

Reviewed by Office Staff

# RC X-Twins

The new Range of Silverlit RC models from Flying Toys...

When the first series of Silverlit flying toys hit the shops, there was a general opinion from traditional aeromodellers that 'they're only toys' and 'they're not for serious modellers' - well, how wrong they were! You can't go to an indoor meeting these days without there being at least a half dozen Silverlit models flitting around and everyone you talk to has either flown one or owned several of them and found them great fun.

True, the control system isn't like normal 3/4 channel RC and the performance is not on the same ballpark as even the most basic of IC or EP trainer, but they have brought fun back into the sport and with it a lot of youngsters who have discovered the joy of flying 'toy' aircraft and are far more likely to move on to have a go with the 'real thing' and maybe build a model themselves. That last part is debatable, I know, but there is no denying the first part. As regards to risk - there is so little involved - the models are lightweight foam and the speed at which they fly cannot be regarded as dangerous. The Infrared control system has a limited range and is directionally critical, so a model flyaway hazard is an impossibility. The technology of the built in powertrain is such that a single charge can give many minutes full throttle running, allowing maximum flight attempts until the 'knack' of control is attained, without having to 'plug and wait' while the battery gets a new dose of Amps. I personally can't wait until my grandson gets to the age where he is able to work through the control protocol and we can do some really serious 'bonding' out in the park! I for one, being what I would call a serious modeller of some years experience, still get a lot of fun out of these little machines and appreciate the opportunity they give to have some real to goodness fun without risking life, limb and a large investment model.

## Test conditions

We have collected here just 3 of the new 'types' from Silverlit and put them through their paces in the hands of several of our office staff (one of the perks of slaving in front of a hot computer day in and day out!) in the field behind our offices. None of the crew are 'modellers' and have no previous experience of RC flying, except with previous examples of the Silverlit range that have been put through the 'hands on' testing process. Each was given a model with a full charge, instructed to read the instructions carefully - and left to their own devices outside for however long it took to run the battery down. The models, it has to be said, stood up to all this use and abuse extremely well, showing just how resilient they are to normal (ok, in one or two cases, abnormal) usage. It took two afternoons to let everyone have a go with every model and then we got them to place them in order of preference i.e. ease of control and hence, fun satisfaction. From four pilots and three different models, there was no clear favourite, it has to be said, but it was also evident that everyone had claimed success in flying the models - even the girls, the female sex being, as it's widely known, to be somewhat lacking eye to hand co-ordination and special awareness as their male counterparts are (yes, I know there are exceptions, but not at least in THIS team of volunteers!). So let's look at the models.

## Where do I get them?

Silverlit flying kits are available from good toy and model shops everywhere and are distributed in the UK by Flying Toys. Visit the website for details of the full range: [www.flyingtoys.com](http://www.flyingtoys.com). The price of the Silverlit V22 VTO is £39.99, the X-Twin Classic Sopwith Camel and the X-Twin jets cost £29.99 each.



Above: Three different jet layouts, same twin pusher format, same great fun!

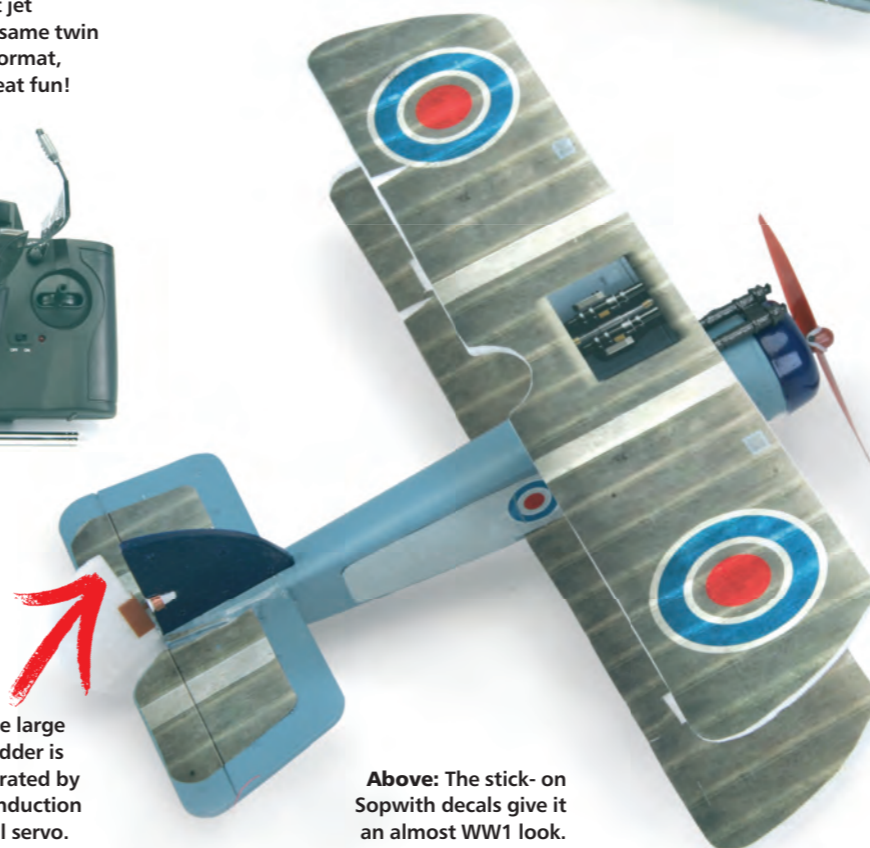
The jet tail surfaces can be 'tweaked' for trimming purposes.



The twin motors have thrustlines built in.



Above: A common Tx for the jets, with trim adjustment.



The large rudder is operated by an induction coil servo.

Above: The stick-on Sopwith decals give it an almost WW1 look.

All Silverlit kits are superbly presented in eye-catching packaging.



## X Twin Classic

The first of our test types is the X Twin Classic Sopwith Camel biplane. It has two channel RC control on 27mHz, this time throttle and rudder control, just like the very early RC control systems, except this is obviously micro-sized and the rudder is operated by an induction coil type servo. The flat plate foam wings have, in true free flight tradition, quite a bit of dihedral built in, in the form of a convex bow, the lower wing is glued to the bottom of the fuselage, whilst the top wing is supported on plastic cabane and interplane struts (braced with thin plastic spure). This, and the oversized tail area (another free flight scale trick to aid stability) and large fin give the Camel a slightly comic look, if seen through critical scale fanatic glasses, but otherwise it's definitely a WW1 biplane! Again, the extreme light weight of the airframe has protected the model from the rigours of testing and it has survived unscathed - that in itself is testimony to its rugged design! This is the one model that can genuinely be flown both indoors and outside, although the same limitations apply - virtually no wind outside, or a large sports hall. There is a spare prop supplied should one break and it is retained by a small band around the prop 'spinner' and two arms on the motor shaft (a 'shaft saver' safety element copied from larger EP models). As the rudder governs the turning, there is just one centrally-placed trim knob on the Tx which needs to be moved in the appropriate direction to counter any natural tendency to turn one way or the other. The Camel tended to fly tail down initially, but was trimmed for more level flight by turning the trailing edges of the tail down a little. This needed re 'tweaking' every now and again as the foam sheet 'memory' caused the tail to flatten out again. The large diameter (comparatively) prop keeps the model flying speed down to a more appropriate WW1 speed range and the large rudder does give quite small turn radii, which can result in a spinning dive, if too tight. Again, as with all these models, it's practice that makes perfect and the slower flying speed gave a fraction more reaction time for our novice Biggles (or should that be Bigglier?). Flight times of about 5 minutes is claimed for the Camel and towards the end of the test sessions, pretty well all the pilots were dog-fighting imaginary little Fokkers like professionals (sorry!).



## PILOT'S VERDICT

Those who flew the Camel first (before flying the others) gave it a higher score than those who tried it last (after flying the others), although the general opinion was that it was the most responsive of the three types (as befits a WW1 fighter), but not as smooth as the jets, and not as skill demanding as the V22. It has to be said that in one person's hands it was seen to be looped and rolled - not prettily, or accurately, but looped and rolled, nevertheless - so it has potential for scale WW1 manoeuvres, too. How about a Red Baron tripe next, with fire buttons to knock out the engine when hit? Scored overall 8 out of 10.

**The X-Twins**

The X-twin range has been out there for a couple of years, but they have tended to be RC flying models of the 'sports' type, i.e. not recognisably like a full-size aircraft and probably worthy of the name 'toy'. However, the latest trio of X-Twins look far more scale like and are based on modern jet types, although they are powered and controlled by pusher propeller equipped twin motors, using differential speed control. The three shown here are a F-18 Hornet look-alike (OK, you have to squint a bit!), a green and grey Mig type and a desert camouflaged Griffen, or Eurofighter type, so you have plenty of choice! They are all controlled the same way and operate on 27mHz radio (the frequency within the 27mHz range is stated on the outside of the box) on various frequencies, so if operating these in the local park, it would pay to make sure no-one is also operating 27mHz, this being the range also allocated to ground based vehicles.

As control is via the two motors using a two stick Tx - left stick for speed and the right stick for turning - the moulded foam airframe is designed for fairly stable flight, although the tail surfaces can be bent slightly to allow fine-tuning the model trim. A light wheeled tricycle undercarriage is supplied and while the models do look a little silly when they are fitted (and are totally useless for taking off from grass), they do make the model fly better i.e. more easily controllable, so we advise you



The F18 Hornet in flight - flies best with the undercarriage, but doesn't look as good!

fit the uc, at least until you've worked out how to control the model and achieved some decent flight times! One of the most important factors regarding achieving success is to fly ONLY WHEN THERE IS LITTLE TO NO WIND! Being very light, the merest zephyr of a breeze will affect their performance greatly, so it's just not worth trying it otherwise. The jets are quite fast and do need a fair bit of space until you get the hang of it, so flying indoors in a sports hall (unless it's a large one) will be a bit frustrating. However, on a calm day, and having taken the patience to get the hang of it, they are great little fliers and, as long as you realise the flight is meant to be radio assisted, rather than under 100% input governed - i.e. don't try and over control - a case of a little now and again, rather than a lot all the time!



All the jets are easy to hand launch using the foam grips in the underside.



All three versions got the thumbs up, scoring between 7 and 8 out of ten across the board. Flight performance can be improved by 'tweaking' the control surfaces 'down' a little to curb the tendency to climb under power and steering left and right was positive and responsive to the 'trim' facility on the Tx.

**The V22**

This bears the PicooZ logo and is a scale model of a twin rotor VTOL aircraft, except that the twin rotors are fixed in the vertical plane, rather than rotatable in the pitch plane, like a true VTOL. With a helicopter-like body, with a fixed stabiliser and twin fins above a functioning vertical tail rotor, it looks nothing like anything that I am aware of, although it looks as though it should! Very realistic-looking, though. The V22 is controlled by an infrared beam via 3 LEDs in the top edge of the Tx and so, like Picoo Z helis, the Tx needs to be kept pointing at the VTOL at all times, or the signal connection will be lost and the model crash. Again, there are three frequency bands available. The Tx is band switchable, the model is not. The twin rotors are speed differentially controlled as per the jets, with a trimming adjuster for both yaw and roll datums, but AND THIS IS THE GOOD BIT, there are preselected dual bands selected by a switch, which allows the V-22 to be steered across the ground on its integral tricycle undercarriage like a Robin Reliant or, at a press of a button, jump into the air in a VTO and fly like a twin rotor heli, with the rotors side by side, rather than fore and aft like the PicooZ Tandem - BRILLIANT! In the air it is very stable and the two trim adjust wheels allow fine-tuning of the flight pattern in the hover. If the V22 is turned to the left (counterclockwise) it slows down, if turned to the right (clockwise), it speeds up, so the way to get forward movement is to feed in right turn to initiate the move, with little blips of left turn to keep it going straight. To stop forward movement, a short left turn input is needed. This, of course takes practice, but it is a lot of fun and I have to say, it needs a fair level of skill and finger

dexterity to get it to fly exactly where you want it. On average it took our tyro pilots several attempts to get it under some degree of control, but once sustained flight had been attained, fully controlled flight followed soon after.



The Tx for the V22 VTO has a special 'take off button, that converts floor level motion into vertical hovering flight!



The V22 looks really neat and performs accordingly!



After initial frustrating attempts, all pilots got the V22 into air and under control. All the pilots agreed that it took more concentration than the other kits tested, but it was the most rewarding in terms of satisfaction, once the techniques had been learnt - and could be flown indoors around the office. I had to fight to get the test aircraft back off them! Scored 9 out of 10.