Senior Design Proposal P.A.L.M.

Personal Automated Lawn Mower

5/24/2021 Project Progress Update

BRIAN DARLING AND GABRIEL DE LA TORRE

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HTTPS://PALMMOWER.COM/

Fully Automated Lawn Mower Shroud Installation



Installed cutter blade shroud

- → Had to make minor modifications to the top of the shroud to fit
- Lowered the cutting blade by using a washer
- Cutting Blade will benefit from being balanced

Fully Automated Lawn Mower Electronics enclosure



- Made with Plexiglass
- → Dimensions are 8" x 8" x 2"
- → Water tight design
- Will be secured to the top of the mower with screws and standoffs.

Fully Automated Lawn Mower Movement Control



- → The mower currently has 5 movement settings, forward,back,turn left in place, turn right in place, and stop.
- → The mower turns in place to allow for accurate navigation of cutting paths during operation.
- → The mower was manually controlled by keyboard inputs, which will be converted to controller inputs.
- → Once the RTK system is fully implemented, the mower will have both the manual steering mode and the automatic steering mode.