

OpenUAS: Flight Software Requirements

v0.1

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1. The flight software shall respond in a timely manner to all internally and externally generated commands.
2. All commands affecting safety-critical flight operation shall be user initiated
3. No portion of the non-safety critical software shall affect the safety critical software.
4. The flight software shall prioritize all human commands above those generated by the autopilot.
5. The flight software shall use sensor values to make controls decisions.
6. Every flight software routine deemed safety critical shall be guaranteed to run at least once per cycle.
7. The flight software shall provide a read-only interface for sensor data.
8. The flight software shall provide a read/write interface for controls data and commands.
9. The flight software shall be resistant to overflow in the sensor buffers.