ADCS
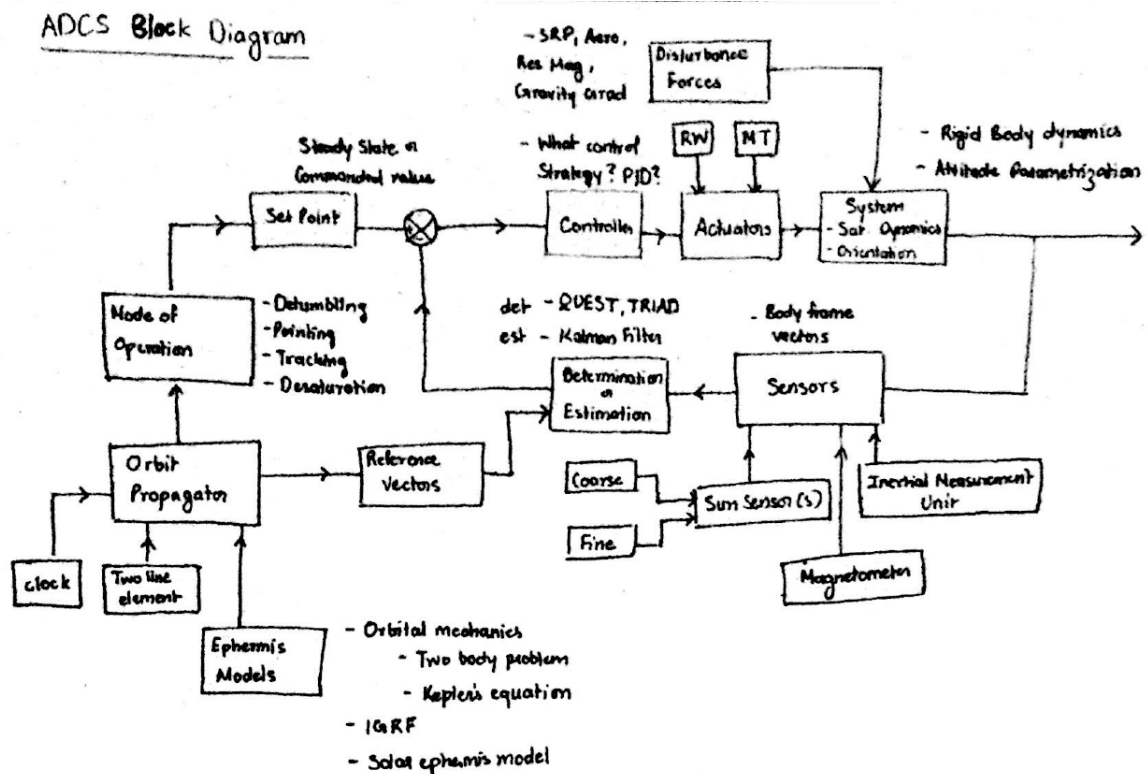
Pranav Chandra N V

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Contents

1 Intro

ADCS Block Diagram

- An orbit propagator basically gives us the estimation of what the orbit will look like at any particular time.

- You require three things for an orbit propagator

  - A clock - Required to sync things together. So that we can get the time difference between any two measurements. We take the clock directly from the OBC main clock. It's essentially a square wave.

  - **Two line element** - Basically represents the data that comes into the system

    * There are multiple forces that are experienced by the satellite.

      · Drags (caused by shape of the satellite)

      · Winds (caused by external winds), radiation pressure (from sun and reflected from earth)

      · Magnetic pressure (from earth's magnetic field)

      · Gravitational force (from earth, sun, moon, etc.)

- Modes of Operation basically comes down to two things, what modes there are and how to get into it. To check if you're pointing at the earth, you can use the series of QRs on earth.

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