

Tuning of Fixed Wing Micro Aerial Vehicles Using Tethered Setup

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Abstract : Techniques have been used to tether and stabilize a multi-rotor MAV but carrying out the same process to a fixed wing MAV is a novel method which can be utilized in order to reduce damage occurring to the fixed wing MAVs while conducting flight test trials and PID tuning. A few sensors and on board controller is required to carry out this experiment in horizontal and vertical plane of the vehicle. Here we will be discussing issues such as sensitivity of the air vehicle, endurance and external load of the string acting on the vehicle.

Keywords : MAV, PID tuning, tethered flight, UAV

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