

Lab 2

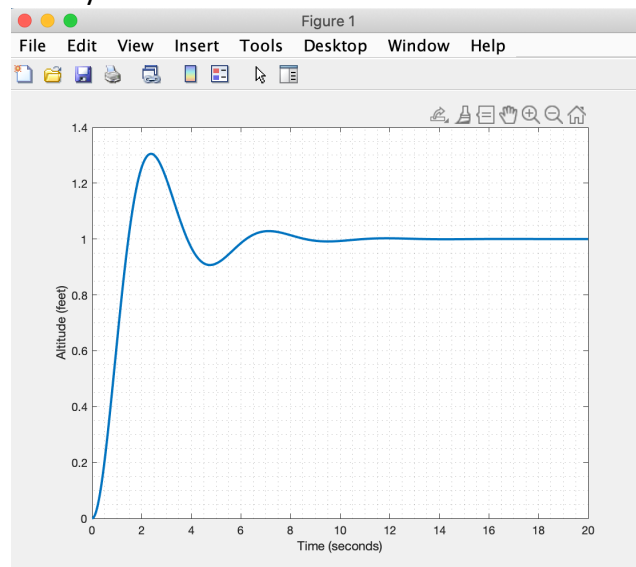
Pre-Lab

Question 2.1)

- One way you could measure vertical speed would be to use the barometer and measure your air pressure multiple times a second. This method is somewhat unreliable because of the change in pressure that could be caused due to the wind outside or opening a window indoors.
- Another way you could measure vertical speed is with the ultrasonic distance sensors on the quadcopter. You can measure your distance to the ground multiple times a second to determine your vertical speed. This method also has its limitations because it doesn't work properly if the object doesn't reflect sound well or in vacuums, where there is no air for the sound to travel.

Question 2.2)

- Peak Altitude of the Response: 1.305 ft
- Time to reach a steady state: 15.64 s



Question 2.3)

- The ones that spin clockwise are called pushers and are marked with a P and the ones that spin counterclockwise are marked with an R.
- The curvature on the propellers also distinguishes both of them. "The side with the consistent curve should be the leading edge when rotating."