

Team Daphne: Amphibian Quadcopter

Abstract

Nowadays, drones can only operate in the one dimensional space of the sky. It makes a lot of places inaccessible due to the fact that most drones aren't waterproof or not dexterous underwater. Our team wants to break the boundary of the operational spaces of the drone. In this sense, we can greatly extend the possible applications of drones, such as geological surveys or military use. Through the preparations of last quarter and the implementations of the spring quarter. Our amphibian quadcopter should be able to fly smoothly both in air and underwater through wireless controls. The PID controller of the quadcopter should function correctly and optimize the controls of quadcopter in air and underwater. All electronics should be waterproof-coated and free of damage underwater and control signals will be able to transmit to the quadcopter underwater.