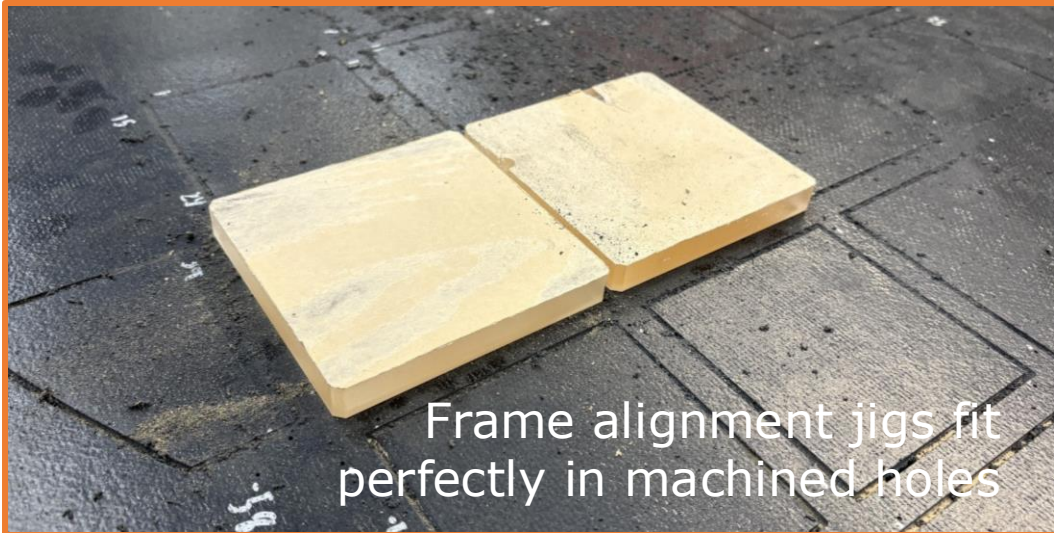
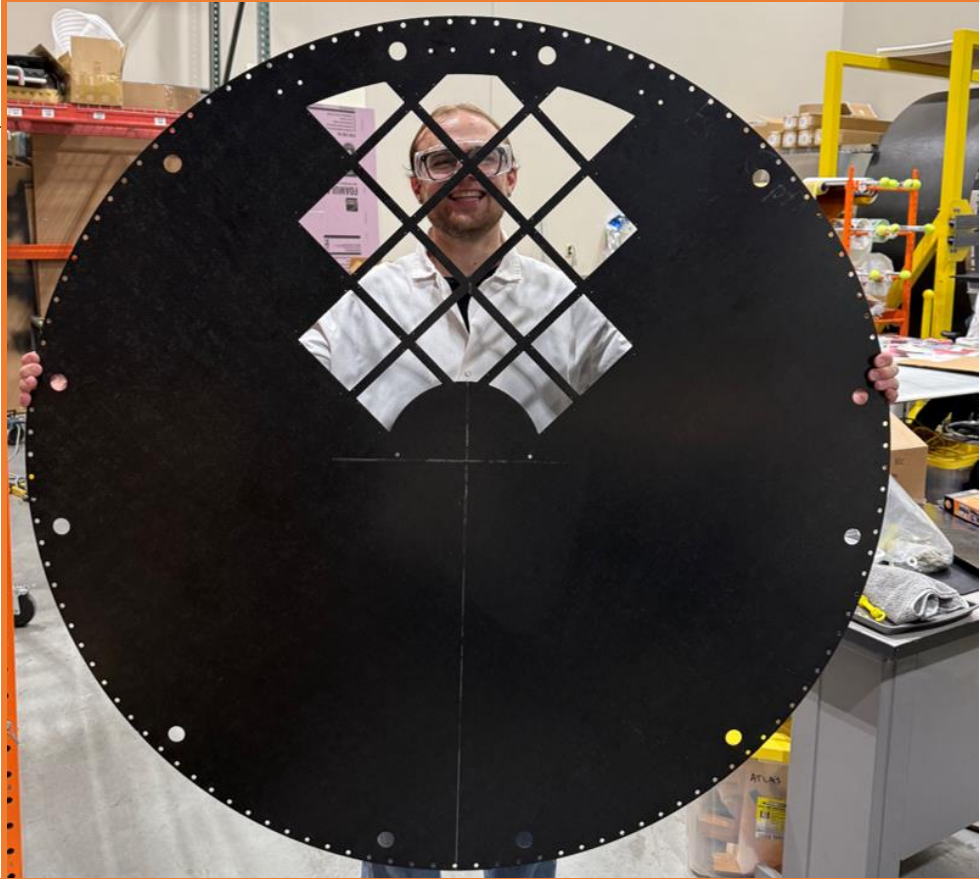
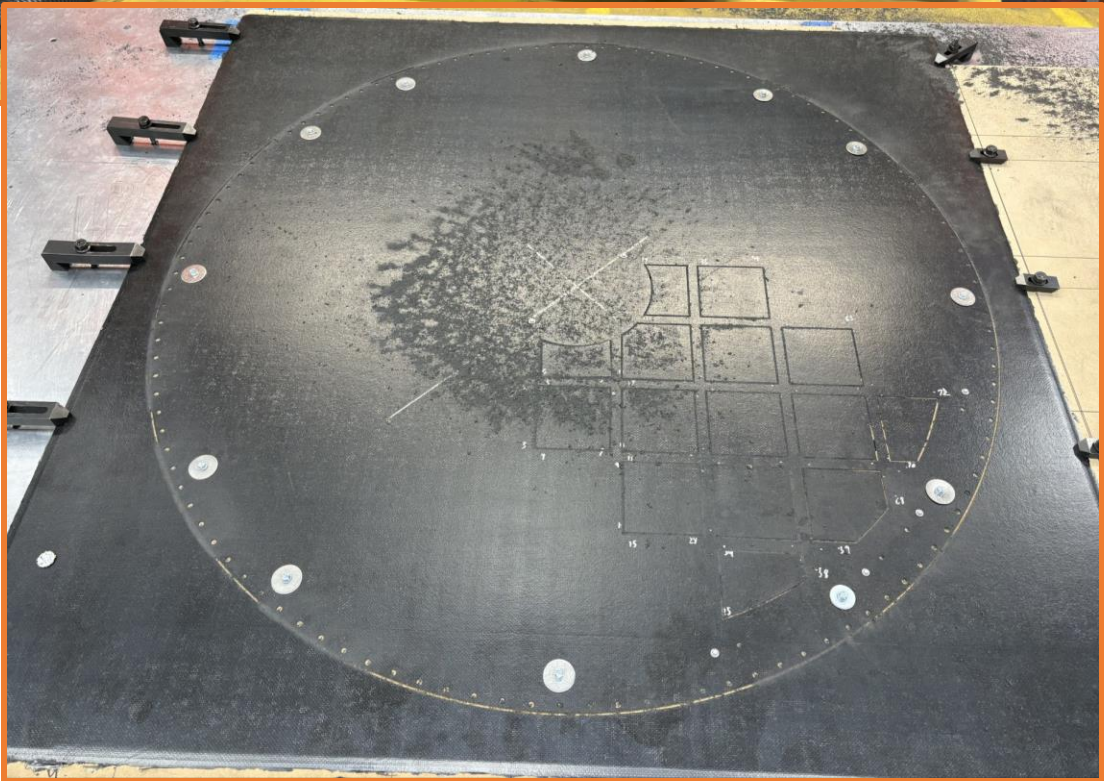


pfRICH sensor plate machining

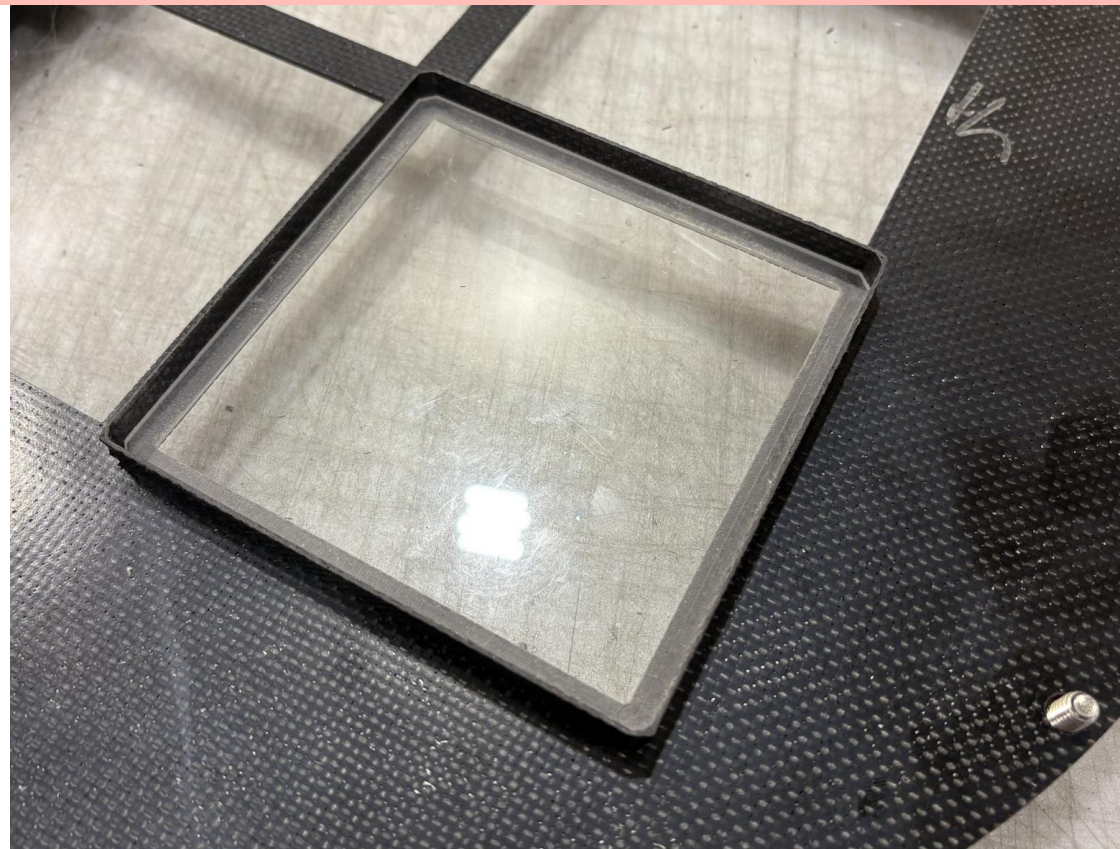
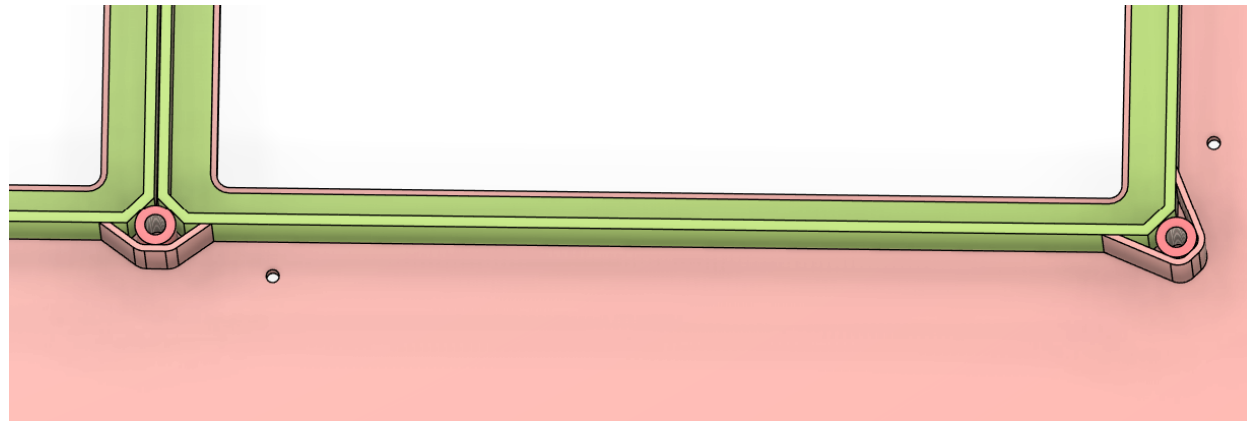
Simon Snydersmith, Cadance Ormsby, Sushrut Karmarkar, Andreas Jung

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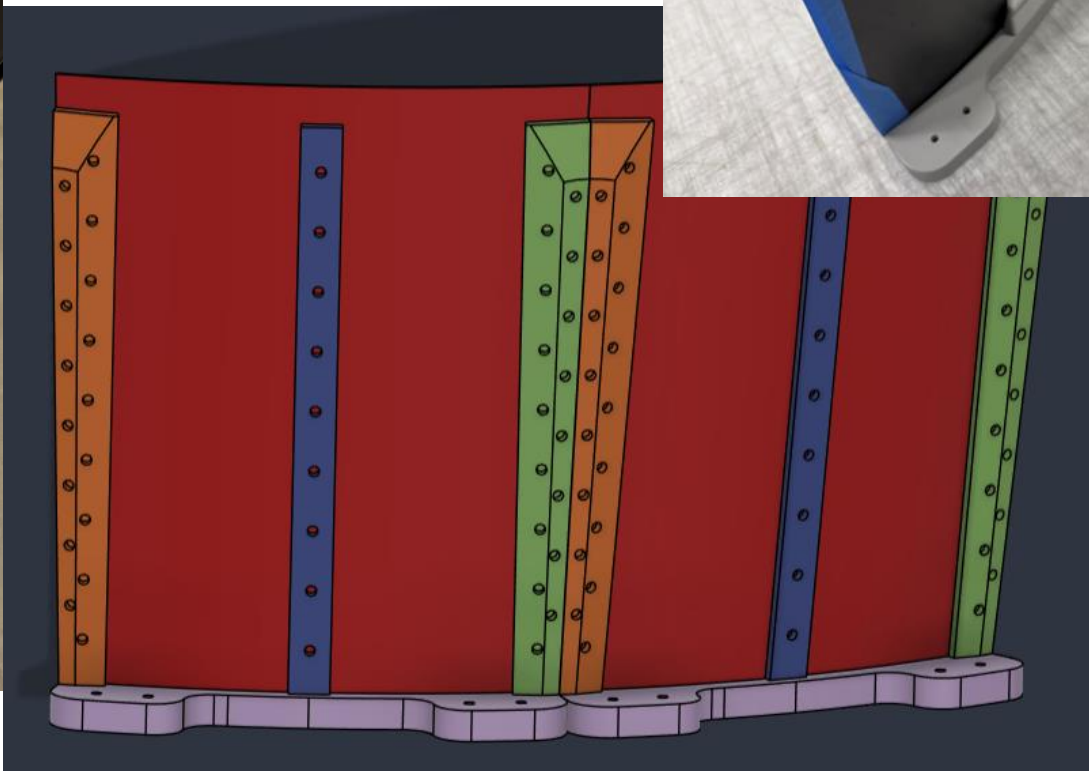
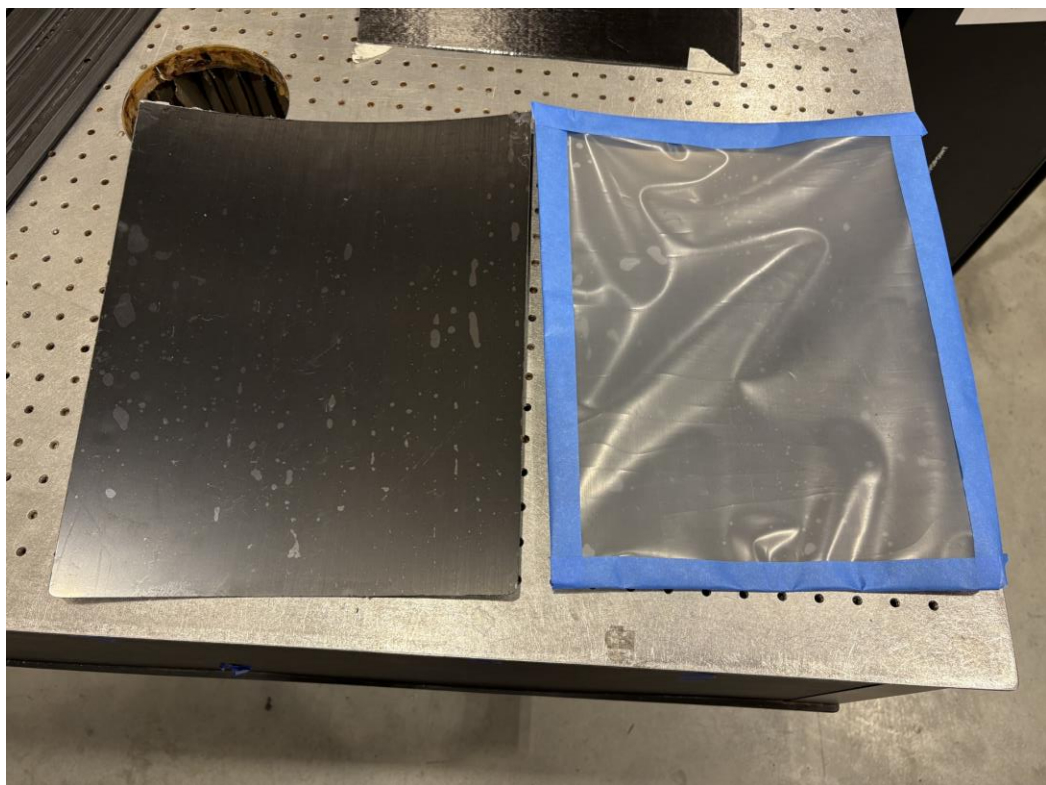
Sensor plate machining

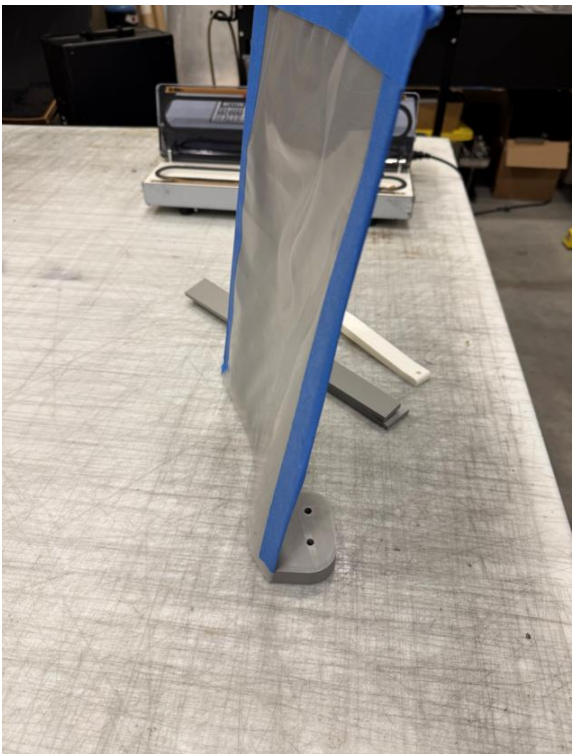
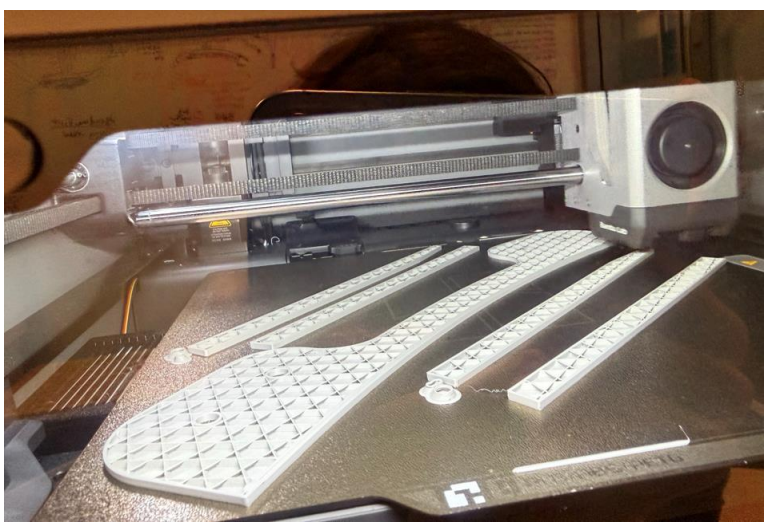


1. Glue sensor frames and inserts onto sensor plate
 - Square holes and inner frame edge are referenced
2. Machine down top edge of sensor frames
3. Bond T-beams
4. Mount triangle mirrors
5. Attach NPT inserts
6. Bolt outer and inner mirrors



- ⬠ 2 carbon-lexan mirrors made and machined
- ⬠ Backings redesigned for stiffer structure and ability to adjust support locations
- ⬠ Backings printed, next step is scanning and bonding

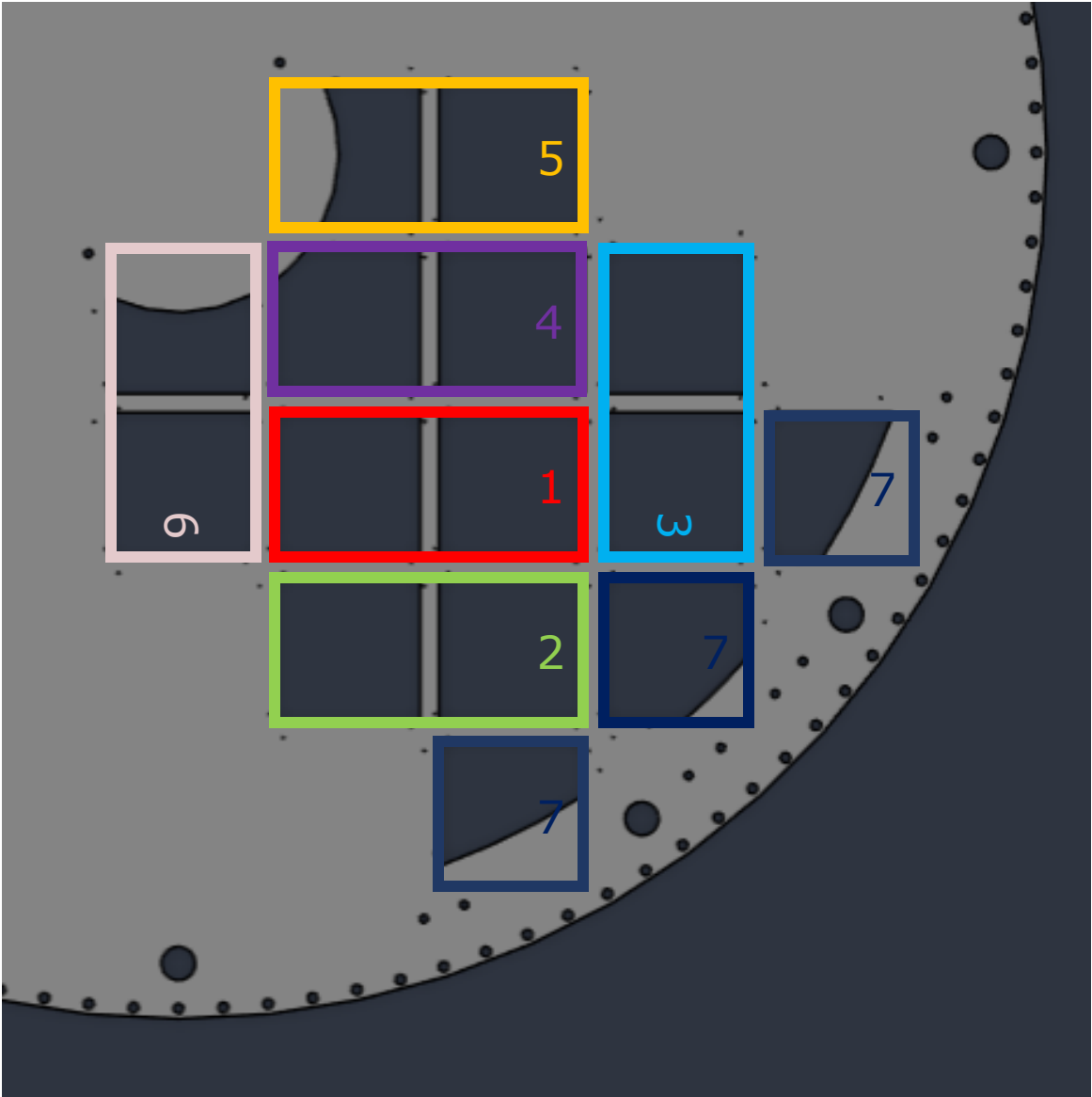




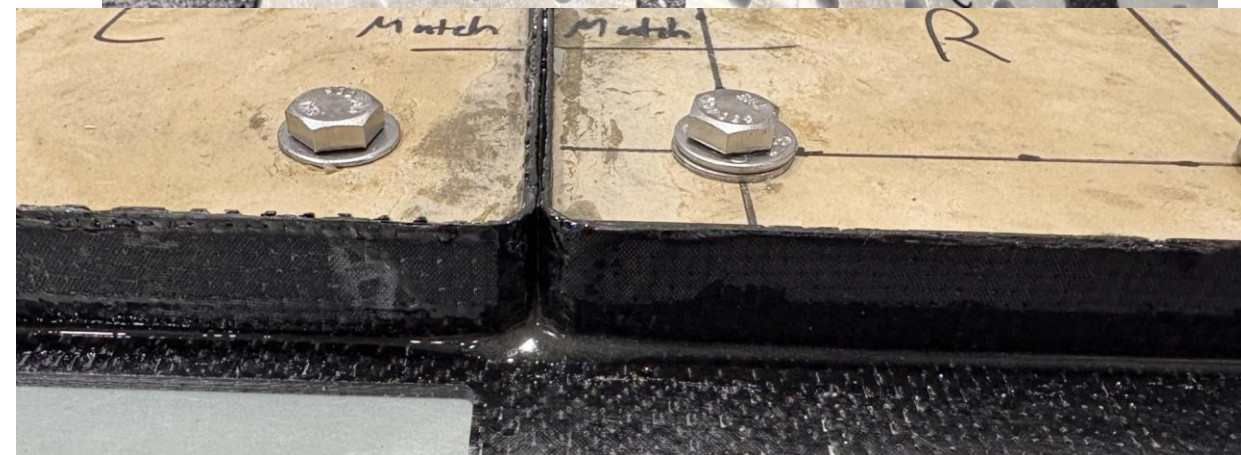
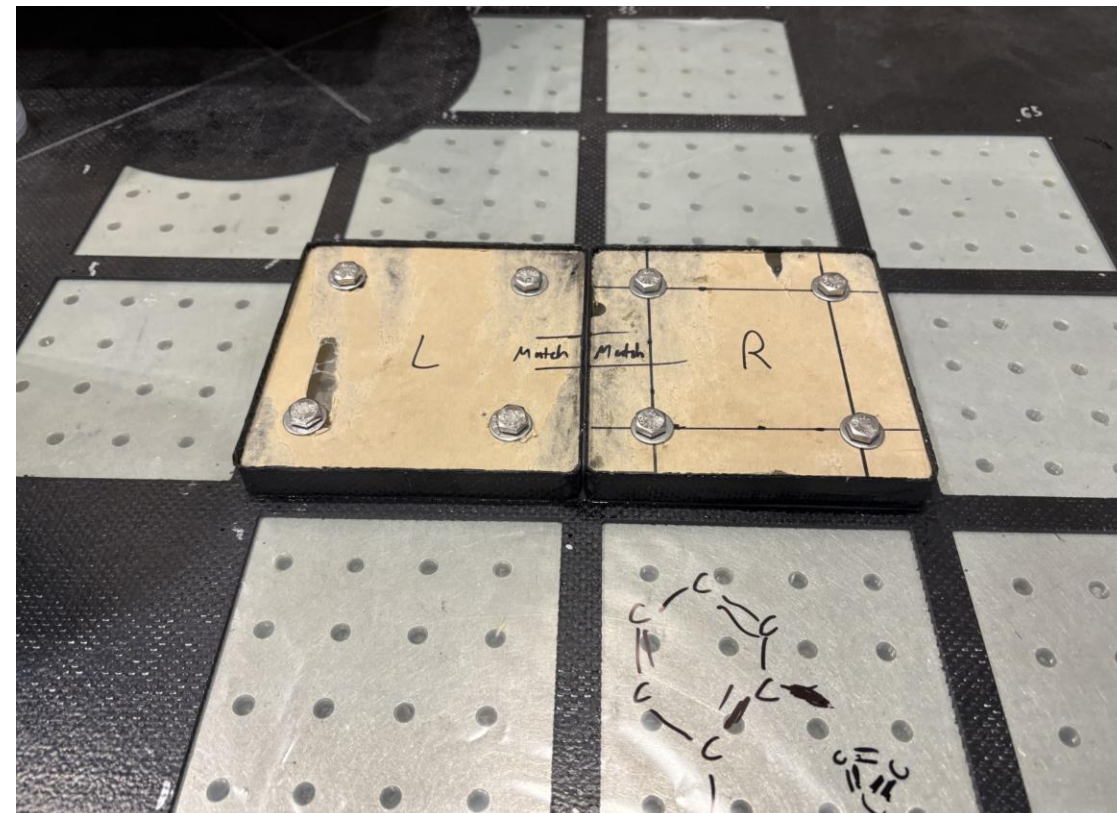
pfRICH sensor frame bonding

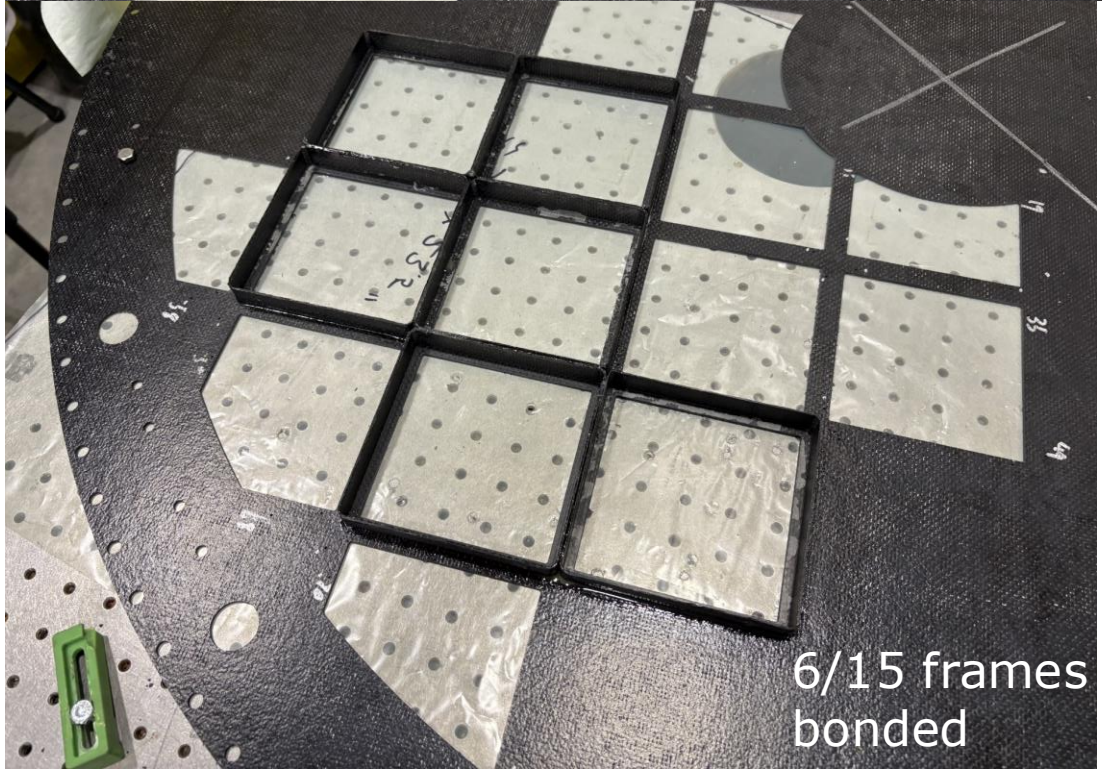
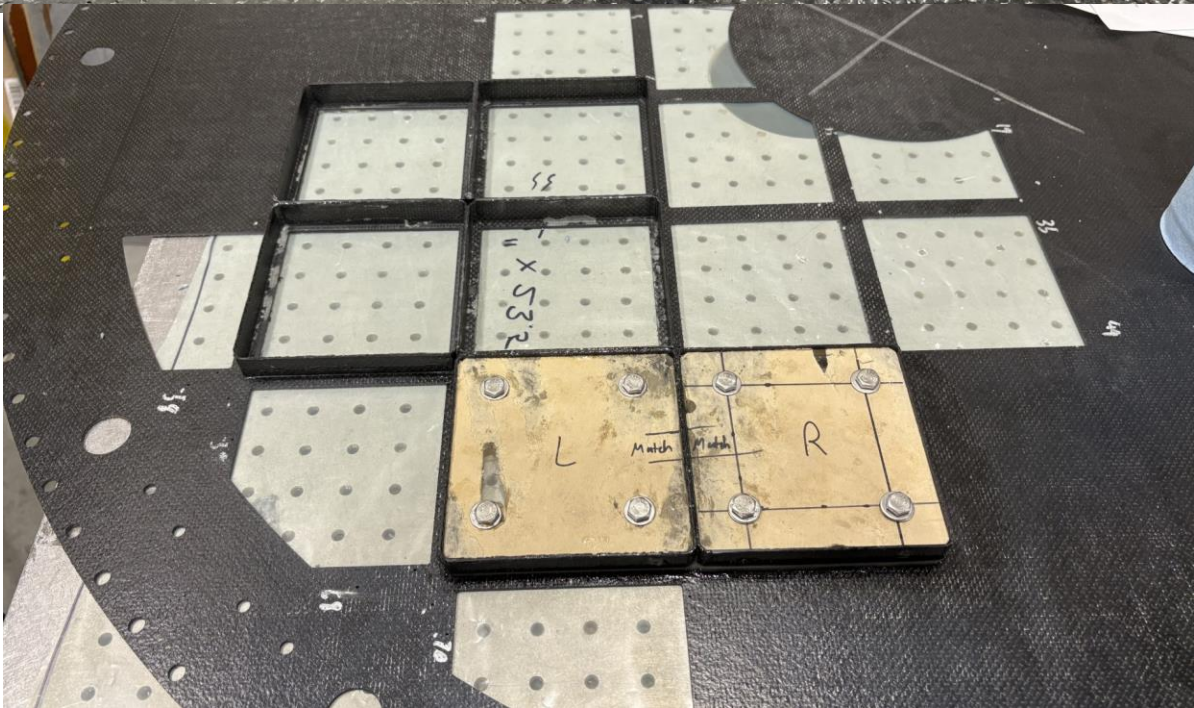
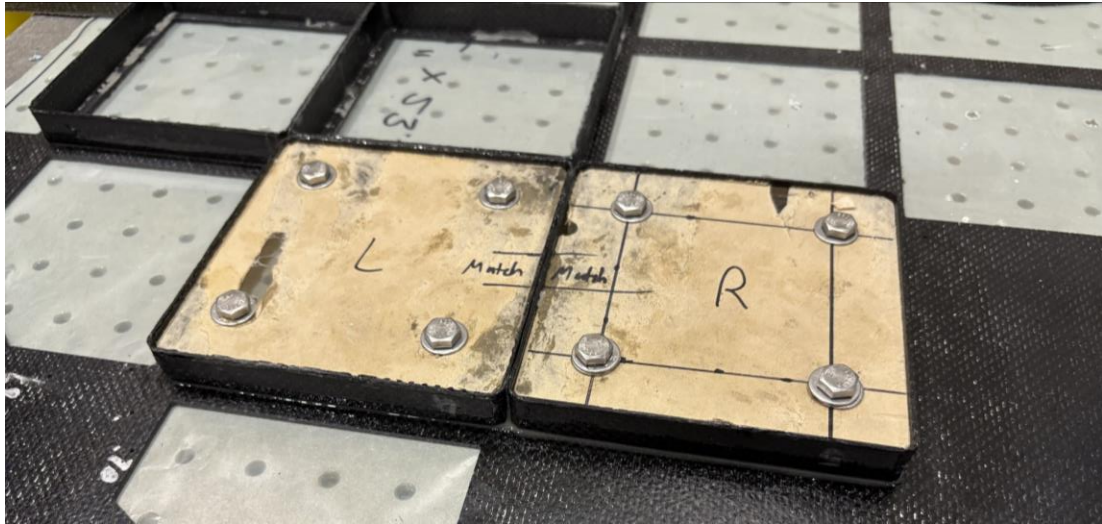
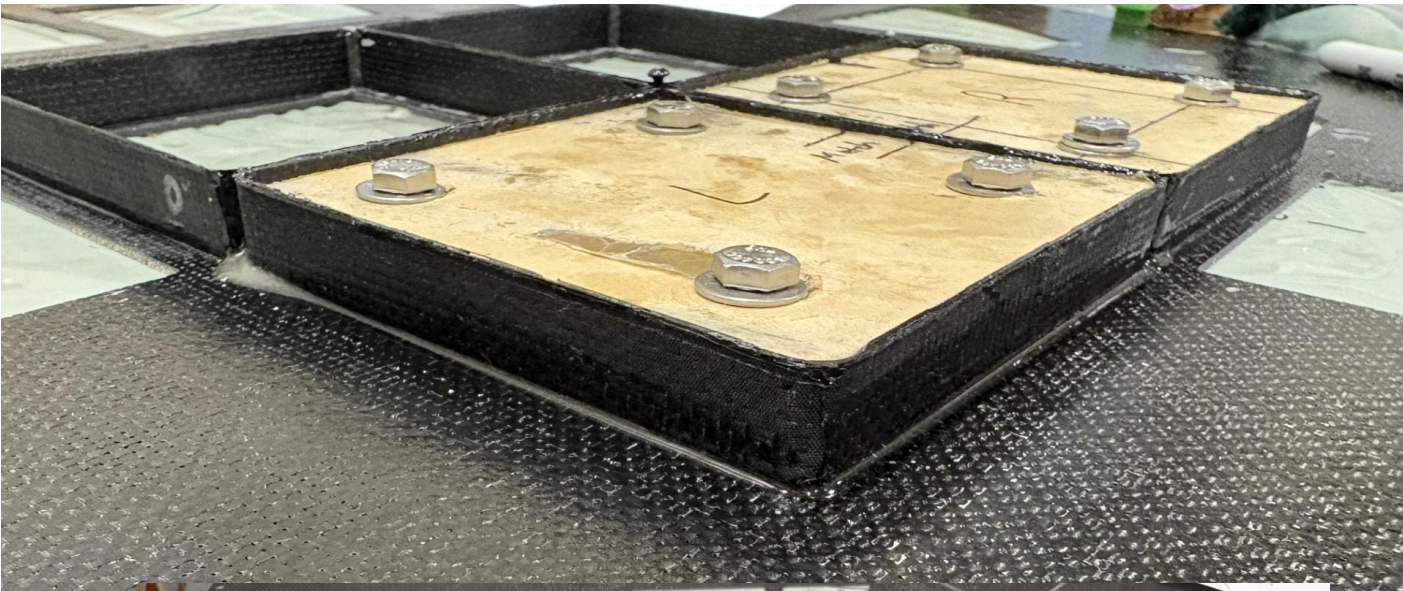
Simon Snyder-Smith, Sushrut Karmarkar, Andreas Jung

15 October, 2026



- ⬡ Frames pressed onto acrylic jigs
- ⬡ Adhesive applied to bottom face of frames
- ⬡ Jigs fit into cutouts on sensor plate and are bolted to optical table to apply bonding pressure
- ⬡ Adhesive also applied between frames
- ⬡ Middle inserts will be put in when 4 frames come together
- ⬡ Edge inserts will go in after all bonding





6/15 frames
bonded

- ❖ Bulkhead NPT fittings with silicone O-rings on each side to seal
- ❖ Mirrors are attached with O-ring sealing bolts

