UNMANNED AERIAL SYSTEM (UAS) POLICY
REVISION HISTORY

The UAS Policy will be reviewed and revised annually by the EHS Director. Additional revisions may be completed if an incident or accident indicates deficiencies in the policy, new hazards which must be addressed immediately, or changes to the FAA drone regulations.

<table>
<thead>
<tr>
<th>REVISION</th>
<th>DESCRIPTION OF CHANGE</th>
<th>REVISION EFFECTIVE DATE</th>
<th>REVISION COMPLETED BY: NAME / COMPANY</th>
<th>MANAGER APPROVAL / DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>• Initial program</td>
<td>1/2017</td>
<td>Wade Behnke / Colby College</td>
<td>Mark Crosby</td>
</tr>
</tbody>
</table>
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1.0 PURPOSE
1.1 Colby College established this UAS Policy in order to protect students, employees and general public from the privacy issues and safety hazards related to the operation of unmanned aircraft systems (UAS) on campus property or on College business off campus.

2.0 SCOPE
2.1 The Policy applies to all UAS equipped with recording devices and/or UAS weighing more than 10 ounces (but less than 10 pounds). The Policy applies to all outdoor operations on campus property as well as indoor operations in areas not specifically established for the operation of sUAS. All students, faculty, and staff must comply with the UAS policy if they choose to operate an applicable UAS on Colby property or for College business off campus. Under this Policy UAS may only be utilized in a productive manner that fully meets institutional, public safety and legitimate educational needs/purposes. The operation of UAS greater than 10 ounces or with recording devices for recreational purposes or commercial interests not related to the College is not allowed on Colby property.

3.0 RESPONSIBILITIES
3.1 Responsibilities for oversight and implementation of Colby College’s UAS Policy are assigned below. Identified personnel may designate tasks assigned to them to a qualified employee, as appropriate.

3.2 Environmental, Health, and Safety (EHS) Director
3.2.1 Oversee the program and complete annual reviews of the Policy.
3.2.2 Conduct incident and accident investigations related to UAS operations.
3.2.3 Provide guidance and training (Moodle) on this policy with the applicable College Departments and operators.
3.2.4 Maintain the list of registered UAS and operators.
3.2.5 Review flight plans and approve the use of UAS allowed under the policy.

3.3 Office of the Provost and Dean of Faculty
3.3.1 Support the EHS Director in regards to faculty compliance with the requirements of the UAS Policy.

3.4 Colby Security
3.4.1 Enforce the compliance requirements listed in this UAS Policy and report deficiencies to the EHS Director.

3.5 Academic ITS
3.5.1 Oversee and assist in the compliance efforts and UAS use by the academic departments and report deficiencies to the EHS Director.
3.6 Faculty Researchers Utilizing UAS:

3.6.1 Ensure that the operation of UAS under their supervision is in compliance with this Policy.

3.6.2 Ensure that all personal who have access and permission to operate UAS demonstrate proper training and are supervised.

3.6.3 Contact the EHS Director to report any safety or privacy incidents related to UAS operation.

3.7 Student Researchers and Colby Drone Club Operators

3.7.1 Follow all requirements listed in this UAS Policy or specific instructions from the Faculty, EHS Director, or Colby Security.

4.0 UAS RISK CONTROL REQUIREMENTS

4.1 Only members of the Colby community (possessing a Colby ID) may operate a UAS on approved areas (Appendix C) of Colby property. Case by case exceptions (contractors) may be authorized by the VP of Administration, Provosts or the EHS Director in their absence.

4.2 All approved third party UAS operations must also meet legal requirements, represent a legitimate need, and comply with the additional requirements of this Policy. In addition, liability insurance must be verified by Colby’s Director of Risk Management.

4.3 Student UAS operators on the Drone Club and conducting UAS based research must complete the following before operation:

4.3.1 Complete the UAS certification/training program (Section 5.0) and pass the Moodle based quiz.

4.3.2 Register the UAS with the FAA and College EHS Director, and mark the UAS with the specific FAA number.

4.3.3 Notify the EHS Director or Security dispatch in the EHS Director’s absence, 24 hours prior to operating the UAS with a completed online flight plan available at: http://www.colby.edu/humanresources/2017/01/20/preflight-notification-form-uas/ (Appendix A, reference only).

4.3.4 The online form will also automatically notify the Robert LaFleur Airport when submitted.

4.3.5 Complete a full preflight inspection checklist (Appendix B) and ensure airworthiness before flying.

4.4 Effective August 29, 2016, faculty and staff conducting Colby business meeting the commercial FAA definition, must obtain a Small Unmanned Aerial Systems (sUAS) certificate (vetted) from the FAA before operation:

4.4.1 To obtain sUAS certificate the operator must pass an initial aeronautical knowledge test at an FAA-approved knowledge testing center or hold a part 61 pilot certificate other than student pilot, complete a flight review within the previous 24 months, and complete a small UAS online
training course provided by the FAA.

4.4.2 Register with the FAA by completing form 8710-13, for a remote pilot certificate (FAA Airman Certificate and/or Rating Application). The registration can be submitted by using the electronic FAA Integrated Airman Certificate and/or Rating Application system (IACRA).

4.4.3 Register the UAS with the FAA (online) and College EHS Director, and mark the UAS with the specific FAA number.

4.4.4 Notify the EHS Director, and Security, 24 hours prior to operating the UAS with a completed online flight plan available at http://www.colby.edu/humanresources/2017/01/20/preflight-notification-form-uas/ (Appendix A, reference only).

4.4.5 The online form will also automatically notify the Robert LaFleur Airport when submitted.

4.4.6 Complete a full preflight inspection checklist (Appendix B) and ensure airworthiness before flying.

4.5 All operators must follow the FAA and Colby specific requirements listed below when operating on campus or off campus on Colby business:

4.5.1 Have the aircraft registration card immediately available when flying.

4.5.2 All Colby Drone Club flights must be done within the flight areas listed in Appendix C. When possible, operate the UAS below tree level and remain clear of surrounding obstacles. Operation above the tree level on Campus must never exceed an altitude listed in Appendix C.

4.5.3 Any operations outside of the defined areas in Appendix C, must be approved by the EHS Director.

4.5.4 Never exceed a ground speed of 25 miles per hour.

4.5.5 Per this policy, two people are required to operate the UAS. One person must act as the remote pilot and maintain visual line of sight with the unaided eye of the aircraft at all times. The second person will act as the visual observer and ensure that environmental conditions remain safe throughout the flight. Specifically, the visual observer will look for people entering the flight area, incoming planes, or other potential developing safety risks in the flight area. The visual observer must also be able to see the UAS at all times.

4.5.6 Do not operate the UAS in poor conditions where the visual observers’ visibility is compromised. In addition, do not operate in conditions where communication between the visual observer and remote pilot may be confused.

4.5.7 Do not operate UAS a half hour after sundown or a half hour before sunup per officially listed times.

4.5.8 Never interfere with manned aircraft operations and ground the UAS if there is any potential for interference.

4.5.9 Never operate a UAS near groups of people, team practices or stadiums.
4.5.10 Do not fly an aircraft with a total flying weight of more than 10 pounds in total, including all cargo and fuel, without specific permission from the EHS Director.

4.5.11 Careless or reckless operations of the UAS will result in immediate loss of privilege to operate a UAS on Colby property.

4.5.12 Never operate a UAS if impaired by drugs or alcohol.

4.5.13 Operation of UAS shall not violate any person’s reasonable expectation of privacy.

5.0 TRAINING

5.1 Student researchers and drone club operators must complete the following training requirements:

5.1.1 Complete the online FAA course Part 107 for sUAS available at: https://www.faasafety.gov/login/reg/Register.aspx

5.1.2 Complete the Moodle quiz with a score of 80% or higher.

5.1.3 Agree to follow the requirements of this policy and sign the Colby Operator Requirements Acknowledgment form (Appendix D).

5.2 The training and certification process required by the FAA for faculty and Staff operators is sufficient. In addition to the UAS certification process all operators must agree to follow the requirements of this policy and sign the Colby Operator Requirements Acknowledgment form (Appendix E).

6.0 UAS INCIDENTS

6.1 In the event of a UAS incident that results in damage to the UAS, property damage, bodily injuries or privacy concerns, the incident must be reported to your supervisor, Faculty in charge, Academic ITS, and/or EHS Director as soon as possible.

6.2 If immediate medical assistance is required, dial 5911 to reach Security Dispatch to summon emergency responders.

6.3 The EHS Director and Academic ITS will review the incident to determine root cause and prevention measures.

6.4 Within 24 hours of the incident a written accident report must be submitted to the EHS Director.

6.5 Any incidents that result in property damage over $500.00 or serious injury are required to be reported to the FAA within 10 days. The EHS Director will submit the report.

7.0 RECORDKEEPING

7.1 This written program will be available for review upon request by any employee during work hours. It is located in the EHS Directors’ office.
7.2 The list of all registered UAS, UAS operators, and UAS Operator acknowledgments will be maintained by the EHS Director.
7.3 All completed preflight inspections and flight plans will be retained by the EHS director for seven calendar years.
Appendix A: Flight Plan
# UAS FLIGHT PLAN (Reference Only)

## Operator Information

- **Remote Pilot**: ____________________________________________ (print)  
  **Phone Number**:__________________________________________

- **Visual Observer**: ____________________________________________ (print)  
  **Phone Number**:__________________________________________

## Flight Information

- **Date of Flight**: _____/____/____  
  **Time of Flight**:______________________

- **Location of operations**:____________________________________  
  **Max Estimated Altitude**:________ (must remain below 400ft)

- **Educational Need/Purpose For Flight**:__________________________

- **Data or Imagery to be Collected**:_____________________________

  ***Note reactional operation on Colby property is not permitted***

## UAS Information

- **UAS Model and Brand**:______________________________________

- **FAA Registration Number**:__________________________________  
  **Clearly Marked on UAS?** □ YES

## Additional Signatures

- **EHS Director Signature**______________________________________

  **Date**: _____/____/____

- **Remote Pilot Signature**:______________________________________

  **Date**: _____/____/____

- **VO Signature**:_____________________________________________

  **Date**: _____/____/____  
  ***Maintain a copy of the flight plan when operating on Colby property***
Appendix B: Preflight Inspection Checklist
At a minimum complete the following preflight inspection immediately before the operation of the UAS. Do not operate the UAS if a deficiency cannot be corrected.

<table>
<thead>
<tr>
<th>Description</th>
<th>OK</th>
<th>NA</th>
<th>Maintenance Required</th>
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</thead>
<tbody>
<tr>
<td>Confirm Airport has been notified of the flight</td>
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<tr>
<td>Ensure UAS is in a level location safe for takeoff, away from obstructions,</td>
<td></td>
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<td></td>
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<tr>
<td>people, and power lines</td>
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<tr>
<td>Verifying all transmitter, on-board aircraft and camera batteries are fully</td>
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<td></td>
<td></td>
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<tr>
<td>charged; (confirm voltages)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Checking all control surfaces for signs of damage, loose hinges, and overall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>condition; Looking over the wing/rotors to ensure they are in good</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>structural condition and properly secured</td>
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<tr>
<td>Check motor/engine and mounting attached to the airframe</td>
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<tr>
<td>Study propellers / mounting hardware (tight) / rotor blades for chips and</td>
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<tr>
<td>deformation</td>
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<tr>
<td>Check the landing gear for damage and function</td>
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<tr>
<td>Test electrical connections, plugged in and secure</td>
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<tr>
<td>Ensure photo / video equipment mounting system is secure and operational.</td>
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<tr>
<td>Check the IMU movements in the ground control software</td>
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<tr>
<td>If using a video recorder, turn on camera system</td>
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<tr>
<td>All transmitter controls move freely in all directions</td>
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<td></td>
<td></td>
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<tr>
<td>All transmitter trims in neutral position</td>
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<td></td>
</tr>
<tr>
<td>All antennas are in the proper position</td>
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<td></td>
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<tr>
<td>Transmitter throttle to zero</td>
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</table>

**Turn on the radio transmitter:**

<table>
<thead>
<tr>
<th>Description</th>
<th>OK</th>
<th>NA</th>
<th>Maintenance Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect / power on battery to airframe</td>
<td></td>
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<td></td>
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<tr>
<td>Ensure led indicators and audible tones are correct</td>
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<tr>
<td>Timer on (if applicable)</td>
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<tr>
<td>Scan for nearby cars / people / animals</td>
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<td></td>
<td></td>
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<tr>
<td>Arm flight controller</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Check for GPS lock</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Increase altitude slightly, listening for any abnormalities</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Short 20-30 second hover at 3-5 feet (listen for vibrations / loose items)</td>
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<td></td>
<td></td>
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<tr>
<td>Confirm Voltage levels are correct</td>
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<tr>
<td>Ensure that UAS is in the proper mode, with all control surfaces moving</td>
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<td></td>
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<tr>
<td>towards the correct positions</td>
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</table>

Note any pertinent issues/corrective actions:

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

Remote Pilot Signature: ___________________________  Date: ___________________________
Appendix C: Map of Approved UAS Operation Areas on Campus
Appendix D: Colby College UAS Operator Requirements Acknowledgment Form
The following operational requirements must be followed at all times when operating UAS on Colby College property or College business off campus:

- Abide by all applicable FAA UAS regulations and the Colby UAS Policy.
- Stay below tree height when possible and never exceed 400 feet of altitude.
- Stay below a ground speed of 100 mph.
- All UAS must be less than 10 pounds in total including all cargo and fuel.
- UAS may only be operated on Colby property in the areas designated on Appendix C.
- Allowed operation times are a half hour before sunrise until a half hour after sundown.
- When operating on the primary campus, Robert LaFleur Airport must be notified 24 hour before the flight. Operations off campus within 5 miles of an airport must notify that control tower 24 hours before the flight.
- A flight plan must be submitted to the EHS Director 24 hours before each flight.
- All student operators must complete FAA course Part 107 and pass a Moodle quiz before on campus operations.
- All staff and Faculty must adhere to and complete the training and certification process required by the FAA and Colby College for small UAS used in commercial operations.
- Maintain copy of the aircraft registration cards on hand during flight operations.

The following actions are **not permitted** under Colby's UAS policy.

- The use of UAS on Colby property for pleasure or recreation is not permitted. All UAS flights must have a clear educational agenda and purpose beneficial to the College or student research.
- Never operate a UAS while under the influence of alcohol or drugs.
- Never operate a UAS without a second person to act as a visual observer. The visual observer must be able to maintain unaided eye contact with the UAS at all times.
- Never operate a UAS on Campus that is not registered with the FAA and properly marked.
- Never operate the UAS over any people not directly involved in the planned flight.
- Never violate any person's reasonable expectation of privacy.

I agree to comply with the requirements listed on this form and the UAS Policy (available for full review on the Colby Safety Office webpage). I understand that I could be subject to disciplinary action and loss of privilege at Colby College for any UAS operation violation.

Print Name:______________________________

Signature:______________________________ Date: ____________________