THE POWER OF RECOVERY

In September of 2017, Hurricane Irma and Hurricane Maria struck St. Thomas causing massive devastation throughout the island. Powerful winds and torrential downpours decimated much of the island's infrastructure. Field Ready, a nonprofit organization, was quick to lend a hand. Here we'll chronicle the process they used to create a crucial stop-gap energy solution that put power back in the hands of the people.

THE FIELD READY DESIGN PROCESS

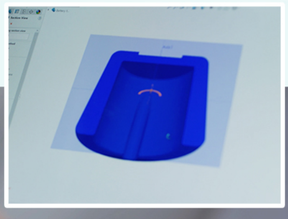
STEP 1: ASSESS

When arriving at a disaster site the first thing the Field Ready team does is assess a situation to determine how they can be of assistance.

Since the hurricanes caused massive devastation to St. Thomas's electrical infrastructure, Field Ready saw an immediate need to create temporary, portable power stations that could be placed throughout the island.

STEP 2: DESIGN

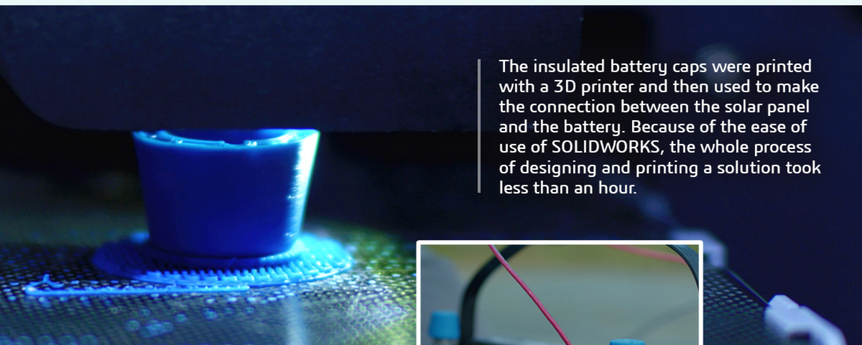
The rapid prototyping and simulation tools within SOLIDWORKS make it the ideal tool for creating designs when time and resources are scarce.



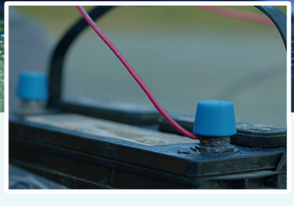
Since the charging stations would be left in the field, it was important that they be safe. Field Ready designed an insulated battery cap that effectively connected the wires of the solar panel to the battery without creating an electrical hazard. First a simple sketch was made, then a prototype was developed and refined within SOLIDWORKS.

STEP 3: MAKE

After the designs have been completed and the model created within SOLIDWORKS, a prototype of the design is made with a 3D printer.



The insulated battery caps were printed with a 3D printer and then used to make the connection between the solar panel and the battery. Because of the ease of use of SOLIDWORKS, the whole process of designing and printing a solution took less than an hour.



When health and safety are on the line, working quickly is absolutely vital. Organizations like Field Ready depend on SOLIDWORKS to develop effective solutions as rapidly and efficiently possible.

To learn more, visit: www.solidworks.com/fieldready