**Flight Test Procedure**

* Safety glasses and closed toe shoes are required at all times
* Make sure battery is charged and test ready
* Make sure propellers are removed and make sure all other components on the quad are securely fastened and free of propeller paths
* Clear VICON cage of all debris, components, and people that are not essential to the flight
* Connect power to the quad and make sure all boot up sequences run correctly
* If flight test will be testing autonomous flight, make sure all initial position and velocity components are set to desired values
* Arm quad and confirm that motors are functioning properly in manual flight and autonomous flight mode
* Disarm quad and disconnect power, securely attach propellers
* Reconnect power and make sure all boot up sequences run correctly
* Again confirm that all initial position and velocity components are set correctly
* Make sure pilot’s field of view is clear
* Make sure all parties involved in test know what the expected flight behavior is and are ready for flight
* Arm quad, from this point on, the pilot must keep eye contact with quad

**Manual Flight**

* + Slowly increase throttle and ensure that no abnormalities are occurring
  + Take off from the ground and fly predetermined trajectory
  + If any abnormalities arise, land immediately
  + Once test is complete, land safely

**Autonomous Flight**

* + Make sure the quad responds properly to manual controls
  + Alert ground station operators that you are about to switch over to autonomous mode
  + If given the green light, switch over to autonomous mode
  + Have ground station give commands to the quad
  + Pilot needs to match autonomous flight controls on transmitter in case manual override is required
  + If any abnormalities arise, switch back over to manual mode and land immediately
  + Once test/trajectory is complete, land quad safely (manually or autonomously depending on the test)
  + Disarm quad and disconnect battery
  + Either prepare for next flight or return battery to storage voltage