

The original Leprechaun was designed by Dick Twomey and first published in Aeromodeller, March 1950. The large free flight towline glider had a low aspect ratio wing with a 103" wing span.

This lovely looking vintage glider does seem to have quite a following, so much so that multiple kits are available for a modified RC version. After watching multiple YouTube videos on the Leprechaun I decided I needed to build one!

Why scratch build you might ask? There were a couple of reasons.

Fuselage length in both kits was just a little too long to fit on my building board, Dane-RC kit is 85" and ValuePlanes kit is 79".

Next is weight. Dane-RC specs say 74-91oz, ValuePlanes says 58oz, but it looks like it may be closer to 72-74 oz after reviewing some of the available build logs.

72 oz isn't too bad and falls right in line with the original Dick Twomey leprechaun free flight glider. But I was hoping to improve upon these numbers by building a slightly smaller version with a better selection of wood.

There are two sets of plans on the outerzone website:

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https://outerzone.co.uk/plan_details.asp?ID=3252

https://outerzone.co.uk/plan_details.asp?ID=8397

The original 103" version and a 67" half scale version. I wanted something between these two so I decided to scale down the 103" set to 80%. This brings the fuselage length down to 69", just small enough to fit on my 6 ft. building board.

At 80% the wing span comes out around 84", but I decided to stretch it to 90". This brings the wing area up to 1145 sq/in.

Components used for this build: Suppo 2810 motor, FlyFun V5 30Amp Mini ESC, Super-s 12x6 folding prop, and two Emax ES3054 servos. To eliminate the need for ballast I ending up going with Lipo 2200mah 3 cell battery.

Final AUW ready to fly weight came in at 48oz. This gives the modified Leprechaun a wing loading of 6.04 oz/sq ft.

She is not a rocket with the Suppo 2810 motor, but it gets the job done. During launches I give her about 1/2 throttle and she flies right out of my hand. Then once both hands are on the sticks push to full throttle and she will climb to 400ft in about 30 seconds. Once you turn off the motor she just slowly floats around up there.

You can find a full build log on the RCGroup forum:

<https://www.rcgroups.com/forums/showthread.php?4290983-Leprechaun-Scratch-Build>

Video of Leprechaun flying:
https://www.youtube.com/watch?v=S8BxKN_gEDQ&t=242s

Photos of this build are [on the LISF website](#).