Reviewed by Tony Crisp

specifications

Manufacturer: Seagull Models
UK Distributor: J Perkins Distribution
Span: 55" (1400mm)
Weight: 3lb (1.4kg)
Functions: 4 channel (additional steering servo needed)
Motor: JP EnErG outrunner recommended
Esc; GWS 45A brushless recommended
Battery: 1800 - 2400mAh 3S EnErG lipo
Servos: 5 x Supertec Nano recommended

Kit price: £43.99

Innovator EP

An excellent EP trainer from Seagull...

As a born again modeller approaching my second childhood, I wanted to learn to fly RC and so through a friend, joined my local flying club. The best advice regarding what makes a good trainer is to ask the club members, so after a few visits to the field to meet my new clubmates and get the lay of the land, I started to ask around as to what would be the best gear to get. The majority of club members fly electric exclusively as the site is very noise sensitive, so it seemed logical that I should start that way, too. Coincidental to my third visit, one of the members brought along a new model, having broken his first model just before deciding he was ready to try for his A test. This new model was a Seagull Models Innovator EP and gave me my first chance to see what an electric powered trainer could do. To say the least I was very impressed - the brushless outrunner motor gave bags of power, most flying being done at well less than full throttle apparently and the 2400mAh 3-cell lipo battery gave it a very good duration. John got one of the more experienced pilots to trim it out for him, who, once having set it up to his satisfaction, flicked over to high rates and started to throw it about - no longer a trainer, but an aerobatic machine! On landing the expert declared that it was a terrific trainer that would take one way past one's A cert, although he didn't think that it would do the B cert as it was almost impossible to spin it! On low rates, he declared it "solid as a rock", Then and there I decided that I had found my trainer! That was two months ago. The review that follows is my experience with the Innovator EP as a relative newcomer - I had a lot of help from my new friends putting it together and setting it up and as I am still on the buddy box, I have relied on them to evaluate the 'flying' bit. In only three weeks flying, I am confident enough to fly around in almost total control and can attest the initial remark that it being a very stable machine. Dave, my instructor, reckons that in a couple more weeks I'll be ready to go solo - so I'm pretty chuffed. Despite the short time I've had it, I'm delighted with the Innovator - and so are my club mates who have had the opportunity to fly it, including Mike who introduced me to the model - and who successfully used it to pass his A at the first attempt just one week after it's first flight on that fateful day. I say fateful, as it was really pure chance that I should be at the field on the very day that Mike's Innovator EP convinced me that it was the one for me - I'm having a ball with it!

The nose locates on an ali tube, four lugs and is retained by four nylon bolts.

The wing joiner is an ali tube and identical nlyon bolts hold the panels in place.

Tail servos are mounted in the flying surfaces - two bolts hold the tail on.

The Model

The innovative thing about this model, apart form it being a super ab initio and aerobatic trainer is that it can be dismantled easily into pieces that fit the box it is supplied in that features a carrying

What's in the box?

You'll find the following :

- Two part fuselage (separate nose section)
- Two part wing
- Aluminium tube nose and wing joiners
- Tail surfaces
- Tricycle wire undercarriage
- Full hardware set
- Illustrated instructions

Contacts

J Perkins Distribution -
www.jperkinsdistribution.co.uk

Seagull Models -
www.seagullmodels.com

The fuselage top hatch gives access to the radio and wing bolts.

The outrunner bolts directly to the firewall above the noseleg fitting.

handle. The wings are two-piece, joined with an aluminium tube and secured by four Nylon (?) wing root bolts accessed from the removable top hatch that is held in place by magnets. Naturally, this also gives access to the radio bay, which contains just the receiver, as the rudder and elevators are mounted in the tail, in each flying surface, needing extension leads to catty the servo leads forward to the Rx. The mounting of the two rear servos is a bit crude, but perfectly adequate (they fit in prepared cut-outs under the film covering) the leads enter the fuselage through a aperture in the top deck just in front of the fin. The tail and fin are held in place by two socket M3 bolts fitted through the bottom of the fuselage. The fuselage extension leads need to be long enough to allow the tail servos to be disconnected, whilst being connected to the Rx. The wing servos are fitted fairly close to the wing panel root, so an extension lead is not necessary, just a Y lead to connect the aileron leads to the Rx.

The undercarriage is a tricycle lay-out, the noseleg is removed by releasing the single screw that firmly holds the steering tiller arm to the noseleg and sliding the leg out of the supporting bracket. The main undercarriage is made from two torsion bar wire legs, held in place by two clamp plates, secured by four self-tapping screws. Up front the motor - I used the recommended JP EnErG outrunner motor (J Perkins staff were very helpful in advising which gear is suitable and as they can supply everything one needs, it makes good sense to buy all the stuff together), which is supplied with a motor mount plate, fixing screws and prop driver unit. The one thing that threw me was how to mount the motor as the mounting plate has to be screwed direct to the bulkhead - to cut a long story short, I had to remove the motor shaft and turn it round so that the mounting plate could be screwed to the rear face of the motor casing - the shaft is naturally a good fit and needed careful removal with a drift and hammer (I guess a drill press would have been the professional way to do it!) - and no, I didn't do it myself, I got one of my new clubmates who flies electric exclusively to do it for me!

I found the instructions very comprehensive and easy to follow and although I did have someone on hand to help put the Innovator EP together, I can report that I did most of it myself and, as this is my first ARTF, I think that says a lot for its ease of assembly.

For battery power I used a 3 cell 1800mAh lipo - Mike used a 2400mAh in his - and this proved a little light for the model in that I needed a lot of noseweight (fitted in the battery bay and one of the cowl cheek sides) to get the advised balance point. The 1800mAh pack gives adequate duration for initial flights, but I have since substituted a 2400mAh pack , too, and removed a lot of the noseweight.

The last very important feature of the Innovator EP is that the whole nose can be removed for transportation in the carry box (removing the prop and noseleg, too). It is located on an aluminium tube that runs fore and aft in the nose section and the rear part of the fuselage and is held firmly by four slots/lugs on the mating bulkheads and four more Nylon bolts - two accessed from inside the radio bay and the lower two from the battery tray aperture under the nose.

All in all, it took me about a week of evenings to get it ready for flight - not bad, I think.

FLIGHT TEST

Pilot: Dave Roberts

RECOMMENDED PRE-FLIGHT CHECKS

The Innovator EP is a pretty looking model and when checking over Tony's model, the build standard looks very neat and well executed. The chequered underside is particularly good for a trainer, to help orientation. Tony had set up everything pretty well for a first attempt and I only needed to adjust the rudder and elevator pushrods a little and level out the ailerons to satisfy myself that it was ready to go for its maiden flight.

IN-FLIGHT HANDLING

Having seen Mike's identical model a few weeks earlier, I was expecting the model to be quite fast, but closer examination of the Tony's motor revealed that it was a smaller motor than Mike had used and this reflected in the reduction of flying speed and agility. Eminently suitable for training purposes, but I was expecting to be able to slip on the high rates and have a ball. The Innovator EP is a really stable platform when trimmed out and the bright colour scheme does certainly make it easy to see. The stall is very forgiving, almost non-existant - the nose just drops and control is recovered almost immediately. Slow speed handling feels nice and safe and on full tap, the speed is sufficient for rolls (needing a dab of down when inverted to keep the roll axial), needing a little dive for a loop, but with a decent amount of air beneath it, it will bunt and fly inverted with little effort. I couldn't get it to spin, another good feature for Tony in his early learning stages - all in all, an excellent trainer.

PILOT'S VERDICT

The duration at full throttle could be improved with a bigger capacity battery pack, but the 1800mAh will be enough for the meanwhile. I like it - just shows how ARTF models and electric flight have come along in recent years!

Checklist - recommended extras...

You don't have to have these extra bits, but they may help!

- ☐ A 3 cell Lipo of more than 2000mAh will help the balance.
- ☐ Two 30cm extension leads and two Y leads.
- ☐
- ☐

Summary

Who is it for?

Make a great little trainer that will do the A test and help get you ready for the B- fit a larger motor and it makes a great little aerobat that's difficult to spin!

Value for money?

In a word, yes! Sturdy, it should take the beginner right through the buddy box to solo learning process with ease.