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## Design and fabrication of unmanned aerial vehicle for multi-mission tasks (Article)

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### Abstract

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The design for UAV was planned taking into account the real-life engineering problems such as different phases involved in developing a product. Here the task is to design, create, build and test a remote-control airplane. The planning and designing of an aircraft must start from the scratch, with lots of restrictions and parameters, like a specific motor to be used from the wing profile, dimensions, centre of gravity, materials and other features which are all involved in the process. The main objective of this UAV is to design an aircraft which is efficient during emergency situations and is capable of dropping packages from a minimum height of 100 feet off the ground. A vision-based control strategy is used in this to track and follow objects using an unmanned aerial vehicle (UAV). This unmanned aerial vehicle is created in such a way that it can be used in multi-mission tasks too. The most favorable design must be of one which can perform efficiently, cost-effectively and carry as many payloads as possible, and all these without negotiating on the safety of the aircraft. © TJPRC Pvt. Ltd.

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