



Acro-Wot Foam-E

HONEST-TO-GOODNESS FOAM AEROBATS CAN SOMETIMES LACK THE CHARISMA TO MAKE IT IN OUR FICKLE WORLD. WELL, ACCORDING TO SHAHID BANGLAWALA, THIS ONE'S GOT 'BUY ME; FLY ME; LOVE ME' WRITTEN ALL OVER IT!

Like the Wot 4 Foam-E, this one is smaller than the balsa version by about 18%, give or take.

Chris Foss has achieved near legendary status in the UK as a designer of airframes that fly brilliantly. Countless pilots have cut their teeth on the entry-level Wot 4, before moving on to the gorgeously aerobatic Acro-Wot. A few years ago Ripmax announced that the Foss designs, up until then only available as builders' kits, would finally be manufactured in balsa ARTF and foam ARF form so a new generation of flyers could enjoy these classic airframes.

Yep, you guessed it, adding the decals really is the longest task!

I was unhesitant in placing an order when I heard that a foam Acro-Wot was on the way, having become well



acquainted with the Wot 4 Foam-E during my final year of university flying a number of them for UAV testing purposes. The machine represents genuinely brilliant value for money, is very versatile, easy to build and easy to repair. The prospect of the same traits but in the sexier Acro-Wot guise was too much to resist.

For an RRP of £149.99 you get an airframe with 9g servos, motor and speed controller (ESC) all pre-installed. The box revealed bubble-wrapped

main components, albeit not rigidly secured but the model is quite tough so, in my view, is unlikely to suffer any major damage in transit. Flying readiness entails some very simple final assembly and the installation of your Rx and battery. Oh, and sticking on the supplied decals, if you wish

ASSEMBLY

Written in plain English, the manual uses colour photos and explains things well, so the assembly process

will be very easy for almost anyone. The tailplane slots into a cut-out on the fuselage after which the fin follows, both being fixed with two bolts secured from the underside. Tail feather control horns are then fixed in place, as is the tail wheel, leaving just the control runs to connect. The aforementioned runs are snakes which are well supported throughout and, on my model, were bind free. That said, I did need to trim back the outer sheath on one snake in order to allow sufficient elevator movement. Swing keepers are used to link the snakes to the surfaces and there are quick connectors at the servo end. The aileron linkages, incidentally, are all done for you.

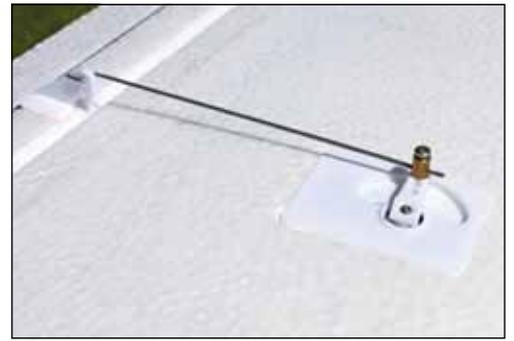
Moving to the undercarriage, this just needs bolting on with two screws, the wheels and axles being prefitted. With this, the propeller and spinner are added to the motor, er... and that's it! Just add your receiver and flight battery and you're ready to go.

ESC FUN?

Well, not quite. The outrunner is unbranded, fitted with an ST Models 11 x 8" prop and mated to a HobbyWing Sky Walker 40 amp ESC, suitable for 2 or 3 Li-Po cells and equipped with a 5V 3 amp BEC. The manual recommends 3-cell Li-Pos of between 2100 and 2500mAh, so I initially tried a 2200mAh pack. This was just a little too big however, preventing the hatch from closing properly and leaving the C of G significantly forward of the recommended location. The ESC is the culprit, its location impeding batteries of the suggested size from moving back into the battery cavity. It's a problem that has prompted Ripmax to leave details of a suggested fix and alternative ESC location on their website at www.Ripmax.com. It's an easy fix and with this done, most 2200mAh 3s packs should slide home.

FINAL CHECKS

Not only are all the moving surfaces pre-hinged in the mould, they're reinforced with integral Mylar strips, positioned at intervals. Very reassuring. Actually, my experience of models made using EPO is that they're very durable. Furthermore the foam itself is very tough and more resistant to damage than EP P. Better still, unlike EP P, EPO breaks away cleanly in a crash so it's easy to find all the chunks and glue them back together without leaving unsightly holes or gaps. EPO is cyano friendly too, 'foam safe' cyano not being required.



I can't fault the tail bracket, horns and swing-keeper clevises, they're all good.



The Acro-Wot's Zlin-inspired lines really do make the design seem almost timeless.



Strength has been added in appropriate locations with two carbon spars running through the main wing. Meanwhile, the ailerons are reinforced with a carbon rod and the wing tip undersides feature plastic reinforcement. The elevators are joined with a metal staple although, frustratingly, this isn't stiff enough and, as such, the halves have differing amounts of travel. I wondered how this might affect the flying, but, thankfully, glaring issues were absent.

The tinted canopy is pre-fitted but can be carefully removed if a pilot figure is preferred. There's no removable cowl as such; access to the ESC and motor achieved by removing the battery hatch. Cooling for the powertrain is via moulded plastic cowl cheeks, with a corresponding air exit hole halfway down the underside of the fuselage.

FAIR DAY

I dialled in the recommended throws but didn't bother with exponential as none was mentioned in the manual. There's plenty of authority from the tail wheel for steering, although it won't be on the ground for long! On my first flight the model shot down the runway like a scalded cheetah. With this, I pulled it into a vertical climb and it rocketed skyward. Aided by inertia? Yes. But there was no doubt in my mind that there's a generous amount of power available. In fact, it almost felt like an unlimited vertical and though I didn't try a prop hang, it may just do one.

Anyway, at this point I cut the power back to trim it out. A few clicks of aileron were required but much more elevator. Up elevator in fact, which indicated to me the tail incidence is probably out. You could move the C of G back if you wish, to try and reduce this trim, but, to be honest the model felt great with the C of G where suggested.

The recommended throws give a sprightly aerobatic performance without being uncontrollable. That lack of exponential caused no issues, indeed the Acro-Wot didn't feel at all sensitive around centre stick. The roll rate is brisk without being too fast and there's plenty of elevator on tap for tight loops or snap rolls. Whilst we're on the subject of rolls and snaps, this thing rolls very nicely,

The simple alloy u/c is strong and has proved to be problem free.

better than I expected. They're quite axial and pleasingly crisp, so large corrections aren't needed to keep the nose from dropping.

Upright snaps are possible, but of the lazier kind rather than violently quick. Negative snaps are faster and if you keep those going you can achieve some nice big tumbles and lomcevaks. If you want faster, bigger snaps then there's scope to increase the control throws beyond the recommend values. The Acro Wot will spin happily upright and inverted with just rudder and elevator.

Cutting the power right back revealed a number of things. First, the stall is completely manageable. The aircraft will slowly dip its nose and quickly return to normalflight when the elevator is released. Failing that it'll drop a wing, though not suddenly. Instead, it's slow, just like the nose drop and there's plenty of warning.

Mind you, why you'd get into a stall in the first place, I don't know, because this machine can be flown incredibly slow yet remain totally controllable. Truth is, one of the best things I did during those first dozen or so flights was just to stooge about a few feet off the deck using just enough power to do big, lazy, slow chandelles and wing-overs – a refreshing change from all the 3D and F3A flying I normally do. You can fly the Acro-Wot almost as slow inverted and it's easy to punch out of trouble with the power reserve.

Inverted flight requires very little elevator, yet it doesn't fly hands-off inverted either, so the recommended C of G feels right. The Acro-Wot has a great glide, too, much better than its racy aerobatic look would suggest; it doesn't just slow and fall out of the sky, which means you can chop the power completely for low passes or landings and watch the model cruise along quite happily.

The sit of this thing in the air is just great so, at times, I go for knife-edge passes. Yes! It will knife-edge! Again



Ripmax' website offers a solution as to where it's best to place the ESC. This is one alternative – simply cut a slot in the foam bulkhead and tuck it in.

Performance is assured no matter which way up it flies. At the suggested C of G, inverted flight needs just a tiny amount of 'down'.



better than I'd have thought, especially given that the fuselage isn't deep at the front and tapers a fair amount at the back. My Katana does a terrible knife-edge in comparison, and it's a proper 3D model. What's more, this Acro-Wot can just about squeeze a big knife-edge loop.

ALL UP

Quite honestly, there's nothing about the way this model flies that I don't like. As something for club flying, it's great. For sport aerobatics, it's great. For stooging about at low power, it's great. As a second model, it's great. Heck with reduced controlled throws you could teach someone how to fly. This is no pattern ship nor is it a 3D model, it's not designed to be, but it's a good all-rounder, fun and versatile. Truth is, it represents ridiculous, and I

really mean ridiculous, value for money; it's not just a case of getting so much model for your cash or the fact it does really go together in thirty minutes – it's a Chris Foss design, something that's associated with genuinely fantastic flying aircraft and this one's no exception. Whatever it is you fly, whatever your skill level, seasoned professional or new to the hobby, you'll really enjoy this model.

With a single figure wing loading, it's no wonder this machine is so forgiving!

DATAFILE

Name:	Acro Wot Mk.2 Foam-E
Model type:	Ready-to-fly EPO foam aerobat
UK distributor:	Ripmax Ltd. Tel. 0208 282 7500 www.ripmax.com
RRP:	£149.99
Wingspan:	1250mm (49")
Fuselage length:	1015mm (40")
Wing area:	410 sq. in. (approx)
All-up weight:	2 lb 11oz (1200g)
Wing loading:	7oz / sq. ft. (2.1kg / sq. m)
Functions (servos):	Aileron (2); elevator (1); rudder (1); throttle (via ESC)
Power system:	3536 820Kv brushless outrunner; 11 x 8" prop, 40 amp ESC - 330 watts, 30 amps peak
Quality:	<input type="checkbox"/> Poor <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Excellent
Assembly:	<input checked="" type="checkbox"/> Easy <input type="checkbox"/> Intermediate <input type="checkbox"/> Difficult
Flying:	<input checked="" type="checkbox"/> Novice <input type="checkbox"/> Improver <input type="checkbox"/> Experienced

