

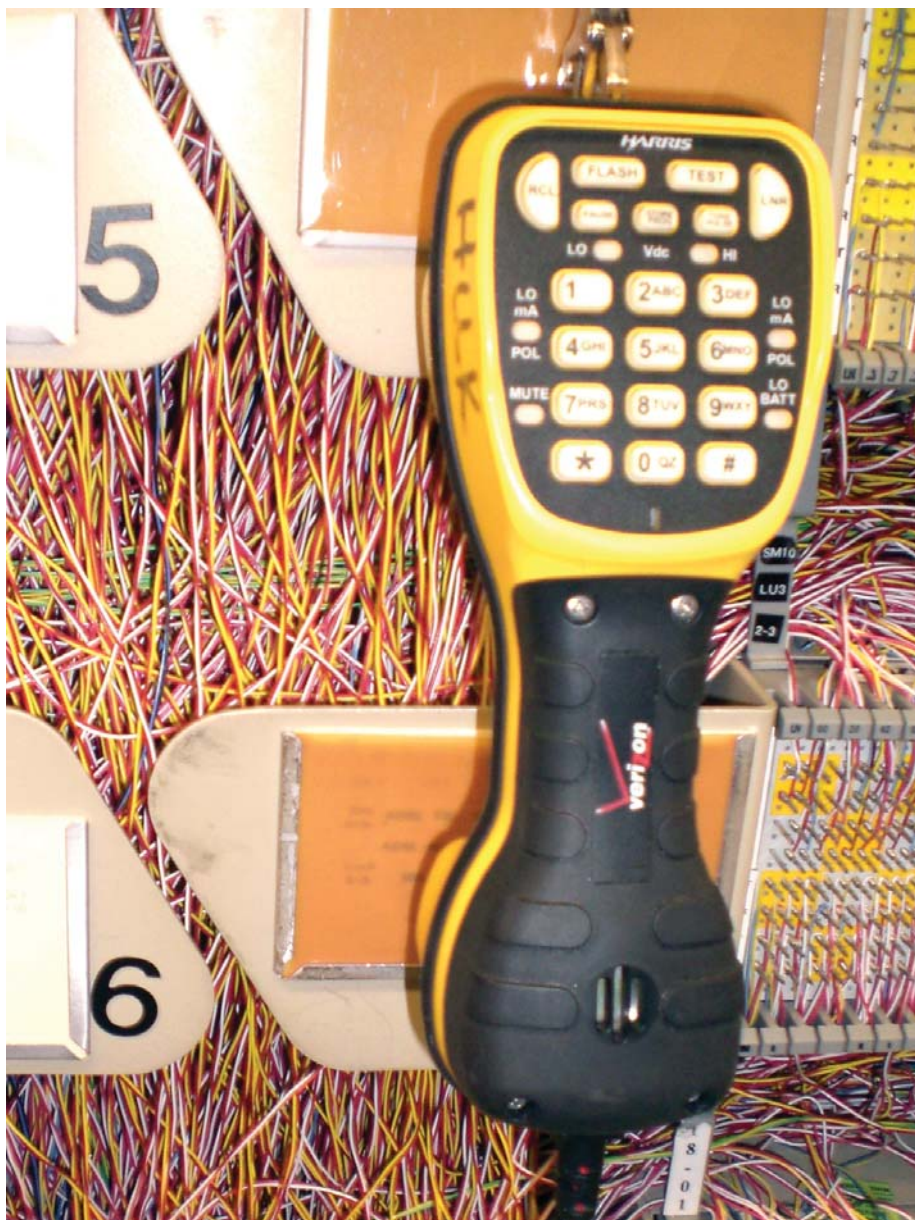
Lineman's Test Set

For this sponsored project Fluke Networks asked us to redesign their lineman's test set. The test set is a tool used to check telecommunications lines and to get information from their dispatcher. My contributions to the final version were form development, user interface, and the physical model. At the end of the project Fluke Networks purchased a design patent for my concept work.

With: John DeLuna and Theara So

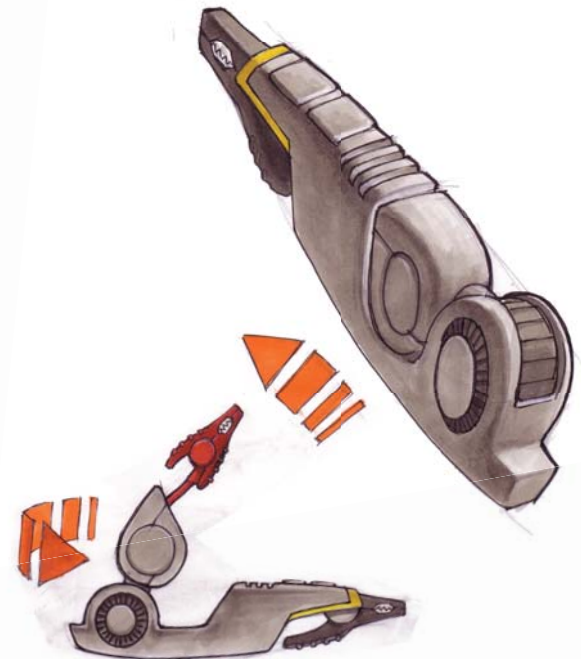
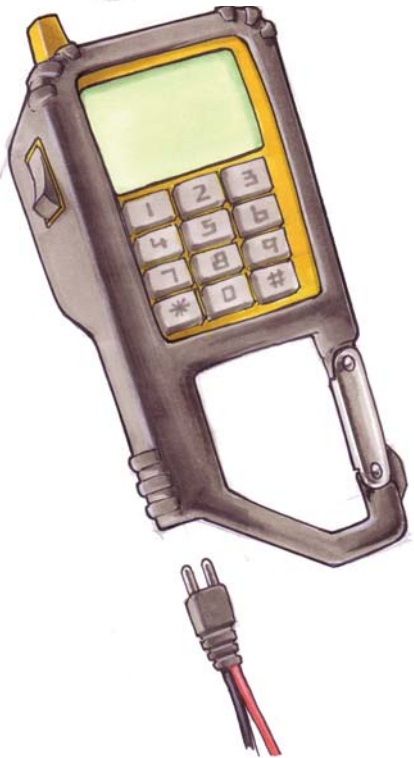
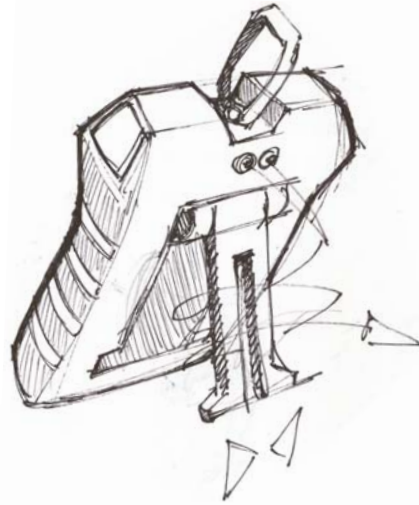


To research this project we shadowed 3 different professionals who used the existing Fluke Networks test set. Our user research indicated that the existing model was too bulky, and the form was based on outdated technology. The features were and complicated to use, and gave no feedback. A lineman's test set is often used in outdoor conditions that are rough on electronics, so the test set has to be well sealed against the elements.



Ideation

We looked at how much we could pare down the test set using current technology. Taking it in the other direction we looked at what other tools we could incorporate, lightening the users load.



Prototype

Once I had the form figured out I created a prototype to get a sense of the volume. It was important to ensure that the button size and location were suitable for single-handed use. It gave us an opportunity to fine tune details as well. We had to decide how the bluetooth headset would dock, how the rubberized grip would be shaped, and how the caribiner would swivel.



CAD Model



Integrated bluetooth headset allows hands-free operation in complex work environments.

Carabiner easily attaches the test set to work surfaces making cord operation easy.



Cords are easily managed by wrapping through the center groove and securing with the carabiner.

