



Safety and Security Standard Operating Procedure

Overview

To ensure all persons performing work, supporting and/or visiting Valkyrie UAS Solutions are able to do so in a safe and secure environment.

Definitions

SOP *Standard Operating Procedure*

POC *Point of Contact*

AED *Automated External Defibrillator*

OIC *Officer In Charge*

RPIC *Remote Pilot In Command*

OEM *Original Equipment Manufacturer*

PPE *Personal Protection Equipment*

RPS *Remote Pilot Station*

Assumptions & Prerequisite Skills

- This SOP assumes that the end user knows how to follow instructions.

Supplies Needed

- Daily safety briefing location identified
- Tool to document points of contact and other life-saving information
- First Aid kit
- AED (?)
- Aircraft and associated equipment for the job (e.g. RPS)
- Proper PPE for the job
 - Hard hat
 - Safety Vest





Overview of Steps

Section 1 – Daily Safety Briefing

Life-saving information

Section 2 – Safe Operations

Safe operations throughout the day

Section 3 – Unsafe Operations

How to address unsafe operations

Section 4 – Incident Reporting

How to report an incident, accident, and/or injury

Section 5 - Security

Secure environment

Section 6 – Biohazardous Material Transportation

How to handle biohazardous material

Section 1 – Daily Safety Briefing

BEFORE YOU START: OIC for the day is identified

1. OIC assigns roles for the operations for the day
 - 1.1. Headcount - assign who will conduct a headcount throughout the day – will be responsible for ensuring all persons are accounted for in the event of an emergency
 - 1.2. CPR/1st Aid/AED (if available) – determine if anyone is CPR/1st Aid/AED certified and assign primary and secondary
 - 1.3. Nearest Hospital/Emergency Service – identify and document the nearest facility that can provide health-related services
 - 1.4. 911 – assign responsible party to call emergency services
 - 1.5. Medical Conditions – determine if anyone has any medical conditions that others should be aware of – if not comfortable sharing in a group, instruct where to put the information in case of an emergency (i.e. in the left sock/shoe)
 - 1.6. Exposures – review known exposures
 - 1.6.1. Walking path of travel
 - 1.6.2. Line of fire/release of energy
 - 1.6.3. Ascending/descending
 - 1.6.4. Pinch points
 - 1.6.5. Others
2. Discuss any learnings from previous day/operations and determine if adjustments need to be made to accommodate those findings
 - 2.1. Assign party responsible for taking next action
 - 2.2. Define next action to be taken
3. Ensure all assignees are familiar with their responsibilities and are able to perform the tasks as needed
 - 3.1. Assign flight operations roles:
 - 3.1.1. RPIC



- 3.1.2. Hub Operator/VO
- 3.1.3. Other roles as applicable
- 4. Discuss the work to be done for the day
- 5. Answer any questions

BEFORE YOU MOVE ON:

OIC to ensure everyone fully understands the job for the day, who is assigned to what role and that everyone is comfortable with the briefing and expectations.

Section 2 – Safe Operations

BEFORE YOU START: OIC has a clear understanding of the operations for the day.

- 1. Review assignment of roles
 - 1.1. RPIC
 - 1.2. Hub operator(s)
 - 1.3. Route approvers
 - 1.4. Route planners
- 2. Discuss the plan of action
 - 2.1. Review flight operations
 - 2.2. Discuss possible risks that could be encountered and how they will be addressed should they arise
- 3. Perform daily operational checks as defined by OEM
- 4. Perform pre-flight checks as defined by OEM
- 5. Perform operations
- 6. Perform post-flight checks as defined by the OEM
- 7. Review any anomalies that occurred and follow appropriate SOP

BEFORE YOU MOVE ON:

Ensure the day's activities have been accomplished, if not, determine next action.

Document any anomalies that were identified and share in the next Safety Briefing.

Section 3 – Unsafe Operations

BEFORE YOU START: OIC should have been assigned for the day.

- 1. If an unsafe act has been identified, it is everyone's responsibility to bring it to the attention of those involved
 - 1.1. The unsafe act should be stopped as quickly and safely as possible
 - 1.2. Parties involved and/or in the vicinity should discuss the unsafe activity – call in the OIC if needed
 - 1.3. Parties should determine what course of action should be taken
 - 1.4. Conduct a new Safety Briefing with the course of action included
 - 1.5. OIC should be briefed based on the urgency of the act
 - 1.5.1. Brought into the discussion immediately if personal or operational safety was in jeopardy
 - 1.5.2. Notified and invited to the new Safety Brief
 - 1.5.3. At the end of the day
- 2. If a person does not feel comfortable addressing the unsafe act directly, they should bring it to the attention of the OIC and/or Safety Director
 - 2.1. Follow the same steps as 1.1-1.5



3. Notify the Safety Director if they were not involved in the process

BEFORE YOU MOVE ON:

Ensure all parties have been properly briefed on the situation and an alternate course of action has been identified. Ensure all parties understand the new course of action and what their role is in the execution.

Section 4 – Incident Reporting

BEFORE YOU START: Familiarization with the mishap details.

1. Regroup and assess the situation. Do not compound the problem.
 - 1.1. Stop, re-brief and make a safe plan.
 - 1.2. Take pictures which may include
 - 1.2.1. Launch site and surroundings
 - 1.2.2. Incident/accident site including the aircraft prior to retrieving
 - 1.2.3. Any other pertinent information such as structures, vegetation, etc.
 - 1.2.4. Pictures of documentation
 - 1.2.4.1. Safety Briefing
 - 1.2.4.2. Flight Assessment Forms
 - 1.2.4.3. Re-brief documents
 - 1.2.4.4. Any other documentation related to the mission
 - 1.3. Document the occurrence. Be sure to include:
 - 1.3.1. Date
 - 1.3.2. Time
 - 1.3.3. Location
 - 1.3.4. Crew/Team Members
 - 1.3.5. Weather Conditions
 - 1.3.6. Written Statements – each crew/team member is write up what occurred as they witnessed
 - 1.3.7. All Pertinent Information
 - 1.3.8. Example of Formal Notification
 - 1.3.8.1. This is a (Team Name) Team alert of an incident that occurred today (or date) at (location). This incident (did or did not) result in injury but (did or did not) result in the (damage or loss), to (equipment, vehicle, etc.) Crew/team members at the scene were (list names). Details are as follows:
 - 1.3.8.2. Include pictures as noted in section 1.2
2. Internal Reporting - Notify OIC and/or Director of Safety by the fastest available means of communication. They will determine further notification as needed.
3. External reporting
 - 3.1. If the occurrence resulted in an aircraft incident or accident, follow FAA/NTSB instructions
 - 3.1.1. FAA:
 - 3.1.1.1. When to report an incident/accident - <https://www.faa.gov/faq/when-do-i-need-report-accident>
 - 3.1.1.2. How to report an incident/accident - <https://www.faa.gov/faq/how-do-i-submit-accident-report-under-small-uas-rule-part-107-faa>
 - 3.1.2. NTSB: <https://www.nts.gov/investigations/process/Documents/NTSB-Advisory-Drones.pdf>
4. General information
 - 4.1. You are painting a picture. Provide a detailed narrative of the occurrence. Provide facts. Include mission objective, weather conditions, position of team members, team member roles, and description of surroundings at a minimum. Be very professional in your writing style.
 - 4.2. Answer any anticipated questions before they are asked. The goal is to provide a detailed enough report that there are no other questions.
 - 4.3. Identify the root cause.
 - 4.3.1. Call it like it is. I.e. if it is a complacency issue – name it as such.
 - 4.3.2. Own it if it is yours. Take responsibility.



- 4.4. Identify a Corrective Action Plan to ensure this type of occurrence does not happen again.

BEFORE YOU MOVE ON:

Ensure all parties have been properly notified of the situation and corrective action plan.

Section 5 – Physical Security

BEFORE YOU START: An assessment of the environment should be conducted.

1. Ensure proper markings of launch/landing locations are clear
2. Ensure proper markings are clear where it is safe for personnel, participants and/or observers to be located
3. Ensure the RPIC has an area where they are:
 - 3.1. Able to conduct operations without distraction
 - 3.2. Free from severe elements
 - 3.3. Have all the tools necessary for them to complete their job effectively
4. Ensure there is a location where the equipment is stored that is tamper-free and secure

BEFORE YOU MOVE ON:

Ensure the environment meets the requirements of operations.

Section 6 – Biohazardous Material Transportation

BEFORE YOU START: Section to be developed.

1. To be developed

BEFORE YOU MOVE ON:

Ensure the environment meets the requirements of operations.

Conclusion

Please direct questions, comments and recommendations for this SOP to:

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Revision History

Date	Version	Description	Approved
5/1/2024	1.0.0	Initial document created	