

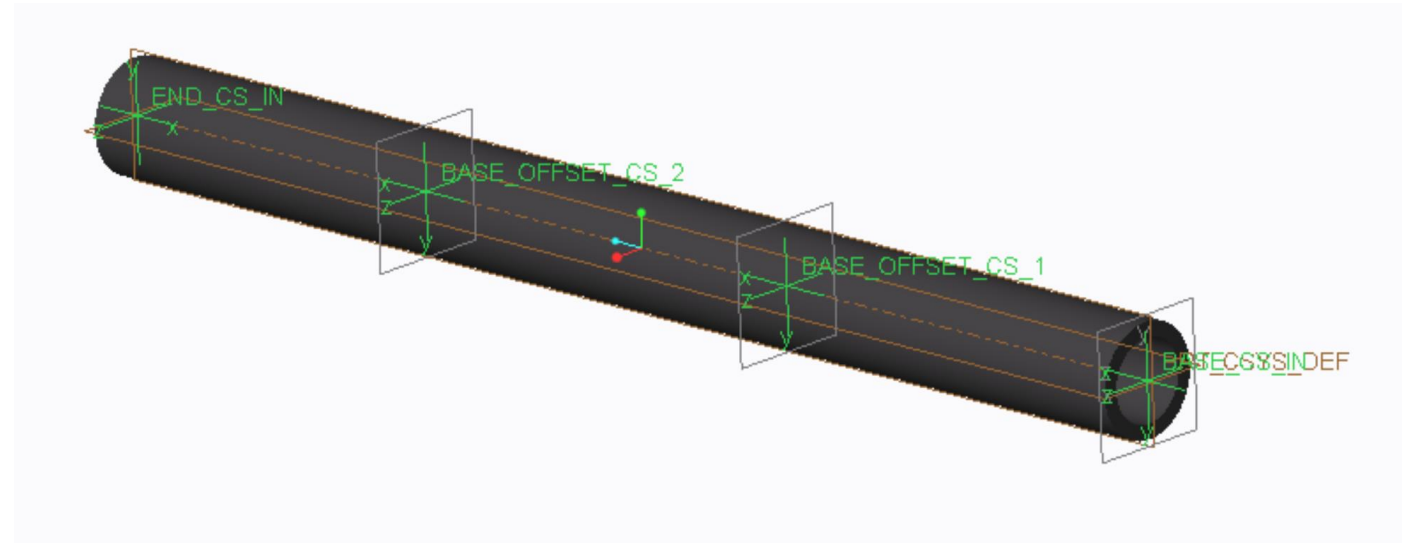
New Components and Seed Designs

Brian Swenson



- Three tube components
- Two offset CS for mid-tube mounting
 - Offset1, Offset2
- BASE_ROT
 - Rotates from the base side
- END_ROT
 - Rotates from the end side
- Offset CS do not rotate independently, can be done on the connecting components

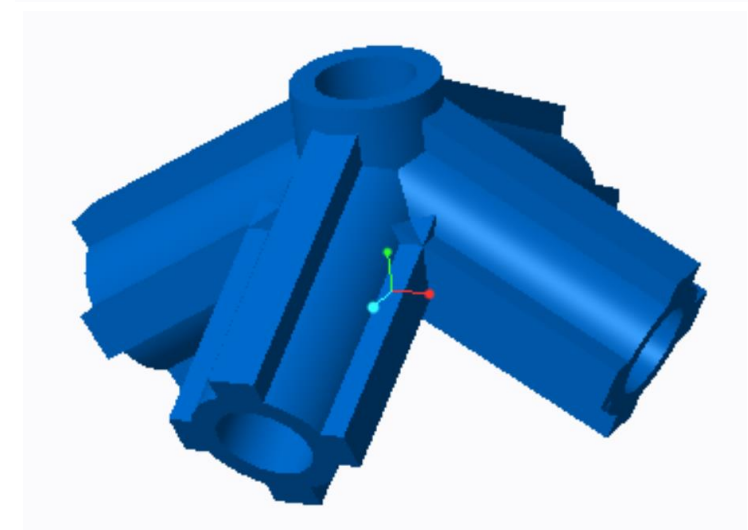
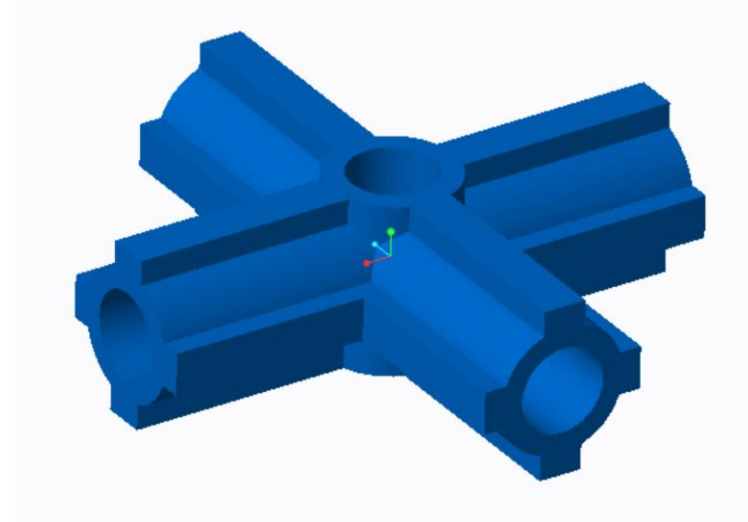
Name	Outer Diameter	Inner Diameter
0281OD_para_tube	7.1374 mm	4.699 mm
0394OD_para_tube	10.0076 mm	7.3152 mm
05OD_para_tube	12.7 mm	10.16 mm



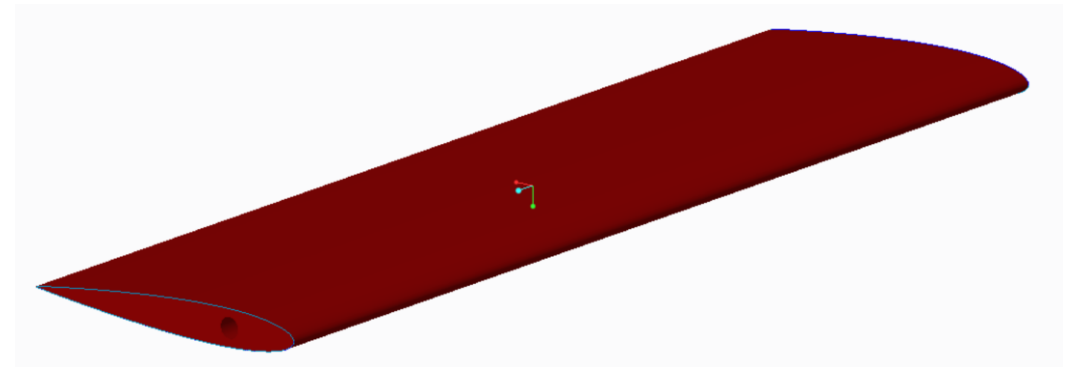
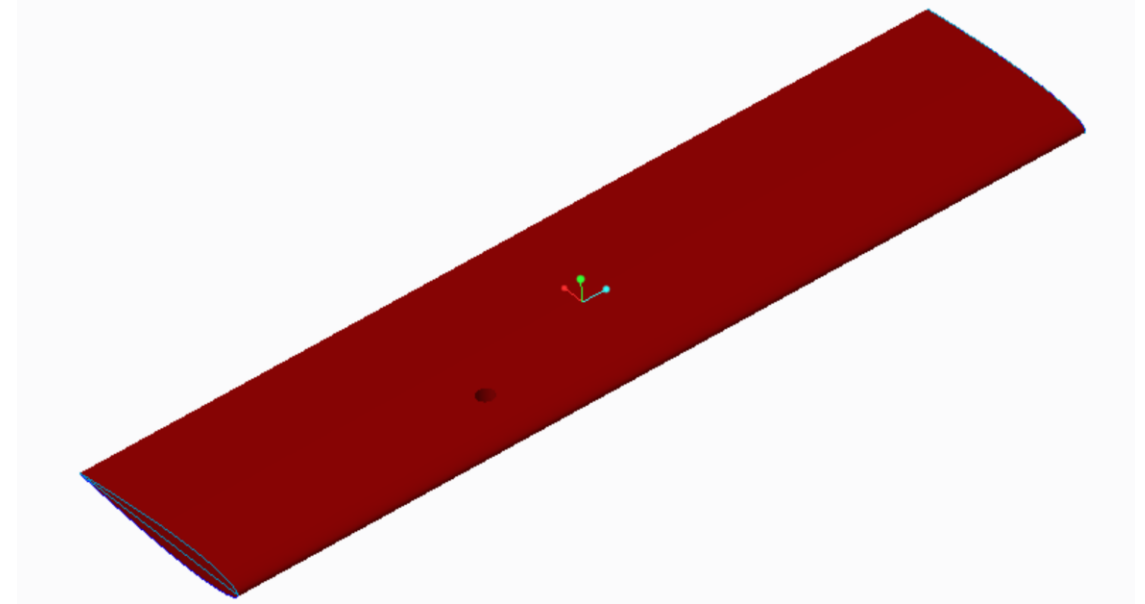
3D Connectors



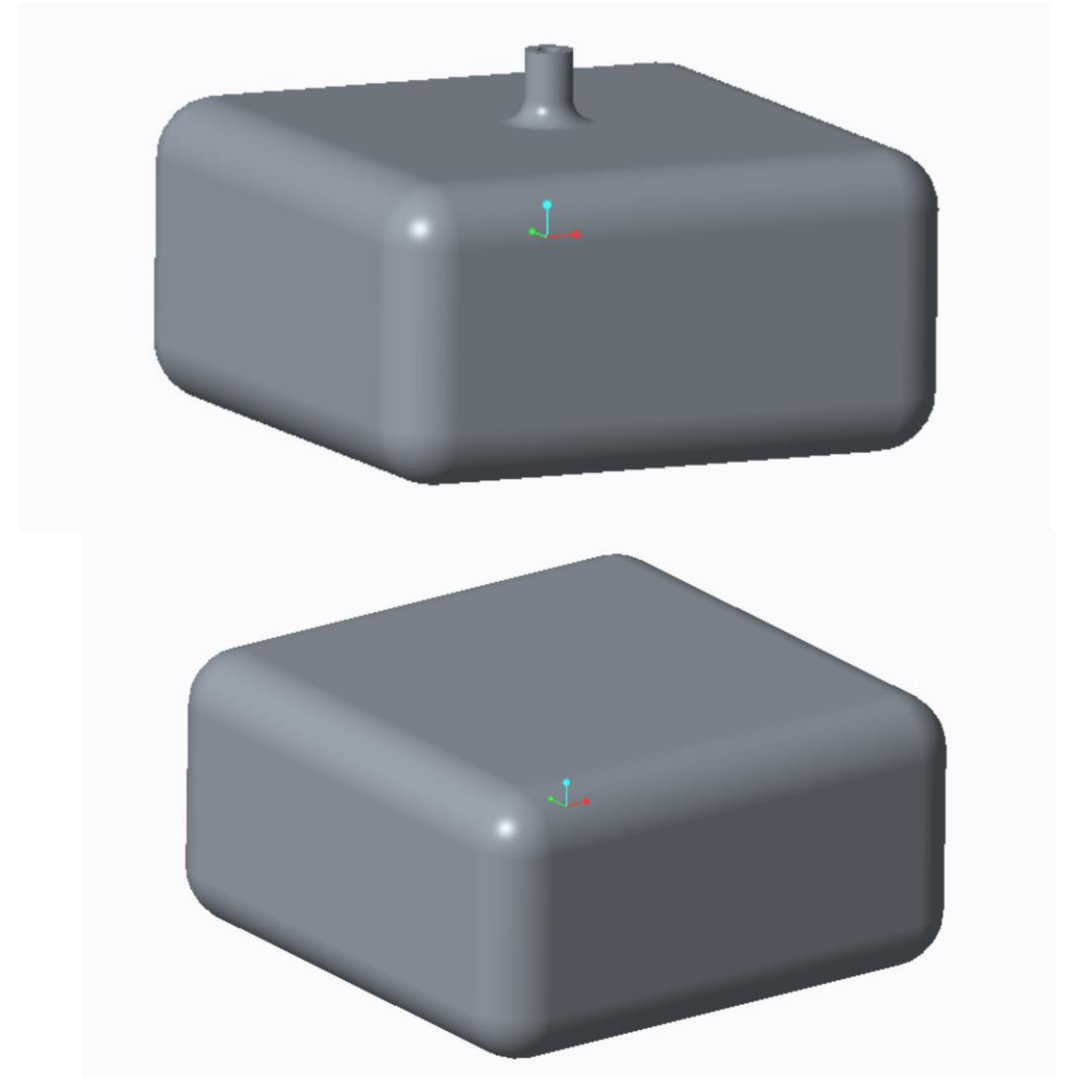
- Five parametric hubs (2-6 ports)
- They scale to the tube used
 - DIAMETER – Use the OD value from the tubes
 - The component names all say 0394, this was kept in to not throw off existing designs
- ANGHORZCONN
 - Same as before
- ANGVERTCONN
 - Allows for novel designs



- Wing_vert_hole
 - Same connection as first hackathon
- Wing_horz_hole
 - Mounting hole through the span of the wing
- LOAD
 - This is the anticipated load in flight, will adjust the weight of the wing
 - If you exceed this value during flight testing, it is assumed that the wing has broken, and the trim level would fail



- CargoCase
 - Connects to hubs
- Cargo
 - Connects to CargoCase
 - WEIGHT – adjust this to reflect a loaded flight



- The middle section is an extruded ellipse
 - HORZ_DIAMETER
 - VERT_DIAMETER
 - FUSE_CYL_LENGTH
- Ends are top to bottom revolves
- Eight mounting points on floor
 - DISP_WIDTH
 - Positive displacement moves positive Y direction
 - DISP_LENGTH
 - Positive displacement moves positive X direction

