### **UNIVERSITY OF WISCONSIN - STEVENS POINT**



## **USE OF DRONES/UNMANNED AIRCRAFT SYSTEMS (UAS)**

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# UW-STEVENS POINT USE OF DRONES/UNMANNED AIRCRAFT SYSTEMS (UAS) 1.0 PURPOSE

The University of Wisconsin Stevens-Point in cooperation with the University of Wisconsin System, regulates the operation of Unmanned Aircraft Systems (UAS) for both recreational and educational purposes on all University properties. The University recognizes that the use of UAS devices (sometimes known as "drones,") has significant current and future academic applications, including flying to collect still or video imagery for commercial art or architectural models; performing biophysical analysis; monitoring crop or wildlife health, conducting geologic or archaeological survey or to support forestry analysis and operations.

Innovative technology generally comes with public regulatory requirements for privacy, safety and security. These campus guidelines establish the minimal requirements for the safe operation of UAS and shall be a referenced for all students, staff, faculty and others interested in such activity on University property. These guidelines primarily respond to Federal Aviation Administration (FAA) guidelines and requirements that promote safe and responsible use of unmanned aircraft, which can be found at FAA – UAS webpage (FAA-RIN 2120-AJ60)

#### 2.0 FLIGHT POLICY

Although the FAAidentifies that individuals may operate unmanned aircrafts at educational institutions under specific circumstances without FAA Remote Pilot Certification, as outlined in Education Use of Unmanned Aircraft Systems Memorandum, May 4, 2016, (Appendix A), the following guidelines include minimal requirements outlined by the University of Wisconsin System and additional guidelines as established by the University of Wisconsin-Stevens Point.

#### 3.0 SCOPE

This policy applies to all members of the UW-Stevens-Point community, including but not limited to University employees, students, clubs, organizations, vendors and any other individuals who may be operating a UAS as part of their employment, as part of any university-related research, instruction, or activity, or for hobby or recreational purposes on campus, to remain in compliance with UW System FAA and State of Wisconsin laws. This policy also applies to any person or entity not affiliated with the University who may operate a UAS on or over university property or land and includes recreational and non-recreational aircraft. Any person operating a UAS on university land is personally liable and responsible for complying with FAA regulations, state and federal laws, and university policies, and may be subject to disciplinary action and enforcement.

#### 4.0 DEFINITIONS

333 Exemption: The 333 Exemption is used only if the pilot cannot operate under CFR 14 Part 107. FAA based this exemption on Section 333 of the FAA Modernization and Reform Act of 2012 (FMRA) 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.

Certificate of Authorization or Waiver (COA): The COA is used only if the pilot cannot operate under Part 107. According to the FAA, the COA is an authorization issued by the Air Traffic

Organization to a public operator for a specific UAS activity. After a complete application is submitted, FAA conducts a comprehensive operational and technical review.

*FAA:* The Federal Aviation Administration is the United States national authority with powers to regulate all aspects of civil aviation.

Model Aircraft: Model aircraft are considered UAS and viewed differently by the FAA than other UAS and have different regulations. Model aircraft operations are for hobby or recreational purposes only and are not for business purposes. Model Aircraft should be flown only in designated areas, fly no higher than 400 feet, be within eyesight of the operator at all times, not intentionally flown over unprotected persons or moving vehicles and remain at least 25 feet from individuals and vulnerable property. Statutory parameters of a model aircraft operation are outlined in Section 336 of Public Law 112-95. Use of a UAS related to the university does not qualify as model aircraft.

Non-Recreational Use: Flying for commercial purposes, for business purposes, for compensation, or for hire.

Part 107: FAA regulation that allows for the commercial, non-recreational use of small unmanned aircraft systems (UAS) weighing less than 55 pounds. FAA Part 107 eliminates the need for a COA or 333 exemption in most cases. A remote pilot in command certification is required.

*Pilot in Command:* An unmanned aircraft that is flying in a state of direct control by a UAV operator. The operator is referred to as the Pilot in Command.

Recreational Use or Hobbyist: Flying for enjoyment and not for work, business purposes, or for compensation or for hire.

Remote Pilots Certificate: Certification required for all UAS operators who operate a UAS under Part 107.

*University Lands:* University lands means all real property owned by, leased by, or otherwise subject to the control of the Board of Regents.

Unmanned Aircraft Systems (UAS): An aircraft operated without the possibility if direct human intervention from within or on the aircraft. This includes all of the associated support equipment, control station, data links, telemetry, communications and navigation equipment, etc., necessary to operate the unmanned aircraft. A UAS may have a variety of names including drone, unmanned aircraft vehicle, unmanned aircraft, quadcopter, quadrotor, etc.

#### **5.0 NON - UWSP OPERATORS**

Non-UW Stevens Point Operators wishing to operate a UAS on or over university owned property must contact Risk Management for approval. They also must provide proof of a CFR 14 Part 107 license as Remote Pilot Certificate or other proof of FAA approval. In addition, operation of a UAS by a non-UW Stevens Point operators over university property must be under a contract which holds and they must also provide the university with proper proof of insurance. The specific

insurance requirements, including the amounts of insurance, are determined by the Office of Risk Management, and may vary depending on the nature of the proposed UAS operation. However, Risk Management prefers aviation Liability Insurance-Limits no less than \$1,000,000 per occurrence. Also, the Board of Regents of the UW System, its officers, employees, and agents need to be added as an additional insured.

Signed agreement is required for non-UW operators which hold the university harmless from any resulting claims or harm to individuals and damage to university property in direct relation to the party's flight operations and are part of pre-flight approval. UW-Stevens Point UAS-Operator Application Form (Appendix D) should be filled and signed by non-UW operators. This form should be provided to Risk Management Department with the enclosures that mentioned under "Additional Requirements for Consultants/Contractors or Non-UW Stevens Point Operators" section of the same form (Appendix D).

#### **6.0 STUDENTS**

Students are not required to obtain a CFR 14 Part 107 license when flights are part of written curricular activity and performed under the direct and present supervision of staff or faculty with a license.

Students independent of classroom-approved activity and acting alone and members of student organizations are not covered under the State's general liability policy and must fill UW-Stevens Point UAS-Operator Application Form (Appendix D) and submit to Risk Management to obtain pre-flight approval. They also must provide proof of a CFR 14 Part 107 license as Remote Pilot Certificate or other proof of FAA approval. If a student approved to use her/his personally owned UAS for university business, the student's personal insurance coverage is primary. The student must provide proof of insurance as required by the Risk Management.

#### 7.0 UW-STEVENS POINT EMPLOYEES

Although FAA rules for educational institutions are less stringent, the UW System requires that any university employee who wishes to operate a UAS as part of their university employment or as part of a university program, related to or unrelated to coursework, must receive approval from the campus entity responsible for monitoring. UW-Stevens Point employees must provide proof of a CFR 14 Part 107 license as Remote Pilot Certificate or other proof of FAA approval. Employees wishing to fly will complete an UW-Stevens Point UAS-Operator Application Form (Appendix D) and submit to the Risk Management to get an approval. Those wishing to fly must have experience in operating the UAS and operate them in a responsible and legal manner. They may also be asked to demonstrate the ability to safely pilot the UAS to be used.

University colleges and departments are encouraged to budget for the cost of a pilot's license as it is necessary to academic advancement. A written knowledge test is required to obtain a license. Check FAA website <a href="Becoming A Pilot">Becoming A Pilot</a> page for more details.

Those wishing to fly a UAS indoors for educational use will work with Risk Management or the assigned campus entity to determine if an exemption is appropriate.

Those wishing to fly a UAS on non-UW-Stevens Point land for educational or research purposes must ensure to obtain written permission from the owner of any property that will be occupied or

overflown during the flight. Property Owner Permission Form (Appendix E) should be used to obtain property owner permission for UAS operations occurring on private property.

If an employee approved to use her/his personally owned UAS for university business, the employee's personal insurance coverage is primary. The employee must provide proof of insurance as required by the Risk Management.

#### **8.0 GUIDELINES FOR APPROVAL**

- The operator of any UAS (commercial or non-UW Stevens Point operators) must abide by all federal, state, and city laws.
- UW-Stevens Point UAS-Operator Application Form (Appendix D) must be filled and signed by UW and non-UW operators.
- All flights must be approved through the UW-Stevens Point Risk Management department and approvals may be requested by contacting the campus Director of Risk Management.
   A minimum of 72 hours advanced notice of flight is required for the approval process.
   Frequent fliers may request a waiver of this time limit to Risk Management.
- Flight requests must clearly identify the area of flight and this must be approved by Risk Management.
- If the university arranges for a contractor or a non-UW operator to use a UAS for purposes associated with a university facility, event, or project, the contractor must adhere to all FAA requirements and campus polices (including to submit UW-Stevens Point UAS-Operator Application Form Appendix D) and provide the university with proper proof of insurance as required from the Risk Management Department and add the "Board of Regents of the University of Wisconsin System, its officers, employees and agents as an additional insured." (See section 5.0 for more details.)

#### 9.0 UAS-DRONE TECHNOLOGY REQUIREMENTS

- UAS may not exceed 55 lbs. in size and must have all manufacturer's specifications in operable condition.
- UAS may contain wireless transmission capability and will be evaluated in the approval
  process to ensure safe access and use of UW-Stevens Point networks. This evaluation
  would be conducted by a representative from Information Technology or Risk
  Management, with consultation from UAS campus experts as needed. Areas that may be
  analyzed include drone security for prevention of hacking, the apps utilized when drone is
  in use, and the drone software.
- UAS with digital photographic or video capture capabilities may be evaluated for feed or storage archival needs if University computer networks are required, particularly for live streaming events.
- In accordance with IT purchasing requirements (under Information Technology website <a href="Computer and Software Purchasing">Computer and Software Purchasing</a> page), any University employee, student, or business unit purchasing a UAS (or parts to assemble a UAS), or UAS services, with university funds or funds being disbursed through a university account, grant funds, or foundation funds must provide proof of a remote pilot certificate. The purchase request will be vetted for compliance. Employees may not utilize personally or externally purchased drones for ongoing teaching, or research purposes. Employees wishing to utilize personally purchased drones for one-time demonstration purposes should contact Risk Management for an exemption.

- Any drones owned by the university must meet criteria for connectivity and data storage.
- No university owned UAS shall be rented, leased or lent to a non-university party.

#### 10.0 FLIGHT REGULATIONS

- All FAA regulations must be followed.
- In operating a UAS for purposes of recording or transmitting visual images, operators must take all reasonable measures to avoid violations of areas normally considered private.
- A UAS shall not be used to monitor or record areas where there is a reasonable expectation of privacy in accordance with accepted social norms. These areas include but are not limited to restrooms, locker rooms, individual residential rooms, changing or dressing rooms, campus daycare facilities, and health treatment rooms.

Note: In Wisconsin, it is a misdemeanor for a private individual to use a drone to "photograph, record, or otherwise observe another individual in a place where the individual has a reasonable expectation of privacy." (Wis. Stat. § 942.10).

- A UAS shall not be used to monitor or record sensitive institutional or personal information which may be found, for example, on an individual's workspace, on a computer or other electronic displays.
- Operators shall be mindful of the safety of people and risk of property damage and aware
  of potential failure modes for their systems. All built-in safety features shall be tested
  before flying.
- Operators must be in line of sight during operation over university lands and may not operate over any persons not directly participating in the operation.
- It is highly recommended that all flights have a visual observer who is monitoring the UAS, in addition to the pilot.
- In the event of an UAS accident requiring FAA reporting (serious injury to any person or loss of consciousness; or damage to any property other than the UAS with repair costs exceeding \$500), fill Appendix F – UAS Accident / Incident Report and notify the university immediately.

Failure to follow this policy may result in disciplinary action and could lead to local and federal penalties. The University may, at its discretion, suspend any UAS activity deemed as dangerous, interfering with, or interrupting the operations of the University. Should a discrepancy between University policy and FAA regulations exist, the more restrictive will govern.

#### 11.0 UPDATES OF THE POLICY

This policy may be updated as appropriate in light of institutional experience and external regulatory changes.

### Appendix A

FAA - EDUCATIONAL USE OF UNMANNED AIRCRAFT SYSTEMS (UAS) MEMORANDUM

 $\frac{\text{https://www.faa.gov/uas/resources/uas\_regulations\_policy/media/interpretation-educational-use-of-uas.pdf}$ 

### Appendix B

FAA – RIN 2120-AJ60

https://www.faa.gov/uas/media/RIN\_2120-AJ60\_Clean\_Signed.pdf

### Appendix C

FAA - AIR TRAFFIC ORGANIZATION POLICY - ORDER JO7200.23.A

https://www.faa.gov/documentLibrary/media/Order/JO\_7200.23A\_Unmanned\_Aircraft\_Systems\_(UAS).pdf

# Appendix D UW-STEVENS POINT UAS-OPERATOR APPLICATION FORM

Please note that the questions below are asked solely for the purpose of determining the safety and legality of the flight.

O Faculty and Staff	O Student	O Non-UW Operator		
UW APPLICANTS 1. Applicant Name				
2. Applicant's University	of Wisconsin Affil	liation (i.e., Department, Center, etc.)		
3. UW-Stevens Point P	oject Name/Descr	iption:		
4. UW-Stevens Point Pr	oject Manager:			
5. Remote Pilot in Com	mand Affiliation (if	RPIC is other than Applicant)		
6. Copy of Remote Pilo	: Certificate or Pilo	t Certificate		
7. Summarize UAS flight experience of RPIC(i.e., number of logged flight hours)				
8. UAS Make and Mode	el and FAA Registr	ation Number		
9. Area(s) of Operation:	Address + Radius	s (mi) or Latitude/Longitude Coordinate + Radius (mi) or rectangular plot)		
10. Dates and Times of	Intended Flights _			
		or example, will the UAS be used for research, teaching,		
		egulations required for the planned operation? If so, why, and		
13. Will the UAS be use		If so,		

18. Please describe the safety plan to prevent and respond to injuries to persons, animals or property.
17. Will the flights occur over or near any persons, animals or buildings?
16. Will there be any non-participants in the operational area? If so, please explain
observer.
involved with each flight. Please include pilots, camera/sensor operators, people being filmed and
15. Please list the number of people, names and each operational role for each person who will be
- Is it more than 55lbs in total?
- What is the payload and USA total weight?(lbs)
- Why is it being transported?
- What is the payload?
14. Will the UAS be used to transport a payload?
- Where will it be maintained?

19. Please describe the plan to mitigate any potential privacy concerns of non-participants.
20. Please describe your plan to obtain written property-owner permissions from anyone whose property
will be occupied or overflown during the flight.
21. Please describe the data-management plan for flight log data
- Who will manage it?
- Where will it be maintained?
22. Please describe your accident and incident reporting procedures
As a condition of receiving authorization to operate a UAS on/over University lands as described above,  [name of consultant/contractor] ("Contractor")
hereby agrees to the following:
1. Contractor agrees that any photos or images of UW-Stevens Point premises and buildings taken by the
UAS will not be used for marketing or promotional purposes without separate written permission of
University.

Please enclose the following with this form:  1. Copy of Remote Pilot Certificate for RPIC  2. Copy of Insurance Certificate covering UAS operations  3. Confirmation of purchasing contract for Consultant/Contract  Contractor-specific requirements outlined in this policy (agreeme copy of FAA accident reports and relevant UAS flight data Consultant/Contractor to affirm all flights will be conducted in regulations and state and local law.  UW-Stevens Point Approvals  Risk Management Signature	ent to maintain flight records and provide a upon request), and which requires
1. Copy of Remote Pilot Certificate for RPIC 2. Copy of Insurance Certificate covering UAS operations 3. Confirmation of purchasing contract for Consultant/Contract Contractor-specific requirements outlined in this policy (agreeme copy of FAA accident reports and relevant UAS flight data Consultant/Contractor to affirm all flights will be conducted in regulations and state and local law.	ent to maintain flight records and provide a upon request), and which requires
<ol> <li>Copy of Remote Pilot Certificate for RPIC</li> <li>Copy of Insurance Certificate covering UAS operations</li> <li>Confirmation of purchasing contract for Consultant/Contraction Contractor-specific requirements outlined in this policy (agreeme copy of FAA accident reports and relevant UAS flight data Consultant/Contractor to affirm all flights will be conducted in</li> </ol>	ent to maintain flight records and provide a upon request), and which requires
<ol> <li>Copy of Remote Pilot Certificate for RPIC</li> <li>Copy of Insurance Certificate covering UAS operations</li> <li>Confirmation of purchasing contract for Consultant/Contraction Contractor-specific requirements outlined in this policy (agreeme copy of FAA accident reports and relevant UAS flight data Consultant/Contractor to affirm all flights will be conducted in</li> </ol>	ent to maintain flight records and provide a upon request), and which requires
<ol> <li>Copy of Remote Pilot Certificate for RPIC</li> <li>Copy of Insurance Certificate covering UAS operations</li> <li>Confirmation of purchasing contract for Consultant/Contract</li> </ol>	
ADDITIONAL REQUIREMENTS FOR CONSULTANTS/CONTRA	ACTORS OR NON-UW OPERATORS
Signature	
value of fluid series of the desired of the series of the	24.0
Name of Authorized Contractor Signatory (print name)	 Date
operations.	
<ol> <li>Contractor agrees to indemnify the UW-Stevens Point from any</li> </ol>	damage or liability arising from the UAS
state and local law.	
	ance with applicable FAA regulations and
3. Contractor affirms that all flights will be conducted in full complia	ant UAS flight data upon request.
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# Appendix E PROPERTY OWNER PERMISSIONS FORM

[Name of Property Owner] [Address of Property]

Dear [Property Owner],

This is a request for permission for the University of Wisconsin-Stevens Point (UW-Stevens Point) to use Unmanned Aircraft Systems (UAS) over your property for the purpose of [provide brief description of purpose of flight] on [dates and times of anticipated flights]. In connection with flying the UAS, the person operating the UAS and other individuals participating in the UAS flight request permission to enter your property to facilitate the safe operation of the UAS, subject to any limits or conditions you feel are appropriate.

The UAS operator may want to use the UAS to take images or collect data for research or educational purposes. Your signature at the bottom of this form grants the participating individuals access to your property and encompassing airspace for those purposes. The UW-Stevens Point commits that this operation will be conducted in full compliance with federal, state and local laws and regulations, and the UW-Stevens Point is insured against damages to persons or property arising from the flight in the unlikely event they occur.

Thank you for your consideration.			
[Name and UW affiliation of person submitting request]			
[UW E-mail and phone number]			
Authorization to Conduct UAS Operations			
By signing my name below, I hereby authorize the University of Wisconsin – Stevens Point (UW-Stevens Point) and its faculty, staff, students and affiliates to conduct UAS flights over my property for the purpose and at the dates and times indicated above, and grant the UW-Stevens Point all necessary rights to use the information collected during the flight for non-commercial research, education and/or outreach purposes.			
Name:			
Address:			
Signature:			
Date://			
Special conditions for use of property (if any):			

University of Wisconsin –Stevens Point Risk Management Manual Use of Drones/Unmanned Aircraft Systems Effective: 05/01/17 Revised by the RM Officer: 08/30/2017 15 of 16

# Appendix F UAS ACCIDENT/INCIDENT REPORT

1. Pilot Name & Contact Information (street address, city, state, zip, e-mail & phone)		
2. Pilot Affiliation		
3. Copy of approved UW-Stevens Point UAS Operator Application Form or UW-assigned Flight Number.		
4. Location of Accident/Incident: Address, Landmark or Latitude/Longitude		
5. Date and Time of Accident/Incident		
6. Accident Scene Photos/Diagram (attach document or images if applicable)		
7. What was the purpose of the flight?		
8. Please explain what happened.		
9. Please provide names of others involved as well as witnesses.		
10. Please describe safety precautions that were taken prior to the flight.		
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11. Please describe any privacy concerns and measures that were taken to mitigate privacy issues (if applicable).		