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Specifications of UAS

Weight without battery and payload	10.960 kg
Max take-off Weight	28.20 kg
Classification of UAS	Medium
Category of UAS	Rotorcraft
Subcategory	RPAS
Max Operating Speed	10 meters per second
Max Attainable altitude	30m
Diagonal length - Folded	800±4 mm
Diagonal length - Ready to launch	2033±8 mm
Max Ascend speed	2.5 meters / second
Max Descend Speed	1.5 meters /second
Max Endurance (full payload)	: 12:39 mins
Endurance without payload (empty tank)	: 23: 32 mins
Dispensing payload	: 15:16 mins
Payloads Supported	Configuration 1: Spraying payload to spray relevant chemical mixtures on crops for crop protection.

1. Maintenance procedures of the UAS

1.1 Maintenance Schedule

Company recommends proper maintenance by the user on daily and monthly basis. Apart from the regular maintenance by user, a predetermined scheduled maintenance needs to be conducted by authorized representative of COMPANY for safe, reliable and efficient operation of UAS.

Maintenance Schedule	To be done by
Every Day	User
Every Month	User

Some common checks will be conducted in UAS for safe and efficient operations.

I. Weather check

- Check current weather conditions, including wind speed and direction , temperature , humidity, and visibility.
- Ensure that weather conditions are suitable for safe flight.

II. Regulatory Compliance:

- Verify that you have the necessary permits, licenses, and authorizations required for drone operation in your location.
- Familiarize yourself with local airspace regulations, no-fly zones, and any temporary flight restrictions (TFRs).

III. Flight Planning:

- Plan your flight route, including waypoints and altitude.
- Consider potential hazards such as obstacles, buildings, power lines, and other airspace users.
- Ensure that your flight plan aligns with the intended purpose of the mission.

IV. Battery Check:

- Inspect the drone batteries for any physical damage, swelling, or signs of wear.
- Ensure that batteries are fully charged and properly installed in the drone.

V. Drone Inspection:

- Conduct a thorough visual inspection of the drone including the airframe propellers , motors and landing gears.
- Check for loose or damaged components, including screws, wires, and connectors.
- Verify that the propellers are securely attached and undamaged.

VI. Controller Check:

- Inspect the drone controller for any physical damage or malfunction.
- Ensure that the controller is fully charged and that all buttons, switches, and joysticks are functioning properly.

VII. GPS Signal:

- Confirm that the drone has acquired a strong GPS signal and that the home point is accurately set
- Calibrate the drone's compass if necessary, following the manufacturer's instructions.

VIII. Emergency Procedures:

- Familiarize yourself with emergency procedures, including how to initiate a return-to-home (RTH) function or perform a manual landing.
- Carry any necessary emergency equipment, such as a fire extinguisher or first aid kit.

IX. Communication:

- Notify any relevant authorities, stakeholders, or nearby individuals of your planned flight.
- Establish communication protocols with any ground crew or observers assisting with the operation.

X. Safety Equipment:

- Ensure that you have appropriate safety equipment on hand, such as safety glasses, gloves, and a high-visibility vest.
- Have a fire extinguisher nearby, especially for larger drones or operations involving flammable materials.

XI. No-fly Zones and Hazards:

- Use a reliable app or website to check for any restricted airspace, no-fly zones, or hazards in your area.
- Stay informed of any temporary airspace restrictions or notices to airmen (NOTAMs) that may affect your flight.

1.2 Pre-flight checklist

A pre-flight checklist is essential for ensuring the safety and proper operation of unmanned aerial

systems (UAS), commonly known as drones. Here's a basic checklist that you can follow:

S.NO	CHECKLIST	DESCRIPTION	REMARKS
1.	Airframe	<ul style="list-style-type: none"> • Inspect all arms are securely latched to the center frame • Verify no play movement between boom and folding mechanism. • Inspect center airframe for structural anomalies • Inspect the airframe for potential loose parts or missing fasteners. 	
2.	Booms	<ul style="list-style-type: none"> • Inspect the length of each boom for any damage or wear to the carbon fiber tube, paying close attention to the junctions on either end 	
3.	Obstacle radar and Terrain radar	<ul style="list-style-type: none"> • check for sedimentation of chemicals on the radar and wipe with wet cloth to clean the surface • use a clean, damp cloth to wipe any dirt that may exist on the surface, such as residual pesticides 	
4.	Motors	<ul style="list-style-type: none"> • Inspect for play between motor bell and base. • Spin the motor by hand and inspect for rough or constricted rotation. • Inspect motor bell for any dents or scratches indicating prior impact. 	

5.	Propellers	<ul style="list-style-type: none"> • Inspect each propeller blade to ensure it is correctly fastened to propeller hub. • Inspect for pitch play between propeller and hub. • Inspect propeller for wear, damage or warping. • With propellers unfolded, verify the blades remain clear of adjacent structures and propellers as they rotate through a full motion. 	
6.	Batteries	<ul style="list-style-type: none"> • Check the voltage of each battery pack: log readings. • Inspect each battery for any signs of damage or swelling. • Inspect battery connectors and leads for damage or wear. • Ensure all batteries are securely fastened to the battery tray. • Ensure battery plate is securely fastened to airframe with both locking pins fully seated. 	
7.	Landing gear	<ul style="list-style-type: none"> • Verify the gear are securely fastened to airframe (or payload, if operating with a configuration where the payload replaces the stock landing gear). • Verify correct orientation of landing gear legs 	

8.	GPS & FC	<ul style="list-style-type: none"> • Verify GPS antennas are locked in their extended position. • Verify control link antennas are securely fastened and correctly oriented. 	
9.	Payload Accessories	<ul style="list-style-type: none"> • Inspect payload attachment points and ensure anti drop clip is in place (if used). 	
10.	Remote Pilot Station	<ul style="list-style-type: none"> • Verify antennas are in good condition and correctly oriented. • Inspect free movement of control sticks. Check for dust or debris. • Calibrate control sticks and inputs if necessary. • Check the RPS battery levels are sufficient for the duration of operation. 	
11.	Failsafe Settings	<ul style="list-style-type: none"> • Check that the RPA Failsafe is appropriately set for type of operation and environment 	

1.3 Post-flight Checklist

After completing a drone flight, it's important to conduct a thorough post-flight test and inspection to ensure the drone is in good condition and that all data has been properly recorded.

S.NO	CHECKLIST	DESCRIPTION	REMARKS
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1.	Visual Inspection	<ul style="list-style-type: none"> • Inspect the drone for any visible damage, including the airframe, propellers, motors, and landing gear. • Check for loose or missing components, such as screws, wires, or connectors. 	
2.	Battery Inspection	<ul style="list-style-type: none"> • Remove and inspect the batteries for any physical damage, swelling, or signs of wear. • Check the battery voltage and remaining charge level to ensure they are within safe limits, • Once the batteries are disconnected, check the battery temperature if there is a rise in temperature, allow the battery to cool (need to place the battery on shady place to cool down the battery) before charging. 	
3.	Controller Check	<ul style="list-style-type: none"> • Inspect the drone controller for any physical damage or malfunction. • Verify that all buttons, switches, and joysticks are functioning correctly. 	

4.	Motor check	<ul style="list-style-type: none"> • Always check that motor temperature is within an acceptable range, and consider factors such as load weight, flight length, and ambient site heat will affect the temperature of motors as well as battery packs. 	
5.	Data Retrieval	<ul style="list-style-type: none"> • Download any data recorded during the flight, such as photos, videos, flight logs, or telemetry data, to your computer or storage device. • Verify that all data has been successfully captured and saved without corruption. 	
6.	Flight log and Review	<ul style="list-style-type: none"> • Review the flight log to analyse important flight metrics, including altitude, speed, distance travelled, and battery usage. • Note any anomalies or issues encountered during the flight for further investigation. 	
7.	Flight performance	<ul style="list-style-type: none"> • Evaluate the overall performance of the drone during the flight, including stability, responsiveness, and GPS accuracy. • Identify any areas for improvement or adjustments to optimize future flights. 	

8.	Maintenance record	<ul style="list-style-type: none"> Record the details of the flight in your logbook or flight journal, including the date, time, location, flight duration, and any observations or issues noted during the flight. Perform routine maintenance tasks as needed, such as cleaning the drone, lubricating moving parts, or replacing worn components. Follow the manufacturer's recommendations for maintenance intervals and procedures. 	
9.	Battery Charging	<ul style="list-style-type: none"> Recharge the drone batteries to ensure they are ready for the next flight. Follow proper charging procedures and storage recommendations to prolong battery life. 	

**CAUTION-THE UAS IS NOT IP WATER-PROOF CERTIFIEDHENCE IT IS NOT-
ADVISED TO WASH THE DRONE DIRECTLY WITH WATER. IT IS
ADVISED TO CLEAN THE DRONE WITH WET CLOTH ON THE OUTER
SURFACE**

2 Preventive maintenance of UAS components

2.1 Maintenance - Every Day

- Perform monthly maintenance of UAS accordingly to ensure the longevity.
- Check whether the screws of the propellers are loose.
- Check the arm joints for any damage or cracks. Grab the carbon tube and shake the arm slightly to check if there is no obvious movement from any joints.
- Rotate the rotor of the motor to check if there is any blockage or rubbing.
- Rotate the motor base around the central line of the carbon tube to check if the motor and carbon tube connection is loose.
- Performing regular maintenance will reduce the monthly maintenance time.

The following checks are suggested to detect deterioration and in-service wear in critical components.

S. No	Maintenance survey	Checks to be conducted	Remarks
1.	Visual Inspection	<ul style="list-style-type: none">• Inspect the entire drone for any visible damage, including the airframe, propellers, motors, landing gear, and any external components.• Check for cracks, scratches, or signs of wear.	

		<ul style="list-style-type: none"> • Ensure all screws and fasteners are tightened securely. 	
2.	Battery Maintenance	<ul style="list-style-type: none"> • Inspect all batteries for physical damage, swelling, or signs of wear. • Check battery connectors and terminals for corrosion or damage. • Verify the remaining capacity of each battery and ensure they are within safe voltage ranges. • If applicable, discharge and recharge batteries to maintain optimal performance. 	
3.	Propeller Inspection	<ul style="list-style-type: none"> • Check for visible deformation, severe wear, cracks and warping. • Replace any damaged propellers with new ones. • Ensure propellers are securely attached to the motors. 	

4.	Arm Joints	<ul style="list-style-type: none"> • Check for any damages or cracks if any, apply gentle movements/force to find any loose joints or fixtures. 	
5.	Arms	<ul style="list-style-type: none"> • Check for any visual bend or cracks in Arms. 	
6.	Motors	<ul style="list-style-type: none"> • Rotate the rotor of the motor to check if there is any blockage or rubbing. • Rotate the motor base around the central line of the carbon tube to check if the motor and carbon tube connection is loose. • Check for any abnormal heating of motors after operations. 	
7.	Camera and Gimbal Maintenance	<ul style="list-style-type: none"> • Inspect the camera lens and gimbal for dirt, dust, or debris. • Clean the lens and gimbal with a soft brush or microfiber cloth. 	

		<ul style="list-style-type: none"> • Verify that the gimbal is functioning smoothly and stabilizing the camera properly 	
8.	Sensor Check	<ul style="list-style-type: none"> • Calibrate sensors such as the compass, gyroscope, and accelerometer according to the manufacturer's instructions. • Verify that sensor readings are accurate and stable. 	
9.	Inventory Check	<ul style="list-style-type: none"> • Store the drone and its accessories in a clean, dry, and secure environment. • Use protective cases or bags to transport the drone safely, especially during travel. 	

Record all maintenance tasks performed, including the date, time, and details of each task. Keep records of any repairs, replacements, or adjustments made to the drone or its components.

Checklist Review: Review your pre-flight and post-flight checklists to ensure they are up to date and comprehensive. Make any necessary revisions or additions based on past experiences or feedback.

2.1.1 Configuration 1 daily maintenance

- Check for leakages from tank.
- Check for pipe connectors.
- Check all connections electronic interface connection, if found damaged, contact company personnel.
- If noted pressure drop check Spray Pump and filters.
- Clean the tank thoroughly using water.
- Check for wear and tear parts.
- Check soldering joints and battery connectors.
- Check for the mechanically tightened bolts.

2.2 Maintenance - Every Year

- Perform monthly maintenance of UAS accordingly to ensure the longevity.
- Check whether the screws of the propellers are loose.
- Check the arm joints for any damage or cracks. Grab the carbon tube and shake the arm slightly to check if there is no obvious movement from any joints.
- Rotate the rotor of the motor to check if there is any blockage or rubbing.
- Rotate the motor base around the central line of the carbon tube to check if the motor and carbon tube connection is loose.
- Performing regular maintenance will reduce the risk of structural damage and provides efficient and precise operation time.

S. No	Maintenance survey	Checks to be conducted	Remarks
1.	Frame Integrity	<ul style="list-style-type: none"> • Inspect the frame for cracks, dents, or other signs of damage. • Ensure all fasteners and screws are tight and secure. 	
2.	Propeller and Motor Inspection	<ul style="list-style-type: none"> • Check propellers for cracks, chips, or signs of wear. • Ensure propellers are balanced for optimal performance. Replace any damaged propellers. • Inspect motors for any signs of wear, overheating, or abnormal sounds. • Clean motors and lubricate bearings if necessary. 	
3.	Battery Maintenance	<ul style="list-style-type: none"> • Inspect batteries for swelling, leaks, or damage. 	

		<ul style="list-style-type: none"> • Check for explosive or toxic gas emission. • Check battery connectors and wiring for corrosion or damage. 	
4.	FC and Electronics	<ul style="list-style-type: none"> • Check flight controller for proper functioning and calibration. • Verify operation of sensors, GPS, and other navigation systems. 	
5.	Electrical wiring inspection	<ul style="list-style-type: none"> • Inspect all wiring harnesses and connectors for damage or wear. • Check solder joints for integrity and reflow if necessary. 	

		<ul style="list-style-type: none"> • Ensure proper cable management to prevent chafing or interference. 	
6.	Software and Firmware check	<ul style="list-style-type: none"> • Ensure that the UAS's firmware and any associated software are up to date to ensure optimal performance and compliance with regulations. • Check the critical parameters are locked and secured. • Conduct POST to verify whether the firmware and hardware are free from tamper avoidance compliance. 	
7.	Training	<ul style="list-style-type: none"> • Provide refresher training for pilots and operators on UAS operation, emergency procedures, and maintenance tasks. 	

8.	Perform System Test	<ul style="list-style-type: none"> • Conduct pre-flight checks using a checklist to verify all systems are functioning properly. • Test flight modes, fail-safes, and emergency procedures. 	
9.	Compliance Check	<ul style="list-style-type: none"> • Ensure UAS registration, pilot certifications, and any required permits or licenses are up to date. • Update maintenance manuals and documentation as necessary. 	
10.	Test Flight	<ul style="list-style-type: none"> • Conduct a test flight in a controlled environment to verify all systems are functioning correctly. 	

This checklist covers the key technical maintenance tasks to be performed annually on a UAS. It's essential to follow manufacturer guidelines and recommendations for specific maintenance procedures and intervals. Regular

maintenance is crucial for ensuring safe and reliable operation of the UAS.

2.3 Component Replacement Procedure

The user is only allowed to get the identical replacement for propellers and the electrical pumps. Since all the components can be replaced but the identical replacement has chargeless service for one year to all the users.

Tool requirements:

- 2.5 mm allen key set
- 3mm allen key set.
- Lock tights.

Functionality checks:

- Check for nicks, cracks and rolled tips or bent blades after completion of motor test.
- Ensure whether the propeller is mounted on the respective directional position and begin the system test.
- Rotate the blade and run your finger around the blades and hubs to ensure any abnormalities.
- Check the pump by connecting the drone and turn on the pump switch in the RC.

S.No	Components	Replacement period
1.	Battery	When the charge and discharge cycles exceed 300
2.	Motor	When the total flight time reaches 500 hours
3.	Frame	To be discarded after 3 years

4.	Landing gear	When total landings more than 1500
5.	GPS, Lidar and other electronics	Can be used till malfunctions
6.	Water Pump	Can be used till malfunctions
7.	Pressure Spray Nozzle	Can be used till malfunctions
8.	Propeller	200ys/500 landings * which ever comes earlier

3 Storage Guidelines

3.1 Drone Storage Guidelines

- Keep in enclosed space.
- Do not expose to direct sunlight for a long time.
- Place drone at nominal room temp and avoid flammable objects near it.
- Make sure everything got plugged out.

3.2 Battery Storage Guidelines

- Never store loose batteries touching each other.
- Don't use or store the battery near fire, heat source, inflammable, explosive, corrosive and other

articles.

- For long-term storage, please keep batteries in storage mode.
- Do not store in too hot place.
- The battery should be stored within 10°C to 50°C range environmental condition.
- Check all batteries are at storage voltage of 22.8V on weekly basis if kept in storage mode.
- If batteries are not at storage voltage, then charge them till storage voltage.
- Never alter, puncture or impact Batteries or related components.
- If sudden drop in Voltage of batteries or bulge in them is observed, mark them as faultybatteries.
- Separate faulty batteries and waste batteries – Mark them as ‘Damaged Batteries’. They must be placed in special treatment cabinets for isolation and disposal.

3.3 Battery Charging Guidelines

- Only use charger designed for lithium polymer/Li-ion battery. Do not use a NIMH/NICD/LIFEPO4/LEAD ACID charger. If the charger can support different battery types. Be absolutely sure to select the Lithium polymer (LiPo) mode on the charger. Failure to do so may cause a fire, which may result in personal injury and property damage.
- User should Always charge Batteries in an open area away from flammable materials, liquids and surfaces.
- Never charge Batteries inside of the model.
- Never charge Batteries that are hot to the touch (above 100° F). DO NOT handle Batteries until they are cool. User should Always set the charger to the proper cell count and/or voltage listed on Batteries' labels.
- User should Always set the charger to the amp charge rate as listed on Batteries' labels. The charger should never be set to charge Batteries at a rate greater than IC (One (1) times the capacity of Batteries in amp hours) unless another C rate is specified in the manufacturer's product documentation or the rate is preset as part of a specific battery and charger combination. DO NOT alter the charge rate once charging has begun.

- Never overcharge Batteries beyond the capacity listed on Batteries' labels.
- Never overcharge batteries over their rated maximal voltage (4.2V/cell for LiPo). It must choose series charging if two or more battery packs be connected in series for using.
- Use charger specified by manufacturer to charge the batteries. When charging, please make sure the surrounding is clean, without sundries around. Don't charge without monitoring. Using LiPo sack is suggested when charging to ensure the charging safety.

3.4 Battery Maintenance

- The temperature is kept in the range of 10~35 °C, the maximum shall not exceed 40 °C, and the humidity is 30%-80%. Do not expose the battery to the sun.
- For The transported battery use foam padded explosion-proof box.
- When the operation is suspended in the field, the battery needs to be removed and left in the shade.
- For a long time of non-use, please separate the battery from the device to avoid battery over discharge caused by the power consumption of the device.
- Battery storage must be kept away from flammable materials, such as fuel generators.
- The storage environment should not have direct sunlight or rain leakage, humid environment.
- The maintenance period of the pouch battery is 6 months.
- The balance port and discharge ports are connected to charger and set the battery to storage mode (i.e., 3.8~3.9V per cell).

4 Life of UAS components

Information to Users on life of UAS main components.

Understanding the lifespan of components is crucial for the safe and efficient operation of your Unmanned Aerial System (UAS). This section outlines the expected lifespans of various components and provides guidelines for maintenance and replacement.

Components	Hours /cycle of operation
Airframe	4000 Hours
Number of permissible landings	5000 landing
Battery	300 cycles
Rotor	500 hours.

Airframe Lifespan

Expected Lifespan: The lifespan of the airframe depends on various factors such as material quality, usage intensity, and environmental conditions. Typically, carbon fiber airframes can last for several hundred flight hours under normal operating conditions.

Factors Affecting Lifespan: Exposure to moisture, impact damage, and stress from aggressive maneuvers can accelerate wear and deterioration of the airframe.

Warning Signs: Cracks, delamination, or structural deformities indicate potential structural issues that compromise the integrity of the airframe.

Replacement Guidelines: Regularly inspect the airframe for signs of damage or wear, and replace it if structural integrity is compromised or if it reaches the end of its expected lifespan.

Landing Gear Lifespan

Expected Lifespan: Landing gear components, including struts, wheels, and landing skids, typically have a lifespan of several hundred landings under normal operating conditions.

Factors Affecting Lifespan: Hard landings, rough terrain, and excessive weight can cause wear and damage to landing gear components.

Warning Signs: Bent struts, worn wheels, or cracked landing skids indicate wear or damage that may affect the performance of the landing gear.

Replacement Guidelines: Inspect the landing gear after each flight for signs of wear or damage, and replace

components as necessary to ensure safe landings and ground operations.

Batteries

Expected Lifespan: Lithium polymer (LiPo) batteries typically have a lifespan of 300 charge cycles under normal operating conditions.

Factors Affecting Lifespan: High temperatures, over-discharging, and improper storage can shorten battery lifespan.

Warning Signs: Decreased flight time, swelling or puffiness, and increased internal resistance indicate a deteriorating battery.

Replacement Guidelines: Replace batteries that show signs of wear or reach the end of their expected lifespan to prevent in-flight failures.

Motors and Propellers

Expected Lifespan: Brushless motors and propellers have a lifespan of approximately 500 flight hours, depending on usage and maintenance.

Factors Affecting Lifespan: Frequent high-speed maneuvers, exposure to dust and debris, and inadequate cooling can reduce motor and propeller lifespan.

Warning Signs: Excessive noise, vibration, or reduced thrust may indicate wear or damage to motors or propellers.

Replacement Guidelines: Inspect motors and propellers regularly and replace them if signs of wear or damage are detected.

5 SOP to wash the agricultural UAS tank when it is having froth inside

Washing an agricultural UAS (Unmanned Aircraft System) tank that has froth inside requires careful attention to ensure that all residues are removed, and the tank is properly cleaned for its next use.

Here are the steps to be followed by User:

1. **Empty the Tank:** Ensure that the tank is completely emptied of any remaining liquid. If there is froth, let it settle or dissipate as much as possible before proceeding.

2. **Rinse with Water:** Begin by rinsing the tank with clean water to remove any loose residue and reduce the amount of froth. This can be done by filling the tank with water, agitating it and then draining it.
3. **Use a Defoaming Agent:** If froth persists, consider using a defoaming agent that is compatible with the tank material and safe for agricultural use. Follow the foaming agent manufacturer's instructions for the correct amount and method of application.
4. **Apply Cleaning Solution:** After the froth has been managed, fill the tank with a cleaning solution appropriate for agricultural tanks. This could be a commercial tank cleaner or a mixture of water and a mild detergent. Ensure that the solution is compatible with the tank material and any residue from the previously used substances.
5. **Agitate and Soak:** Agitate the cleaning solution inside the tank to ensure thorough contact with all surfaces. Allow the solution to soak for a period recommended by the cleaning agent's manufacturer to break down any remaining residues.
6. **Scrub if Necessary:** For stubborn residues, use a non-abrasive brush or sponge to scrub the inside of the tank. Be careful not to damage any sensors or internal components.
7. **Rinse Thoroughly:** Drain the cleaning solution and rinse the tank several times with clean water to remove all traces of the cleaning agent and any loosened residues.
8. **Dry the Tank:** After the final rinse, allow the tank to air dry completely before closing any lids or caps. This helps prevent the growth of mold or bacteria.
9. **Inspect the Tank:** Once the tank is dry, inspect it for cleanliness. Ensure that there are no residues or cleaning agent left behind.
10. **Record the Cleaning:** Log the cleaning process in your maintenance records, noting the date, the cleaning agents used, and any observations about the tank's condition.

Always wear appropriate personal protective equipment (PPE) when handling cleaning agents and defoaming chemicals. It is necessary to follow specific cleaning protocols to avoid cross-contamination.

6 Components performance and reliability based on continuous monitoring

The main components in the UAS where performance has to track continuously for safe operations are given below.

S. No	Component	Monitoring details
1.	UAS	<ol style="list-style-type: none"> 1. Check the Stability (position holding) 2. Check Ease of control 3. Check if any Visual defects on entire UAS 4. Check for any loose Screws on entire UAS 5. Check whether the Flight time as per specifications 6. Check the visual defects/Cracks on landing gear.
2.	Motors	<ol style="list-style-type: none"> 1. Check the abnormal Aural sound of the motor during operation 2. Check Obstructions of motor rotation due to field dust 3. Check the abnormal motors heat after flight landing.
3.	Propellers	<ol style="list-style-type: none"> 1. Check the Visual defects
4.	Batteries	<ol style="list-style-type: none"> 1. Check the Charging time of Battery's 2. Check the Flight time as per

		specifications 3. Check the Visual defects (Bulging) 4. Check the Sparks while powering
5.	Remote	1. Check the Signal strength on GCS. 2. Check the Antenna holders tightening status. 3. Check Visual defects on the remote due to rough use. 4. Check the Battery backup whether as per specifications.
6.	Sprayer system	1. Check the Pump flowrate (2.5 lit/min) 2. Check for the Nozzle leaks 3. Check for the Hose pipes visual defects 4. Check the Nozzle dust

User needs to check all these above given lists for every 50 flights to the manufacturer and also is advised to report the manufacturer in case of components failure the user can reach us through customer service helpline or write a mail to us with attached log details

Operator to entry continuous monitoring performance in logbook

- On the flight operation logbook at each page bottom sufficient space is provided to end. The cumulative value of number of landings for landing gear number of operations for Airframe and motor and number of charge and discharge cycles for batteries.
- Once this cumulated hour reached manufacturer provided life, operate immediately Contact the manufacturer to the address given and intimate them.
- If log book entry finished, please contact the same address for extra log book. User needs to check all of these above given lists for every 50 flights

NOTE- For warranty claims customer need to fill and bring the UAS log book according to the maintenance Schedule to nearest service centers. For the warranty claims user need to log the performance of UAS regularly either in Maintenance manual or Logbook

If user found any defects, they need to bring the manuals along with the UAS to start the repair.

Contact details:

+91 9955111150

Contact@vaimanikaaerospace.com

Plot No. 570, 10B, Rajendra Nagar Main Rd, Mahmudi Chak, Rajendra Nagar, Patna. Bihar 800016

6.1 Communication to VED PRABHA AEROSPACE PRIVATE LIMITED in case of in issues.

Technical Support and Help Desk Guidelines

If you encounter any technical issues with your Unmanned Aircraft System (UAS) that you cannot resolve through standard troubleshooting procedures, please follow these guidelines to seek assistance from our Technical Support Line or Help Desk:

1. **Prepare Information:** Before contacting technical support, gather all relevant information about the issue, including:
 - The UAS model and serial number.
 - A detailed description of the problem.
 - Any error messages displayed.

- The conditions under which the issue occurred.
 - Steps you have already taken to try to resolve the issue.
2. **Contact Technical Support:**
 - Find the contact details for technical support in the 'Contact Information' section of this maintenance manual.
 - Reach out via the preferred method (phone, email, or online form)
 3. **Describe the Issue Clearly:** When connected with a support representative, clearly describe the issue you are experiencing. Provide all the information you have prepared to help them understand the problem.
 4. **Follow Instructions:** The support representative will guide you through troubleshooting steps. Follow their instructions carefully. Do not attempt any procedures that you are uncomfortable with or that are not recommended by the manufacturer.
 5. **Documentation:** Keep a record of the support call, including the date, time, the name of the representative, and any case reference number provided. This will be useful if you need to follow up on the issue.
 6. **Escalation:** If the issue cannot be resolved during the initial contact, ask about the next steps. The support representative may escalate your case to a specialist or arrange for further assistance.
 7. **Update Maintenance Records:** Once the issue is resolved, update your UAS maintenance records accordingly. Include details of the problem, the support provided, and any repairs or replacements made.

Contact Information

- **Phone:** 9955111150
- **Email:** vaimanikaerospaceofficial@gmail.com
- **Online Support Form:** <https://vaimanikaerospace.com/>
- **Address :** **VED PRABHA AEROSPACE PRIVATE LIMITED**
Plot No. 570, 10B, Rajendra Nagar Main Rd, Mahmudi Chak, Rajendra Nagar, Patna. Bihar 800016

Please note that our technical support team provides you with the assistance you need to keep your UAS

