CHARIS
UNMANNED AERIAL SOLUTIONS

CUSTOMER ENQUIRY FORM

CUSTOMER DETAILS	
CUSTOMER NAME	
ORGANISATION	
CONTACT NUMBER	
EMAIL	

DATE
JOB NUMBER
DATE REQUIRED
CLIENT VISIT REQUESTED
YES / NO

DESCRIPTION OF WORK REQUIRED

SPECIFICATIONS	
Type/ Model of UAS to be used:	*Videography:* Format: Output: ☐ Video ☐ Photo
Mapping No. of Ha to be covered: Resolution: Flight height: Overlap: Sidelap: No. GCPs to be placed:	*Spraying:* No. of Ha to be covered: Dosage: Flight height and Speed:

PRE SITE SURVEY

JOB NUMBER	DATE

FLIGHT TEAM COMPOSITION	
PILOT IN COMMAND:	
OBSERVER:	
UAV REGISTRATION:	

OPERATING SITE LOCATION		
OPERATING SITE NAME:		
SITE LATITUDE:		
SITE LONGITUDE:		
ALTITUDE AMSL:		ft AMSL
DATE WORK REQUIRED:		
IS THERE VEHICULAR ACCESS:	YES	NO
WORK REQUIRED:		

ITEM	ACTION TO COMPLETE	FINDINGS
AIRSPACE	Airspace Class? (A,C,D,E,F,G) - ATC Permission Required?	
TERRAIN	What is the Terrain? (Flat, Mountainous, Boggy)	
PROXIMITIES	Other Aircraft (Aerodromes, Heli Pads, Model Sites)	
HAZARDS	Live Firing, High Intensity Radio Transmissions, Gas Venting	
RESTRICTIONS	Nuclear Power Stations, Prisons, High Intensity Radio	
SENSITIVITIES	Nature Reserves, Recreational Areas, Bye Laws	
PEOPLE	Local Habitation (Do we need to Letter Drop?)	
LIVESTOCK	Local Farms	
PERMISSION	Local Authority, Land Owner, Military Space	
ACCESS	Public Right of Way, Gates & Roads	
CORDON	Is a Cordon Required? (Do we need extra staff?)	
FOOTPATHS	Public Footpaths, Bridal Paths	
ALTERNATE	Alternative Operational / Take Off Sites	
RISK MITIGATION	Can the job be done at another time to avoid School times etc	
WEATHER	24 hour forecast	
NOTAMS	Any Notice to Airmen that may affect operations	

COMPLETED PRE-NOTIFICATION	If Notified, Record Date, Time & Contact Name
LOCAL AIR TRAFFIC CONTROL:	
MILITARY CONTROL:	
NOTICE TO AIRMEN:	

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RISK ASSESSMENT FORM

FLIGHT TEAM:	PILOT-IN-COMMAND:	OBSERVER:
	PAYLOAD OPERATOR:	AIRCRAFT:

1 – HAZARD	2 - AT RISK	3 - EXISTING CONTROL MEASURES	RISK			7 - FURTHER CONTROL MEASURES	RISK		
(Something with the potential to cause harm, how will it be realised and what is the potential injury?)			4 SEVERITY	5 PROBABILITY	6 RISK		8 SEVERITY	9 PROBABILITY	10 RISK

FURTHER ACTIONS (Further control measures which could be implemented at the planning stage to improve safety)

ADDITIONAL COMMENTS (Actions identified by personnel on site, to make the operation safer)

AUTHORIZED BY THE ACCOUNTABLE MANAGER	Name (Print):	SIGNED:

AT RISK (Column 2)	SEVERITY (Column 4 and 8)		PROBABILITY (Column 5 and 9)		RISK RATING (Columns 6 and 10)		
E - Employees	1	NO INJURY, PROPERTY DAMAGE	1	EXTREMELY UNLIKELY	Severity X Probability - 1 to 5	MIN	Y - Acceptable Risk
C - Client	2	MINOR INJURY	2	REMOTE POSSIBILITY	Severity X Probability - 5 TO 10	LOW	Y - Acceptable Risk
V - Visitors	3	REPORTABLE INJURY	3	WILL POSSIBLY OCCUR	Severity X Probability - 12 TO 15	MED	? - Needs further consideration
P - Public	4	MAJOR INJURY OR FATALITIES	4	WILL PROBABLY OCCUR	Severity X Probability - 16 TO 20	HIGH	N - Unacceptable Risk
A - All			5	ALMOST CERTAIN			

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ON SITE SURVEY

PILOT:
OBSERVER:

DATE

WIND SPEED
m/s

TEMP
*C

DIRECTION

ITEM	ACTION TO COMPLETE	FINDINGS
OBSTRUCTIONS	Masts, Power Lines, Buildings, Train Tracks, Trees, Lakes, Rivers, Canals or Industrial Hazards	
VISUAL LIMITATIONS	Anything that May Impair Vision? (Up to 5KM)	
CORDON	Is a Cordon Required? (Do we need extra staff?)	
LIVESTOCK	Any Animals or Wildlife Present Nearby?	
TERRAIN	Flat Surface, Rough, Sloped, Wet, Trees?	
PERMISSION	Do We Have the Land Owners Permission?	Signature:
PUBLIC	Public Right of Way, Footpaths, Gates	
AIR TRAFFIC	Do We Need & or Have Clearance?	
COMMUNICATION	Are Two Way Radios Required?	
PROXIMITY	Are We Far Enough Away from Buildings?	
TAKE OFF AREA	Where is the Safest Convenient Position?	
LANDING AREA	Where is the Safest Convenient Position?	
OPERATIONAL ZONE	Are there Any Hazards or Obstructions?	
EMERGENCY AREA	Where is the Safest Convenient Position?	

CONTACT NAME AND TELEPHONE NUMBERS
PILOT:
OBSERVER:
CLIENT:
LOCAL POLICE:
LOCAL HOSPITAL:
LOCAL AIR TRAFFIC CONTROL:

NOTES:

PRE FLIGHT CHECKLIST

	Note: You must perform a general inspection before every flight	**Flight 1**	**Flight 2**	**Flight 3**	**Flight 4**	**Flight 5**	**Flight 6**	**Flight 7**	**Flight 8**	**Flight 9**	**Flight 10**
General inspection	Check the foam central body and wings for cracks or other damage.										
	Verify that the pitot probe is properly attached to the airframe and that the holes in the probe are free of obstructions.										
	Verify that the ground sensor is free of obstructions and that the sensor's lens is clean.										
	Verify that the wing struts are not split or damaged in any way.										
	Verify that the tubes within the Central Body that hold the wing struts are not cracked or damaged.										
	Verify that the power cables within the battery compartment are well insulated and not damaged.										
	Verify that the camera's lens is clean.										
	Ensure that rubber bands do not show cracks or any other sign of aging.										
	Place the camera bay insert provided into the drone's camera bay.										
	Plug the camera connector into the connector.										
	Ensure that the ailerons are properly aligned with the servo connection mechanism before pushing the wings fully into the central body.										
	Insert wings into the drone **- Verify well fitted**										
System	PC powered – **on**										
	Antenna USB-**Connect**										
	E-motion 3 – **Start**										
	Aircraft power - **Connect batteries**										
	Aircraft – **Verify active tones**										
	eBee Plus ailerons up and down and the status										

	LED turn solid green to indicate it is ready.										
	E-motion 3 **- Go to Mission, select drone and camera**										
	Connect drone–**Press**										
	Working area in emotion **- Verify correct**										
	Set home way point – **Adjust and verify correct**										
	Check transition path – **Adjust and verify correct**										
	Set **landing point (+alternative landing points if need depending on wind changes)**										
	Check correct **Mission block** (flight plan) – **Assign**										
	Define **RTK source** if needed										
	Camera- **Remove cover**										
	Verify battery voltage										
	Check data link signal										
	Check RTK – **Fixed**										
A r e a	Winds**- Check direction and velocity**										
	Sun **– Verify visibility and vision impacts during take-off and landing**										
	Takeoff Flight Area**-Clear**										
	Position Aircraft- **Nose pointed into wind**										
T a k e - o f f	-Start motor - **Shake the drone 3 times towards the front**										
	Elevons – **Checks the right and the left elevens movements**										
	Takeoff **- Point drone up into wind 45 degrees launch the drone**										

POST FLIGHT CHECKLIST

	Flight 1	Flight 2	Flight 3	Flight 4	Flight 5	Flight 6	Flight 7	Flight 8	Flight 9	Flight 10
Drone battery – **Disconnect**										
E-motion – **Disconnect drone**										
Check drone condition										
Check motor condition										
Check camera Condition										
If it's the last flight of the day or Changing location										
Wings **- Remove from drone**										
Antenna – **Disconnect from PC**										
Put the drone and the antenna properly in the box										
Safely put the batteries in the box										
Backup data and perform post-flight processing in e-motion										

INCIDENT LOGBOOK

Rwanda Civil Aviation Authority	**RCAA-Form-UAS004** UAS ACCIDENT AND INCIDENT REPORTING FORM (For initial report of UA Accident or Incident)

1. Report Number (Office Use)	2. Date and Time :	3. Name of Reporting Party:

4. Telephone:	5. Address:
6. Phase of Operation :	7. Location of Accident:
8. UA Reg. Number:	9. Make / Model:
10. Remote Pilot:	11. Telephone:
12. UA Damage:	13. Any person/ property affected on ground:

Destroyed	Major	Minor	Other	Fatal	Major	Minor	Nil

14. UA fire? Yes / No	15. Is wreckage secure? Yes / No

16. Description of Accident or Incident:

17. Witnesses? Yes / No (If Yes, provide contact details of each witness).	Names:	Contact details
18. Submitted by:	This report shall be submitted direct to Flight Safety Services (FSS) Office or ATC by quickest means but no later than 24hours.	

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COMBINED PILOT &AIRCRAFT HOURS LOGBOOK

DATE (DD/MM/YY)	TAKE-OF F TIME (HH:MM)	LANDING TIME (HH:MM)	AIRCRAFT SYSTEM NAME	BATTERY NUMBER	PILOT-IN-COMMA ND	LOCATION NAME	PURPOSE OF FLIGHT	COMMENTS AND MINOR INCIDENTS