

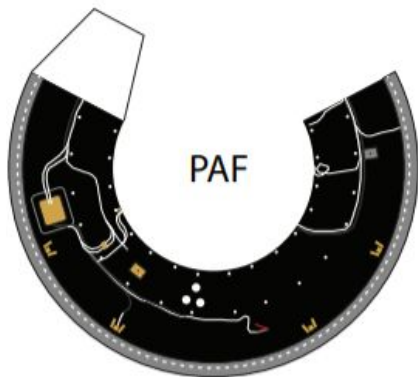
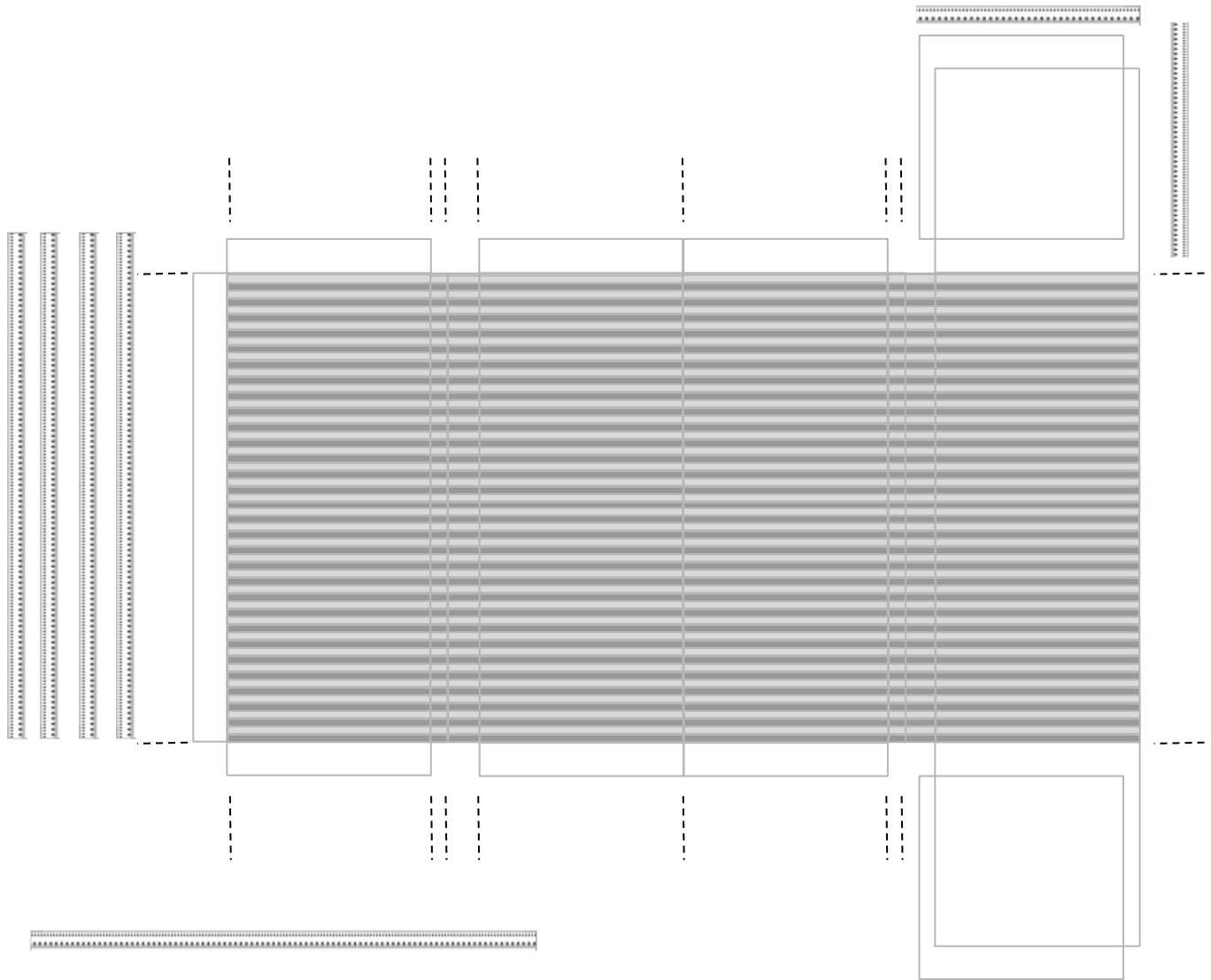


SpaceX Starlink Mission Payload
1:100 Scale
Robert Mays

SpaceX - Starlink Mission Payload

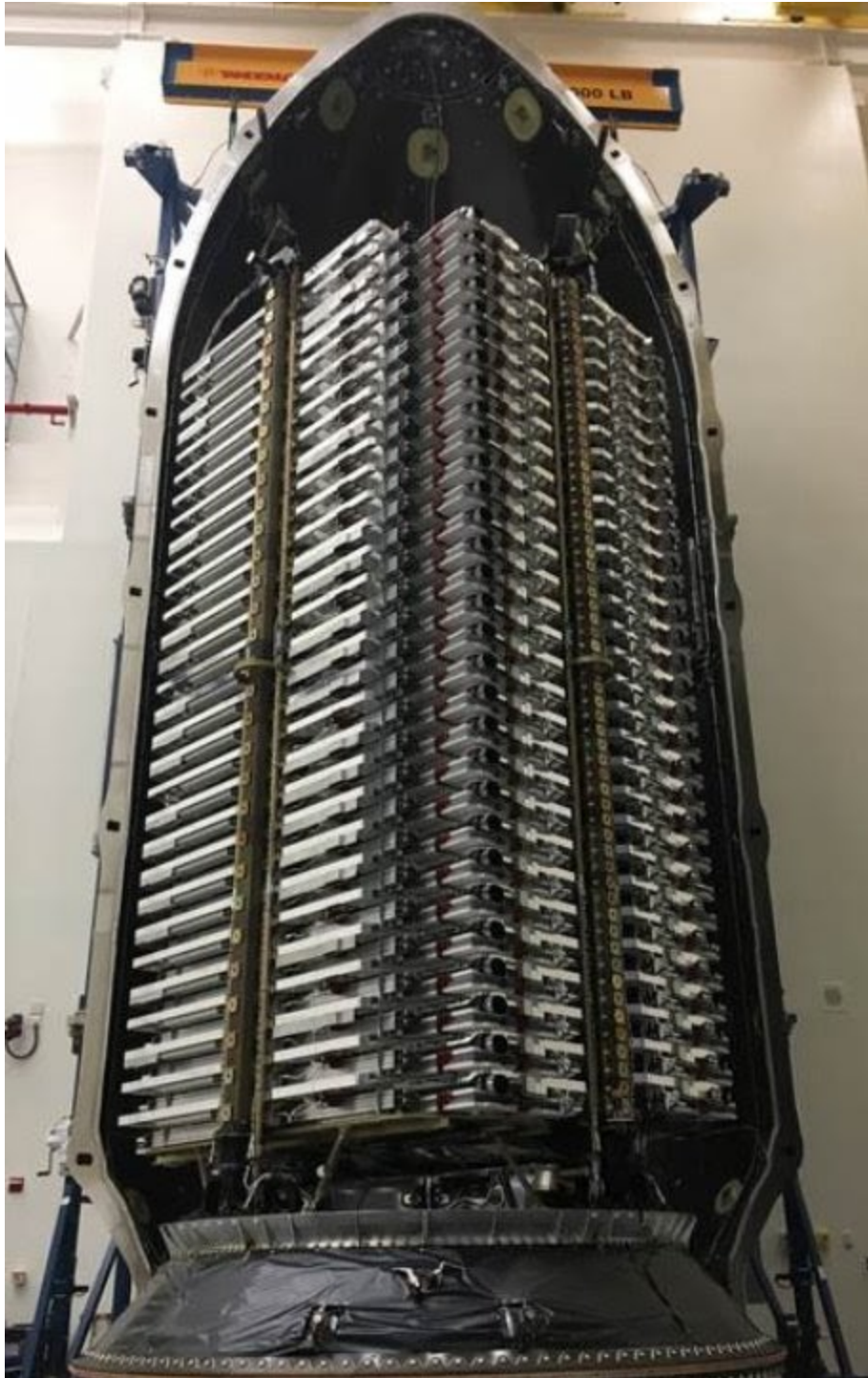
1:100 Scale (approx.)

Print on Cardstock (110 lbs)



I designed my model of the Starlink payload stack just after the May 24, 2019 launch of Starlink 1. I wanted to build a model of the Starlink payload and fairing halves which could be displayed in either a launch or disassembled configuration.

I referred to a widely-circulated photo of the Starlink 1 payload to help me determine payload dimensions in relation to the fairing half shown behind it.



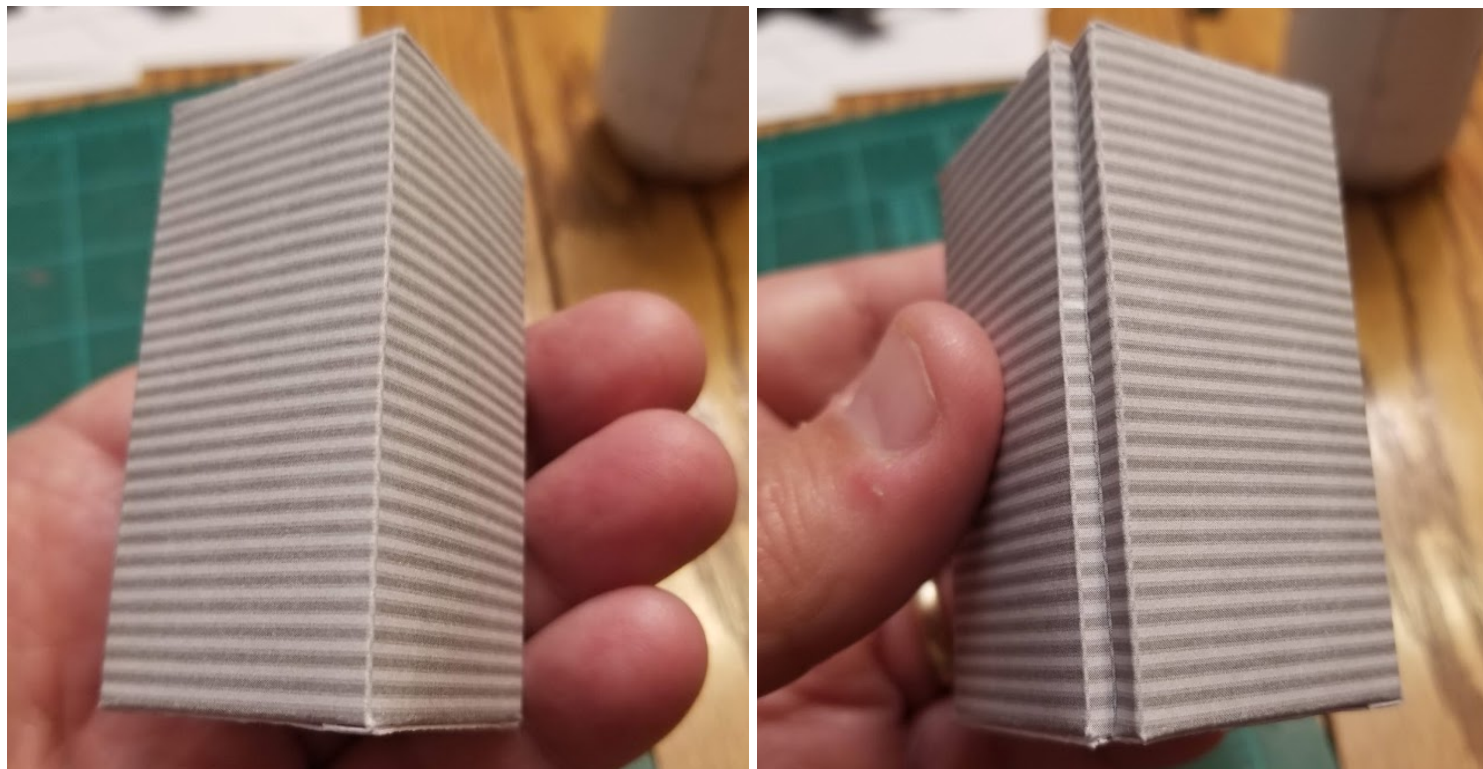
The PAF design is borrowed from AXM's [Falcon Heavy Tesla Roadster payload](#) kit.



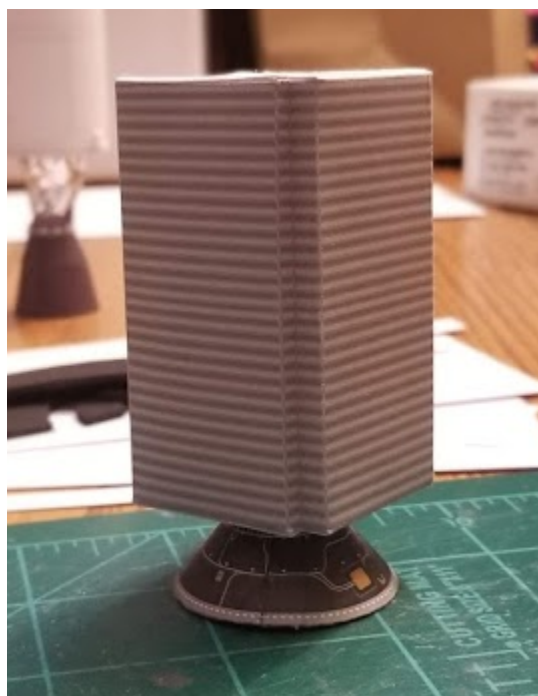
The actual payload depicting the stack of 60 satellites is an overlapping squares box design. The prescribed fold indicators for various vertical edge folds are identified with dotted lines on the parts page. Carefully score and bend these folds to produce the distinct multi-angle payload shape.



Note that vertical cuts need to be made along the various tabs in order to separate them. These cuts allow each tab to be bent correctly to accommodate the various edge angles and also serve as a base to glue the top and bottom flaps of the box. Score the backside of each fold to ensure a clean seam on the folds.



Now, glue the assembled box to the PAF, making sure to center the smaller end of the PAF within the overlapping squares pattern on the bottom of the box.



Finally, glue the vertical bars onto each face of the box, making sure that each bar is centered horizontally on the box face. Note that the bars extend a bit beyond the top of the payload box. Attach the horizontal bars across the top of the box in a cross pattern. Note that this addition to the top is a guess, as I didn't have a reference photo to determine what

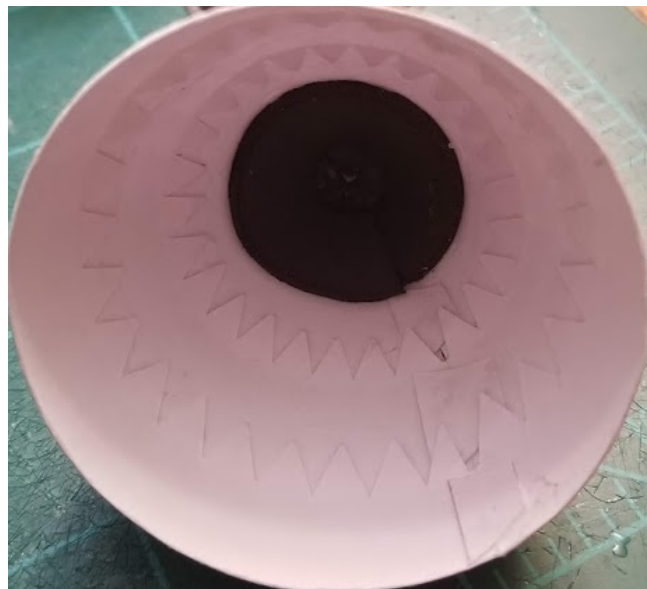
the top of the payload actually looks like. You can use sections from the extra bar provided on the parts page the line the inside of each vertical bar overlap, if desired.



To build the separable fairing halves you the cut and build the fairing sections, but with a few extra steps. After each fairing part was cut from the parts sheet, use the extruded part to create an “inside” backing using black craft foam.



Build the nose cone, main cylindrical section, and bottom reduction flare sections as normal, but before you join them all together, glue the black foam pieces to the inside of each assembled section and then join the sections together.



Let the glue on the assembled fairing thoroughly dry. Then, using your hobby knife with a sharp blade, carefully cut down the fairing halves seam to produce the individual fairing halves.



The halves are held together with magnets. I used these [neodymium magnets](#), split in half, to join the halves. The magnets were placed at the latch locations depicted along the fairing seam.



I hope that you enjoy implementing this customization of AXM's design as much as I did!