

Platework for *Ashey* – July 2020

I'm cracking on now with *Ashey's* bunker, which is going to be a supplementary water tank. I needed some curved angles to support the upper curved corners of the bunker.



Initial failure – I soldered two pieces of angle back to back and battered them round a piece of bar. The solder gave way and they were so badly distorted that I threw them away...



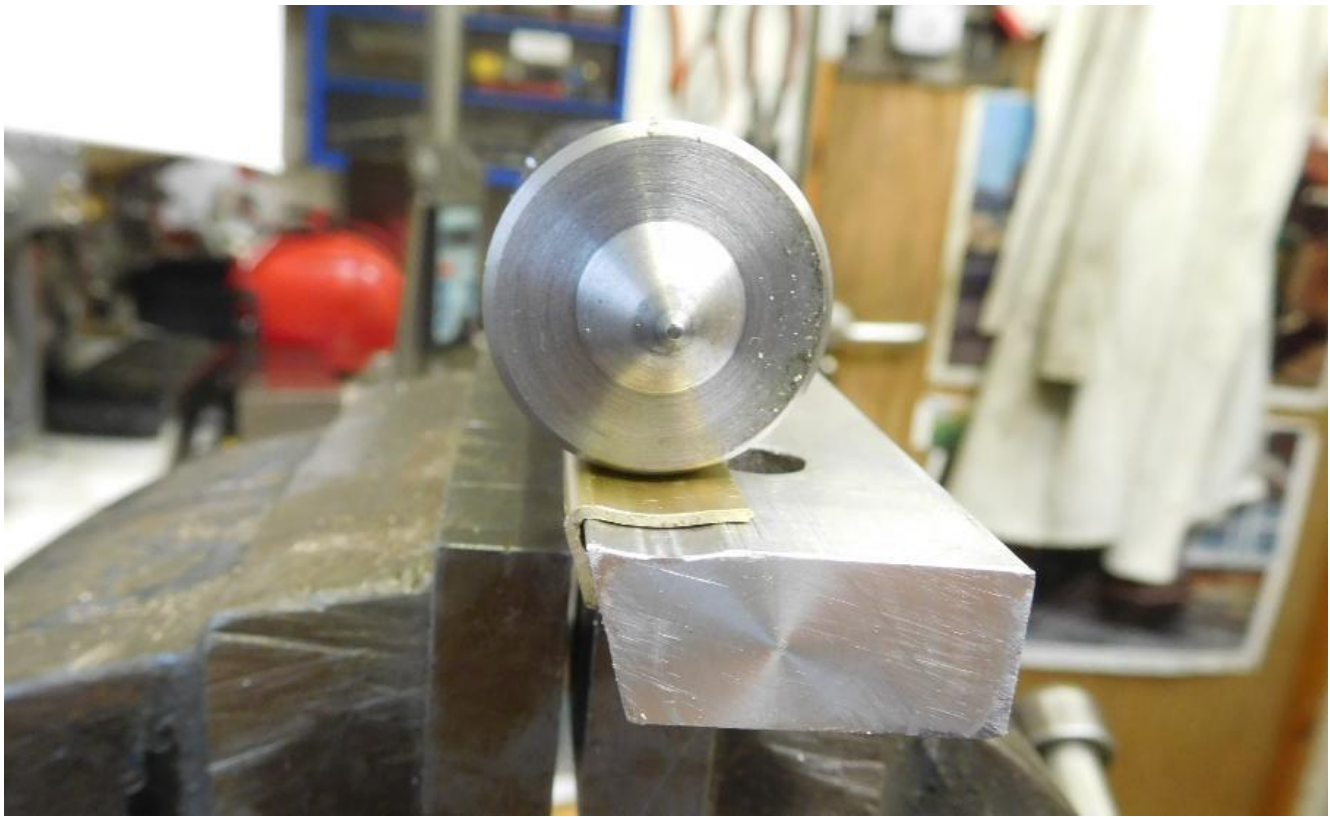
The only sensible solution then seemed to be to make it from a piece of brass bar – I turned an angle-section ring, cut out a segment, and that did the job without any horrible distortion.



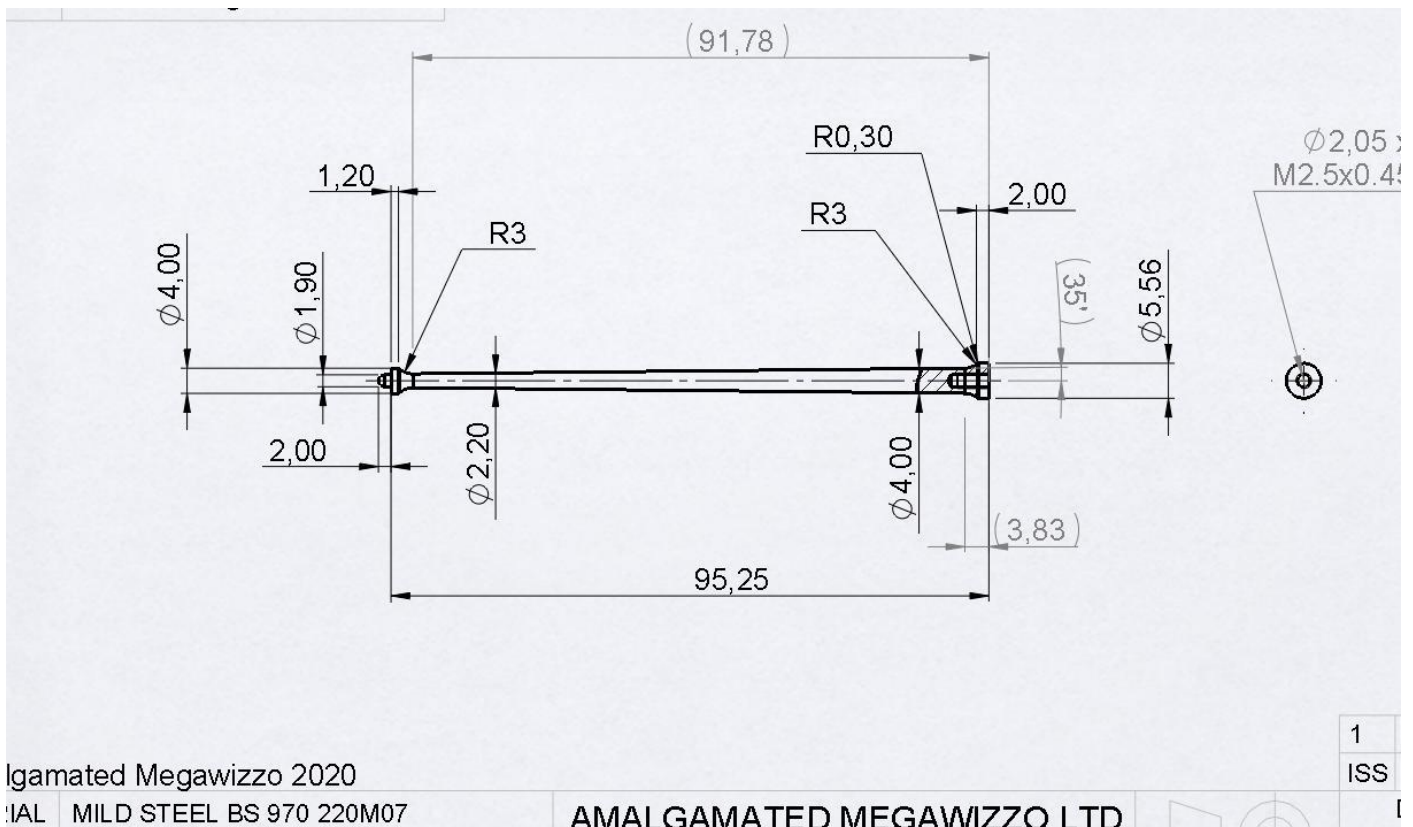
Next awkward bit was the cross-support at the rear, which is a **7** in section. Forming this section needed a former:



I used a piece of aluminium and machined a radius on one side (I used a 20mm ball-nosed slot drill) and a suitable angle on the edge. I fitted a length of brass sheet into place and by battering it in the vice with hammers and battering tools soon made it look like I wanted it to. The piece of steel bar is 1.1/4" diameter.



Next job – the stanchions (or handrails) which fit either side of the cab aperture.



On the O2 (as can be seen from the photo of *Calbourne*) they are tapered; my drawing (from Don Young's dimensions) says 35 minutes per side. There are two more stanchions at the front end of the side tanks, so I needed six in all.



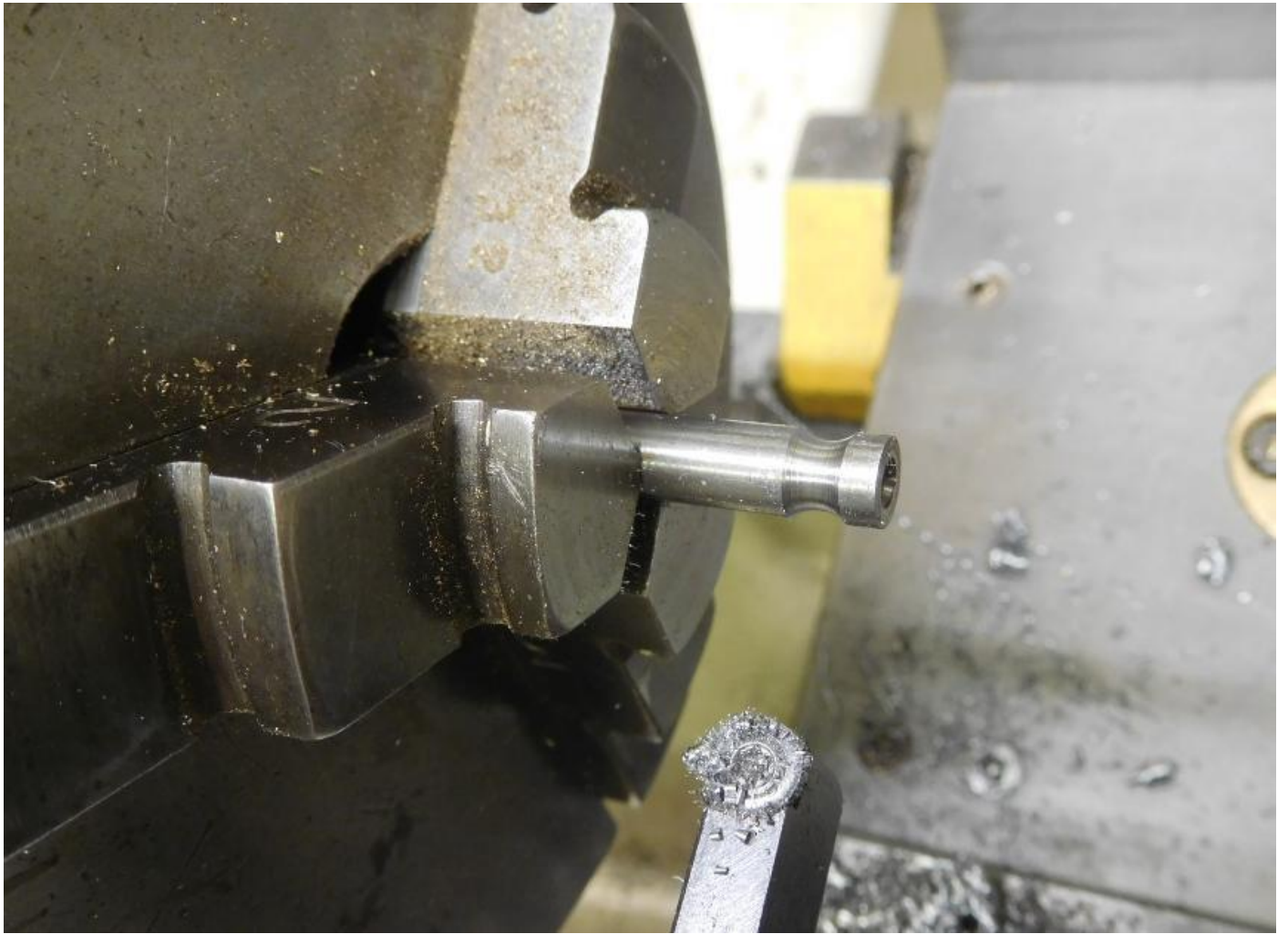
Turning long tapered things isn't easy because you can't use a travelling steady as the diameter isn't constant. The travel of the top slide on the Myford would not have been sufficient to do it in one hit, and matching up the two turned diameters would have been tricky.

It would have been possible to machine the taper on the Myford by offsetting the tailstock, and I could then have used power feed. But I find that resetting the tailstock back to turn parallel again is a bit of a pain-in-the-botty department. Besides, setting it to give the taper I wanted for the stanchion taper would be a bit tedious.

However, my Boxford 280 has a decent amount of travel on the compound slide – enough to do it in one hit, unlike the Myford.

So because I'm lazy I went for the angled top slide and used the Boxford.

First of all I turned the bottom diameter of the stanchion and formed the bottom radius in the correct position as per the drawing.



Then I set over the top slide to about the right angle and turned a taper. It was a bit too steep, so a slight adjustment was needed and I had to throw the first one away.

I used a fairly sharp-radiused tool to machine the tapered section, as can be seen from the photo. Minimising the amount of cutting tool in contact with the job seemed like a good idea. I suppose I could have used the radius tool instead, but I was concerned about it digging in, and I wasn't making any more "works of modern art" if I could help

it! I took it carefully and supported it with the centre in the tailstock. I had a bit of bother with the live centre because the bearings have seen better days (must obtain and fit some new ones!) so I used a dead centre (below) instead. That caused a bit of bother too, as heating up of the job became a bit of a problem and one component started going blue. In the end I used my Skoda 2MT live centre that I use on the Myford, but with a 2-3MT sleeve on it. The bearings in the 2MT centre are clearly in much better nick!



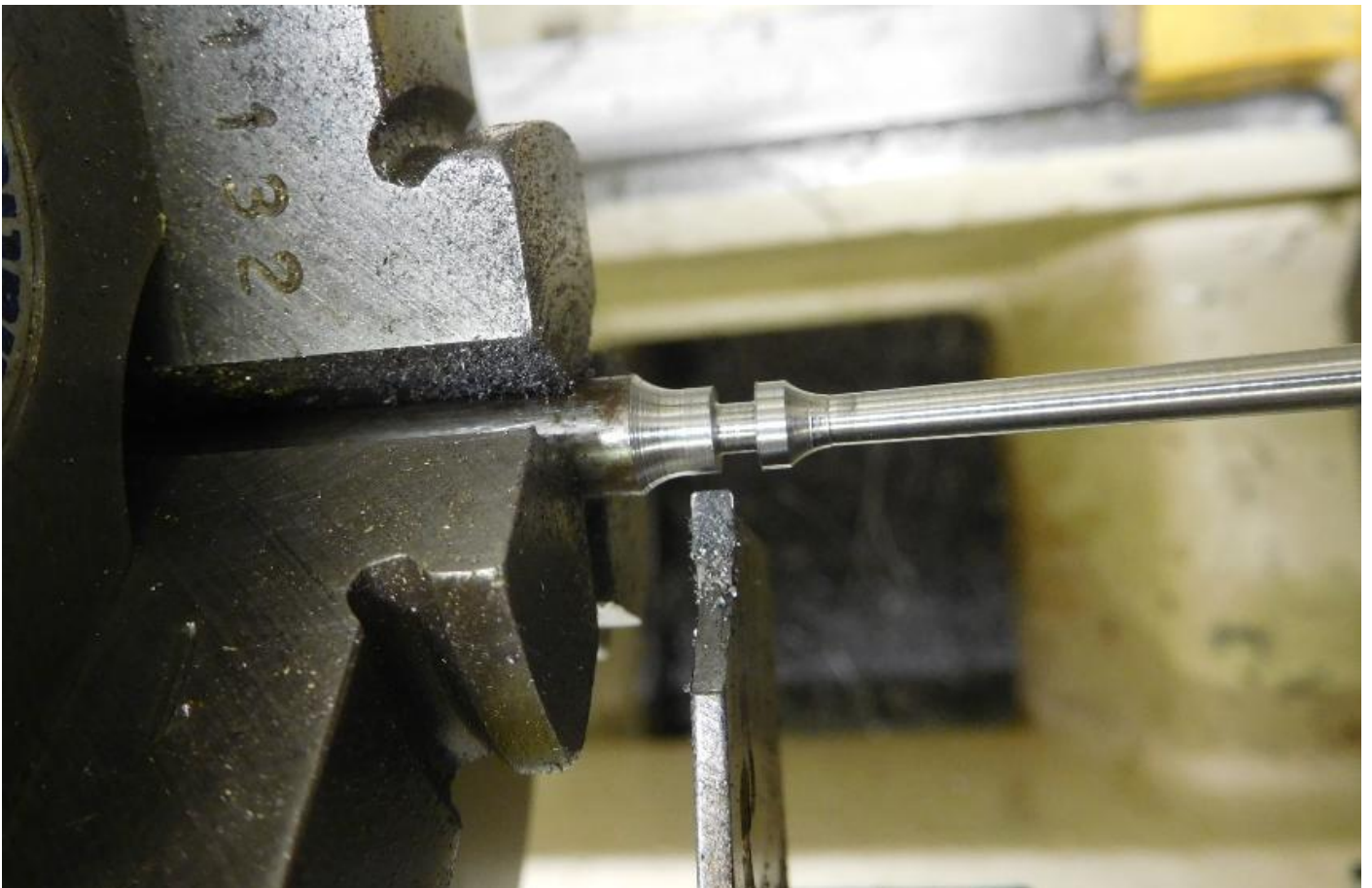
Upper parallel diameter turned to size:



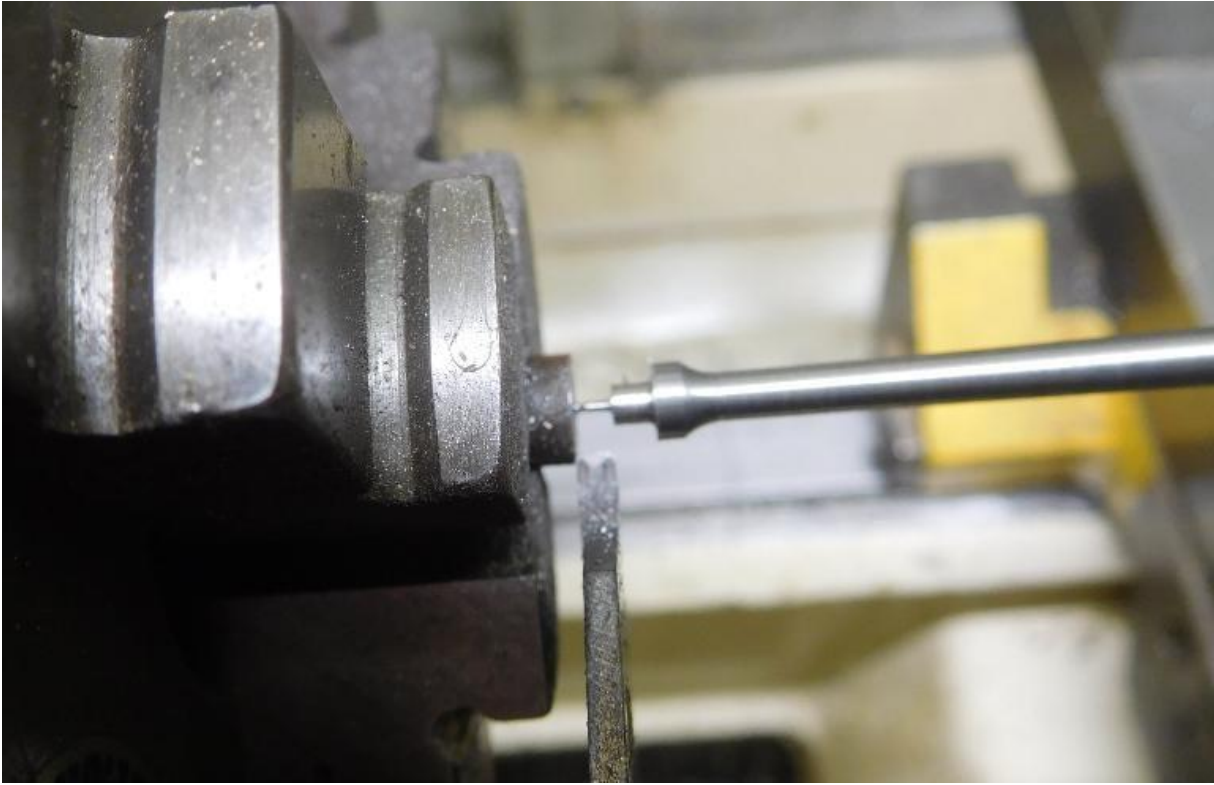
Top radius formed:



Top pip being formed – this fits in a hole in the cab beading.



Parted off – taking it carefully and supporting the outer end, I got the parting-off pip to 0,5mm (0.020") before it fell off! (When I parted off the first – dud – one, there was a "Ping!" and the part disappeared somewhere. I still haven't found it... just as well it was a scrap one!)



I got the time per component down to 20 minutes by the end. They're not absolutely identical but by fitting them in matched pairs I hope they'll escape to much condemnation. Still a lot to do to finish the tanks...

