is responsible for completing the internal application checklist and drafting the applications.

b. Private UAS Use within Institutional Airspace

i. A *UAS Operations Request Form* must be completed by the proposing individual and submitted to the Division of Research and Economic Development, or designee, for approval.

1. The application must include the following:

a. An explanation of why the Private UAS Use must take place within institutional airspace;
b. Proposed activity within proper time, place, and manner restrictions;
c. Type of UAS to be utilized, including any applicable FAA registration identification, and the manner in which they will be operated;
d. Type of data collected and plan for collected data; review of justifications for any proposed data collection;
e. Flight and maneuver plan;
f. Person(s) who will be operating the UAS and proof of any required training;
g. A description of personal safety equipment that will be used (indoor operations requests must be accompanied by a protocol that complies with the current SDSU Environment Health and Safety UAS Indoor-use Safety Document);
h. Schedule of the activities to be undertaken;
i. A plan for emergency and accident response;
j. Creation and maintenance of logs of all flights and all data files collected;
k. Creation and maintenance of operator file(s) with proof of any required training;
l. Copy of approved COA, Section 333 exemption, or Part 107 waivers, if required; and
m. Proof of insurance.

2. The request will be routed to Facilities and Services and to the relevant building coordinator for approval if indoor use is requested.

3. The approved form will be returned to the requester, and copied to the Vice President for Technology and Security and all approvers.

ii. Proper authorization will be granted in writing, which may include specific limitations, requirement of a written contract, or other stipulations.

c. Purchase of UAS, Contracts for Third Party Operation, and Legal Services

i. Purchase of institutional UAS insurance, equipment, software, and related items requires the prior approval by the Vice President for Research and Economic Development, designee, or successor, and to the extent the purchase entails information technology systems resources, the Vice President for Technology and Security, designee, or successor as well as compliance with standard purchasing rules and regulations.

ii. Contracts for Third Party Operations of UAS at the University are subject to this policy; all rules, regulations, and policies applicable to contracts; and final approval by the Vice President for Research and Economic Development, designee, or successor.

iii. Outside legal services for University COA and Section 333 exemption processing will be coordinated by the University's Office of General Counsel.

d. Reporting Obligations

i. UAS operators and any observers are obligated to report accidents and emergencies involving UAS operations governed by this policy to the Vice President for Research and Economic Development, designee, or successor and University risk management personnel within twenty-four (24) hours of incident. Emergencies requiring immediate assistance should be reported to local emergency response and the University Police Department by calling 911.

ii. UAS operators governed by this policy are required to maintain records and logs as required for the lawful operation of the properly authorized UAS and maintain in accordance with record retention protocols and applicable law. UAS operators shall comply with all applicable reporting provisions.

5. Responsible Administrator

The Vice President for Research and Economic Development, successor, or designee is responsible for biennial and ad hoc review of this policy and its procedures. The University President is responsible for approval of this policy.

SOURCE: Approved by President on 04/15/2016. Revised; Approved by President 02/06/2019. Revised; Approved by President 06/05/2020.