IMPROVING PLASTIC PROPS

by Mike Nassise

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The December issue of *Flying Models* has a great tip on improving plastic propellers in order to prevent runaway prop shafts. Why I call it to your attention, in case you don't subscribe to this superb magazine, is due to the fact that I got knocked out in the final round of WW II Combat in a local contest this past Fall by a runaway prop shaft. I had just finished winding my motor, and was attaching the prop when the dreaded whirring of a ramp failure signaled my departure from the round without getting a chance to fly. What really ticked me off was the fact that, based on my model's performance in earlier rounds, I had a good chance of winning the kanone.

Here's what modeler Bill Greves suggests you do in order to avoid this type of disastrous situation. I generally do much the same with the plastic props on my models, but for some reason I neglected to make the simple modification on the WW II ship I was flying and, therefore, got what I deserved, second place. In fact, I generally go Bill one step better and add a light coating of 5-minute epoxy to the altered prop hub to add more strength to the area. Be careful not to get any epoxy in the prop hole.

- (1) Using a sharp hobby knife or razor blade <u>extend</u> the notch to the <u>back edge</u> of the prop shaft hole.
- (2) Cut the extended notch deeper. Smooth with a mini file.
- (3) Bend the "catching" part of the prop shaft more than 90 degrees.







I've found that the above procedure significantly improves the performance of plastic props, eliminating many of the problems that go with using ramp style free wheelers. It's especially important to do this with plastic props whose hub will be hidden away under a spinner.

And then Ed Pelatowski wrote in the following month's newsletter:

"Concerning the improving plastic props procedures, I think that you can, more or less, double the effectiveness of the method described in *Tailspin* with just one additional modification. All you have to do is take a moto tool with an abrasive wheel or disc and grind a flat edge on the bent portion of the prop shaft that rests against the vertical notch of the prop hub. You can probably use a regular drill or even a small file to do this as well. This minor modification prevents the prop shaft from running over the notch edge and wearing it down to the point where it will no longer grip correctly. I haven't had any trouble with broken shafts, and I've ground some of them down quite a bit."