

Unmanned Aerial System

Operations Manual

UAS Operations Manual

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I. Preface:

The following procedures are intended to promote the safe, efficient and lawful operation of the Company Unmanned Aerial System (UAS). Safety, above all else, is the primary concern in each and every operation, regardless of the nature of the mission.

II. Philosophy and Mission Statement

It shall be the mission of the personnel who are trained in the use of UAS, to use this resource to protect lives and property of citizens of our County and first responders in a constitutionally and legally sound manner and in compliance with Federal Aviation Administration (FAA) regulations. The use of a UAS can be utilized in circumstances which would save life and property, as well as being able to detect possible dangers that could not otherwise be seen.

The UAS can support first responders in any all-hazards incidents which would benefit from an aerial perspective. These uses would include Patrol Operations, Traffic Incidents, Drug Task Force Operations, Search and Rescue missions, Explosive Ordnance Detection missions, Disaster Response, Barricaded Suspects, Hostage Situations and other high-risk tactical operations, hazardous materials spills, natural disasters, terrorist related events, fire related incidents, and crime scene preservation. The UAS would also be utilized for training missions.

The Federal Aviation Administration Modernization and Reform ACT of 2012 provides for the integration of civil unmanned aircraft systems into national airspace. While privately and publicly operated unmanned aircraft systems can have legitimate roles in areas such as agriculture, scientific research, and public safety, these systems present new challenges to the privacy and due process rights of Washingtonians.

Both public and private operators of unmanned aircraft systems have a responsibility to not infringe on the rights or property of the citizens of Washington. Any data, information, photographs, video or recordings of individuals, both in public and private, should be minimized and retained in a manner consistent with current privacy standards.

III. Protection of Rights and Privacy

UAS Commanders, operators and observers will have the protection of citizens' civil rights and reasonable expectations of privacy as a key component of any decision made to deploy the UAS. UAS operators and observers will ensure, and will be held accountable for ensuring, that operations of the UAS intrude to a minimal extent upon the citizens of the County. To accomplish this primary goal, we will:

- A. When the UAS is being flown, the onboard cameras will be turned so as to be facing away from occupied structures, to minimize the inadvertent video or still images of uninvolved persons.
- B. All video and still images will be maintained in strict compliance with Company policies and procedures.

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- C. Public input will be managed by the UAS Commander or his or her designee, and regularly monitored to address citizens' concerns and recommendations.
- D. COMPANY does not conduct random surveillance activities. The use of the UAS will be tightly controlled and regulated.
- E. The authorized missions for the COMPANY UAS are:
 - 1. Video/photographs crime scenes
 - 2. HAZMAT Response
 - 3. Search and Rescue Missions
 - 4. Barricaded Suspects and other high-risk tactical operations
 - 5. Disaster Response (Flood, earthquakes, etc.)
 - 6. Training missions as authorized by the Training Certificate of Authorization
 - 7. Fire Response
 - 8. Any Operations
 - 9. Patrol Operations
 - 10. Special Enforcement Efforts as directed by COMPANY UAS Policy
- F. A committee will be formed and will meet semi-annually for the purpose of reviewing the existing UAS procedures as well as new technologies, laws and regulations on UAS usage. The committee will consist of the UAS Commander, Manager and COMPANY PICs.
- G. The COMPANY UAS program will operate strictly within the law and policy. If in doubt, prior to operating the UAS, operators will ensure that warrant(s) are applied for and obtained. UAS deployments will balance all operations with the need to accomplish the mission while maintaining public privacy and the freedom from intrusion.

IV. Definitions:

- A. **Certificate of Authorization (COA):** Provided by the FAA which grants permission to fly within specific boundaries and perimeters. Training flights cannot take place without a valid &E (training & evaluation) COA and missions cannot take place without a valid operational/emergency COA.
- B. **UAS- Unmanned Aircraft System (UAS):** Any powered aerial vehicle that does not carry a human operator and uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely up to FAA regulation altitudes, can be expendable or recoverable, and have the capability to digitally photograph or record incidents.
- C. **Pilot in Command (PIC)** - The Pilot in Command (PIC) employee of the Company, who has obtained and maintains a valid remote pilot airman's certificate in compliance with all Federal Aviation Regulations. The PIC is responsible for the complete and overall operation of a UAS flight and is accountable to maintain proficiency in the Make and Model of the UAS used for missions, maintain operational knowledge and flight proficiency as required by Federal Aviation Regulations, report any maintenance issues of the UAS operated by him or her to the UAS Team Leader, and have the ability to apply good judgment in all situations, whether routine or emergency in nature.

D. Visual Observer (VO) – An employee who conducts flight operations to support both patrol and surveillance missions. The VO must be familiar with the aerial limitations and Federal Aviation Regulations to direct and assist PICs in their missions. The VO will be trained by Master Trainers (MT) who have obtained and maintain valid remote pilot airman certificates in compliance with all federal aviation regulations.

V. Administration

5.1 Operations Manual

- A. The policies and procedures contained in this manual are issued by authority of the Manager. As such, it is an official document of the Company.
- B. This manual is not intended to be all-inclusive, but as a supplement to other department guidelines, Federal Aviation Administration regulations, Certificate of Authorization COA, and the UAS manufacturer's approved flight manual.
- C. The Operations Manual has been written to address UAS operations as they existed when it was drafted. Equipment, personnel, environment (internal and external) change over time. The management of change involves a systematic approach to monitoring organizational change and is a critical part of the risk management process. Given this, it is essential that this manual be continually updated as necessary. The entire manual will be reviewed, at a minimum, annually to assure it is up-to-date. Any changes to the manual will be communicated as currently dictated by department policy.
- D. A copy of the manual will be issued to every person having UAS responsibilities and will be posted on the COMPANY DMS System.

5.2 Organization

- A. The UAS Unit shall be comprised of those personnel approved by COMPANY Special Operations and includes operators, observers and others deemed necessary, such as information personnel and those who have an assignment as part of the UAS unit.

5.3 Personnel

- A. **UAS Commander:** The Commander assigned to COMPANY Special Operations is responsible for the overall direction and performance of the UAS unit and will exercise command and control over both.
- B. **UAS Supervisor:** A supervisor or manager will be appointed to supervise the PICs and VOs assigned to the unit and their activities. The UAS supervisor is responsible for the day-to-day supervision and command of the Deputies assigned to the UAS unit.
- C. **UAS Team Leader:** An appointed position via the UAS Manager, and who has obtained and maintains a valid remote pilot airman certificate in compliance with all Federal Aviation Regulations.

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D. UAS Team Leader Responsibilities:

1. Maintain all training, flight and maintenance records for each operator and observer as well as individual airframes.
2. Maintain contact with the FAA and familiarity with the pertinent FAA regulations.
3. Evaluate airframes based on mission needs.
4. The UAS Team Leader must maintain proficiency on all UAS operated by the unit.

E. Pilots in Command (PIC):

1. Applicants must complete a UAS application process through COMPANY Human Resources
2. To be considered for selection as a PIC, applicants must pass the Basic Knowledge examination and successfully pass a UAS basic operations practical demonstration under the supervision of the PIC Team Leader or designee PIC.
3. Applicant(s) will be required to complete approximately 80 hours of online and hard copy study materials in conjunction with a nationally recognized training origination's 40 hour UAS training course. These actions are in preparation of completing and successfully passing the FAA Part 107 UAS certificate test.
4. An UAS operator's primary duty is the safe and effective operation of the COMPANY's UAS in accordance with the manufacturer's approved flight manual, FAA regulations and Agency policy and procedures. Operators must remain knowledgeable of all FAA regulations, UAS manufacturer's flight manual and bulletins and COMPANY policy and procedures.
5. Operators may be temporarily removed from flight status at any time by the UAS Commander, for reasons including performance, proficiency, physical condition, etc. Should this become necessary, the operator will be notified verbally and in writing of the reason, further action to be taken and expected duration of such removal in accordance with COMPANY policy.
6. The UAS Team Leader shall coordinate with the COMPANY Training manager to maintain a file for each PIC which shall include copies of FAA certifications, training records, etc. This file will be reviewed in accordance with current COMPANY policy and procedures.

F. Visual Observers (VO)

1. An observer is any sworn Deputy who has been provided sufficient training to communicate clearly to the PIC any turning instructions required to stay clear of conflicting traffic. Observers will receive training on rules and responsibilities described in 14 CFR 91.111, operating near other aircraft, 14 CFR 91.13, Right-of-Way Rules, cloud clearance, in-flight visibility, and the pilot controller glossary.

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2. An observer's primary duty is to be an observer for anything that may affect the operator's primary duty (See and Avoid).
3. The Department UAS Team Leader shall coordinate with the COMPANY Training Manager to maintain a file for each VO which shall include copies of training records, etc. This file will be reviewed in accordance with current COMPANY policy and procedures.

5.4 Facilities

- A. UAS operations will be housed at the COMPANY tech office.
- B. UAS systems will be in the possession of the PIC assigned to each device. PICs will be responsible for ensuring their UAS equipment is properly maintained and secured.

5.5 Scheduling

- A. To facilitate the broad use of the UAS, it shall be made available for approved missions per COMPANY policy.
- B. To maintain a level of proficiency with the UAS, operators will be required, as part of their acceptance into the UAS unit, to attend quarterly training. Training will be coordinated through the UAS unit and announced in advance for scheduling purposes.

5.6 Miscellaneous

- A. Inquiries from the news media will be forwarded to the Public Information Officer. Operators/Observers shall follow currently established department policy regarding interactions and inquiries from the media.
- B. Requests for UAS support from other government agencies within or outside the County will be responded to by the manager or their Designee, and assessed by the UAS Team Leader for feasibility and lawful operation under FAA rules and regulations. Should it be determined the UAS request does not meet COMPANY policy and/or procedures, the manager, MT, or Team Leader is authorized to decline the request. Proper policy and procedure, as well as FAA regulations, shall be followed when accepting mutual aid support for the UAS.
- C. Complaints or inquiries regarding UAS operations shall be routed through the Human Resources Department.

VI. Safety

6.1 Safety Policy

- A. The COMPANY is committed to maintaining a safe and healthy workplace, including:
 1. The ongoing pursuit of an accident-free workplace, including no harm to people, no damage to equipment, the environment or property.

2. A culture of open reporting of all safety hazards in which management will not initiate disciplinary action against any personnel who, in good faith, disclose a hazard or safety occurrence due to unintentional conduct.
 3. Support for safety training and awareness programs.
 4. Conduct regular audits of safety policies, procedures and practices.
 5. Monitor the UAS community to ensure best safety practices are incorporated into the organization.
- B. It is the duty of every member within the UAS unit to contribute to the goal of continued safe operations. This contribution may come in many forms and includes always operating in the safest manner practicable and never taking unnecessary risks. Any safety hazard, whether procedural, operational or maintenance related should be identified as soon as possible after, if not before, an incident occurs. Any suggestions in the interest of safety should be made to the UAS unit chain of command.
- C. If any member observes or has knowledge of an unsafe or dangerous act committed by another member, the UAS manager is to be notified immediately so that corrective action may be taken.

6.2 Operational Hazard and Occurrence Report (OHOR) and Investigations

- A. Occurrences are unplanned safety related events, including accidents and incidents that could impact safety. A hazard is something that has the potential to cause harm. The systematic identification and control of all major hazards is foundational to safety.
- B. The OHOR concept provides a mechanism to report hazards and occurrences, real and perceived, to those responsible for UAS operations.
- C. There is no specific format for the OHOR as the information provided is what is important, not the format, and should be used without hesitation to report any anticipated, current, or experienced safety hazard, or occurrence. Further, the OHOR can be submitted anonymously and to whatever level in the chain of command, to get the matter proper attention, without fear of reprisal.
- D. Written memorandums fully explaining the problem will be given to the UAS Commander.
- E. Every hazard and/or occurrence will be investigated, with the results and corrective action taken communicated to all members. The investigation will be conducted by a supervisor, under the direction of the UAS Commander, or any other member of the department who has the technical skill necessary to thoroughly conduct the investigation. The services of an independent subject matter expert may be necessary in some cases to assure a thorough and complete investigation.

- F. Hazards requiring immediate attention will be brought to the attention of the UAS Commander or direct supervisor, verbally, without delay.
- G. All members are authorized to take action to correct a hazard if, in that member's opinion, delay will result in accident or injury. The UAS unit chain of command will be notified immediately in such situations.

6.3 Safety Officer - Operator/Observer/Supervisor

- A. In regards to safety, all members of the UAS unit are responsible for the following:
 - 1. Ensure all flight operations personnel understand applicable regulatory requirements, standards and organizational safety policies and procedures.
 - 2. Observe and control safety systems by monitoring all operations.
 - 3. Review standards and the practices of departmental personnel as they impact operational safety.
 - 4. Communicate all reported safety related problems and the corrective action taken. If there were any in-flight problems, or learned experiences, the proper procedures for handling that problem should be discussed.
 - 5. Copy and circulate pertinent safety information.
 - 6. Copy and circulate emergency safety bulletins.
 - 7. Place any electronic copies of safety information or bulletins on the COMPANY UAS shared drive for members to access.
 - 8. It is emphasized again that safety is the responsibility of ALL members of the UAS unit.

6.4 Safety Training

- A. All members shall receive training in the following subjects prior to operating the UAS:
 - 1. Agency commitment to safety
 - 2. Agency policy
 - 3. UAS members' role in Safety and Emergency procedures
- B. All members shall review the UAS Safety Policy and Procedures on an annual basis.

6.5 Medical Factors

- A. Operator and Observers shall only deploy the UAS when rested and emotionally prepared for the tasks at hand.

- B. Physical illness, exhaustion, emotional problems, etc., can seriously impair judgment, memory and alertness. The safest rule is not to act as an operator or observer when suffering from any of the above. Members are expected to "stand down" when these problems could reasonably be expected to affect their ability to perform flight duties. A self-assessment of physical condition shall be made by all members during pre-flight activities.
- C. Performance can be seriously hampered by prescription and over-the-counter drugs. If it is determined that the medication being taken could hamper and/or impair a PIC or observer, that member shall be prohibited from the deployment or exercise.
- D. No member shall act as an operator or observer within eight hours after consumption of any alcoholic beverage. (Federal Aviation Regulation 91.17)

VII. Training

7.1 Objective

- A. The key to continued safe operations is by maintaining a professional level of competency. The first step in this process is establishing minimum qualifications for selecting members, and the second step involves training those personnel. COMPANY UAS operators will conduct mandatory training on a quarterly basis per COMPANY policy.

7.2 Instructors

- A. All PICs with FAA certified Part 107 certificate holders, will be given instructor duties. Such duties can include developing training courses; provide training and student evaluation and documentation.
- B. Duties of instructing new members shall fall upon those who have the most flight time and knowledge of UAS operations. Instructors will be designated based on experience and competency with the UAS operation and approved by the UAS Team Leader. All COMPANY UAS instructors shall attend a certified Instructor Development Course.

7.3 Training Plans

- A. All members will have a training plan on file that outlines training objectives for the upcoming year. This training plan will be held in conjunction with the member's normal training file per department policy.
- B. The approved training plan will be developed jointly by the UAS Supervisor, Team Leader and PICs. All deployments or exercises will be documented and count toward a member's training.
- C. It is the member's responsibility to verify their training file contains all pertinent information.

7.4 Initial Training

- A. Upon acceptance to the UAS unit via COMPANY HR processes, the new member shall acquire an FAA Part 107 airman's certificate.
- B. Observers must have completed sufficient training to communicate to the PIC any instructions required to remain clear of conflicting traffic. This training, at a minimum, shall include knowledge of the rules and responsibilities described in 14 CFR 91.111, Operating Near Other Aircraft; 14 CFR 91.113, Right-of-Way Rules: Except Water Operations; and 14 CFR 91.155, Basic VFR Weather Minimums; knowledge of air traffic and radio communications, including knowledge of appropriate sections of the Aeronautical Information Manual.
- C. Before a new UAS team member can be authorized to conduct flight operations as a COMPANY UAS operator, they must complete at least eight hours of flight training with the UAS instructor(s) to show proficiency of the flight training exercises and the airframe. This must be accomplished to show their ability and knowledge of the UAS.

7.5 Recurrent Training

- A. All members within the unit shall maintain proficiency in their operator/observer abilities. Members who do not have any documented training or flight time within a span of 90 days will have to show proficiency before being an operator/observer during a deployment or exercise.
- B. Recurrent training is not limited to actual operating/observer skills but includes knowledge of all pertinent aviation matters.
- C. Failure to prove proficiency can result in removal from UAS responsibilities.

7.6 Miscellaneous

- A. All requests for training shall be approved through the UAS member's chain of command.
- B. Depending on the nature of the training request, all efforts will be made to accommodate the hours of training to minimize impact to staffing levels.
- C. Members are encouraged to attend and forward information on FAA sponsored safety seminars. This may be done while on-duty with the approval of their chain of command.
- D. Overtime will be authorized for COMPANY UAS training, although every effort shall be made to minimize overtime through fiscally responsible scheduling.
- E. Training shall only be conducted at approved locations and follow the provisions within the approved FAA COMPANY COA.

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VIII. General Operating Procedures

8.1 Requests for UAS Support

- A. Requests for UAS support shall be made through COMPANY Dispatch for on duty UAS personnel. Dispatch will forward the request to the UAS manager or Team Leader.
- B. Requests for UAS support can be made at any time during the day or night by any COMPANY supervisor.
- C. Emergency UAS requests will be forwarded to the Manager. There will be a group page maintained by Manager to notify members assigned to the UAS Unit for emergency services. The PIC has ultimate authority on launch decisions.

8.2 Call-out Procedure

- A. A COMPANY supervisor will screen all initial requests to use a UAS from patrol or investigation units.
- C. The approving supervisor will then contact the COMPANY UAS Manager or Team Leader to request the deployment of the UAS.
- C. The UAS Manager or Team Leader will screen the request using the following factors:
 - 1. Is the proposed use of the UAS within the capabilities of the UAS equipment and personnel to perform?
 - 2. Does the proposed use of the UAS fall within the FAA and department policies and regulations for UAS usage?
 - 3. Can the UAS be deployed safely given current weather conditions?
 - 4. If the UAS deployment requires a warrant, has one been requested and approved?
 - 5. Are operators sufficient trained and qualified personnel available to safely operate the UAS?
- D. The UAS Unit Manager or Team Leader will either accept or decline the request for UAS support. If the request is denied, the UAS Unit Manager or Team Leader will provide a reason for declining the support request to the requester. If the UAS Unit Manager or Team Leader accepts the support request, a UAS operator will be assigned who will be provided all available mission information.
- E. The UAS PIC will contact a visual observer from the list of available trained observers and arrange for the observer to meet the operator at the scene. The UAS operator is responsible for transporting the UAS and all required equipment. Upon arriving at the requested location, the UAS operator will contact the on-scene Incident Commander and will check in and receive a briefing on the mission requested. The UAS operator will make an on-scene determination of the ability of the UAS to perform the requested mission safely and within department and FAA policies and procedures.

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- F. If the UAS operator determines that the use of the UAS would violate department policy or directives, the UAS operator will inform the Incident Commander of the potential conflict along with recommendations for modifying the requested mission to conform to the department policies and procedures. As this is a change from the original approved mission, the UAS operator will contact the UAS unit chain of command for direction on how to proceed. After the completion of the mission, the UAS operator will communicate any concerns through the UAS chain of command.
- G. UAS operators will have sole discretion for declaring safety or violation of FAA rules. If the UAS operator determines that a requested mission would violate FAA rules or endanger civilians, the UAS operator will respectfully inform the Incident Commander of the reasons for refusing to operate the UAS. The UAS will not be flown in this circumstance and the authority of the UAS operator is absolute.
- H. If the UAS operator determines that the requested mission will potentially damage the UAS or its associated equipment, the UAS operator will inform the Incident Commander of their concern and suggest mission parameters changes. The UAS PIC is the final authority regarding UAS operations.

8.3 Deployment Priorities

- A. The UAS shall not be used for the purpose of random surveillance.
- B. If several separate requests for UAS support are received simultaneously, they shall be prioritized.
- C. In general terms, requests for UAS support are prioritized as:
 - Life Safety
 - Evidence/Documentation

8.4 Flight Boundaries

- A. Although there may be requests for UAS support outside of our County, the certificate of authorization for our UAS restricts UAS deployment outside of the County and further restricts the proximity of flight to other locations.
- B. At no time shall UAS support be granted outside of the County without first obtaining an emergency FAA COA and approval by the UAS Commander.
- C. Information regarding flight boundaries can be found in the COMPANY FAA COA and the use of an airport Terminal Area Chart attached therein.
- D. Maximum altitude shall not be set more than 400 feet AGL, per the FAA COA.

8.5 Minimum Personnel Requirements

- A. Due to the nature of the missions, the minimum personnel required on ALL missions will be an operator and observer. Under no circumstances will an operator attempt to complete a deployment alone.
- B. Although training is not considered a mission, an observer shall be used.

8.6 Flight Time Limitations

During any 24 consecutive hours, the total flight time of any pilot may not exceed 10 hours, which shall include any other unmanned flying by that pilot. A pilot's flight time may exceed the flight time limits if the assigned flight time occurs during a regularly assigned duty period of no more than 12 hours and:

- A. If this duty period is immediately preceded by and followed by a required rest period of at least 8 consecutive hours of rest per COMPANY policy.
- B. If the flight time is assigned during this period, which total flight time when added to any other unmanned flying by the pilot may not exceed 12 hours.
- C. If the combined duty and rest periods equal 24 hours, each flight assignment must provide for at least 8 consecutive hours of rest during the 24-hour period that precedes the planned end of the agency flight. When a pilot has exceeded the daily UAS flight time limitations in this section, because of circumstances beyond control of the agency or pilot, the pilot must have a rest period before being assigned or accepting an assignment for flight time, of at least:
 - D. Twelve (12) consecutive hours of rest if the flight time limitation is exceeded by more than 30 minutes.

8.7 Personnel Responsibilities for Deployments. Open communication achieves safe operations.

- A. UAS Operator (PIC)
 - 1. The operator is directly responsible for, and is the final authority over the actual operation of the UAS.
 - 2. Operators have absolute authority to reject a flight based on personnel safety or violation of FAA regulations. No member of the UAS Office, regardless of position, shall order an operator to make a flight when, in the opinion of the operator, it poses a risk to personnel or is in violation of FAA regulations.
 - 3. Operators are responsible for compliance with this manual, department policy and procedure and FAA regulations.
 - 4. The operator's main duty during the deployment of the UAS is to operate the UAS safely while accomplishing the goals of the deployment.
 - 5. Operators shall utilize see-and-avoid for any obstacle that will lessen safety during the mission.
 - 6. Operators shall be responsive to the requests of the observer in order to accomplish the deployment.
 - 7. Operators shall be responsible for documentation for mission training and updating

of the flight book.

B. Visual Observer (VO)

1. Observers shall utilize see-and-avoid for any obstacle that will lessen safety during the mission.
2. Observers are responsible for the safe aspect of the deployment.
3. Observers may operate any attachments to the UAS , allowing the operator to maintain complete focus on the operation of the UAS.
4. Observers shall remain alert for suspicious persons or activities on the ground and coordinate response by ground units.
5. Observers shall monitor the radio updates.
6. Observers shall assist the operator in the main objective of safe operations of the UAS.

8.8 Personal Equipment

- A. Operators/Observers shall wear eye protection at all times while the UAS is in flight.
- B. Operators/Observers will take into consideration the current weather conditions when planning to deploy, and wear appropriate clothing to deploy comfortably.
- C. There are no documented issues with the use of the radio or cellular phones during the deployment of the UAS, but the operator/observer should , at all times, take into consideration safe operation of the UAS when using the radio or another device. (Use of the radio or other device is strictly prohibited by the PIC during flight per the COA.)
- D. Operators/Observers shall be clearly visually identifiable as the Company Office personnel.

IV. Pre Flight/Post Flight Actions

9.1 Inspections

- A. Operators/Observers are both responsible for a thorough pre-flight inspection of the UAS.
- B. Before and after each deployment (whether an incident or training), the operator and observer shall conduct a thorough inspection of the UAS in accordance with the instructions contained in the manufacture's user's manual.
- C. Any issues found that will put in jeopardy the safe operation of the UAS shall be documented and resolved immediately prior to flight.

- D. It has been recognized that the use of a checklist is a significant method to combat UAS accidents. A pre-flight and post-flight checklist is contained in the Base Station and will be utilized prior to each flight.
- E. Any physical equipment that cannot be resolved on-site, and which have an impact on safety or the mission, will override the deployment. These issues will be resolved before flight.

9.2 Weather

- A. Before each deployment, the operator/observer will ensure that he/she gathers enough information to make themselves familiar with the weather situation existing throughout the area of deployment. The operator shall utilize FAA approved weather resources to obtain the latest and most current weather conditions.
- B. An anemometer should be utilized in order to better estimate the wind speed and determine if it is within the capabilities of the airframe being flown.
- C. The weather conditions reported for the operation shall be recorded in the flight log.
- D. The operator shall ensure that the flight will occur within FAA VFR weather requirements.

9.3 Documentation and Evidence

- A. Inspection and weather will be documented prior to flight within the log book.
- B. After each flight, the operator will document the UAS operations.
- C. After each deployment, video obtained by the UAS Operation will be submitted to the Manager in accordance with Company policies and procedures.
- D. Aerial digital photography (still or video) shall be stored in accordance with COMPANY department policy and procedure.
- E. The operator of the UAS is responsible for digital evidence handling as well as writing any supporting documentation for the incident.

9.4 Planning

- A. The operator/observer shall familiarize themselves with all available information concerning the deployment including, but not limited to, the weather conditions, hazards, description of the incident, deployment goals, etc.
- B. Operators will ensure that the location for take-off and emergency landing is adequate for a safe deployment.
 - 1. The take-off/landing location should be clearly marked and identifiable.
 - 2. At least one emergency landing area should be identified per deployment.

3. Operators will ensure that they are aware of their surroundings in the event that an emergency landing is necessary. This includes the ability to recover the UAS.

9.5 Checklists

- A. Operators shall utilize the checklists to ensure the highest level of safety for deployment.
- B. Prior to flight, the flight log shall be initiated.

9.6 Maintenance

- A. Although there are few parts on the UAS that need servicing, it is necessary that the manufacturer's maintenance schedule is followed and properly documented.
- B. Any issues that arise during maintenance that cannot be resolved by routine methods shall be forwarded to the manufacturer for further technical support.

9.7 Other

- A. Operators/Observers will ensure that no items are attached to the UAS prior to flight that are not required for safe operation and to complete the mission goal.