

LAFAYETTE COLLEGE

Electric Formula SAE 2019-20

Easton, Pennsylvania 18042-1775

FSAE Electric Formula Car Meeting Minutes – 3:10, AEC 429, February 17, 2020

Scribe: Simone Khalifa

Attendees: Leah, Simone, Connor, Clement, Alicia, Zhengxie, Tiger, Austin, Dwayne, Phil, Maureen, Tim, Jordyn, Jon, Zach, Dan, Carl, Noah, Gabe, Monserrat, Nick, Michael, Luc, Cat, Jack, Prof. Nadovich, Prof. Helm, Prof. Sajadian

Prototype Pack:

Flexible bus bar sample coming in this week

I/O board and mount need to be completed

Bolted boards to sheet of acrylic- PacMan and one CellMan soldered

Firmware:

- CANopen working on ESP32 with object dictionary

- Need to incorporate previous code into CANopen

- I2C communication defined and solidified--functionality to be added

- Merge everything to completion on Wednesday 2/19

System Integration in CarMan:

Nick has been working on waterproofing

Mounting is near completion (din rails, fuses, relay boards, discharge relay mount)

Need isolation wall--drill mounting holes before electric installation

Alicia needs enclosure to finish cabling

Wires going straight through box--no connectors (going to use ones from dyno room)

Want to remove cables from dyno later this week--waiting on SCADA dyno testing

Chassis:

Support structure for side impact finished

No progress on battery enclosures

Need to cut each end to fit in car--submitted to Rob

Work on body paneling this week

ATP Meeting:

Reasonable electric tests--write-up needed

Suspension:

One corner of AR-Mounts left to do, Push-rods made

Need to get dampers and bell cranks on car

Need to change control rods length for steering

Spline tacked on to steering shaft--front assembly can be done when chassis is ready

All steering hopefully done this week

Get all pick-up point in tact before car has to move

Drivetrain:

Sprockets came back; once a major plate is in from Rob, can install onto car

Dyno Testing:

Throttle panel not finished but otherwise in good shape

Driver Display:

New panel design (we should all view it and make sure it has what we want--design review)

Circuit board for dashboard display made and needs to be reviewed

TSI:

Purchase request submitted to GLC for board re-spinning

Motor Controller:

Box ordered this week--very big--need to adjust to fit with firewall

Radiator:

New one too big: Can fit big one on back of car--rules compliant but prime place for rocks

Heat calculations done--works well enough for endurance race

Tubing routed for smaller radiator

Big one draw three time amount of current

Ten Bonus Points for ESF!!!

SCADA needs to be completely functional by March 10th

Budget:

Reached 50% of total budget