

Menlo Park Fire Protection District
Unmanned Aircraft System (UAS)
Operations Manual



Version 1.0

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Preface

The purpose of this operations manual is to provide members of Menlo Park Fire Protection District a set of operational procedures intended to promote the safe, efficient, and lawful operation of an Unmanned Aerial System. As such, this handbook will be considered a living document and will be subject to modifications as seen fit by the leadership at MPFD.

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MISSION STATEMENT

To protect and preserve life and property from the impact of fire, disaster, injury, and illness.

COMMITMENT

To deliver high quality, professional, and effective customer service.

FIREFIGHTER CODE OF ETHICS

As a firefighter and member of the Menlo Park Fire Protection District, my fundamental duty is to serve the community; to safeguard and preserve life and property against the elements of fire and disaster; and maintain a proficiency in the art and science of fire engineering.

I will uphold the standards of my profession, continually search for new and improved methods and share my knowledge and skills with my contemporaries and successors.

I will not allow personal feelings, nor danger to self, deter me from my responsibilities as a firefighter.

I will at all times, respect the property and rights of all men and women, the laws of my community and my country, and the chosen way of life of my fellow citizens.

I recognize the badge of my office as a symbol of public faith, and I accept it as a public trust to be held so long as I am true to the ethics of the fire service. I will never use my official position to obtain advantages or favors for my friends, my family, or myself.

I will constantly strive to achieve the objectives and ideals, dedicating myself to my chosen profession, saving of life, fire prevention, and fire suppression.

As a member of the Menlo Park Fire Protection District, I accept this self-imposed and self-enforced obligation as my responsibility.

Definitions and Abbreviations

Above Ground Level (AGL): AGL is the altitude expressed in the actual number of feet measured above the ground.

Air Traffic Control (ATC): Manages traffic from the airport to a radius of 3 to 30 miles. Provide pilots taxiing and take off instructions, air traffic clearance, and advice based on their own observations and experience. Maintains separation between landing and departing aircraft, transfers control of aircraft to the en-route center controllers when the aircraft leave their airspace, and receives control of aircraft on flights coming into their airspace.

Certificate of Authorization (COA): Issued by the FAA and grants permission to fly within specific boundaries and parameters.

Cities: Refers to the cities of Menlo Park, Atherton, East Palo Alto, Redwood City, and unincorporated San Mateo County, CA.

Federal Aviation Administration (FAA): Federal agency in the United States and part of the Department of Transportation. The FAA regulates U.S. civil aviation, U.S. commercial space transportation, operates control towers, builds, installs, and maintains electronic aids to navigation, and registers all pilots and aircrafts in the United States.

Incident Commander (IC): The IC is responsible for directing and/or controlling resources by virtue of explicit legal, agency, or delegated authority. The IC develops incident objectives and manages all incident operations. The IC sets priorities and defines the ICS organization for the particular response.

Instrument Flight Rules (IFR): Under IFR, ATC exercises positive control (i.e., separation of all air traffic within designated airspace) over all aircraft in controlled airspace, and is primarily responsible for aircraft separation. Aircraft operating under IFR must meet minimum equipment requirements. Pilots must also be specially certified and meet proficiency requirements. IFR aircraft fly assigned routes and altitudes, and use a combination of radio navigation aids and vectors from ATC to navigate.

National Airspace System (NAS): The NAS is made up of a network of air navigation facilities, ATC facilities, airports, technology, and appropriate rules and regulations that are needed to operate the system.

Navigable Airspace: FAA controlled airspace classified as: A, B, C, D, E, and G.

Notice to Airmen (NOTAM): A NOTAM is time critical information concerning the establishment, condition, or change in any component in the National Air Space (NAS). The NOTAM provides knowledge that is essential to personnel concerned with flight operations in designated areas. NOTAMs may be filed as a temporary change to the NAS

as they were not known in advance to publish on aeronautical charts or other operational publications.

Pilot: Any member who has successfully met the criteria outlined by the UAS Committee for full flight duty.

Pilot-in-Command (PIC): Person who has final authority and responsibility for the operation and safety of flight, has been designated as the PIC before or during the flight, and holds the appropriate category, class and type rating, if applicable, for the conduct of the flight. The PIC is solely responsible for the input of commands/piloting during flight operations. Pilots are authorized to evaluate and accept or decline any mission or portion thereof due to safety concerns.

Menlo Park Fire Protection District (MPFD): The fire department responsible for fire suppression, medical aids, and rescues for the communities of Menlo Park, Atherton, East Palo Alto, and unincorporated San Mateo County, CA.

Unmanned Aerial Vehicle (UAV): A powered, aerial vehicle that uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely, and can be expendable or recoverable. Refers more specifically to the unmanned aerial vehicle itself.

Unmanned Aerial System (UAS): Consists of an unmanned aircraft weighing less than 55 lbs., the command system, a secure control link, camera, and other related safety support equipment, including ground control base stations and specialty vehicles designed to support unmanned flight operations.

Unmanned Aerial System Crewmember: A Pilot in Command, Visual Observer, or other persons assigned UAS duties for the purpose of flight.

Visual Line of Sight (VLOS): Visual contact between PIC or VO and a UAS sufficient to maintain safe operational control of the aircraft, known location, and be able to scan the airspace in which it is operating to see and avoid other aircraft or objects aloft or on the ground.

Visual Observer (VO): The Visual Observer is equally responsible for the visual observation of the UAS while in-flight. The VO shall alert the PIC of any conditions (obstructions, terrain, structures, air traffic, weather, etc.) that may affect the safety of flight. The VO is responsible for all on scene radio communications between the IC or designee and the PIC, in addition to all aviation related communications required by the FAA. The VO shall be certified by successful completion of an approved training course outlined by the UAS Committee.

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Section 1

Administration

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1.1 Preface

The following procedures are intended to promote the safe, efficient, and lawful operation of Menlo Park Fire Protection District's Unmanned Aircraft System (UAS).

1.2 Operations Manual

The operations manual is written to satisfy the following criteria

- 1.2.1** The policies and procedures contained in this manual are issued by authority of the Fire Chief of MPFD. As such, it is an official document of the Menlo Park Fire Protection District.
- 1.2.2** This manual is not intended to be all-inclusive, but serve as a supplement to other department guidelines, FAA regulations, the COA, and the aircraft manufacturer's approved user manual.
- 1.2.3** This manual has been written to address UAS operations as they existed when it was drafted. The manual will be reviewed and updated in the same manner and time frame as other programs at MPFD. Any changes to the manual will be communicated as currently dictated by District policy.
- 1.2.4** A copy of the manual will be issued to each person having UAS responsibilities and will be posted on the shared drive so all MPFD personnel may have access to it.

1.3 Organization

- 1.3.1** The UAS unit shall be comprised of those personnel approved by the UAS Committee and the Fire Chief. Personnel include pilots, observers, those contributing or have an assignment to the UAS program.
- 1.3.1** The UAS unit will be comprised of trained MPFD personnel and members of the community who operate on a voluntary basis.

1.4 Personnel

- 1.4.1** UAS Committee: The UAS committee will consist of the UAS program Manager, the UAS Coordinator, and three to five members of the UAS Program.

1.4.1.1 UAS Committee responsibilities

- Selection of UAS Program members
- Development of training modules and Position Task Book (PTB)
- Equipment evaluation and purchasing (present and future)

- Budget maintenance

1.4.2 UAS program Manager: The commander is responsible for the overall direction and performance of the UAS program and will exercise command and control over both.

1.4.3 UAS Coordinator: The coordinator is responsible for the day-to-day supervision of the UAS program. In addition, the coordinator will serve as the supervisor to any community volunteers involved in the program.

1.4.3.1 UAS Coordinator responsibilities

- Maintain all training, flight, and maintenance records for each pilot, observer, and each individual airframe
- Maintain contact with the FAA and familiarity with applicable FAA regulations
- Maintain proficiency on all UAS operated by the UAS program
- Obtain and maintain an FAA *remote pilot certificate with a small UAS rating*

1.4.4 Pilot in Command: The PIC is the sole person responsible for the safety and operation of the UAS during a mission or training.

1.4.4.1 Pilot in Command responsibilities

- Have an understanding of, and comply with, FAA regulations applicable to the airspace where the UAS will operate
- Have an understanding of, and comply with, the manufacture's user manual
- Maintain proficiency on each of the airframes in the UAS program
- Obtain and maintain an FAA *remote pilot certificate with a small UAS rating*

1.4.5 Visual Observer: The VO is crucial in ensuring the UAS operates in a safe manner.

1.4.5.1 Visual Observer responsibilities

- The ability to effectively communicate with the PIC, the IC, and manned aircraft (if applicable) via radio or face-to-face (whichever is most appropriate)
- Have an understanding of, and comply with, regulations concerning right of way rules, operating near other aircraft, careless operation, etc.

- Knowledge of, and ability to use, UAS support equipment (radio, camera, charging station, etc.)
- NOTAM filing (if applicable)

1.5 Facilities

1.5.1 UAS operations will be based at MPFD Station #1.

1.5.1.1 The UAS Committee will determine which apparatus will house a UAS on a full-time basis.

1.5.1.2 The UAS Committee will determine which pilot(s) will have a UAS assigned to them while on duty.

1.5.2 A daily check will be performed on all UAS equipment to ensure a state of readiness.

1.5.2.1 Each pilot is responsible for their own daily check. The daily check on the UAS equipment in the battalion vehicle will be performed by the on-duty BC or their designee.

1.5.3 All UAS program members are equally responsible for maintaining, cleaning, and securing the UAS equipment.

1.6 Miscellaneous

1.6.1 Media: Inquiries from the news media will be forwarded to the on-duty battalion chief and/or the UAS Commander. Members of the UAS program will follow currently established department policy regarding interactions and inquiries from the media. Reference Policy #318 of the Menlo Park Fire Protection District.

1.6.2 Mutual Aid: Reference Section 4.4 of this manual.

1.6.2 Call Out Procedure: Reference Section 4.2, 4.3, and 4.4 of this manual.

1.6.3 Complaints: Complaints, concerns, irregularities, etc. from the public and/or other agencies will be referred to the on-duty battalion chief. The battalion chief will inform the UAS program Manager and/or the UAS Coordinator at their discretion.

Section 2

Safety

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2.1 Preface

The Menlo Park Fire Protection District is committed to maintaining a safe and healthy workplace. Above all else, the primary concern on every operation, regardless of the nature, is safety.

2.2 Safety Policy

The above goal is achieved through the following

- The ongoing pursuit of an accident-free workplace, including no harm to people, equipment, property, or the environment
- A culture of open reporting of all safety hazards in which management will not initiate disciplinary action against personnel who, in good faith, disclose a hazard or safety occurrence due to unintentional conduct
- Support for safety training and awareness programs
- Conduct regular audits of safety policies, procedures, and practices
- Monitor the UAS community to ensure best safety practices are incorporated into the organization

2.2.1 It is the duty of every member within the UAS program 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. Any suggestions in the interest of safety should be made through the UAS program chain of command.

2.2.2 If any member observes or has knowledge of an unsafe or dangerous act committed by another member, the UAS Commander is to be notified immediately.

2.3 Safety Awareness

In regards to safety, all members of the UAS program are safety officers and are responsible for the following

- Ensure all flight personnel understand applicable regulatory requirements, standards, and organizational safety policies and procedures
- Observe and control safety systems by monitoring all operations

- Review standards and practices of departmental personnel as they impact operational safety
- Communicate all reported safety related problems and the corrective action(s) taken. If there were any in-flight problems, lessons learned, and the proper procedures for handling the problem should be shared and discussed
- Copy and circulate pertinent safety information
- Copy and circulate emergency safety bulletins
- Place electronic copies of any safety information to the UAS Program file in the shared drive

2.4 Emergency Procedures

Members will follow established procedures and policies with regard to emergency notification(s). Further information on safety related matters is located in the Menlo Park Fire Protection District Services Policies and Procedures Manual.

2.5 Medical Factors

The health of the flight crew is paramount and any member of the UAS program can stand down if they feel they are not able to perform their duties to the highest level.

- 2.5.1** A self-assessment of physical condition shall be made by all flight crew members during pre-flight activities.
- 2.5.2** No member shall act as a PIC or a VO within eight hours after consumption of any alcoholic beverage.

Section 3

Training

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3.1 Preface

To ensure the continued safe operation of the UAS, high levels of competency must be achieved and maintained. Proficiency, in both academic knowledge and practical skills, is best realized through regular training.

3.2 Instructors

- 3.2.1** The primary instructor will be the UAS Coordinator. Through training modules established by the UAS Committee, the UAS Coordinator will conduct training based on the varying needs of the program.
- 3.2.2** 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 program Manager.

3.3 Training Policies

- 3.3.1** All members will have access to the monthly and yearly training plan through Target Solutions.
- 3.3.2** Training plans will be developed jointly by the MPFD Training Division and the UAS Committee. Training will be implemented by the UAS instructors.
- 3.3.3** Training for members who have been cleared for full flight duty may conduct their own training by utilizing the chain of command.
- 3.3.4** All deployments and/or exercises will be documented and counted toward a members training.
- 3.3.5** Each member of the UAS program has the responsibility to verify their training file is accurate and up-to-date with all pertinent information.

3.4 Initial Training

- 3.4.1** Upon acceptance into the UAS Program, each new member will attend an orientation and be given a task book.
 - 3.4.1.1** The new member orientation will address the following
 - MPFD UAS Operations Manual review
 - PowerPoint presentation
 - Issuing of the Position Task Book

- 3.4.1.2** The Position Task Book will contain the following

- PIC sign-offs
- VO sign-offs

3.5 Pilot Training

3.5.1 A member is authorized to conduct flight operations as the PIC when the following criteria has been met

- PIC task book completion
- Minimum flight hours on each airframe as determined by the UAS Committee

3.5.1.1 Any member that has the status of 'pilot' may act as a VO while the PIC is at the controls of the UAS.

3.6 VO Training

3.6.1 Following the completion of the required training approved by the Fire District's Training Division, authorized personnel may serve in the role of Visual Observer.

3.7 Recurrent Training

3.7.1 All members shall maintain proficiency in their pilot/VO abilities. Members who do not have any documented training or flight time within 90 days of their previous operation/training/exercise, must meet with the UAS Coordinator before they can be returned to full flight status.

3.8 Miscellaneous

3.8.1 All requests for training shall be approved through the member's chain of command.

3.8.2 Members are asked to utilize the Training Calendar for pre-scheduled training.

3.8.3 Unless approval is obtained through the chain of command, overtime will not be authorized for training.

3.8.4 Training shall only be conducted at approved locations as provided by the COA.

Section 4

General Operating Procedures

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4.1 Preface

Deployment of the UAS in the safest and most efficient manner is the purpose of this section and the goal of the UAS program.

4.2 General Deployment Rules

- 4.2.1** MPFD's UAS will be given the designator of "Drone 1" during all flights. Subsequent Drones deployed will be given "Drone 2" and so on. When operating with other agencies (such as Fremont Fire or Redwood City Fire) the designator "Menlo Drone 1" may need to be utilized for clarity. This designator is subject to change at any time as determined by the IC, Operations, or the UAS Program Manager.
- 4.2.2** A minimum of one pilot and one observer are required for all deployments.
- 4.2.3** No pilot may act as a PIC for more than 10 hours in any 24-hour period.
- 4.2.4** Requests for deployment can be made at any time during the day or night.
- 4.2.5** All requests for UAS assistance will be made through one of the following
- The on-duty battalion chief
 - The UAS Commander
 - San Mateo County Public Safety Communications (PSC)
- 4.2.6** Requests for deployment will be prioritized in a manner that has life safety as the main objective.
- 4.2.7** Rules, regulations, policies, and procedures in place for flights within MPFD's jurisdiction will remain as such should the UAS provide mutual aid to an allied agency.
- 4.2.8** The pilot is ultimately responsible for the UAS operation and their authority is absolute.
- 4.2.9** No member of MPFD (or other entity), regardless of rank, may order a pilot to:
- Accept a mission
 - Fly outside of FAA, COA, or manufacturer's parameters
 - Violate any rules or regulations that the PIC feels would put first responders, members of the public, or the flight team at a greater risk than is normally assumed with flight operations

4.2.9.1 Should the pilot decline a mission, the pilot must make a written declaration outlining the reason(s) why the mission was not accepted and submit the draft to the on-duty battalion chief, the UAS Commander, and the UAS Coordinator.

4.3 Deployment Rules- Internal

4.3.1 When the need for the UAS becomes apparent, the on-duty battalion chief will take the appropriate steps to make contact with a UAS pilot.

- Requests for UAS deployments will be made through the on duty MPFPD Battalion Chief.
- The Battalion Chief will gather information pertaining to the mission and contact the Pilot in Command to notify him/her of the mission and all pertinent information.
- The Pilot in Command will determine if the UAS can be deployed safely and practically and will either accept or decline the mission.

4.3.2 The pilot will screen the request based on the following criteria

- Is the proposed mission of the UAS within the capabilities of the equipment and personnel to perform?
- Does the proposed mission fall within FAA and COA requirements?
- Does the proposed mission fall within department rules, regulations, policies, and procedures?
- Can the UAS be deployed safely given the current and future weather conditions?

4.3.3 If the mission is accepted, the following will take place when the pilot arrives on scene (if not already present)

- The IC and the pilot will conduct a face to face briefing
- The pilot will make an on-scene assessment of the conditions and determine if the UAS can fulfill the requested goals of the mission
- The IC will contact PSC and request a secondary radio channel to be used for flight team communications when needed.
- Normal pre-flight operations will be initiated including the filing of a NOTAM when required by the COA

4.4 Deployment Rules- External

4.4.1 The FAA issued COA outlines the parameters of where and when MPFPD's UAS may operate.

4.4.2 Requests from allied agencies (outside of the Menlo Park Fire Protection District) will follow the same procedures as internal requests.

- 4.4.3 Should the mutual aid request come through PSC, the on-duty battalion chief will be notified and gather as much information as possible on the nature of the mission.
- 4.4.4 The pilot will screen the request based on the criteria outlined in 4.3.2 of this manual.
- 4.4.5 The on-duty battalion chief will inform the requesting party of the pilot's decision to accept or decline the mission.
- 4.4.6 The procedures outlined in 4.3.2 of this manual will remain in place regardless of the operating area or mission type.

4.5 Pre-flight

- 4.5.1 Before launch, a thorough pre-flight inspection must be completed by the designated PIC and VO.
- 4.5.2 The pre-flight checklist will be utilized to the fullest extent.
- 4.5.3 A pre-flight checklist can be located in Section 5.3 of this manual.

4.6 Weather

- 4.6.1 Before launch, a thorough check of the weather will be conducted and all members of the flight team will be made aware of the findings.
- 4.6.2 Weather information can be obtained through two primary means
 - An anemometer
 - FAA approved weather resources
- 4.6.3 Weather information obtained during the pre-flight phase will be documented in the flight log.

4.7 Post-flight

- 4.7.1 After landing, a thorough post-flight inspection must be completed by the designated PIC and VO.
- 4.7.2 The post-flight checklist that will be utilized to the fullest extent.
- 4.7.3 A post-flight checklist can be located in Section 5.4 of this manual.

4.8 Documentation

- 4.8.1 A flight log form will be completed following every mission or training exercise.
- 4.8.2 The flight log can be found on Target Solutions under the “Self-Assign” Tab.
- 4.8.2 All pictures and videos captured during a mission will be stored in accordance with Menlo Park Fire Protection District’s Data Retention Policy.
- 4.8.3 Materials not required to be retained can be deleted at the discretion of the UAS Commander, the UAS Coordinator, or the Training Chief.
- 4.8.3.1 Pictures and videos captured during training fall under this category.

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Section 5

Appendices

5.1 Preface

Additional information, used to supplement Sections 1-4, can be found in this section.

5.2 Data Retention Policy

Following a UAS operation by the Menlo Park Fire Protection District, an MPFD Officer shall meet with the UAS operator to collect the digital media files. The digital media recorded by the Fire District will be uploaded into the approved digital footage management system. The collection and uploading of the digital media will be documented in a data retention log by the operator.

Unauthorized use, duplication, and/or distribution of UAS digital media files is prohibited. Personnel shall not make copies of any UAS digital media files for their personal use and are prohibited from using recording devices (such as a personal camera, tablets, or smart phone) or any secondary video camera to capture UAS systems media including the retention of video cached on the web. All recorded digital media; images and audio are property of the Menlo Park Fire Protection District and shall not be copied, released or disseminated in any form or manner outside the parameters of this policy without the expressed written consent of the Fire Chief.

1. Departmental request for a UAS digital media, including requests from the District Attorney's Office or City Attorney's Office, shall be forwarded as a written request via e-mail, to the Menlo Park Fire Protection District, with sufficient information to locate the UAS camera system file.
 2. Non-Departmental Requests for a UAS digital media shall be accepted and processed in accordance with Federal, State, and local laws, and Fire Departmental policy (discovery, media inquiries, subpoenas, Public Records Act requests, etc.).
 3. When practical, District personnel will be advised prior to any release of UAS digital media files under the California Public Records Act (CPRA).
- B. Request for Deletion of Accidental Recording
1. In the event of an accidental activation and/or recording, the recording employee may contact the UAS Coordinator and request that the UAS digital media file(s) be deleted. The UAS Coordinator shall review the file, affirm that the file does not contain images that represent a breach of privacy or have evidentiary value and make a recommendation to the Operations Division Chief to approve or deny the deletion request. Upon approval, the file may be deleted or if applicable the approved request for deletion shall be sent to the Menlo Park Fire Protection District UAS Manager for deletion.
- C. Copying Procedures
1. Request for copies of UAS digital media files shall be approved by the Operations Division Chief and submitted to the Menlo Park Fire Protection District.

2. Menlo Park Fire Protection District Officers will be responsible for handling and processing requests for DVD copies and/or online sharing of files for court and other approved request approved by the Fire Chief or his/her designee.

D. Training

1. A UAS digital media file may be utilized as a training tool for individuals, specific units, and the department as a whole.
2. Fire District personnel requesting utilization of a UAS digital media file for training purposes shall submit the recommendation through the chain of command to the Operations Division Chief.
3. The Operations Division Chief approving the utilization of a UAS file for training will send an email to MPFD UAS/Drone Division requesting a copy of the recording be placed in the UAS Training file on the District UAS drive. This file will hold all training recordings. Recordings may not be moved to other files, copied or sent beyond this file without the approval of the MPFD Training Division.

E. Retention timelines

1. Photographic and video data that is collected will be retained in accordance with Fire District Policies 711, 800 and the Fire District's Records Retention Schedule. This will be determined by the nature of the material in question. Training footage may be retained or purged as needed.

UAV Preflight Check List: X

- Check General Condition of UAV for Damage _____
- Check Props _____
- UAV Batteries Charged _____
- Insert UAV Battery _____
- Tablet Batteries Charged _____
- Insert and Connect Tablet _____
- Transmitter Batteries Charged _____
- Total Battery Reserve Time Noted _____
- Camera Selected and Installed _____
- Camera Settings Adjusted _____
- SD Card Inserted _____
- UAV On Level Ground Away from Metal _____
- Good Power Up _____
- Good Connectivity Between All Devices _____
- Latest Firmware Updated _____
- Controller / IMU Calibration _____
- Gimbal Test _____
- Picture Test _____
- Film / Video Test _____
- Controller Stick Test _____
- GPS Lock _____
- Flight Spotter _____

In-Flight Checks:

Recorded by VO: X

- Start Timer _____
- Turn on UAV _____
- Update Home Point _____
- Take Off _____
- Hold Hover for 10 Seconds _____
- 360 L / R _____
- Forward / Backward 10 Feet _____
- Up Down 10 Feet _____
- All Systems Go _____
- Cleared for Flight _____
- Reassess All Systems Every 3-5 Minutes _____

Post Flight Checks:

- Power Down UAV _____
- Power Down Transmitter _____
- Check UAV for Damage _____
- Check Photos or Videos _____
- Upload or Transfer Data _____
- Log Flight _____
- Charge UAV, Transmitter and Tablet Batteries _____
- Store UAV for next Mission _____
- Complete Flight Log in Target Solutions _____

Go/No-Go Checklist

1. Aircraft

- Pre-Flight Checklist complete

2. Mission parameters

- Qualified PIC at controls
- All persons briefed and assignments known/discussed
- Direct communication with IC and VO
- Direct communication with local airspace controllers/aircraft (if needed)

3. Weather

- Current and future weather conditions known/discussed

4. Location

- Airspace restrictions known/discussed
- NOTAMs and TFRs known/discussed
- Primary and secondary landing/safety zones known

*Flight operations may not commence until all items are checked and/or mitigated.

NOTAM Filing Procedures

Electronic

1. Go to: **www.1800wxbrief.com**
2. Username:
Password:
3. Click **UAS** along top ribbon
4. Under **UAS Management**, click **Planning**
5. Enter required information
6. If including GPS coordinates, follow this format: xxxxxx.xNxxxxxx.xW

Telephone

1. Obtain GPS coordinates prior to calling
2. Call **1-877-487-6867**
3. Enter **22**
4. Enter **1**
5. Speak to a **“Flight Data Specialist”**
6. Provide required information

Notification Contact List

Notify when operating within 5 miles:

Palo Alto Tower: 650-493-0641
(Brian Fisher- Tower Manager)

San Carlos Tower: 650-592-5289
(Stacey Maye- Tower Manager)

Moffet Field Tower: 650-604-0685

**Utilize Hover app or similar for additional airports within 5 miles of operations*

Notify for Bayside operation:

USCG Command Center: 415-399-3530
(Will advise affected Air Stations)

Fremont Fire- ACRECC Supervisor: 925-423-9732
(On Duty BC's will be notified)

Operations at SLAC:

Stanford Life Flight 650-796-5936
(Michael Baulch-clinical coordinator)
48 hours-notice if possible. MBaulch@stanfordhealthcare.org

Operations outside of COA:

**For operations that require a COA amendment:*

Federal Aviation Administration: 202-904-9400
(Steve Pansky, Senior Aviation Analyst)