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Hawaii Preparatory Academy

Class of 2018

Project:

I intend to built a new type of Amphibious unmanned vehicle from scratch. This vehicle can fly and swim and is going to be the first of it's kind. I want to built this robot because I want to widen my knowledge about Aerodynamics & Hydrodynamics.

Background:

In 2015 & 2016 in my sophomore year I took a robotics class at my school in Germany in which I built an ultra light super fast drone that could reach a top speed of 57.6 mph. With this experience want to go a step further and built something more challenging and something more unique. My goal know is to focus more on ability than on speed.

Purpose:

The purpose of this project is to widen my and others knowledge about Aerodynamics, Hydrodynamics and Robotics. The purpose of use could be selected individually. It could be used to deliver important documents through the air and water and it also could be used for Water and Air surveillance.

The project itself and how I'll built it:

I will start out with building a model of the vehicle by only using legos. Then when I've got a rough image of what it's supposed to look like will make a animated movie of the the vehicle being used. The vehicle will be powered by strong electric motors and these will be powered by a 2.0 lithium polymer battery. The vehicle will use propellers to remain in motion in the air as well as in the water. At first I will make it go over water and if it works well I will modify it to also be Hydrodynamic underwater.

Legacy:

The main reason of this project is that my knowledge and my research will expand during my time at Hawaii Preparatory Academy. The data, knowledge and research will be the legacy of my project. The future of this project will be to inspire the next generations that will work on projects like these with passion and the will to witness and learn. I also want the next generations to realize the opportunities that they can get at schools like Hawaii Prep. It's their job to expand and widen our Horizon so we can make this a greater world.