

Project #35: Automated Pressure Washer

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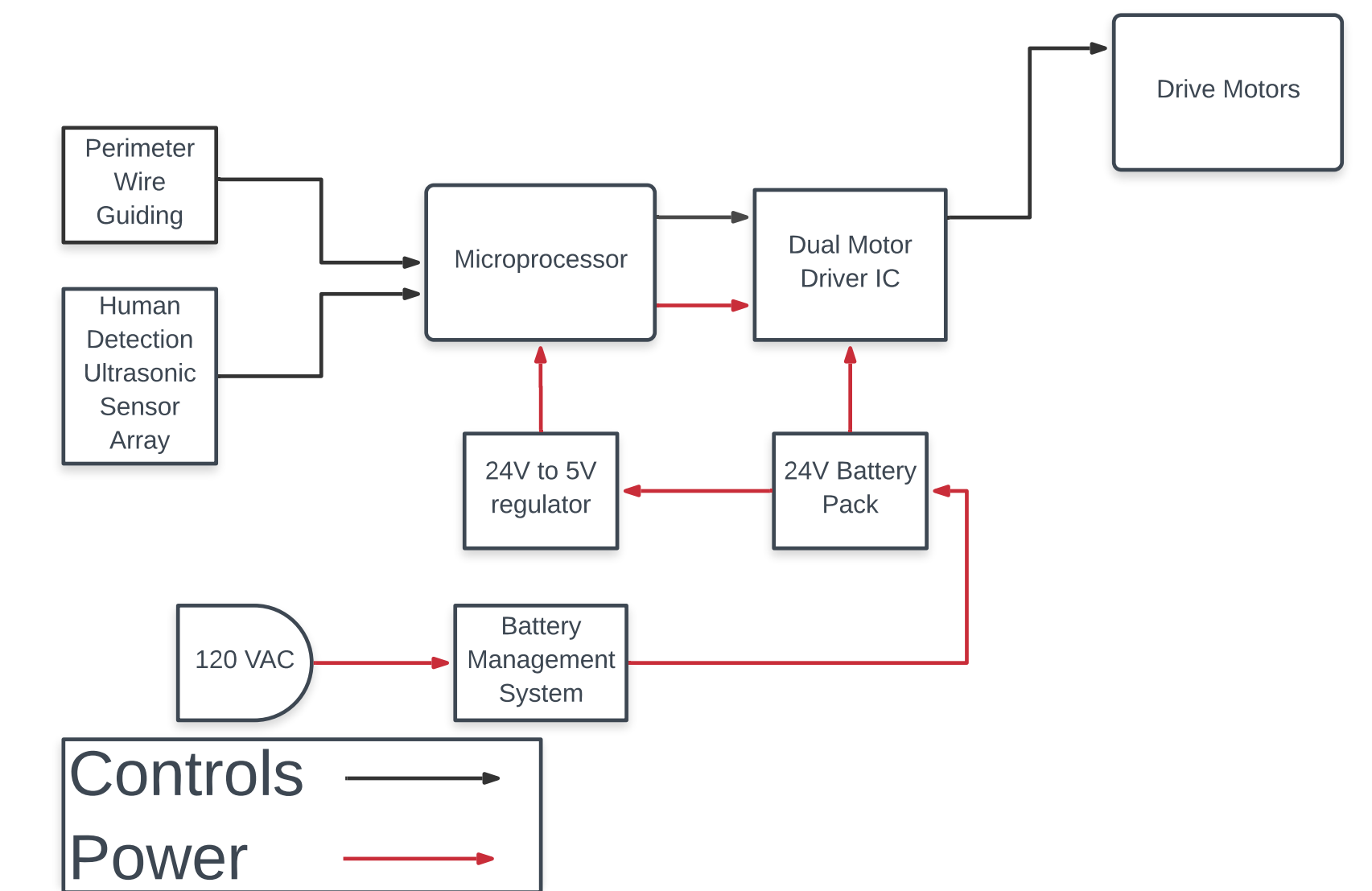
Objective Statement

Design and develop a solution that will pressure wash outdoor surfaces, autonomously with minimal human intervention.

Assembled Prototype



Case Diagram



Manufacturing



1.) Base Frame



2.) Frame Complete

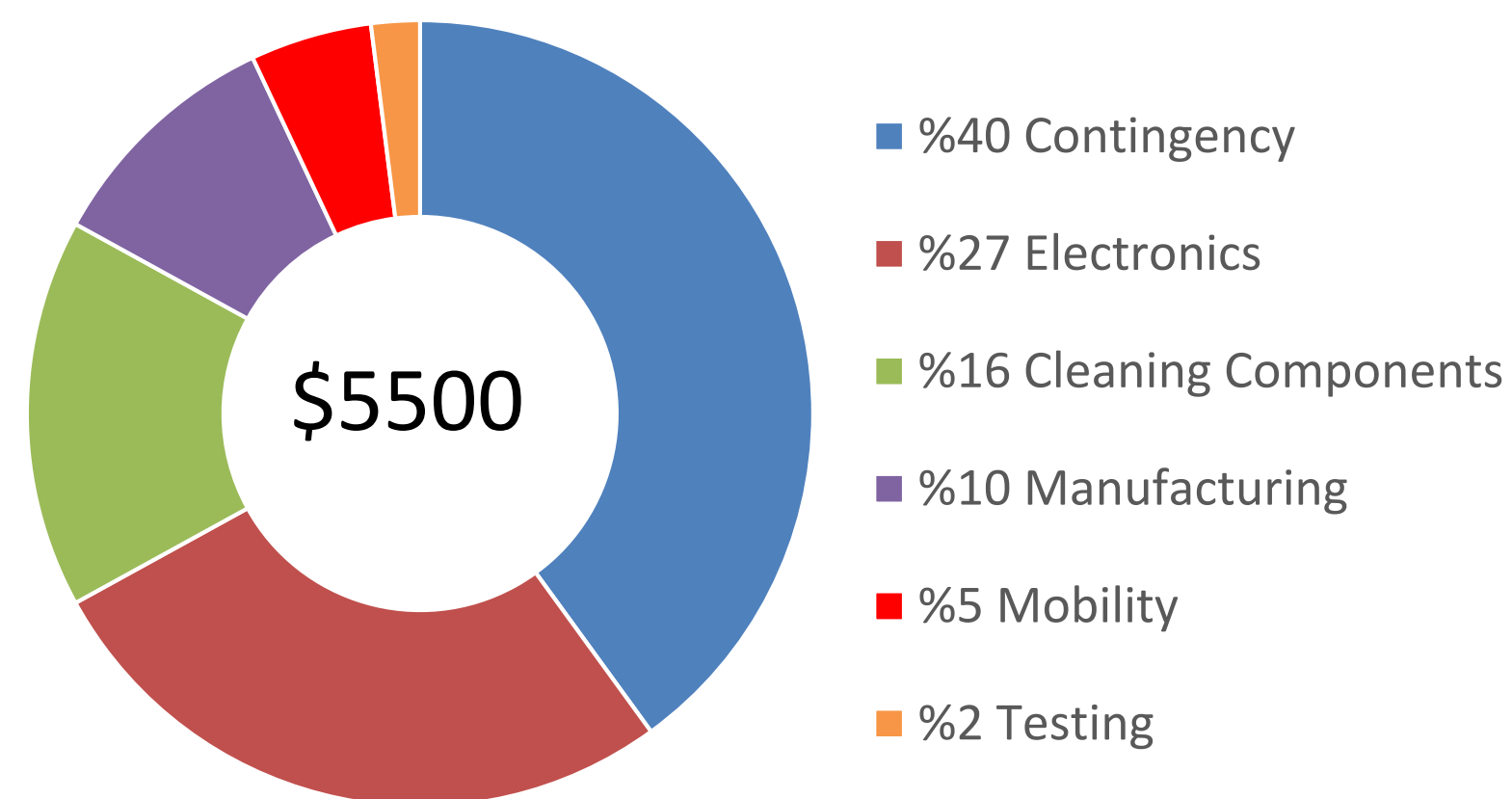


3.) Cleaning Equipment & Motors Added

Materials

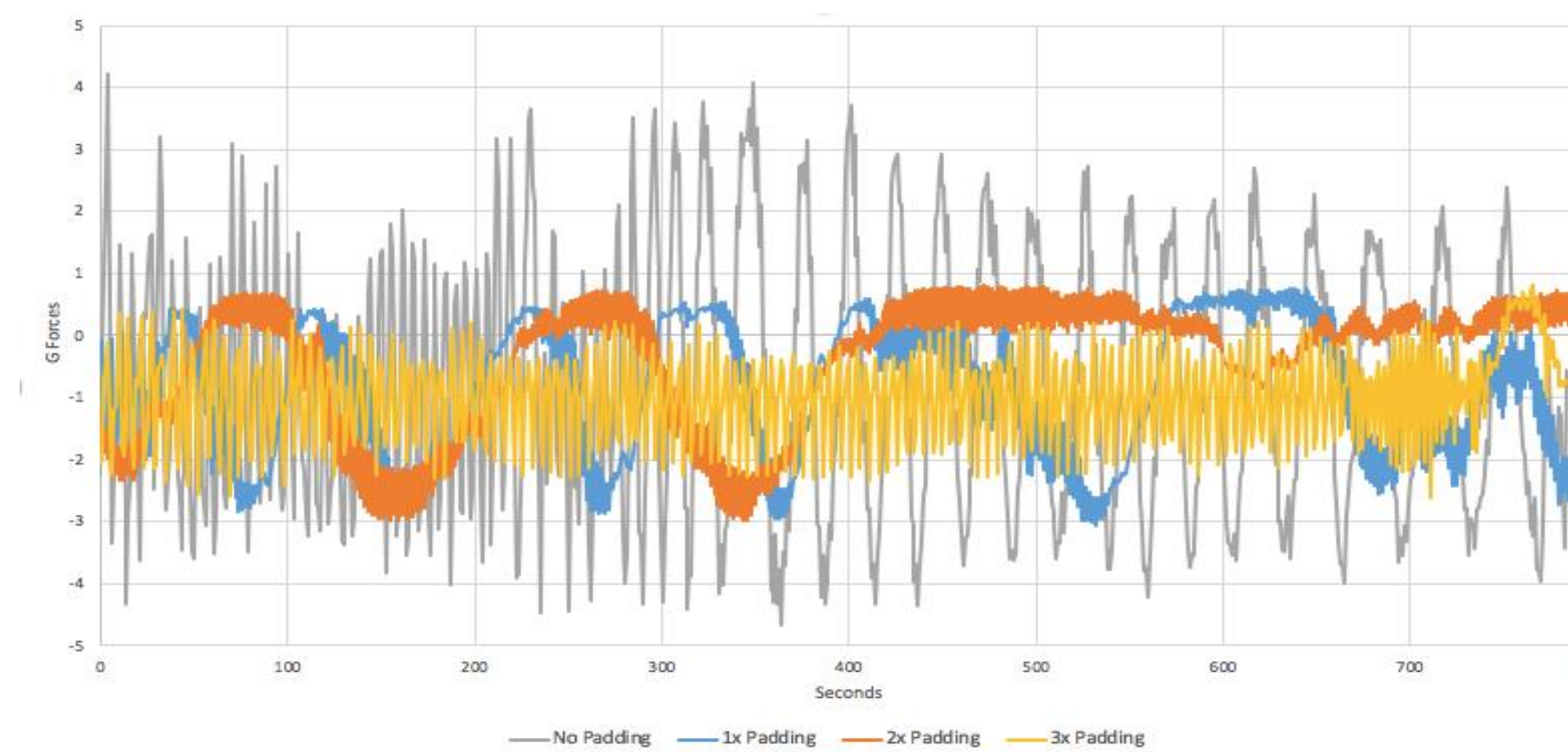
- Aluminum 6061
- UHMW Plastics

Budget



Testing and Validation

- Strength Testing
- Vibration Testing
- Object Avoidance
- Speed Testing



Safety

- Remote kill switch
- Ultrasonic sensors
- Low speed of operation

September

October

November

December

January

February

March

April

• Concept Generation

• Concept Evaluation & Selection

• Solid Modeling & Drawing

• Order Parts

• Manufacture & Assemble

• Testing & Validation

• Testing Validation

• Analysis & Reporting

Sponsor: Mikel Ricks

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