



USN Next Generation Bomb Hoist



The Bomb Squad

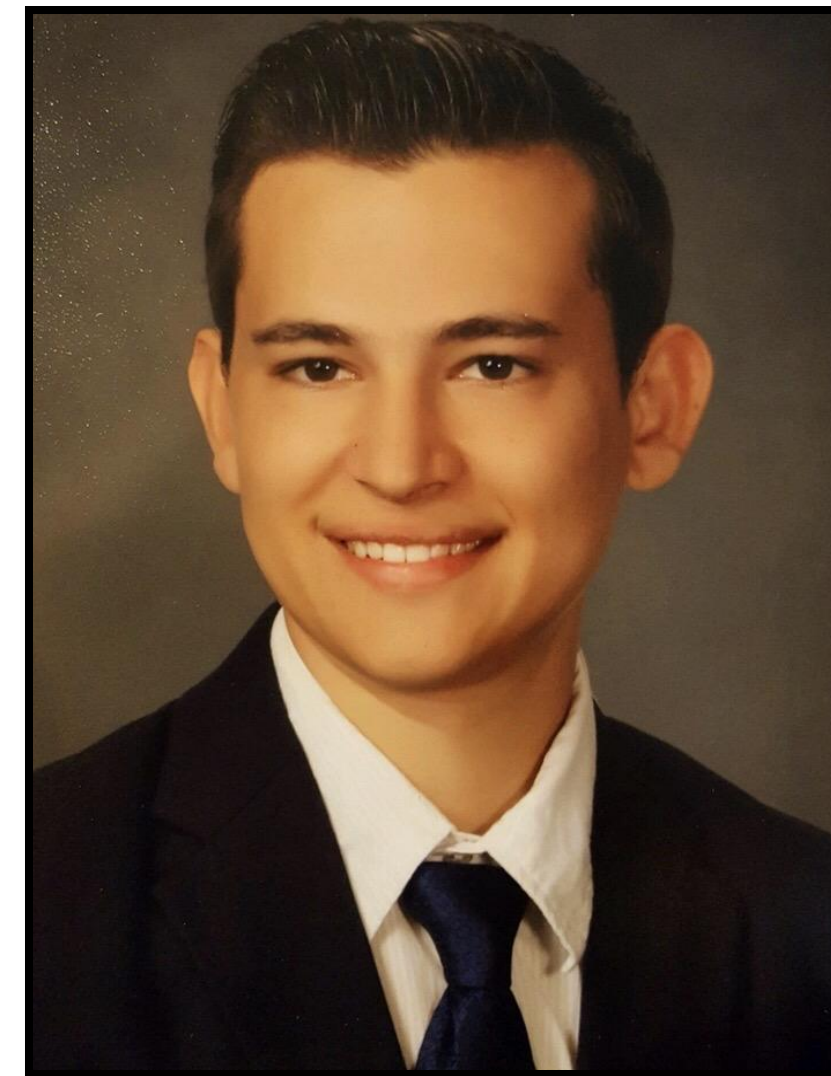


SAN DIEGO STATE UNIVERSITY

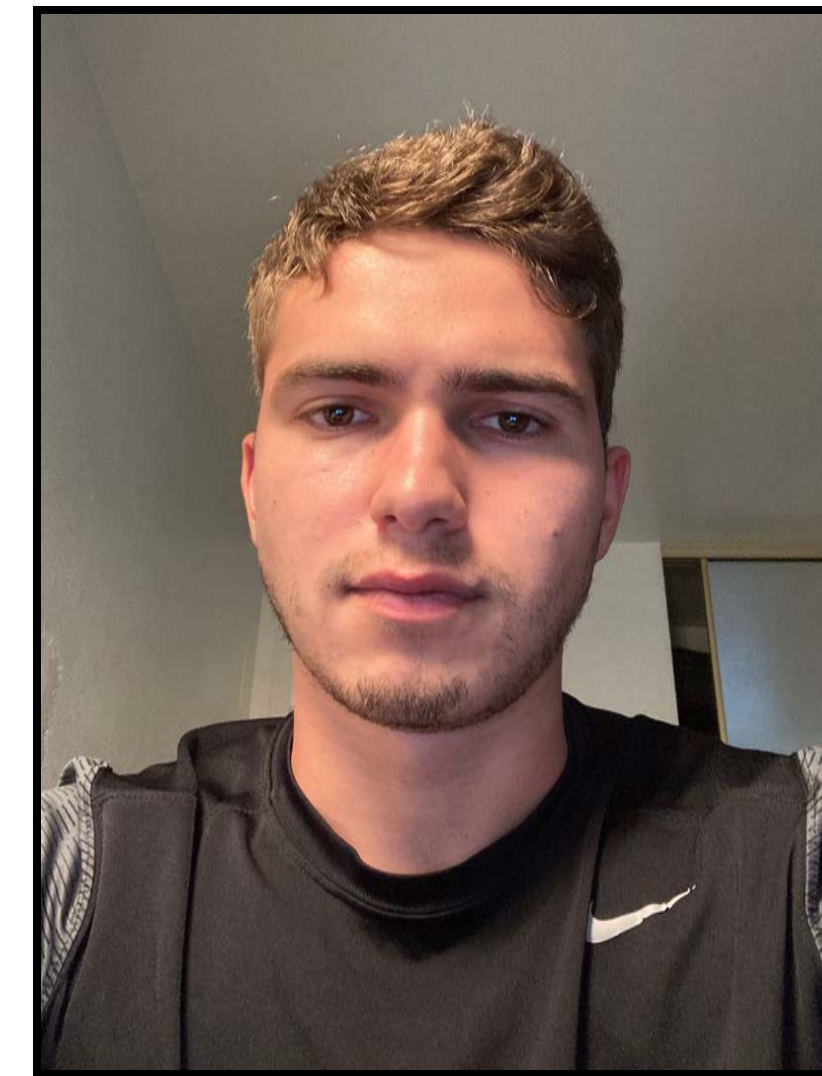
Project Overview

The HLU-288/E Bomb Hoist is the current hoist being used by both the Navy and Marine Corps for loading and downloading ordinance. This hoist is outdated, and not time efficient for lighter loads due to its single gear ratio. The need is to develop a next-generation manually operated bomb hoist that is more time efficient for lighter loads by utilizing multiple gear ratios, while also maintaining lightweight, high durability, and safety requirements. This new hoist must handle 1500 lbs on a single point lift and up to 3000 lbs with a double reeved cable. The next generation hoist must also implement a new clutch that will slip between 1800-2000 lbs of cable tension to safely secure the ordinance to the aircraft .

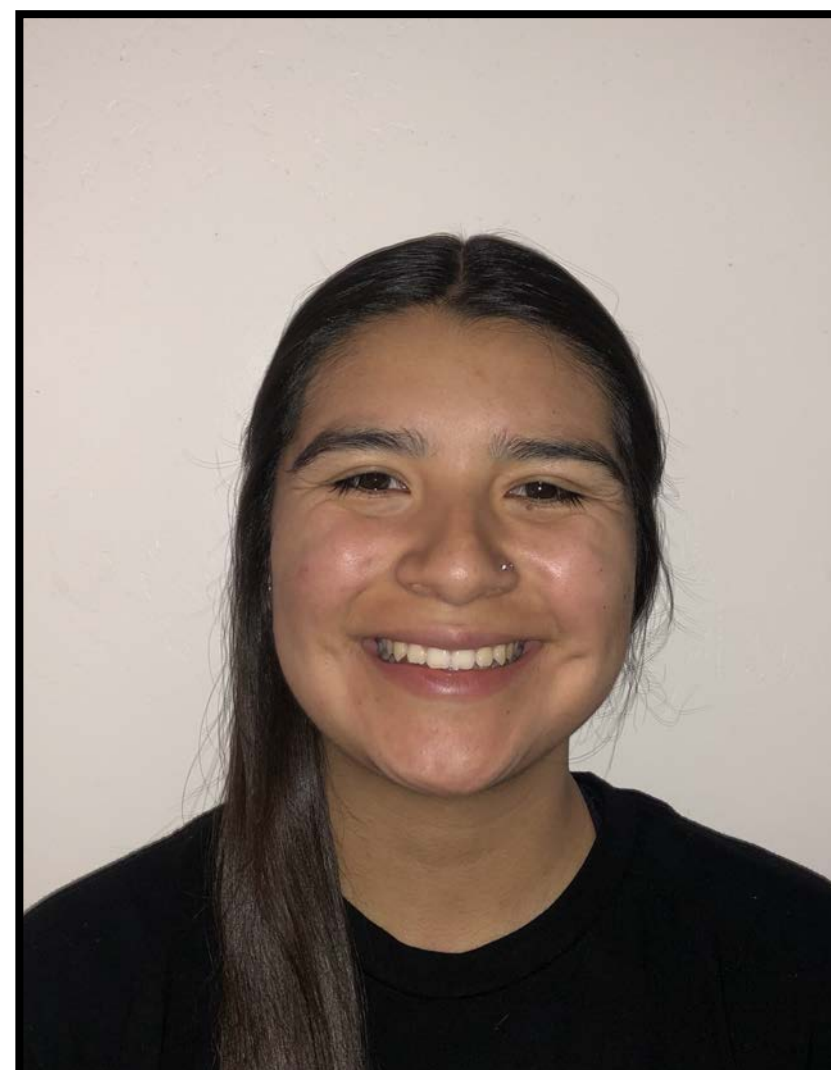
Team Members



Dillon Sansom
Team Leader



Kyle Mahoney

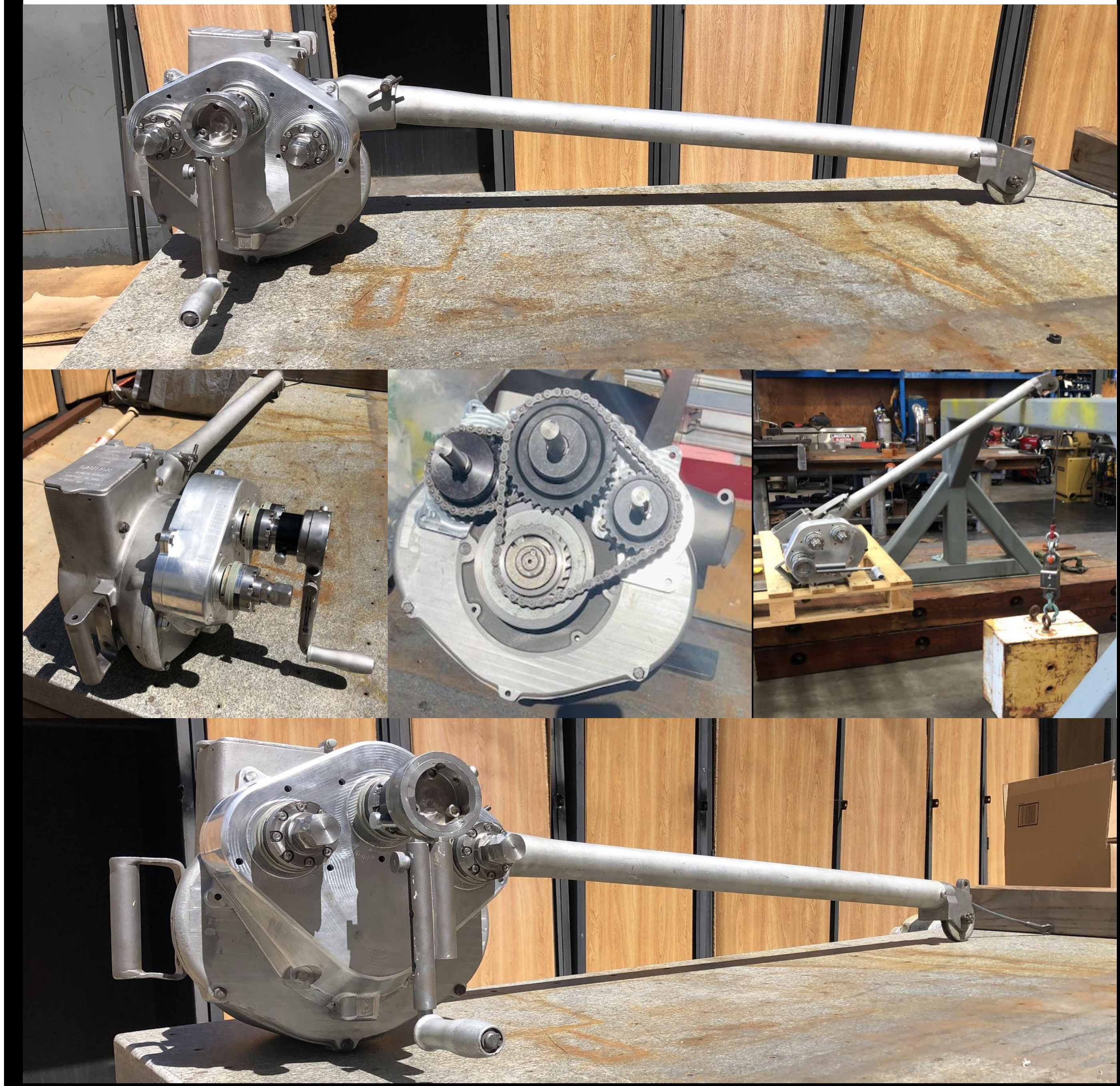


Celine Garcia

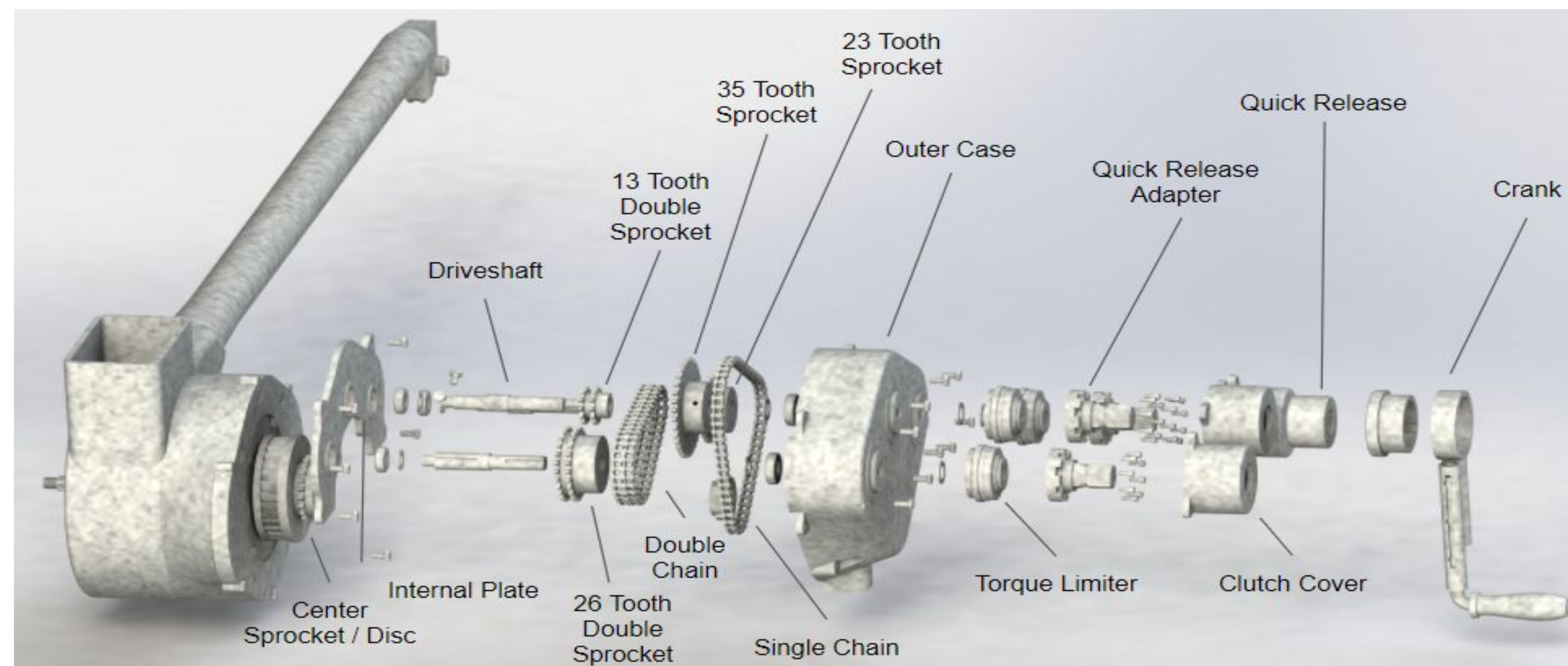


Corey Sizemore

Final Product



Exploded View CAD Model



System Level Diagram

