Project Goals

1) Redesign the existing motor controller to switch motor directions faster by replacing the relays of the controller with one high power 400 amp mosfet.
2) Redesign the existing motor controller to be safer by replacing the existing mosfets with one high power 400 amp mosfet.
3) Develop a system to safely test the newly designed motor controller.

Project Deliverables

1) 2 motor controllers that safely handle high amperage spikes, switch motor direction quickly, provide regenerative motor braking and a current limit.
2) Motor Controller Micro Controller Board that accepts RF input from a RF Joystick and provides the motor direction and motor speed control input to the newly designed motor controllers.
3) RF Joystick that communicates motor speed and direction to a Motor Controller Micro Controller Board.
4) RF Kill Switch to cut all power to the motors should anything go wrong during the motor controller testing.

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