

Top tip: Using wood propellers – balancing

I like Master Airscrew (MA) propellers. Up to now I have used the plastic ones, but needing props with larger diameters and pitches I have switched to wood. Apart from the props being lighter, I have found this has one major benefit – ease of balancing.

The latest batch of wood MA props had a rather rough applied finish. They were also out of balance. I looked at various forums for balancing techniques. Some suggested shaving or sanding the back face of the heavy side near to the hub. Others proposed embedding weights in holes in the hub. Then I came across one person who suggested using the weight of surface coating. That sounded good, especially as I had to refinish the prop anyway.

I sanded the prop down to smooth wood. I checked it for balance and marked the heavy side 'H' on rear of the hub with a fine marker pen and added the date of balancing. These marks would be out of sight in use.

I applied a single coat of de Luxe Materials EzeKote to the whole prop to seal it, and sanded very lightly. Then I checked the balance again. I applied further coats to the light side until it balanced heavy. EzeKote is a water-based coating that gets lighter as it dries. I found three coats were needed on the lighter side to weigh it down enough when dry. Once dry I then did successive light sandings until the balance was perfect, with the prop staying where it was put on the SLEC balancer however it was angled.

Of course if the prop was very out of balance it would be wise to use a rounded diamond file to remove some wood from the rear face near the hub first and sand smooth, before using the EzeKote.

I ended with a balanced prop with a much better finish than at the start. And of course there is one further advantage to wood. Light acrylic paint can be applied to tips and other areas and will stick. Again balance must be checked after painting and more paint applied if one side is light.

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