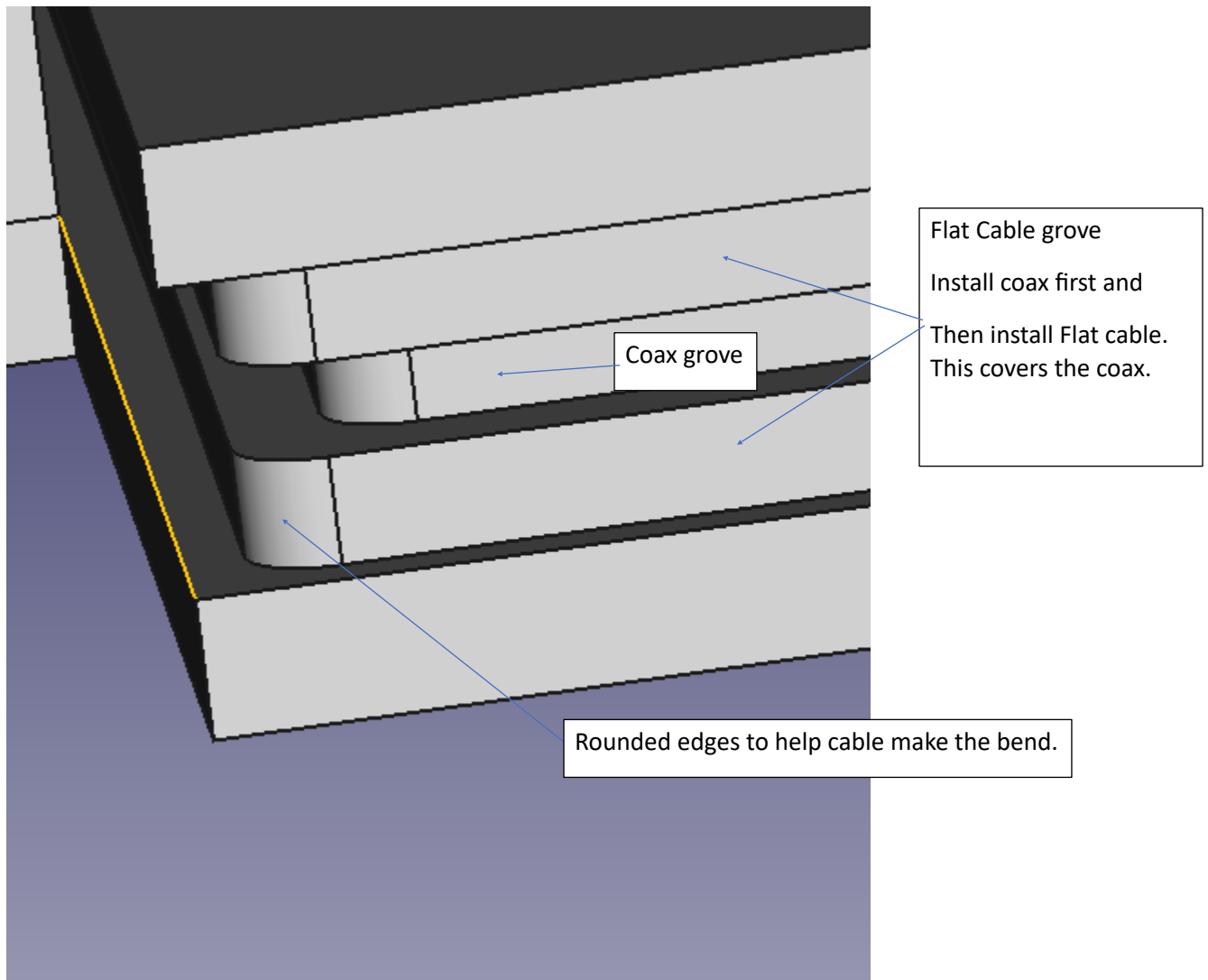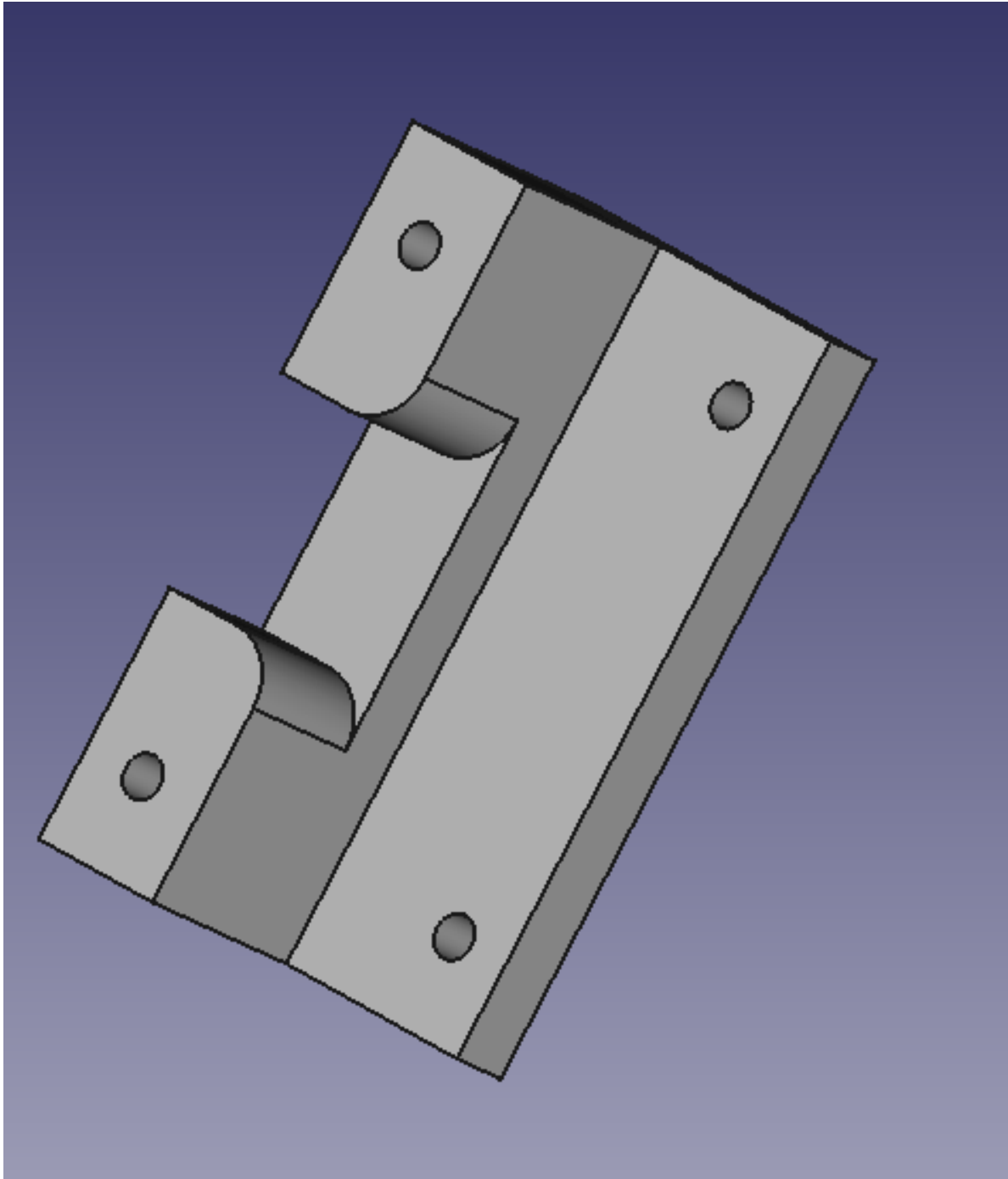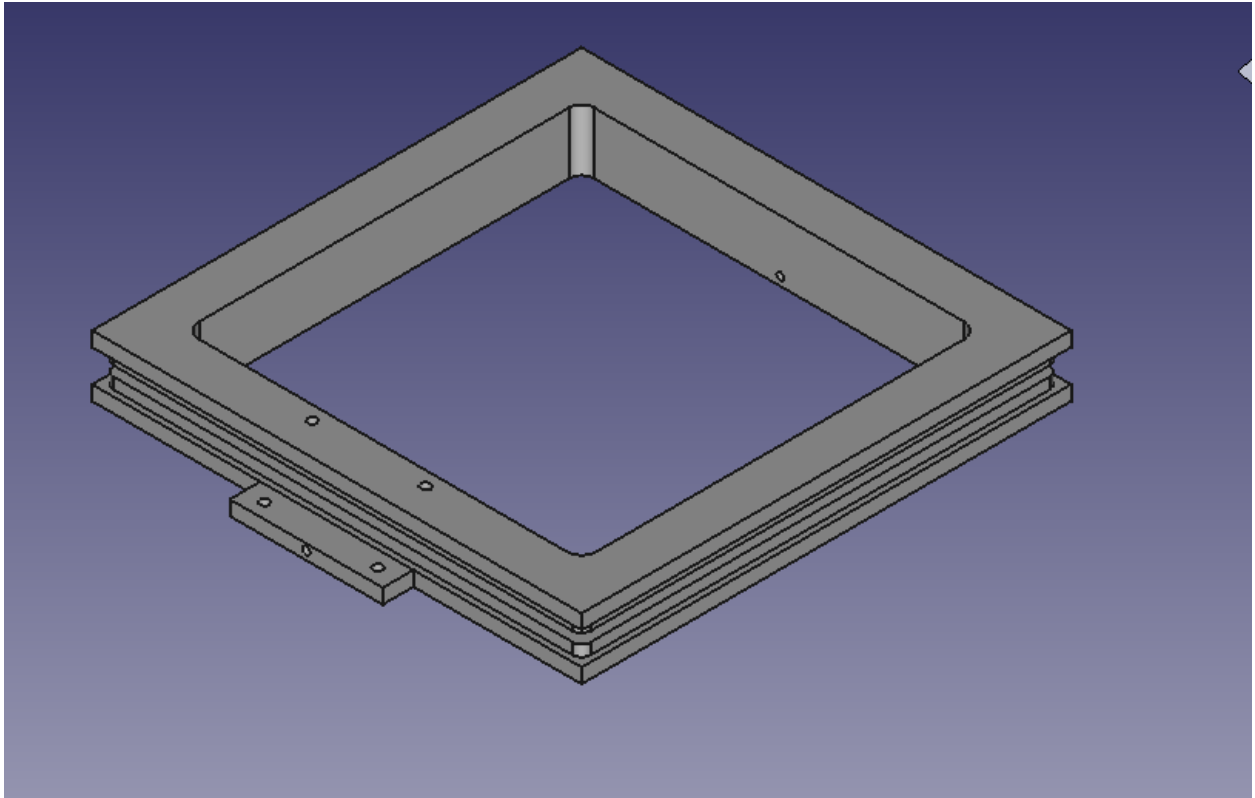A square loop frame.

Grooved channels should allow the flat ribbon cable to lay flat in the channel with the pickup coax in a lower channel below the ribbon cable. No need to try forcing bending a flat cable into a round structure. The coax can be put in place first, then the ribbon cable on top. A much easier installation. The original design with a round loop had issues getting the ribbon cable installed and formed to match the curved surface simultaneously and keeping the coax well aligned in the bundle. It was very challenging to work with.
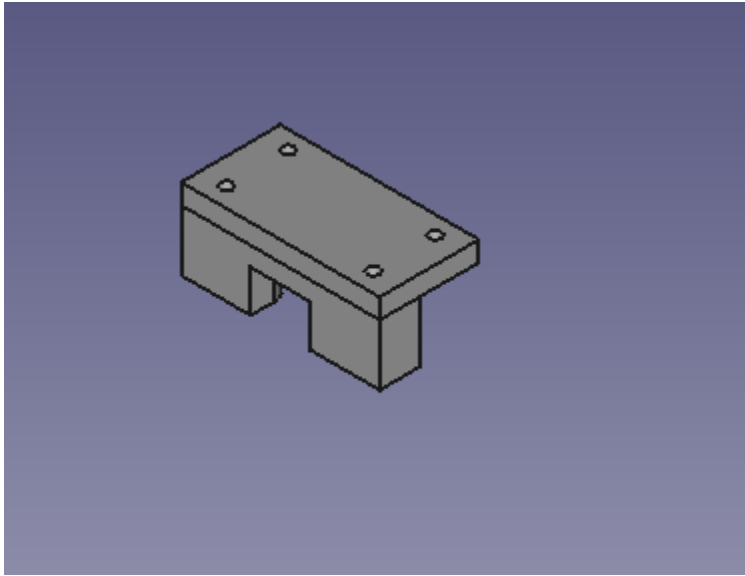

Flat Cable grove

Install coax first and

Then install Flat cable. This covers the coax.

Coax grove

Rounded edges to help cable make the bend.

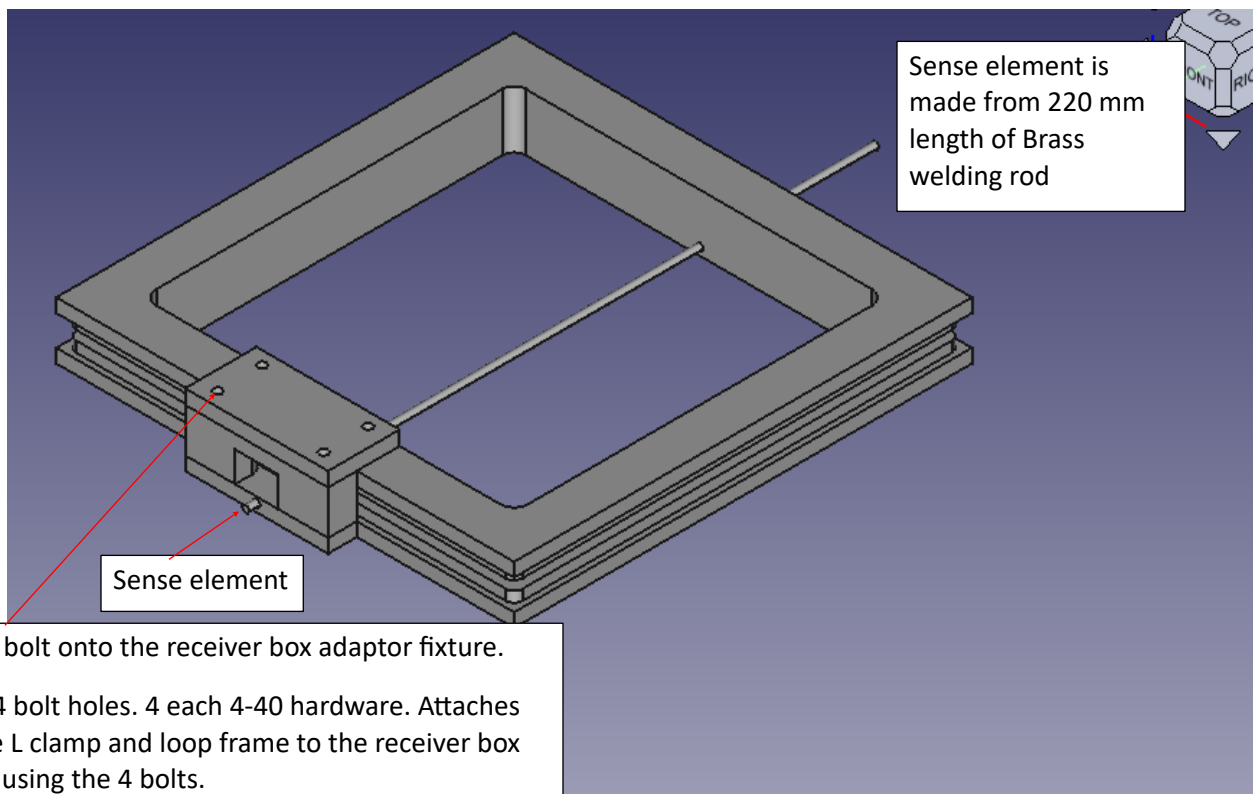Bottom view of L block clamp showing rounded edges to help cable bend.

Loop main frame. No gluing or C clamps are required for the loop frame assembly. Printed as a single assembly. It will have more capture area than Dale's original receiver. It should be closer to the rig expert FoxRex receiver.
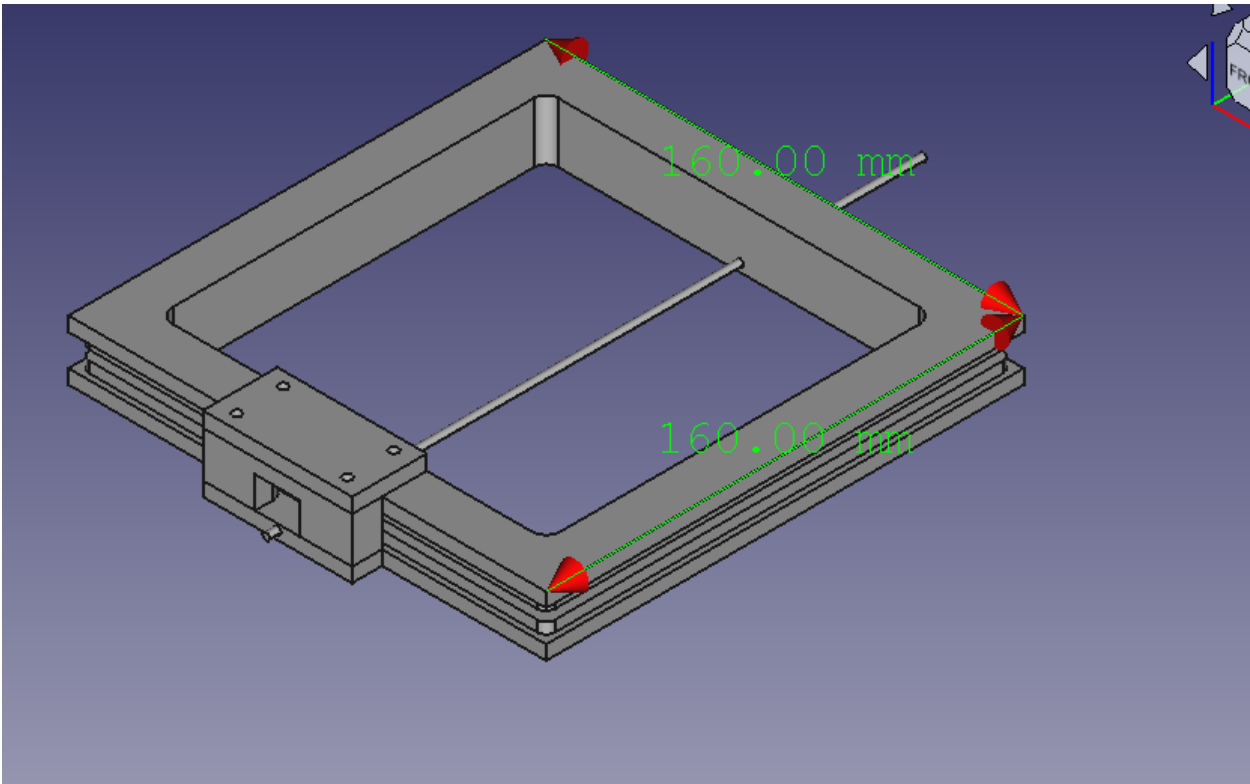
L block clamp.

Complete assembly showing sense antenna installed.

Sense element is made from 220 mm length of Brass welding rod

Sense element

This will bolt onto the receiver box adaptor fixture.

Via the 4 bolt holes. 4 each 4-40 hardware. Attaches both the L clamp and loop frame to the receiver box adaptor using the 4 bolts.

160.00 mm

160.00 mm

After running the Prusa printer slicer software using support material, the estimated print time will be 9H 35 seconds.
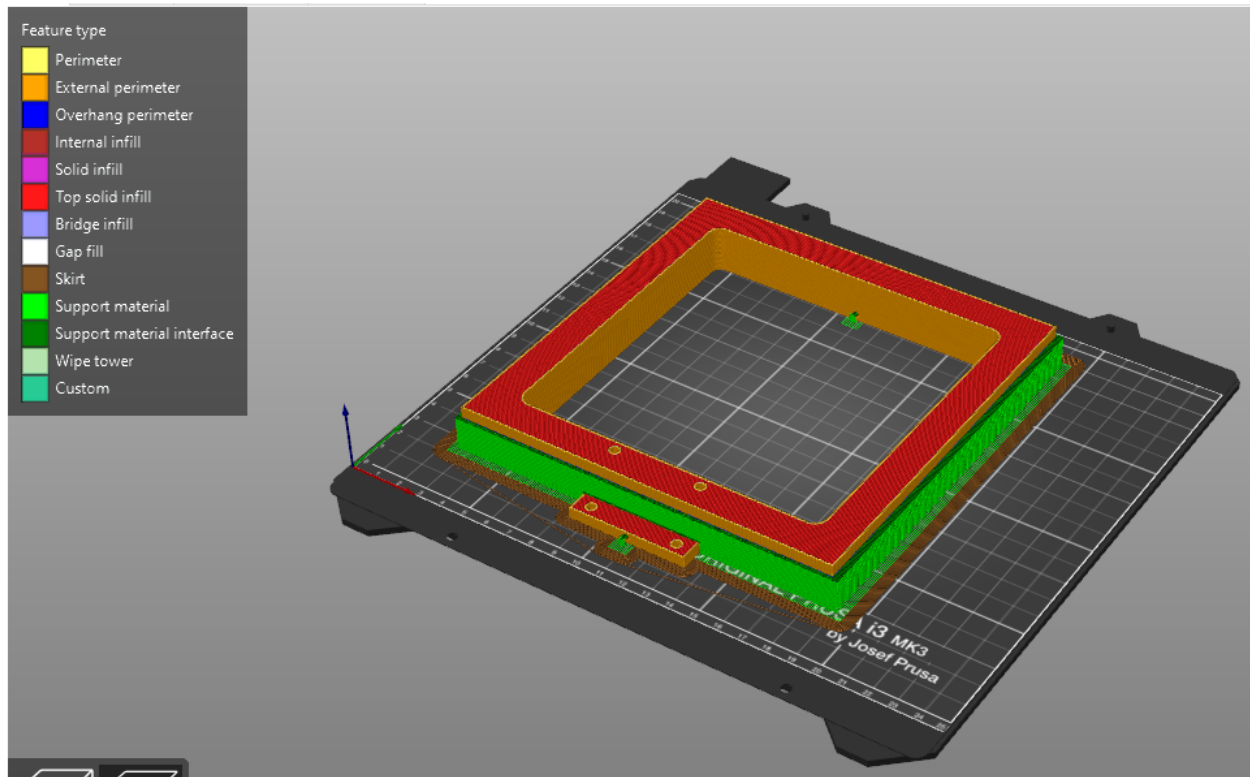
The Gcode files are for use with a Prusa printer.

The MF files are the Prusa printer slicer project files. If using another printer, start with the STL files and then prepare for your printer (slicing and adding printing supports for the loop.

Given the print size, I think it is possible to print a slide-on cover covering the ribbon. Will wait to see how the loop works (electrically and in the field) before designing that.

This design should be printable on most printers. **I have a higher-end unit and print using PTEG material. It's more robust and heat resistant.**

A square loop frame is different from traditional round radio-O loops and is cool looking. It looks like photos from the early days of radio.