Last TA Check-in of 1st Semester

- Wednesday 3-3:45pm
  - U of M Crookston
  - U of M Morris
  - Winona State University
- Wednesday 7-7:45pm
  - Century
  - Hamline
  - SJU/CSB
  - U of M TC
  - MSUM
  - Hill Murray
- Friday 3-3:34pm
  - Concordia
  - Normandale

Check in Prompts

- PDR
- Basic sensors (magnetic, temperature, pressure)
- Sample collection
- Moving electronics from solderless breadboard to more permanent design.
- Additional functionality
  - Extra sensors
  - Modular sensors
  - Telemetry/visual feedback
- Flying the Blue Heron
  - Weight capacity
  - Taking video/capturing images
- Biggest struggles/successes

PDR

- PDR is due January 22nd
  - We will have only one more meeting before then.
- You will need to address:
  - The skills you are developing (programming, soldering, flying).
  - The drone's capabilities.
  - How you are dealing with COVID related restrictions.
  - Plans for the sensors and electronics.
- Make sure you are looking at the rubric!
- Don't forget to be documenting the work you do.
  - This will make the PDR and later reports much easier to compose

Things to Consider:

- I suggest getting your hands on more sensors sooner rather than later. Here are some good places to purchase from
  - https://www.adafruit.com/
  - https://www.sparkfun.com/
- For contest scoring, some points are supplementary points awarded at the judges' discretion.
  - How might you earn these points?
    - Additional sensors
    - Creative solutions for switching sensors
    - **A "base-station" hub**
    - Live telemetry

Questions For Me?

Question For You:

Do you feel there is any particular topic or aspect of the contest that your team needs additional guidance on?

Next Semester Meetings

- Monday: 7:00pm - 7:45pm
  - Century
  - Hamline
  - U of M TC
  - Winona State
  - MSUM
- Wednesday: 7:00pm - 7:45pm
  - CSB/SJU
  - Normandale
- Thursday: 12:00pm - 12:45pm
  - U of M Morris
  - U of M Crookston
- To Assign:
  - Hill Murray
  - Concordia
- These meetings will begin the week of January 11th and be biweekly after that.

Tasks For Next Meeting

- **Delegate tasks for writing the PDR and have a good start on a draft.**
- Have preliminary plans for the following (include specifics, like we plan to use components A, B or C for this purpose):
  - What sensors you will fly.
  - How to try to collect a physical sample.
  - Whether or not you want live feedback from the drone and if so, how will this be implemented.
  - How all these component be attached to the drone and Teensy in a durable yet lightweight manner.
    - Do we need modular components?
- Continue to practice Flying the Blue Heron.
  - Practice taking pictures and videos.