



Acro Wot Mk.2

SO SUCCESSFUL WAS THE REBORN WOT 4 THAT IN ORDER TO COME CLOSE, RIPMAX' LATEST OFFERING IS GOING TO HAVE TO BE GOOD... VERY GOOD!

Surprised? You shouldn't be - the success of the Wot 4 ARTF meant that the Acro Wot was odds-on favourite to follow.

Team it up with a .70 four-stroke and you'll struggle to find a better sporting combination.

Here's something for you trivia fans, I bet you didn't know that Chris Foss sold his first Acro Wot kit on 7th May 1985. Well, now you know. Oh, and he followed that up with another 68 kits at the Sandown Model Symposium a week later. The figure now runs into the tens of thousands and the machine has gone on to become an all-time classic, the quintessential low-wing club aerobic trainer and sport hack.

Although the traditional kit still sells and will remain in production, it's no great surprise to see this pre-built version, after all, the ARTF Wot 4 has



sold in vast quantities since it was introduced three years ago.

Devised as a low wing, fully-symmetrical Wot 4 variant, Chris admits that his love of the Zlin 50 had some influence on the Acro Wot's styling, indeed, if you look carefully, the evidence is there. Unlike the Wot 4, the Acro Wot is unusual in that it's survived all these years in its original guise. There have been no amendments and no later versions, although that hasn't stopped builders making their own tweaks and mods

along the way. Some will tell you that such tinkering is unnecessary yet all agree that the Acro Wot is, and remains, the very best of its type

Having applauded the longevity of the design the keen eyed amongst you will have noted that this particular model is a Mk.2. Sure enough, bringing the model to the ARTF market has allowed Chris to make some subtle changes. Here, then, you'll find that the fuselage is a bit wider and deeper, the wing tips are now of a Hoerner style rather than flat



ended and the rudder has grown, too, increased at the expense of the fin thanks to a balanced upper section.

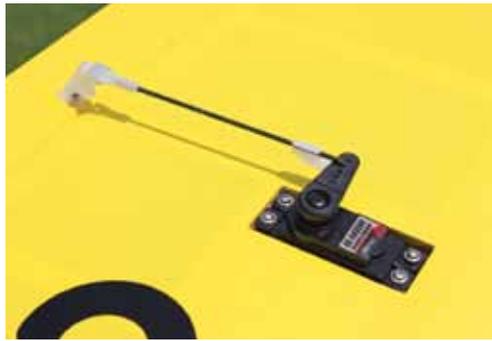
UP CLOSE

Like the ARTF Wot 4, this one's for i.c. powerplants, specifically .40 - .55 two-strokes and .70 - .80 four-strokes. Ask any Acro Wot fancier which engine hits the sweet spot and the .70 four-stroke will be your answer Chris will tell you the same. All agree that the power, low down torque and the ability to swing a large prop (that can be used to help slow the model on down-lines) combine to make it the connoisseur's choice. Don't get upset if a four-stroke isn't feasible, it'll fly well on a .46 two-stroke, although I'd suggest that intermediate and experienced pilots will prefer a .60.

You'll have to make your own arrangements if electric power is your bag. There's no shortage of affordable power systems these days but, disappointingly, and like the ARTF Wot 4, this one doesn't possess a top hatch. As a result, wing removal is the only means of battery access unless you're willing to cut some balsa and create an alternative.

So, what of the kit? Supplied with a good hardware set that includes a 270ml fuel tank, spinner, engine mount, dural undercarriage and wheels, there's also a pre-fitted pilot figure, plus a factory decorated fibreglass cowl and canopy. The airframe is built using laser-cut balsa, liteply and traditional ply and is covered in a new variation of the traditional Foss scheme which really doesn't seem to have dated over the last 27 years. Although the covering hasn't been named, it's nicely applied and responds to a little heat when the odd wrinkle appears.

Like many Foss designs there's a refreshing simplicity to construction that contrasts with many contemporary ARTFs. The wing is a



Standard servos will suffice here. I used sport digitals.

The hardware is perfectly fine although large engine fitters might be inclined to consider a fuel tank with an increased capacity.

part sheeted built-up structure, while the tail feathers are full sheet with cross-grain tips, the stabiliser also having a built-in ply strengthening brace. Significantly, the airframe is strong, well made and features little touches that, for an ARTF, stand out. Examples, of such are the 6mm ply wing bolt plate with triangular reinforcement and the hardwood engine mount on the firewall that adds both strength and side thrust. Just like kit built Acro Wots, then, the ARTF is built to last



ARTF or two the process is an entirely straightforward affair and, no doubt, a reflection of Chris' involvement though the model's development stages. Without re-writing the manual, let's take a minute to stroll through the process:

GETTING IT TOGETHER

There's nothing tricky or difficult where assembly is concerned, indeed for those who've already built an

Fuselage: Here, the engine mounting holes are pre-drilled and captive nuts factory applied, though do note that the engine mount bearer spacing may not be wide enough for over-large engines. Truth to tell, getting my ASP 70 to fit was a quite a squeeze. When positioning the engine, do make sure to measure the prop driver distance from the front of the hardwood firewall extension, as the manual illustrates.

Moving rearward, you'll find that the second former is cut to accept the fuel tank, however the tank is too short to sit with its front resting on the firewall and rear on the former As a result, it'll need supporting with foam. Fitting the elevator pushrod is a little

This, the first ever Mk.2 Acro Wot reflects some of Chris' design tweaks. Note, for example, the new rudder and Hoerner wing tips.





I honestly think the machine still looks as fresh as the day the first kit was sold.

fiddly but made far easier when using the method described in the instructions; perhaps easier still if the pushrod is inserted before the engine is fixed in place.

It's nice to see that the canopy hasn't been factory fitted, which means it can be attached using a preferred method – canopy glue at the rear and trim tape at the front for me. Before adding the canopy, note that you may need a heat iron to tighten the black film that covers the cockpit floor. On a hot day there's a chance of this wrinkling again, so consider screwing the canopy in place to facilitate access.

Tail: Another easy section but don't forget to insert the wire elevator joiner before the stabiliser is glued permanently into place!

Radio: The pre-cut servo apertures should accept most servos, and there's plenty of room for the receiver and battery. The elevator, meanwhile, operates courtesy of a pushrod, whilst the rudder employs a closed



loop system. Note that the thick dowel pushrod is a snug fit and may need some tweaking to ensure it doesn't snag on internal formers.

Wing: A straightforward operation although it's suggested that the servos are added after the two wing halves are permanently joined, whereas I think most will find it easier to add them before. I found the leading edge retention tab in need of a little trimming in order for it to fit the hole in the fuselage former.

FINAL FIT

My model weighed in at 6 lb 10oz (3005g) after requiring some 8oz (234g) of lead in the nose to balance at the suggested 3.25" back from the root leading edge. I was a bit surprised to find this was required given that I was using one of the larger engines in the suggested range but need it the model does. I may lose an ounce or two during a carefree moment at some point in the future but, for now, I'm happy with the way the model flies and see no particular need to experiment. Maximum rudder deflection is suggested from the off while the

remaining control throw suggestions are good starting points. I've subsequently increased the rates, whilst softening with a little expo' as, I'm sure, many others will do.

AIR SIDE

My model required precious little trim during the first few flights, indeed a few clicks of 'up' soon had her tracking well. Side and down thrust seem pretty spot-on so, again, I've not tweaked here either. I genuinely think the 70 four-stroke is a fine choice for this model, one that provides plenty of pulling power when matched to a 13 x 8 APC prop. I'm convinced that the resulting rate of climb will satisfy experienced pilots and, yes, the big prop's presence can be felt on the downward legs. Those fitting engines on the larger side may be inclined to upgrade the fuel tank which, in truth, seems sensible for although I've managed to squeeze 10-minute flights from that supplied, a more modest 8 minutes is the careful norm.

So, how does it fly? Well, like the Wot 4, this one displays a very wide performance range. It's a very friendly aeroplane if you're just moving up

Acro Wot fanciers won't need me to tell them that this is a delightful aeroplane. For anyone else, trust me, it is.





The simple, strong, fuss-free dural u/c is easy to fit and absorbs the shocks nicely.

from a trainer and want to fly carefully on low rates yet, on high rates, it'll also impress those with an aerobatic bent. I think it's fair to say that the model has a slightly more traditional aerobatic repertoire and flying feel. As a result, if you're accustomed to the precision of, say, an Extra 300, then the rolls may not seem quite so axial. Mind you, that's not really a slight, indeed all the way through what's impressed me most about the Acro Wot is how very enjoyable it is to fly. Rolls are smart enough and the machine still retains the ability to set the adrenaline flowing when the sticks head for the corners. Slow speed handling is predictable and safe, although those moving on from a Wot 4 won't find the model quite as benign, which is how it should be. This, after all, is a low-wing aerobatic trainer. That said, the stall, when it comes, isn't vicious and the model won't trip you up at any stage unless you go seeking trouble.

Knife-edge needs a little coupling and perhaps a touch more rudder than you'd expect, whilst point rolls and slow rolls are easy. Inverted flight, meanwhile, needs just a hair's breath of 'down' at the suggested C of G, and if spins and flicks are your thing, rest assured that recovery won't cause you a problem. Finally, landing the model is a routine task



I cut an extra aperture on the cowl underside to help promote cooling air flow. A sensible precaution with a close cowled engine.

that'll require only the usual balance of throttle and elevator.

Now, I have to be honest, I hadn't flown an Acro Wot prior to this, indeed I'm ashamed to say that somehow this Foss classic has passed me by. This being the case, I jumped at the chance to fly Totally Trad' columnist Pete Lowe's kit-built, .60 two-stroke powered version on the day of the ARTF's test flight. The trad' machine weighed the same and was identically balanced, so, by way of comparison, it's a good one. In the event I did notice that Pete's version sometimes displayed a fish-tailing tendency at slower speeds (an Acro Wot kit trait I'm told), something that's been addressed in the Mk.2's tweaks. Nevertheless, when factors such as control throws were accounted for, the two models flew and felt very similar although, I have to be honest, the ARTF seemed a shade nicer all told.

SUMMING UP

It's fair to say that the ARTF Acro Wot and I have bonded quickly and although it may sound like a cliché, as one flight followed another, I've really come to appreciate what a fine machine this is. Aside from the obvious requirement that they fly well, classic R/C models often have an indefinable quality that sets them

apart; you can see how this one fits the description. Acro Wot fans won't be disappointed with this model, and nor will anyone else. It'll sell well, not only because of its name but because of the obvious care and thought that has gone into the package and the assured performance that results.

DATAFILE

Name:	Acro Wot Mk.2			
Model type:	ARTF sport aerobat			
Manufactured by:	Ripmax Ltd.			
UK distributor:	Ripmax Ltd. Tel. 0208 282 7500 www.ripmax.com			
RRP:	£139.99			
Wingspan:	59.25" (1505mm)			
Fuselage length:	47.25" (1200mm)			
Wing area:	640 sq. in.			
All-up weight:	6 lb 10oz			
Wing loading:	18oz / sq. ft.			
Functions (servos):	Aileron (2); elevator (1); rudder (1); throttle (1)			
Engine used:	ASP .70 four-stroke			
Quality:	<table border="1"> <tr> <td>Poor</td> <td>Acceptable</td> <td>Excellent</td> </tr> </table>	Poor	Acceptable	Excellent
Poor	Acceptable	Excellent		
Assembly:	<table border="1"> <tr> <td>Easy</td> <td>Intermediate</td> <td>Difficult</td> </tr> </table>	Easy	Intermediate	Difficult
Easy	Intermediate	Difficult		
Flying:	<table border="1"> <tr> <td>Novice</td> <td>Improver</td> <td>Experienced</td> </tr> </table>	Novice	Improver	Experienced
Novice	Improver	Experienced		