

FN82 update January 2022

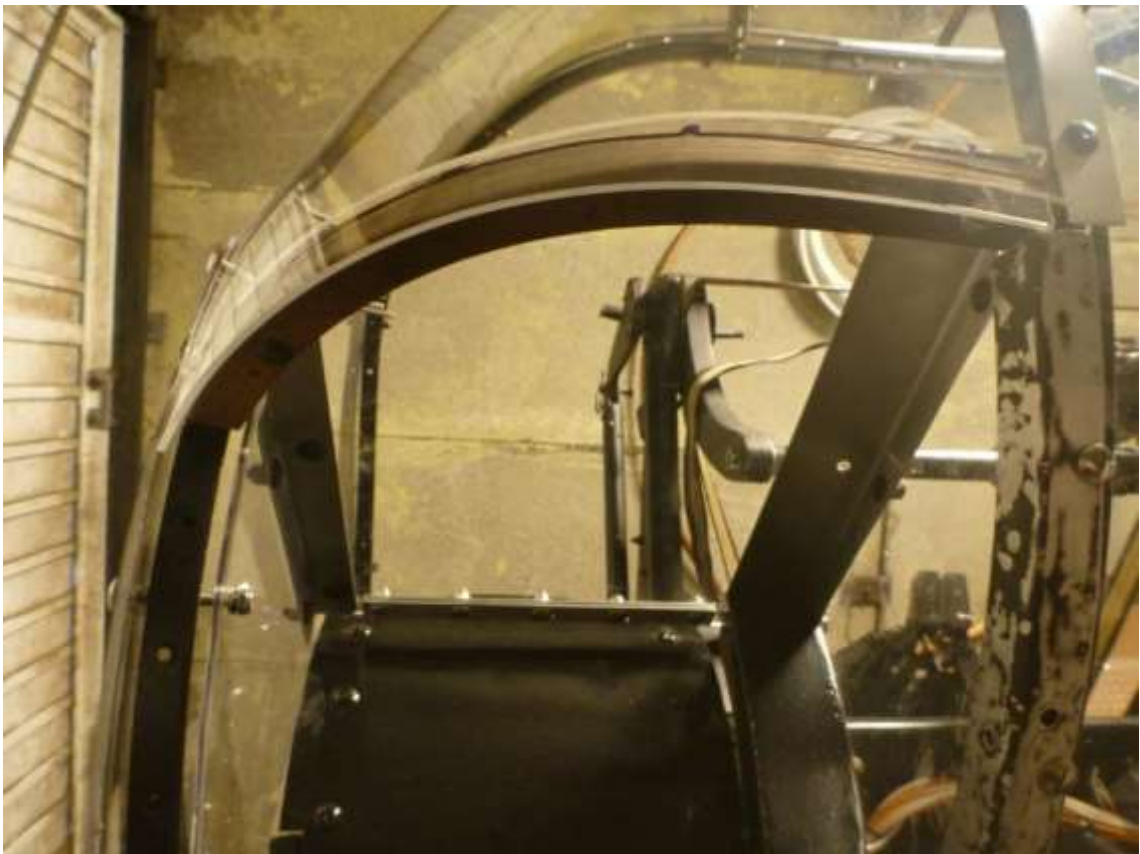
During the second half of 2021, work on Just Jane's rear turret slowed due to some delays in the production of replacement parts. This period presented the opportunity to progress the display FN82 turret and, essentially, learn some lessons in two very complex assemblies.

One of these assemblies is the turret cupola front half. The plan here was to build the cupola using a mix of original but damaged parts, new build parts and perspex panels both bought in and locally made. The really tricky perspex panels had been made in New Zealand and the 'sample' panels were selected for this turret.

The main difficulty with this was the lack of any 'given' position for the arches, cross frames and panel holes. Starting with the rear arch, four main arches and (wooden) mock-up cross frames, it was then possible to position and drill the complex curved top panels. With these in position, it was possible to build in the other flat and curved panels and their supporting structure.

By the book, the cupola should be built off the turret accommodation plate. However, given all of the variables, it seemed wise to build it whilst fitted. Whilst being a lot more fiddly, this does mean that the cupola will definitely fit once finished. Some artistic license was used in building the support structure near the wooden cross frames – these will be trimmed back once the alloy cross frames are fitted.



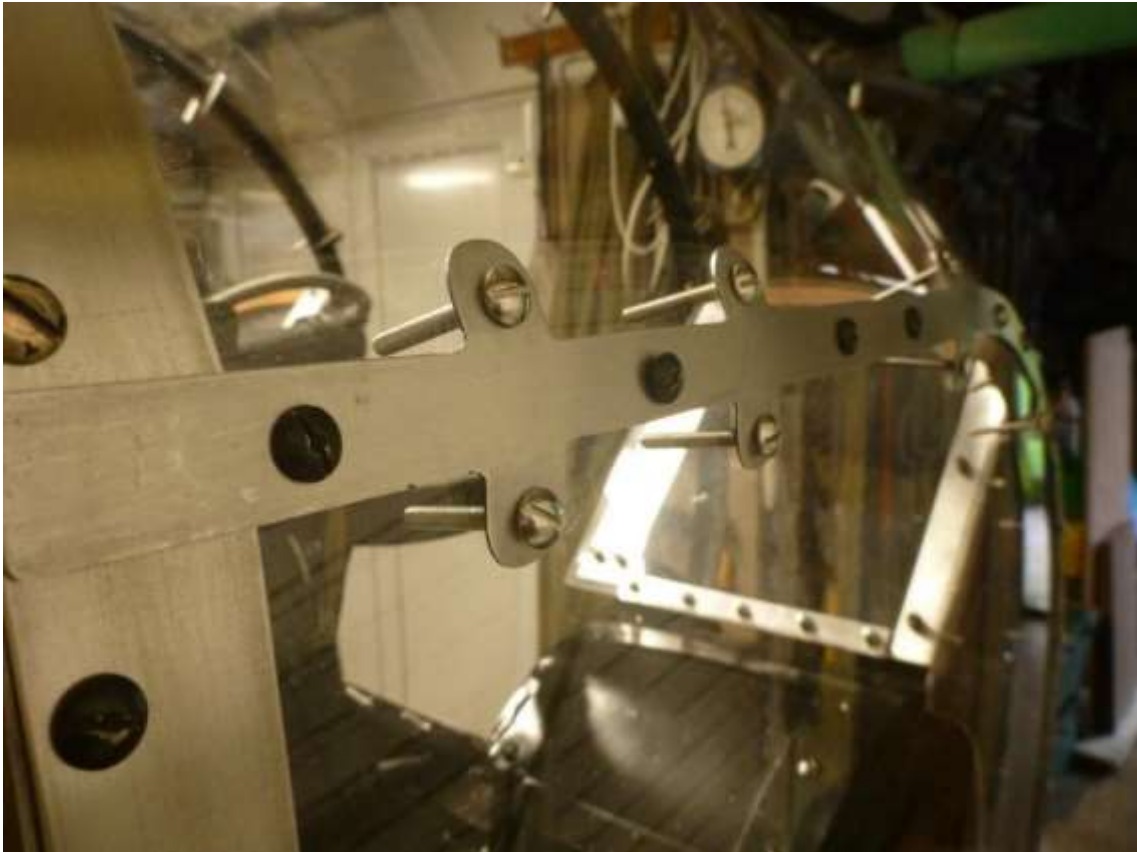


With the panels all made and positioned, the next task was the capping strips. No original capping strips were left on Just Jane's turret as the result of various restorations over the years. However, most of the bolt holes could be accurately worked out either from the pen markings on the curved panels or from original holes in the frames.

These are time consuming to produce – starting with a paper rubbing, then a cardboard pattern and finally the alloy strip. A major time saver here was to assemble the strips with long bolts and plain nuts, thus speeding up the constant on and off process required to get a good fit.







Several days work resulted in a complete turret cupola front half that just needs the cross frames fitting and their capping strips fitting at some point.



So, with the display turret cupola taken as far as possible for the time being attention can turn to Just Jane's cupola. The first task here is to trim the four new build arches and then fit their end fittings. This sounds easy, but having marked them to the same length as the originals, they actually won't fit so the next stage is to mark the likely lengths by trial fit.



The other complex assembly to progress is the drum and floor assembly the original of which had corroded very badly as seen below.



With the original drum sides fitted within a new build floor it was easy enough to mark the rivet holes and drill them. This was done with both new floor panels. The drum sides could then be grippered and then riveted to the floor.

Once done, it was possible to fit the fixed floor assembly, the ammunition lower feeds and the ranging pedals to produce an almost complete drum and floor. This now needs to be fitted to a replica rotating turret ring as we have no spare one.

The replica turret ring can then be fitted with original motors etc, but that is a task for next month.

The final image shows the new components for the drum and floor that will be fitted to Just Jane's turret in due course.



