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UAV Risk Assessment Form

Company name		Start Date	
Project reference		Finish Date	
Project description		Site location / Address	

Method Statement

We will use an Elios 3 UAV equipped with an Ouster LiDAR unit payload to fly and inspect the project stated above to create a complete 3D point cloud map of all sections designated as flyable. The first flight will be an exploratory flight to determine on-site hazards and total extent of radio signal for maximum safe flights. The following flights will then be used to map and inspect the project asset. The point cloud will have an accuracy of ~1.5 cm for specific point distance accuracy from the UAV and an overall mapping accuracy of +/- 1.8 cm when tied into existing stationing. The point cloud will include all visible geometry; rocks, supports, obstructions, irregularities, etc. Only agreed upon areas designated in the quote will be flown.

All flights will be performed using the onboard 4K camera and 16,000 lumen LED lighting to provide a video/picture inspection of any locations directed by the client. Any specific areas of interest during the inspection will be considered POI's. (Points of Interest) At those locations 4K photos will be taken. As each flight is 9 to 10 mins in temps above 0C, 120 VAC power will be needed on-site to continually recharge batteries. I have a total of 9 batteries and 5 chargers which is enough to continuously fly all day long as long as there is 120 VAC available.

Deliverables

We provide the final model as a Point Cloud in Autodesk ReCap format that is insertable into most Autodesk Products. The point cloud will contain the entire project asset flown, connected and registered together into a single file. The flight videos will also be included as .mov files for each flight as a separate file, along with any relevant .jpeg pictures taken at POI's. The POI's will be put together in a Word .doc report with flight number, headings, and XYZ coordinates, time stamps for video reference, along with a picture showing the 3D point cloud location for reference of where the picture was taken.

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1 Task description

Personnel Involved		On site contact	
Name	Role	Name	
Bryce Kohler	Cirrus Design Pilot	Contact	

Description of the Task	On site sequence of Operating
	Subject to change / amendment 1. On site safety induction
Specific staff training	

Is Cirrus Design allowed to use the gathered footage for public communication material?	Yes/No
Is Cirrus Design allowed to disclose the company name for public communication material?	Yes/No

Elements that may damage the UAV

Moisture or presence of water	Explosive environment	Wind higher than 5m/s	Confined space	Elements that may entered the cage (Twigs, rods, pipes, any elements that may fall)	Other:
Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	

UAV recovery after incident

In case of incident, can the UAV be recovered?	Yes/No
If left in place, can it damage the asset?	Yes/No

Hazardous substance – Attach MSDS if necessary

 Toxic	 Harmful or irritant	 Corrosive	 Biohazard	 Oxidizing	 Highly Flammable	 Explosive	Other:
Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	

Required Personal Protection Equipment

 Safety boots	 Safety gloves	 High visibility	 Hard hat	 Eye protection	 Ear protection	 Overall	Other:
Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	

Identified residual hazards	First aid facilities	
All inspection area should be designated as no go zone for all personnel not involved in the operation	Name of on-site first aider	
	First aid box location	
	Nearest hospital location	

Key plant tools & Equipment	Other essential equipment (i.e. generator, power outlet, car ,etc.)
	120 VAC is present for Battery charging purposes.

Other comment
Be aware that having Cirrus Design on site flying a UAV can generate a lot of interest and curious people may distract the pilot. Only required personnel are expected to be in the vicinity of the flight and it is preferred that no one be physically in the way of or interfere with the Lidar Scans or Inspection Photos.

Name and signature of the person requesting the inspection.

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2 Appendix

Put here any available Prints, drawing etc.

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