Project Title: Analysis and Assessment of Open Source Standalone Ventilators

Description: As seen with the recent COVID-19 pandemic, during a disaster situation there can be a shortage of ventilators which can compromise the healthcare system's ability to treat patients. With unknowns in the potential to increase production of conventional ventilators, viable, low cost and scalable solutions are necessary. Conventional ventilators are complex machines produced by a few companies around the world making it difficult to reach necessary production levels in a disaster situation. To address this issue some groups have developed open source standalone devices including existing ventilator producers such as Medtronic, who released the design of one of their current ventilator models. The goal of this project would be collect information and provide a full assessment of all available open source standalone ventilators in order to establish a viable solution based on existing designs.