

Use bullet points for each section and be concise. 2 pages maximum.

Project Status: Overview of Status of Analysis, Design, Fabrication, Tests, etc. One or two sentences to describe your project status.

- Currently completing design of Bowden cable (wire construction, diameters, end fittings).

Accomplishments from Previous Week: Your status of last week's goal. If you did not succeed, explain how you are going to recover it, or it is not a problem any more.

- Determine the mechanism used to link the actuator and the flow control valve
 - We decided on the Bowden cable over the gear box since it offered more flexibility and it had a much lower cost
- Since the instructor meeting on Monday we have started integrating the different components of our project (actuator, linkage, valve) by making selections based on requirements from other areas.

Goals for Next Week (list names after each item). Use specific and measurable objectives. Be specific on each goal and have the teammate's name after it. So that the instructor could better understand the project progress and give the progress report grades.

- Contact more Bowden cable manufacturers and/or determine the process for self assembly of Bowden cable, look through McMaster Carr with refined search criteria.
-Matthew
- Design a CAD model of the current flow valve prototype to present our sponsors for next week -Michael

Sponsor Comments: from Last Meeting and Actions Taken to Address these Comments (indicate date of comments and if via email or in person)

- No comments were given by the sponsor that required action.

Instructor Comments: from Last Meeting and Actions Taken to Address these Comments (indicate date of comments and if via email or in person)

- Comment: Could the inner Teflon tube be omitted from the Bowden cable? (4/4, in person).
 - Matthew and Michael have contacted manufacturers to inquire about cables and housings.
 - Generally, removing the inner tube would greatly increase friction and may disrupt the behavior of the Bowden cable.

Risks and Areas of Concern: The main risks and concerns that prevent you from accomplishing your goal. Try not to put minor concerns in here.

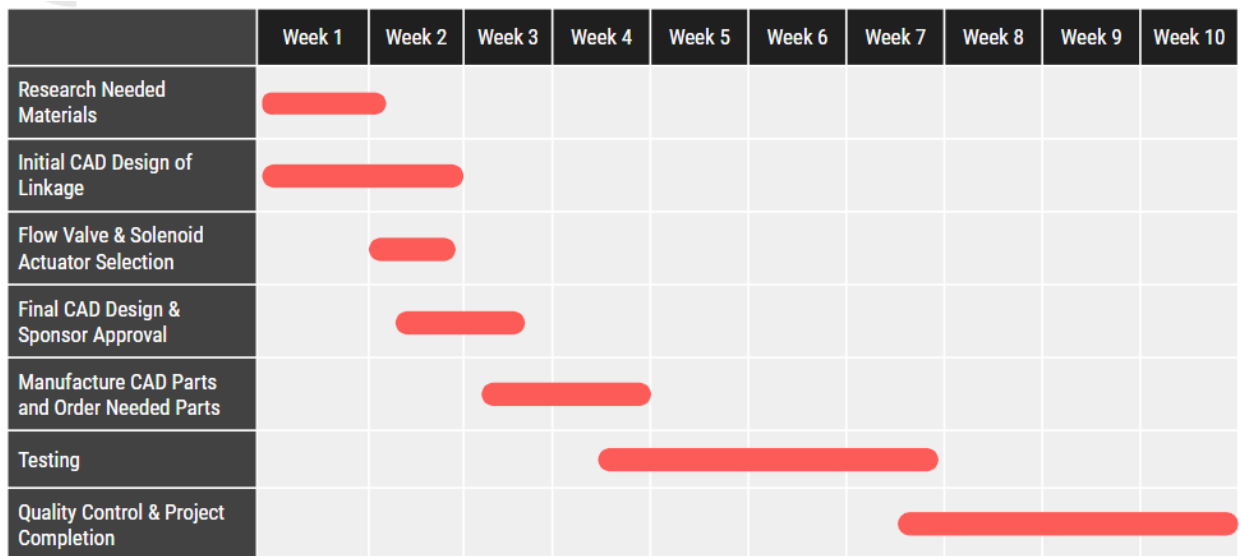
- Bowden cable inner tube material temperature ratings may not be high enough for the environment.
- With how low the forces are going to be (between 20N and 50N) it will not be feasible to have a high coefficient of static friction since the actuator will not be able to overcome those forces at low PWM.
 - This means that we do need the Teflon coating AND the inner tubing to decrease friction losses as much as possible.

Resources or Information Required but not Available: List them here and the instructor will try to help you.

- None.

Schedule: Describe upcoming milestone, update Gantt Chart, Budget (list amount spent and amount remaining).

- Upcoming milestone: Completion of preliminary design proposal. Fabrication of a prototype Bowden cable. Characterization of PWM response of existing AFC valve.
- Updated Gantt Chart:



- Budget: Amount Spent: \$0.00, Amount Remaining: \$2000.00

Progress on Report & Webpage:

- Uploaded week 1 presentation on webpage