

## Mosquito

The year was 1975 when Graupner introduced its 2.5-meter electric glider. At that time, electric propulsion was still in its infancy, and the only viable power system consisted of a Mabuchi 600 series motor driving a propeller via a gearbox. The battery? Now both banned and forgotten — 1.2 V NiCd cells.

When Stefan from Graupner recently introduced an updated kit version of the Mosquito, my heart skipped a beat — I ordered one immediately. The model now features added ailerons and flaps, but in terms of dimensions and overall look, it remains the classic Mosquito. And as a bonus — in this age of “burnt wood” (laser-cut kits), which I tend to avoid, I was happy to see that there are still manufacturers who use honest-to-goodness milling. This is one of them.

At the end of the year — the start of my building season — I began construction. Looking back now that it’s finished, I have to admit the build took a lot of time, especially the wings, which really tested my patience due to the added ailerons and airbrakes.

From the start, I knew the covering would be traditional — clear tissue paper — with the finishing done using a “squirrel” brush and the same paints I remember from the Graupner days, which are still available from Stefan Graupner.

The quality and workmanship of the kit materials were very good overall, but I did run into some issues that complicated the build. The balsa used for the wing sheeting varied in thickness and quality, which made things more difficult. Also, the tail surfaces were made from particularly heavy balsa, which led to the need for significant nose weight to balance the model. While the model is now complete, I may build a new, lighter elevator later to reduce the amount of lead up front.

However, since this project is more about nostalgia and casual flying than pure performance, I didn’t worry too much about it during the build. Apart from the mentioned issues, everything else went smoothly without major problems.

For propulsion, I used an Actro N 28-3-1300 motor with a 9x6” folding propeller from Aeronaut. The servos — all from CHASERVO — are HV85s for the ailerons and elevator, and DS09s for the rudder and brakes. The ESC is a YGE 35A, which supports telemetry and adjustable BEC voltage — perfect for my HV servos (I chose 7.4 V). The receiver is a Jeti R9, which I had on hand and which also supports telemetry from the ESC.

Battery selection had to wait until the very end, after determining how much nose weight would be required. And it turned out to be quite a bit — I eventually chose the largest pack that would fit: a Hacker ECO-X 3S 1800 mAh. Even then, I had to add 156 grams of lead.

As always, I made the wiring myself to measure — but without high-quality crimping tools and components from Mundental, that wouldn’t have been possible. Honestly, I really enjoy this part of the process, just like in this build.

Wherever possible, I took advantage of 3D printing — whether for custom parts or build jigs. This year, I upgraded my printer to a Prusa MK4S and added a 0.25 mm nozzle for very small parts, so I can now produce anything I need. You’ll notice some of these details in the photo gallery.

As for the color scheme — I wanted to keep it close to the original but simplified it a bit. The final weight came in at 1563 grams with the center of gravity set to the recommended 62 mm from the leading edge. That's more than the recommended 1400 grams, but considering the purpose of this model — relaxed flying and nostalgia — I don't see it as a tragedy. If I make a new, lighter elevator, I estimate I could save another 80 grams.

Now, all that's left is the maiden flight. I hope it goes smoothly — and then it's just about relaxing and enjoying the flights.

As always, I've included a few photos from the building process. For more details, feel free to check out my gallery.