Millersville University Governance & Policies

Effective: August 1, 2019

Administrative Policy DRONES or UNMANNED AIRCRAFT SYSTEMS (UAS)

Approved: August 26, 2019 President's Cabinet

<u>Purpose</u>

Unpersonned (or Unmanned) aircraft systems (hereafter UAS), including drones, are being used on college and university campuses for a variety of educational, recreational, and commercial purposes. Examples include the use of drones to film athletic events, to take photographs for marketing purposes, and to conduct research. Millersville University recognizes that the regulated use of UAS may be beneficial to academic and administrative units on campus and endeavors to allow this use while ensuring the safety and security of the campus and surrounding communities. This policy formalizes the processes to manage University-related UAS operations, to protect people and property near UAS operations, and to ensure full compliance with all State and Federal laws and regulations.

The Federal Aviation Administration (FAA) has jurisdiction over the national airspace system and UAS are subject to regulation by the FAA. Federal law is clear that the FAA may take enforcement action against operators who operate aircraft in a manner that endangers public safety or the safety of the national airspace system. Accidents involving UAS are investigated by the National Transportation Safety Board (NTSB) and the FAA.

The policy ensures that the University has clear lines of authority and welldefined internal processes to identify, manage, and mitigate risk and to ensure safe and legal operation of UAS in furtherance of its institutional goals and objectives.

<u>Scope</u>

This policy applies to University employees, students, and visitors to campus, and it covers the use of UAS on the Millersville University campus.

Definitions

• Unpersonned (or Unmanned) Aircraft (UA): an aircraft without a human pilot onboard; instead, the UA is controlled by an operator on the ground. A UA is sometimes called a drone.

- Small Unmanned Aircraft (SUA): an unmanned aircraft weighing less than 55 pounds (25 kg) on takeoff, including everything that is onboard or otherwise attached to the aircraft.
- Model Aircraft: a SUA flown strictly for hobby or recreational purposes.
- Unpersonned (or Unmanned) Aircraft System (UAS): an aircraft without a human pilot onboard but with associated elements, including communication links and components used to control the UA safely and efficiently.
- Remote Pilot in Command (PIC): A person who holds a remote pilot certificate with a small UA rating and who has the final authority and responsibility for a small UAS operation conducted for work (commercial purposes) under 14 CFR Part 107.

<u>Policy</u>

The FAA classifies all aircraft into one of two categories: public or civil. A public aircraft is one that is used only for the United States Government; or owned and operated by the government of a State, the District of Columbia, a territory or possession of the U.S., or a political subdivision of one of those governments. Any aircraft that does not meet the definition of a public aircraft is considered civil aircraft. Regardless of category, however, all UA weighing more than 0.55 lbs. (250 grams) must be registered with the FAA and labeled clearly before flight. The FAA effectively classifies civil aircraft operations into one of two categories: 1) flying for fun (as a hobby or for recreation) or 2) flying for work (for commercial or work-related purposes).

Flying for Fun

Hobby or recreational use of a UA or UAS is prohibited on or over property owned, managed, or leased by Millersville University. Any employee, student, or visitor wanting to fly UA or UAS for hobby or recreational purposes is encouraged to consult the local chapter of the Academy of Model Aeronautics (AMA) to find an AMA-sanctioned location where such use is approved.

Flying for Work (Commercial Use)

 Remote PICs who are Millersville University employees (including student workers) or hired by University employees (contractors) will comply with all FAA rules and regulations, and take great care to avoid violating the rights of others to privacy and from harassment. If working abroad, the PIC will comply with the rules and regulations of the country in which they are working.

Remote PICs will notify the Director of Safety and Environmental Health about the location, date, time, and duration of any UA or UAS operation on or over property owned, managed, or leased by Millersville University no later than 48 hours prior to the start of the operation. Flights over property owned, managed, or leased by Millersville University must maintain an isolation distance of 200 feet distance from private residencies and occupied student residence halls, and 50 feet from academic and administrative buildings.

Any University employee interested in operating a UA or UAS or hiring a third party to operate a UAS to support the University's institutional goals or objectives should contact the Director of Safety and Environmental Health to discuss rules, responsibilities, and procedures.

Any MU employee or contractor wishing to operate a UA or UAS over campus property will provide the Director of Safety and Environmental Health with proof of training, licensing, certification, and insurance.

The person operating the UA or UAS is fully responsible for compliance with all FAA regulations and safety requirements.

If communication to local authorities of the UA or UAS operation is necessary, the MU employee or contractor will make such notifications.

The person operating the UA or UAS is fully responsible for knowing and following this policy and its requirements.

Flying Indoors

Operating a UA or UAS indoors is only permitted with approval by the Director of Safety and Environmental Health. Only designated indoor areas, and designated buildings, can be used for operating a UA or UAS.

Responsibilities and Procedures

The Director of Safety and Environmental Health will be responsible for:

- Policy development.
- Establishing fly/no-fly zones and approval/denial of indoor flying requests.
- Being the central point contact for UA or UAS approval. This will include, receiving notification of location, date, time, and duration of any UA or UAS operation as well as proof of training, licensing, certification, and insurance, from the MU employee or contractor wishing to operate a UA or UAS over campus property. The Director of Safety and Environmental Health may deny an individual or a contractor permission to fly over Millersville University property if they fail to produce proper documentation that they are authorized to fly and know how to follow all safety and regulatory requirements of operating a UA or UAS. The Director of Safety and Environmental Health may deny an individual or a contractor permission to fly over Millersville University property if: the date and time of the UAS operation will interfere with university operations, the proposed

flying location is a no fly zone, the proposed indoor flying location is prohibited, or the proposed fly zone will be too close to people.

- Public communication as necessary to notify the campus community of certain UA or UAS operations over campus property. Not every authorized use of a UA or UAS over campus property will require such communication.
- Work with university employees to maintain standardization of UA and UA and UAS parts.

FAA Part 107

In 2016, the FAA created new opportunities for businesses and government to use small UA. Remote pilots working for either a private business or a public entity may now operate a UAS in accordance with the rules in 14 CFR Part 107 (Summary of Small Unmanned Aircraft Rule (Part 107)):

Part 107 rules for remote pilots in command (PIC):

- 1. Must hold a remote pilot airman certificate with a small UAS rating, which requires:
 - being at least 16 years old;
 - passing an initial aeronautical knowledge test at an FAA-approved knowledge testing center;
 - vetting by the Transportation Safety Administration (TSA); and
 - passing a recurrent aeronautical knowledge test every 24 months.
- 2. Must conduct a preflight check of the small UAS (aircraft, control station, and crew) to ensure that it is in a condition for safe operation.
- 3. Must not operate a small UA if he or she knows or has reason to know of any physical or mental condition that would interfere with the safe operation of a small UAS.
- 4. Make available to the FAA, upon request, the small UAS for inspection or testing, and any associated documents/records required to be kept under the rule.
- 5. Must report to the FAA within 10 days of any operation that results in serious injury, loss of consciousness, or property damage of at least \$500.
- 6. Must NOT act as a remote pilot in command or VO for more than one unmanned aircraft operation at one time.

Part 107 rules for small UA operations:

- 7. Operations in Class B, C, or D airspaces are allowed with ATC permission.
- 8. Operations in G and some E airspaces are allowed without ATC permission.
- 9. Operations must yield right of way to all other aircraft.
- 10. The aircraft must NOT be flown recklessly or carry hazardous materials.
- 11. Flight must occur during daylight (or during civil twilight with anti-collision lighting).

- 12. Flight must occur within visual line-of-sight.
- 13. Flight must occur while atmospheric conditions allow at least 3 miles of weather visibility from the control station.
- 14. Flight must occur no higher than 400 feet AGL, or no higher than 400 feet above a structure if the aircraft is within 400 feet of the structure.
- 15. Flight must NOT occur at speeds faster than 100 mph (87 knots).
- 16. Flight must NOT occur over people not under a covered structure.
- 17. Flight must NOT be controlled from a moving vehicle.

Part 107 rules for small UA:

- 18. The aircraft must weigh less than 55 lbs. (25 kg). *
- 19. <u>The aircraft must be registered with the FAA</u> if it weighs more than 0.55 lbs. (250 grams).

The aircraft must be in a condition for safe operation before each flight.

Future changes to FAA rules

As the aviation industry, UA or UAS technology, and applications of UA or UAS evolve, the FAA may change the special rules for model aircraft, the rules in Part 107, or other rules. Any change will supersede this policy. This policy will be amended, or rescinded, accordingly, following normal university governance rules.

Public Certificate of Waiver or Authorization (COA)

Government entities or organizations (e.g. public universities) not wanting to operate a UA or UAS under Part 107 rules may choose to apply for a blanket public Certificate of Waiver or Authorization (Public COA). Public COAs can be granted only for purposes that meet the strict definition of public aircraft operations. Public COAs cannot be granted to public universities for education, training, or other uses because those applications are considered commercial in nature. Note - any such COA would be granted to the University and not to an individual.

UA and UAS Acquisitions

The Director of Safety and Environmental Health will work with other university personnel to try to acquire systems that have broad applicability across all university research and education functions. The purpose is to avoid having different UA, UA and UAS batteries and parts, etc., (maintain standardization). The UA must weigh less than 55 pounds (25 kg) and be restricted to traveling less than 100 mph (87 knots). <u>The aircraft must be registered with the FAA</u> if it weighs more than 0.55 lbs. (250 grams).