* Intro
  + Motivation

An accurate dynamics model is important for all aircraft, but especially unmanned vehicles. Unmanned vehicles use control laws to maintain desired flight, and these control laws usually require plant dynamics to be fairly well known. An accurate dynamics model also helps validate the vehicle’s design, and allows the designer to update and improve the design techniques based on the performance of the final design. (TALK ABOUT PREVIOUS WORK HERE)

* + - Need an accurate dynamics model of an aircraft, to better understand conceptual design, performance, etc
  + Scope

The primary goal of this thesis was to develop a flight data logger capable of recording vehicle dynamics of a small UAV. The system needed to be minimally-invasive, requiring as few aircraft modifications as possible. As a top-level goal, the system had to be capable of measuring all states required to capture a drag polar. Additionally, it needed to be adaptable enough that, in the future, it could potentially measure values such as stability derivatives, dynamic thrust, and

* + - Develop a flight data logger capable of accurately measuring dynamics
      * Verify this was completed by completing a single test case (drag polar)
      * Explain how the system can be used for other measurements
  + Equations of motion
    - Want to get to coefficients, but not parabolas.
* Drag Meta-Modelling
  + Theory behind it being parabolic
    - Explain K1, K2, CD0
  + Regression stuff that you currently have written
  + Error Analysis
* Simulation
  + Current stuff should be fine
* Hardware Selection
  + Current stuff should be fine
* Flight Test
  + Verification Techniques
  + Flight Test aircraft and modifications
  + Flight Test Plans and Documentation
* Results
* Summary
* Appendices
  + Schematics
  + Test documentation
  + Time histories all signals for a flight test