

Product Review

Multiplex Easy Glider
by
David Hipperson.



The old ad' used to tell us that "oils ain't oils" and much the same could be said about "foamies". Over the past three or four years I've assembled a number of these either as part of a review for this magazine or purchased on one of those occasional whims. To be fair the standard of all that have interested me has improved but far too many still suffer from some basic flaws. One is fragility, in that foam as an unprotected structural medium is sadly prone to varying degrees of hangar rash. The second, is that too many manufacturers create interesting designs but in an apparent effort to reduce price to the lowest possible level fall down either on the aerodynamic side reducing flying ability or on the supply of accessories, including motors, that on occasion barely make the grade.

Multiplex have not fallen into traps such as these in no small part because of it's use of the Elapor foam from which it constructs it's models. This type of foam withstands a fair amount of abuse without noticeable damage and I'm reliably informed that boiling water can repair some dings and dents by re-expanding the afflicted foam. I'll admit that I waxed lyrical over the Easy Star that I reviewed but

it has proved to be an outstanding flying machine. So much so that I went out and purchased another with my own money and this model has been much modified (see future Flying Electrics columns) yet retains the same superb flying characteristics. Having been offered the chance to review the Easy Glider Electric (henceforth the - EGE) I found that Multiplex had not dropped the ball despite producing the biggest foam model I've personally encountered. I suppose that the EGE has to be regarded as a kind of grown up Easy Star as it shares a similar wing plan form (although now 1800mm span) and section, the structural system is much the same and the aircraft, as you'll see later, scores just as well in the flying department. It is however, significantly more elegant in overall appearance and makes one wonder just how far foam can go.

Specifications

Span - 1800mm (70 inches)

Overall length - 1115mm (44.5 inches)

All up weight - 880 grm (31oz) approx

Wing area - 41.6 sq.dm (4.5sq. ft.)

Wing loading 21gm/dm (6.9oz.sq.ft) approx.

ON OPENING THE BOX

Lots of foam! All neatly packaged up in bubble wrap for protection but, as one might expect, not that many pieces however, if we are lucky the photo should give you an idea what it all looks like. The wing joiner is similar to that of the Easy Star but longer and it was interesting to note that this 7.8mm internal diameter tube may also be used as a ballast box in the sailplane version merely by slipping in 8mm threaded steel rod, see page 16 of the instructions.

There are those of you I'm sure who are familiar with my whinges about the quality of instructions well, in this case, there are no causes to moan. The instruction book is comprehensive, clear and well written with an excellent diagram section which runs to seven pages. The impressive bit is that on setting up, flying and safety written by Klaus Michler who appears to not only fly models but really enjoy the process and he conveys that enthusiasm perfectly, take my tip and read it all. Finally, to eliminate every possibility a CD is included so if you have a computer you can enjoy a 40+ minute video on constructing your EGE while also included on this disc is a basic, but adequate, flight simulator that might give you something to play with when it's too dark to fly.

What more could one ask?

POWER SYSTEM

The motor/gearbox/prop' assembly is neat and very well made with nice meshing to the gears. Although the box is not ball-raced the bearings look like sintered bronze or similar and when I did my dismantling trick I found it to be well packed with grease. This dismantling was so that I could run the motor in as I do with all my 400's and unlike my underwater runs this time I did it on low voltage, unloaded, over the course of some eight hours.

A number of writers on the net implied that they were going straight to



When you open the box, the Easy Glider jumps out and assembles itself!



The power system is included in the package.



A view from the three quarter rear of the easy Glider.

significantly more powerful motors and though I've got no argument with their decision as this comes down to individual choice it rather seems to be defeating the point of the exercise. The EGE is a light-weight electric sailplane and in one attempt to maintain that light weight the motor is merely retained in place by the Elapor moulding of the nose and this particularly nice way of fitting the motor is so simple you would not believe. Should you ever need to put in another I'd guess it might take all of a couple of minutes.

The 400 motor supplied is cheap, easy to replace and the package keeps the weight down. If one chooses to escalate the power one may well enter the spiral that goes more power, more weight, more power etc. with the end result that performance might well suffer. More to the point is that if I wanted a hotliner I'd buy one.

ASSEMBLY

So well thought out is this kit that it's difficult to know what to say about this that

will prove of interest but perhaps a few comments from my build may prove helpful. Prior to starting I read through a lot of posts on various Internet sites some of which boasted how quickly the writer had built his/her Easy Glider, some being down around two hours.

Well, I'm not sure how they do it but I'd recommend slowing a tad and enjoying the build. I believe this not only increases the pleasure factor but genuinely allows one to make a better job of it.

Start by giving all external surfaces a light sanding. Please use a new sheet of clean sand paper (I used aluminium oxide) with a fine grit and be gentle. You are not trying to sand the actual flying surfaces but just lightly scuff away the hundreds of tiny moulding "pimples" and the moulding flash that occurs along some edges. It's my own belief that this may help with flight but even if it doesn't it will allow you to smooth down the decals from the superb roll provided when you get round to decoration. Above all make certain that you sand off the pimples from the mating faces of the fuselage because if you don't you will have, in effect, a sort of stand off gap between the two halves. Before joining these two halves I also opened up the battery bay just a bit to allow a little more flexibility in battery choice but this is up to you.

Once you have cut away the joining parts at the ends of the control surfaces work the foam that acts as hinging but

do it with care, no mad bending back and forth at 90 degrees please. I found that after gluing in the wing joiner covers they protruded very slightly so this ridge of material was carefully removed with a sanding block. These covers and aileron servos were then covered with glass reinforced tape applied lengthwise along the wing. This sort of tape can be readily obtained from any good hardware store. Similarly this same tape was applied along the bottom of the fus' from the nose back past the wing as it protects the bottom of the fus' on landing. It may not be strictly necessary to do this but I felt it couldn't do any harm.

Be prepared to kiss goodbye to a pair of HS 55 servos for the ailerons as once installed you'll have to do some surgery around the wing joiner covers to retrieve their cables should you wish to remove them. At this stage though also be advised to think about offsetting the servo arms to give the required aileron differential if you are like me and prefer to do it mechanically rather than simply dialing it in on your transmitter. All this means is merely setting each arm so that it leans towards the leading edge at about 30 degrees to the vertical when the servo is at neutral.

Experience tells that the bulk of models are more likely to come out tail heavy so it was a minor surprise to find a tail weight in the form of a ball bearing supplied. This is recommended for the electric version. I had some misgivings but thought the designer must know what he is doing so was then mildly peeved to find that the d.....d thing came out tail heavy with the battery in the correct location. True, I could adjust the balance by shifting the battery pack but it was odd.

If you choose to paint any part of your model as I did with the fus' and fin please check that your paint is foam compatible before spraying. Despite all the messing about, taking photos, tinkering etc. the whole assembly process took around eight hours of very leisurely work.

OUT AT THE FIELD

Dame fortune smiled on me providing two superb days one after the other so guess who went to the field two days running. All the surfaces lined up and the range check went well so a freshly charged pack of 7 X 1050 KAN cells was inserted and at a ready to fly weight of exactly the box top specified 31oz the EGE was given the old heave ho!



The Multiplex Easy Glider up where it belongs.

The model simply flew away dead straight and climbing slightly without a touch to the trims, honest. I had it set up with aileron as the primary turn control and a smidge rudder mixed in and this proved perfect for me. On seven cells or later when I tried it on a 2S 1800 LiPo pack the model climbs smoothly and definitely but cannot be called a ball of fire. Then again it's not meant to be as this is a sizable model and though lightly loaded is still only powered by a geared 400. Nevertheless, the climb is more than adequate and quite the equal of some of the direct drive 600 electric sailplanes I've flown. Remember that this is not a contest model or an all weather beast but something to be flown for pure enjoyment on those calm, sunny, lift loaded days or balmy evenings when there's a pleasant breeze.

The low wing loading gives the Easy Glider Electric impeccable manners. By the second flight I was quite happy to turn hard at very low altitude (like under 6 metres!) and if there is a stall it's hard to find as my model merely gave a nod and kept on flying. I tried it on eight cells and the climb rate definitely looked to improve but the speed under power did not. A couple of writers on the Net suggest that it works well even on the 400 motor with 3S LiPos but as I haven't tried this – yet! I can't recommend it. On the glide the EGE is really smooth and quite a bit quicker than I'd imagined but the potential is clearly there to catch the merest bobble of lift.

I've now flown the model over several sessions and though I haven't tried it in high winds it has not given cause to change my initial impression that this is a really nice aeroplane and I'd recommend it to anyone looking for a sports electric sailplane.

CONCLUSIONS

I guess I should try to find faults but I really can't. This isn't me being nice or trying to curry favour with the importers but more a matter that the engineering of the kit and flight performance are just so good. I honestly thought that the Easy Star was as good as it gets but the Easy Glider Electric is one step up yet again. Make no mistake Multiplex have turned out a really competent and deceptively sophisticated electric sailplane that offers performance quite disproportionate to the asking price. I can tell you quite honestly that in my electric flying career I've spent much more money than the Easy Gliders are being sold for, on models with much less capability. The sheer fact that the model is made from foam should not deter even the more skilled among you from giving this aeroplane a second look. I'll guarantee that if you get the chance to fly one you will not be disappointed.

Multiplex Products are distributed to hobby shops by: Model Engines AUST. PO Box 828 Noble Park. Vic. 3174.

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