

LAFAYETTE

COLLEGE

Electric Formula SAE 2020-21

Easton, Pennsylvania 18042-1775

FSAE Electric Formula Car Agenda – 3:10, Zoom, October 19th, 2020

Monday Check-Ins

- Battery-Packs
5.2 Finished wiring diagram, 5.7.1 Connected the wiring prototypes 5.6.1 Pacman V1.2 usability concluded, Pacman board completed
- CarMan
4.2.2 Carman interconnect Diagram, 4.1.4 relay board will be completed next week
- EPAL (Dashboard)
6.2 Ported Wiring diagram from lucidchart to visio → got feedback from Nad and Ben, will work on 6.3 Software diagram under construction
- Drivetrain & Cooling
Cooling → reworking reservoir 8.1, 810 are being worked on for this week (corrected PO for res and updating inventor models) new BOM to address the res
Drivetrain → Design review last tues, 12.1 models need to be updated, last design review scheduled for Tuesday, and parts will be sent to shop once the review goes through
- Frame/Chassis
SES submitted was sent in but **rejected** “good first start”, rules committee wants to see mounting solution and impact protection.
Rear frame has changed to make it easier to manu and make it cheaper → doesn't affect subsystems.
Released full car model so sub systems should be putting stuff on the full model so the SES can be completed.
- Interconnect
3.2 Wiring Diagram is complete and will be uploaded today, The connector list will be created for the diagram and it will be completed.
- SCADA

7.12 cloned git repo to dyno pi. Displaying emulated data → want to get real data 7.2 working on wiring diagram, 7.6.7 display GUI can edit config to group sensors on GUI,

NAD

→ “If I go to 401 if I turn power off and on” will a simulated display come up on the PI

→ Tiny tasks on WBS → need level 2 goals the entire team understands and you are working towards

TLDR: So revise the schedule to functional goals

- Steering, Suspension, Braking
 - Completed individual models behind on inventor
 - Finished full car simulation
 - 11.1 Inventor Files for steering system is new focus
 - Brakes will begin on wed 10/21

Management

- ID001 has been compiled and will be submitted within an hour
 - Juniors dont need to submit
- TD002 will be submitted this evening
- Really good 5 min - Helm <3
 - Zach shouldn't do all of them so subsystems can take the presentation on
- SES submitted → will be reworked

Put together a mini presentation so we can show who is ahead and who is behind

- Weekly status letter
- Compact as part of minutes

Identify dependencies

- Define dependencies to make gantt chart useful

PROF NOTES:

ORDERING

For ordering when you have designs, talk to rob so he can check inventory, and give you feedback on the drawing (if he sees something that could make it easier for machining) McMaster catalog → “they keep a lot of stuff” and will charge you a mark up still cheaper than lowes. Getting sheet aluminum and large metal is cheaper to buy from a local vendor. We still have to source costs if things are in the shop, so the car cost can be totaled correctly

ELECTRICAL PARTS

Digikey is good pricing when we order in quantity. On the other hand Wire and Connectors are worth shopping around for go to room 401 in AEC and then we should look around to get better prices. There is a local electrical supply place can be the cheapest places (home depot) → MCmaster is the other spectrum is very overpriced.

SCHEDULING

Once you have decided on your dates you shouldn't change them. The schedule is a benchmark for how the project is going. There can be a reason for why things aren't in → we don't change schedules; we monitor progress based on the planned schedule.

OVERDUE TASKS in RED so that we can see what we are behind on.

How do we present the schedule so ppl feel they are being treated fairly but we can see where we are.

Don't beat ppl up on the schedule but it explains where we are.

DATES

- DIT2 done is spring semester - ECE and ME together
 - Ethics questions
 - Uses a national baseline