

KINGFISHER

Rugged, multi-role models are certainly 'on trend' at the moment and with a boxful of all-season accessories to keep you airborne come rain or shine FMS is hoping to steal the march. David Ashby takes a closer look...

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"...if you're after a multi-role model then don't let the word 'trainer' put you off. This is simply a relaxing and enjoyably well-mannered aeroplane"

Appealing looks and friendly handling make the Kingfisher a no-brainer for general sport flying.

TESTING, TESTING | RTF multi-purpose sportster



In a departure from the recent glut of EDF jets and warbird releases, FMS has decided that it's high time it entered the multi-role trainer market. And a busy genre it has been these last few years thanks to E-flite's Timber and Durafly's Tundra; both proving extremely popular. Is there room for another all-terrain flyer? Well, in terms of size the Kingfisher sits between the 1300mm

span Tundra and 1500mm Timber. It comes with floats, as do the other two, but they don't have the Kingfisher's skis. Large wheels are obligatory and this one has 4.75" beasts with a foam inner and a rubber outer, so they're a bit better than the Tundra's all-foam jobs. The Kingfisher adds an FPV capability too with the inclusion of a second canopy hatch that's moulded to accommodate the extra gear. Oh, and it'll tow a glider as well, thanks to a neat slot that allows a tow line to be passed around the main wing spar (although there's no line release mechanism).

The model arrives ready to fly with a factory-fitted power system and servos. Your receiver and 3S 2200mAh LiPo are all that need to be added. Flaps are on board although early photos of the Kingfisher appeared at the start of the year revealing a model without, which may explain why the manual fails to illustrate them or suggest deflections. Still, the manual makes amends by detailing the ESC's programming steps, which is something you don't always find, and it's very handy if the ESC sees use in another model after Kingfisher.

Rather than decals, a bright, sprayed colour scheme has been added which, with good masking, has created a neat appearance. The model certainly looks appealing.

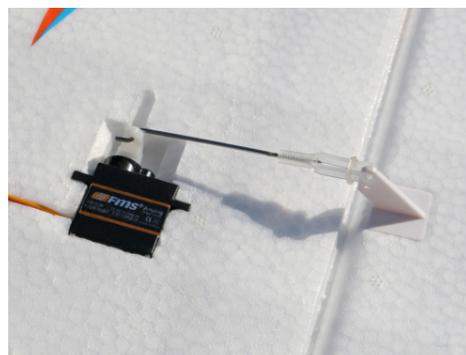
ASSEMBLY

The manual is well-illustrated and the assembly steps straightforward, so getting everything together barely warrants a mention. Y-leads are supplied for ailerons and flaps, although they're optional for those who have enough receiver channels and prefer to hook them up separately. A shelf above and behind the battery bay is an obvious home for the receiver and succeeds in keeping wiring away from ham-fisted battery swaps.

The wing is two-piece and each is retained thanks to a neat clip system. Wing supports are secured using quick-release R-clips so break down is swift, although the model should fit in most cars without that. The fin forms part of the fuselage and a clever locking system accepts the clip-on stabiliser. Clever again, the steerable tail wheel passes up through the stab to be



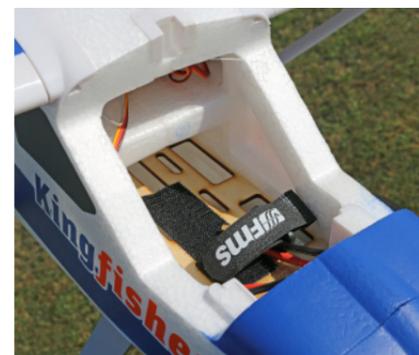
It's all good back here. That little plastic tab at the back end is pushed up to release the tailplane and slide it out.



These FMS clevises never look up to much yet I've never had one fail.



The wing struts are quick-release thanks to R-clip retaining pins.



Plenty of room under the canopy for a 3S 2200mAh LiPo along with a small FPV VTx battery.



The little shelf just behind the battery bay is the perfect place for your receiver.



The rudder horn plate also clamps the tail wheel leg or interchangeable water rudder.

clamped against the rudder. It can be quickly removed to make way for the water rudder that's attached in the same way. The floats are braced using the struts provided and these use the rear fuselage hard point and main undercarriage mount, with clamps for retention. Skis simply replace the wheels and use a wire clip to ensure they remain parallel to the fuselage for landing.

PRE-FLIGHT

My 11 x 7" prop and spinner spun well without the need for balancing and a 3S 2200mAh LiPo battery sits neatly under the canopy, retained by a Velcro strap. The canopy is retained by a plastic clip rather than the usual magnets and that's a good thing, especially as the FPV canopy module will be carrying the weight of the camera and VTx. Needless to say, nothing good would happen if it parted company.

Both high and low rate control surface deflections are suggested although there's little difference between the two and, for most flyers, the low rates will be enough, especially considering the model type and remit. My Kingfisher balanced just fine in the recommended range, i.e. 60–65mm from the wing leading edge, measured at the root.

TRAINER?

FMS describes the model as a multi-role trainer so establishing its suitability for beginners was my first task at the field. I've treated the model to both calm and breezy conditions over the last few months and found a benign and friendly aeroplane with predictable handling and a wide speed range. The Kingfisher isn't fitted with stabilisation aids but I'm increasingly of the opinion that they're not really needed unless you're teaching yourself to fly. In a club environment (with an instructor at the sticks) artificial stability can be a hinderance in that there are more processes to remember and there's more to go wrong (remember too that all these aids must be turned off before an A-certificate test is attempted). In truth this model is every bit as good as a stabilised alternative but with the simplicity and easy flying characteristics that beginners will come to appreciate. Flight endurance comes in at the 8–9 minute mark, perhaps a little more, and the 3S 2200mAh packs needed are cheap-as-chips these days, so a fistful of LiPos will be enough to make a dent in the learning programme at every flying session.

Some modest aerobatics are in the flying repertoire including slow rolls, loops, stall turns and so on. Inverted flight needs a little elevator stick pressure. I should add that this is a good model for those unfamiliar with flaps. I've allocated mine to a slider and tend to use them for



Although it's a steady training platform you can still throw it about.



This is the sort of grab 'n' go model you'll appreciate when the weather's less than comfortable.



The 4.75" tundra-style wheels enhance both the versatility and the fun factor.

DATAFILE

Name:	Kingfisher
Model type:	Multi-purpose sportster
Manufactured by:	FMS
Distributed by:	CML Distribution – www.cmldistribution.co.uk
RRP:	£199.99
Wingspan:	1400mm (55.1")
Fuselage length:	915mm (36")
Wing area:	451sq.in.
All-up weight:	1400g (49oz)
Wing loading:	15oz / sq.ft.
Power system:	3536 850KV motor, 40A ESC, 11 x 7" prop, 3S 2200mAh LiPo
Functions (servos):	Aileron (2); flap (2); rudder (1); elevator (1); throttle (ESC)
Req'd to fly:	Tx, Rx and 3S 2200mAh LiPo battery

landing. It's fun to climb to, say, 100ft, fly to the edge of the patch, drop the flaps all the way, push the nose down and come to rest just half way down the strip.

FLOATS & SKIS

Snow has yet to arrive so I can't speak for this particular aspect although the Kingfisher is a capable, steady platform, so I'm sure they'll increase the model's versatility and fun factor. At time of writing I have the floats fitted and a trip to some local water is on the cards with brother Graham who has the new float-equipped FMS J3 Cub to try. Should

be a fun trip and we'll report back soon. Now, some will be tempted to add an extra LiPo cell for a bit more power but I have to say it's not essential and certainly something that shouldn't concern beginners.

A good trainer then? Certainly, it's a pretty, well-made machine (better, in my opinion, than the Tundra) that flies very well indeed. And there's no reason why beginner's should have all the fun, so if you're after a multi-role model then don't let the word 'trainer' put you off. This is simply a relaxing and enjoyably well-mannered model. ✈



FPV MODULE

Inclusion of a dedicated foam hatch cover designed to hold FPV gear is a nice touch. It incorporates a ply shelf and opening for a camera, the shelf's underside suitable for a video transmitter with the gap behind the shelf allowing an antenna to pass up through to the outside world. I tend to run a fixed-wing VTx on a separate power supply, usually a 2S 700mAh LiPo and the Kingfisher has room for this just behind the main battery. It's a neat, self-contained FPV solution that can be quickly swapped out for the standard canopy.

I have some misgivings though. Many dedicated fixed-wing FPV models are of pusher configuration for good reason; the wavy lines created by the spinning prop clutter the picture feed, which some find a distraction. Nevertheless, I fitted a Foxeer Monster V2 camera and a VTx, donned goggles and took the Kingfisher skywards.

The prop picture noise was there and while a bit of airframe on screen helps with orientation, there's a bit too much nose in view for my liking. The camera mount is snug for a reason – to hold the camera secure – so with no scope to raise the camera (while keeping it parallel to the model's centreline), the only solution is to either angle the lens upwards or place the camera on top of the canopy.

It's subjective, perhaps, and all that may be of little concern to you. What's in little doubt is that the Kingfisher offers an easy-flying, viceless FPV platform in calmer conditions. The large wheels mean take-off is simple and while landing using FPV is always tricky as it's so difficult to judge a model's precise height, again, the u/c can take a few messy arrivals in its stride.

Floats are supplied with the model and we'll be testing them very soon. Stay tuned.