

Preliminary Design Review (PDR) Form

Team #, University and Team Name	Haggis Aerospace
Chairperson + Position	Maksim Vassiljev Vice team lead
Team Members Present	Chad Barnard Anton Parsons Josh Humphries Joseph Helmes
Review Date	27/01/22

Review Items	Y/N	Comments
Requirements & Compliance	Y	Assumption that since concept paper requirements compliance hasn't changed. Will be reviewed once the Cad model is complete
Weight budget	Y	With current estimations, we have a spare kilo of weight, however, expecting it to add up during manufacturing and further design
Cost budget	Y	The BOM, having all the costliest components ordered, was reviewed. Still under budget but getting close. COTS are barely fitting under budget, with more parts to order. considering getting a cheaper flight controller
Test plan	Y	Testing of manufacturing methods is underway. A test plan for parts and prototype to be made before 10.02.
Safety	Y	Manufacturing risk assessment reviewed. No changes.
Risks	Y	Risk reviewed. Main risks are reduction in manufacturing quality due to delays in schedule and possible further delays due to parts shipment time
Schedule	Y	Schedule reviewed, significant delay in many sectors. Decision to try to recruit more team members to speed things up. Schedule adjusted to current delays

Changes since Concept Paper

Please describe the changes and why they are necessary.

No major changes since Concept Paper. Cruise speed changed from 60 to 50 knots to allow more flexibility in flight. CNC Aluminium is no longer available to us, so most parts will be 3d printed.



Main issues arising and actions to be taken

Please list and explain all outstanding issues raised by the review and the specific actions that you will be taking to address them.

The actions we expected to finish during holidays took longer than expected and hence we are behind schedule by about half a month. To correct for this, the Gantt chart was reviewed, and time for prototype and cad finalisation was shortened. This shows that we are low on human resources, so a decision to expand the team was made and recruitment of new members will begin shortly.

Motors and batteries suffer a delay of about 10 days in expected arrival due to the lunar new year celebrations in China. If the components won't arrive in time, the prototype will use different components that we have on hand for initial tests.

Autopilot development suffers due to unknown issue with telemetry. More hands directed to that sector (Chad) to try and solve it, as well as procurement of new components to be done (by trying to get a sponsorship first by Maksim before 6.02)

Name	Role	Signature
Chad Barnard	Team Leader	
Maksim Vassiljev	Chairperson	

Chairperson - The independent person chairing the review meeting e.g. your academic supervisor (see F.4). If they are not available, someone independent should chair the review meeting (e.g. your industry mentor).

Please upload your form to Mashoom in .pdf format.