For our second design project, my design team had to redesign a USB hub for Lockheed-Martin. This hub had to have 7 ports, the ability to stack horizontally and vertically and withstand the vibrations of UAV flight. We applied the design process to help us translate customer needs to a feasible solution.

Our hub (shown above) fulfilled the requirement criteria because it had multiple ports, the ability to stack horizontally and vertically and had vibration loading due to the springs and sponges inside between the ports and the surface of the hub, which absorbed the shocks.