



CANOPY
AEROSPACE

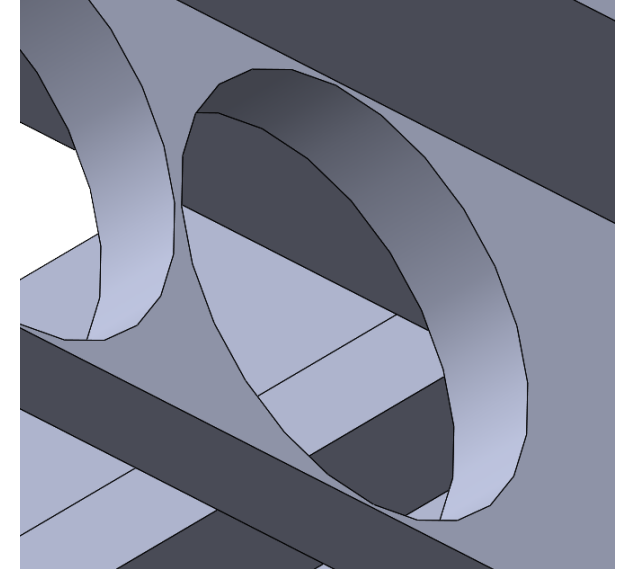
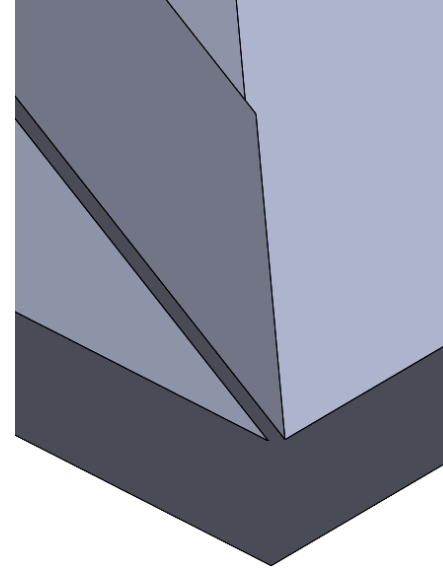
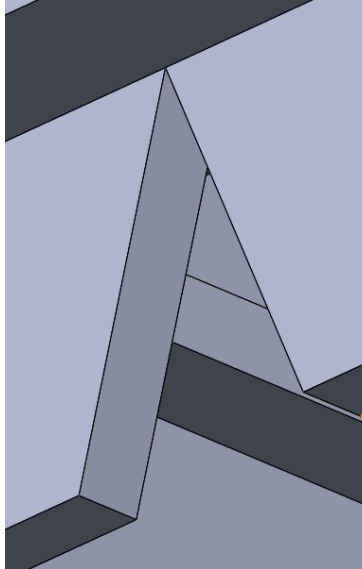
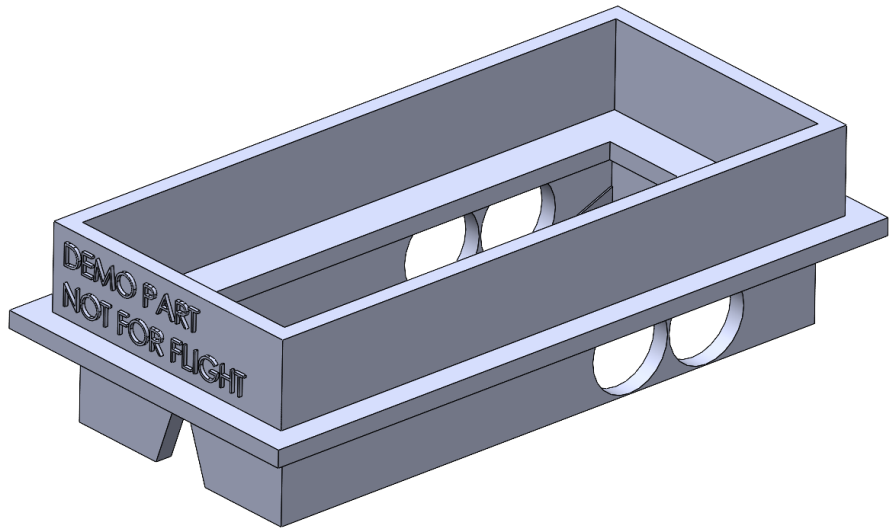
AM Ceramics Feature Recognition Demo

Charlie Fuller
7/28/23



C00001 – bad candidate for printing/redesign required

- Wall thicknesses $>10\text{mm}$
- Exceeds 350mm in one dimension
- Horizontal holes $>10\text{mm}$ with very thin walls near regions with cross sectional area change
- Unsupported overhangs around part
- No fillets, lots of sharp corners
- Not a 'complex' part, could be manufactured with something other than 3D printing



C00002 – good candidate for printing

- Meets wall thickness requirements ($0.4\text{mm} < t < 4\text{mm}$)
- Meets part volume requirements ($XY < 300\text{mm}$, $Z < 100\text{mm}$)
- Fillets on all re-entrant angles
- No sharp overhang angles requiring supports
- Sufficiently 'complex' to warrant printing

