



HD Air Studio delivers custom Canon 5D gimbal to VulcanUAV



Client

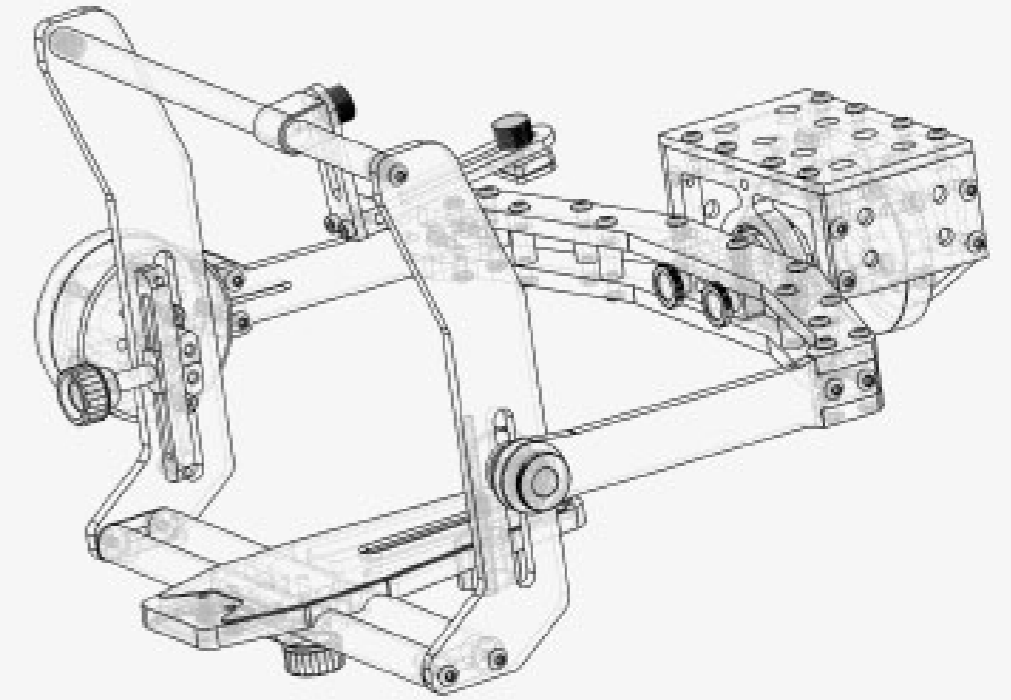
VulcanUAV specializes in building VTOL multirotor aircraft systems for various applications, including aerial photography, crop monitoring, surveying and lidar, infrastructure inspections and a range of unusual heavy lift applications.

About the project

VulcanUAV has been using HD Air Studio gimbals in various types of projects for a couple of years now. Initially, these were standard, off-the shelf gimbals suitable for a number of cameras on the market. The first custom gimbal commissioned by Vulcan UAV was a front mounted two axis unit designed to carry a G300 gas sensing camera. More recently VulcanUAV entrusted HD Air Studio with the project of developing a custom camera stabilizer adjusted to optimize for the application of a Canon 5D for a custom drone produced in-house by VulcanUAV for Perceptual Robotics for their Dhalion autonomous wind turbine inspection system. VulcanUAV was looking for a ready-to-use-out-of-the-box solution to work seamlessly with their API.

How HD AIR Studio helped

- ✓ HD Air Studio designed and produced a 2-axis front-mounted gimbal for the Canon 5D compatible with the VulcanUAV's multirotor.
- ✓ A lightweight, rigid construction was achieved that was crucial to the success of this project in order to deliver perfect image stabilization even with longer focal length lenses.
- ✓ The camera stabilizer was designed in a way which guarantees unobstructed access to all units and wireway alike.
- ✓ HD Air Studio made sure that VulcanUAV would have convenient access to HDMI and USB connectors without the necessity of detaching the gimbal.
- ✓ The gimbal controller was delivered by HD Air Studio in a dedicated cover to be housed inside the drone by VulcanUAV at a later stage of the project.



„The custom gimbal developed by HD Air Studio keeps the camera image perfectly still even with longer focal length lenses. The gimbal offers great resistance in difficult conditions – we mount it to a drone which carries out autonomous inspections of turbine blades and structures both onshore and offshore. The inspection system needs to maintain an image resolution of 3 pixels per millimeter without the need for the aircraft to get too near the turbine blades. At this level of resolution any movement in the camera during the shot will lead to focus issues which cannot be present if the data is to be usable for detailed inspection. The reliability of this camera stabilizer is key to our effective operations.”

VulcanUAV