



## *Hurricane landing techniques.*

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The Hawker Hurricane as a model has excellent ground handling and flight characteristics. The model shares many of the same handling characteristics of the full size plane. It is very well behaved on take off and in the air and is a joy to fly around the patch. But to many pilots the Hurricane seems to be a real hand-full to land. These traits come from a variety of factors. Some of the factors that contribute to the models perceived problems the most are:

- 1) **Overweight.** (Heavy models must land faster; ideal weight for this plane is 24 to 28 lbs. If you are over the 28 lb mark expect it to land a little quicker. To help reduce weight, change the tail wheel to a Dave Brown foamy, and then rebalance to remove weight from the nose to get the CG where it belongs. Another trick is to make the washer on the prop out of steel. This will get the weight as far forward as possible and you'll see that you can take some away from the firewall and still get a proper CG with less weight.)
- 2) **Being flown too slowly on landing approach.** (This plane requires a power on approach at approximately a 15-degree "glide" slope. However, it must be done with power "on". Not throttled back and gliding like a pattern plane.)
- 3) **Too much flap being used.** (A very common trait of planes with split flaps is that the full flap deflection tends to make the nose go down. Holding up elevator compensates this. But, as we get closer to the ground and try to flair we find that there is no elevator authority or travel left. This condition is even more aggravated if the CG is too far forward. Best set-up is to use about 30 degrees of flap on landing approach.)
- 4) **CG incorrectly located.** (Too far forward or aft: Too far forward tends to drive the plane into the ground as the elevator runs out of authority. Too far aft makes for a very sensitive and "stall prone" model)
- 5) **Elevator throw too small.** (This coupled with the elevators small design area adds a great deal to the problems. Unfortunately the size of the tailplane is dictated by the "scale" outline so we have to compensate in other ways. If possible set up the elevator with exponential so that it is not sensitive in flight yet provides max throw on landings.)
- 6) **Looking for a "three point landing".** (Forget it; this plane will not do that. Best landings are on the mains. Power should be held on a bit above idle until the ship is about to touch down. It needs to be "flown onto the runway" on the mains. Then the power can be brought back to idle.)

Oddly, the model exhibits many of the same traits that the full size plane does. When reading the full size pilots manual it cautions the pilot on the proper use of power and flaps on the landing (as well as other things to avoid, like a spin past two turns). The full size does use a lot more flaps on landing and the pilot is required to pull the elevator back almost to full up on touch down but the "bigger" size all around helps it be more controllable. (After all, the air molecules we fly in have not shrunk to match the model).

One thing to keep in mind with this plane is that the stab and elevators are very small in area compared to many other WWII birds, especially the US types. If you are used to flying P-47's, Corsairs or P-51's the Hurricane will need a little re-learning on landing. Try to follow some of the above advice and you'll get to know and love her.