Meeting Minutes: 360 Designs

Call to order

A meeting of 360 Designs was held in the BEL 211 office on 10/31/2019. Attendees included Tanner Sloan, Jake Metter, Mark Jennings, Max, Nick (EPC) and Trevin (EPC) via Webex.

Agenda

- 1. Call to Order
- 2. PowerPoint
 - a. Mia Culpa (2min)
 - b. Review Mark's Purchases: approve/ disapprove (5min)
 - c. Feedback Options: physical button v. 2nd encoder v. other (5min)
 - d. Project / Parts Status (3min)
 - e. Additional Parts To Order? (3min)
 - f. Relay Design Review (3min)
 - g. Revised Schedule (5min)
- 3. Future expectations, discussions (2min)

Reports

- Jake is the treasurer and all financial communications with the client need to go through him.
- Jake and Tanner met with Max and drilled a ¼" whole in the shaft in order to fit another encoder for "measurement comparison."

Unfinished business

• None

New Business

- Mark shared preemptive purchases of electrical components for the design. All purchases reviewed and approved by Trevin for the budget.
- Ideas for model "success" measurement

- o Physical "push button" is black and white, may be too simple and not showcase the resolution changes of the programmable encoder.
- o 2nd encoder attached on opposite end of ball screw
 - Would require a programmable encoder on the end because we need a high accuracy encoder
 - Option: box in the second encoder so that it its not visible to the eye
- o Parts to potentially buy
 - LED array to display success/failure and degree of success/failure
 - Speaker for success/failure?
- o Mark displayed initial relay design for commenting from EPC
- o The schedule has been revised. Two options to present programmable design to EPC: Thurs Nov. 21, week Dec 2-6.
- High speed inputs: 8. Does each encoder need its own HS I/O? Mark can contact Unitronics in the future if we need more I/O.

Announcements

- Mark shared the PLC HMI which just came in recently. Many ports and input/outputs. Mark shared the other obtained hardware and the stepper.
- Jake has got the Wikipage started and will be working on it this weekend.
- Next steps:
 - o Getting feedback loop working (is it on/off)
 - o Getting Unitronics to drive stepper
 - o Finish physical apparatus
 - o Get switch design up and running before pursuing attaching the second encoder
 - Would want a 58TP
- Can we get original source code from program and copy-paste in to Unitronics?
 - o Other option: relatively inexpensive Windows 10 tablet/laptop.

o Have OS spec before design review.

Adjournment

The meeting was adjourned.

<u> Tanner Sloan - 10/31/2019</u>

Secretary