Solidworks Personal CAD Project: Quadcopter

With the rise of drones being used for military, economics, logistics, science, and even entertainment, Quadcopters are the proud symbol of the future of engineering, aerospace science, and robotics. And so with Dynamic Assembly’s CAD software, Solidworks 2013 Professional, I incorporated my own innovative take on the quadcopter. My design incorporates notable designs of quadcopter from Parrot drones, Oberwelz designs, private prototypes, and even the Amazon Prime Air prototype.

I made various parts of the quadcopter. I started with the 4 Circle foam body that I noticed most of the quadcopters had. I then worked on the metal frame that housed the important parts such as the motors and the propellers. I then wanted to make the quadcopter like the Amazon Prime Air in how it transport packages and so gave it legs that stood tall enough to store a package. I then wanted to give characteristics to make it look like it was more of a drone than a RC toy. That was when I put the Glass Sphere to make the quadcopter look like it was a drone with a sensor on top of the quadcopter. Once I made all the parts, I put it together in an assembly. Below is my final result out of designing my quadcopter.
Assembled Quadcopter made on Solidworks 2013 Professional X64

Isometric View
Front View
Top View
Side View
Rendered Quadcopter (Powered with AMD RADEON HD 6450, 1 GB Dedicated)
Assembly Drawing on B Landscape Paper