

wcUAVc Design Concept Review

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Please organize your review comments to address each of the categories. A standard one-paragraph review would be optimal.

<u>Categories</u>	<u>Review Comments</u>
Aircraft (LTA, Fixed Wing, etc.)	Not clear what you are proposing to design, build, and fly. Strategic level concept looks great.
Launch & Recovery Mode ()	May need to focus on one concept, or take on a different role in wcUAVc developing operational concepts.
Avionics ()	Commercial AP's are awesome these days. But as a reviewer I'd like to have seen a specific basis for selection. (TACP Director suggests you compare APM2.6 with PixHawk and purchase from eBay to keep your bill of materials down.)
Sensors (daytime video, nighttime video, RFID, etc.)	More specifics needed on the sensors to evaluate if they will be able to detect and characterize humans and wildlife during daytime and nighttime. Also need to clarify how you will interrogate the active RFID tags.
Stabilization (isolators and damping)	ITACP Director notes that the Technology Achievement Award for electronic stabilization is still open.)
Communications (Aerostat)	Aerostat for communications is nice concept. (TACP Director advises that radio links can be very short range. There are variety of options for extending range.)
Embedded Systems (Not well described)	Raspberry Pi as a good, low cost computer, but you may want to upgrade to a higher performance computer such as Beagle Bone Black. (TACP Director clarifies that the focus of wcUAVc is on embedded systems. Aircraft should perform data processing, data fusion, and event characterization on board.)
Extra Features	Many good ideas for operational concept, but not much detail on specific platforms.
Other	