

Winter Flyers

We test a selection of the latest micro indoor and outdoor flying models prior to the winter indoor sessions



With winter just around the corner we can expect our outdoor model flying sessions to be curtailed during the darker evenings and wet and windy weather outside, so we thought you might like to see some of the latest indoor models in a bit more detail, and how they fly, both indoors and out.

So, during the build up to Christmas over the next three issues we shall be looking at a selection of micro indoor and outdoor models that will suit all ages from early beginners right through to us older, more experienced pilots. For ease of assembly and not wanting to waste any time in preparation with long building projects the models will be mainly the RTF 3 and 4-channel micro helis, a couple of twin rotor varieties, plus PnP or BnF indoor types. This range is ever increasing with some very desirable models available, and therefore it is difficult to cover them all, but we have already received a number of the more popular brands to include, and shall be looking at these.

To start this series we take a look at four of the new Silverlit micro helicopters offered to us by Flying Toys, the UK distributor.

Bell 222

The Bell 222 is bound to attract favourable attention from micro helicopter fans as it is undoubtedly one of the most popular com-



The Bell 222 is a simple to operate 3-channel I/R helicopter

mercial choppers in the world, perhaps better known by modelers for its famous military counterpart the 'Airwolf' TV series.

This latest range of micro helis are beautifully moulded from remarkably robust injection moulded rigid plastic, and this 3-channel Bell 222 has a length of 169 mm (6 $\frac{3}{4}$ ") and incorporates an electronic gyro facility for outstanding directional stability, with a convenient set top transmitter trim provided for precision L/R yaw trimming adjustment. The transmitter features a 'removable' right hand transmitter stick cap fitted that restricts control stick movement to aid beginners. When removed full control is restored and it will turn far more smoothly.



Training transmitter is easily converted for more experienced pilots by removing the ring around the pitch/yaw control

As with most of the latest helis from Silverlit, the Bell 222 features a red flashing power indicator, and switchable blue LED searchlight.

Supplied completely ready to fly, with a variety of attractive liveries available on Infrared bands A, B and C, allowing up to three of these Silverlit helicopters to be flown simultaneously.

A lightweight lithium polymer battery built into the helicopter provides flights of

up to ten minutes, driving two powerful micro motors, and can be conveniently recharged in less than half an hour direct from the transmitter, conveniently powered by six AA-size Alkaline dry cells.

We test flew this model indoors and found it similar to fly to the early Silverlit micro helis, but a little more stable due to its larger size. The throttle control (left stick) also acts as the height control (fixed pitch), so by increasing the power also gives you the



Flying indoors is easily achievable by a novice pilot

desired height. A fine balance is needed to fly circuits at a constant height and this control is a bit fierce, but you soon get used to it.

The yaw and forward/rearward cyclic controls are sensitive, and again light, smooth control is the name of the game for a good flying session. Manoeuvring around the room was no effort and pinpointing a landing spot was easier than doing it – until I got the hang of it, and then with determine effort and a little more concentration it became easier to spot land.

As with all these helicopters from Silverlit, and probably applies to other makes too, it becomes more sensitive to yaw and power as the battery drops off and the gyro cannot hold so easily, so a quick recharge of the on-board LiPo battery from the transmitter's umbilical charge lead and back to normal flying in just a few minutes.

This Bell 222 is super stable and easy to operate indoors in the smallest of spaces, as I found out from flying it in my conservatory, and can be flown outdoors in calm conditions if you wish.

Suggested retail price for the Silverlit Bell 222 is £39.99.

Z-Century

The Z-Century is a new addition to the range from Silverlit from July 2010, and moves up the ladder a little offering full 4-channel infrared control, which makes them more for the intermediate heli pilots who have broken their teeth with the 3-channel type.



Z-Century is a 4-channel micro helicopter and comes with a handy-sized transmitter



We found this 4-channel helicopter easy to fly with full control around the house from room to room

Once again the robust injection moulded body materials used seem much tougher than before and represent a more durable model with a nice scheme and elegant lines more in keeping with much larger model helicopters.

Fitted with an electronic gyro it is very stable in the air, and a pleasure to fly. Using technology again associated with much larger, more expensive models, you can now take-off, hover and descend, spin left and right, fly backwards, forwards and even sideways too, under full control, and these models can encourage novices to increase their skills and move on to greater things in the future with the knowledge of full control and a certain level of manoeuvrability with the steeper turns and use of the full cyclic control from the transmitter.

The TX-962 transmitter is a much larger I/R transmitter that fits more comfortably in your hand. It has the same basic features as the other types from this manufacturer and offers two fully proportional control sticks with a central L-R sub trim and central button for turning a nose searchlight on the helicopter on and off. The Tx operates from four AA cells and includes a built-in charge lead for the helicopter. Alternative charging from any computer USB port can be achieved using the lead provided.



Outdoors and the Z-Century is a bit more of a handful in less than calm conditions and perfect light



Full 4-channel control with the TX-962 transmitter

With a full battery charge from the Tx we first test flew this model indoors. The handling of the Z-Century is most pleasing and easy to control. The steering is much more manageable with less tendency to swivel around when the throttle is increased or decreased, as with the 3-channel types, and the smooth controls give the pilot self-assurance in knowing that it will go where they want it to.

Taking-off from a smooth tabletop does require a small amount of yaw (rudder) correction, but once in the air the yaw trim required little attention. Gentle control movements result in a smooth flying model, and turning corners to fly into other rooms is very satisfying. Reducing the throttle decreases the height and a

slow descent results in a perfect landing. Taking-off from a carpet or anything other than a slippery surface is straightforward with no yaw control.

Activating the nose mounted LED 'searchlight' is a novelty and perhaps good in a darkened room, but it does tend to use up the battery a little quicker.

We waited until it was calm outdoors, which meant as dusk was upon us, and with some trepidation ventured into the garden with a fully charged model to see what the effect of 'outdoor air' has on this very light model. It wasn't long before it was airborne and immediately it was noticeable that flying one of these models outdoors seems totally different than flying indoors. Even the slightest draught effects the controls, and with the sun setting low you have to battle with the controls as the infrared system is taken over by the sun's light levels. Remember also that being I/R it has a limited range, and rapid movements of the throttle can very quickly result in the model climbing high and catching a cross-wind, resulting in very little control – and a bit of a walk!

We did manage flights of around 10-minutes on occasions, and recharging is once again simple from the transmitter and taking around 30-minutes to complete a charge.



Z-Bruce is similar in both size and flying capabilities to the Z-Century

Z-Bruce

Similar in specification to the Z-Century, Z-Bruce takes on a different form as it is more 'scale-looking' with the appearance of a Jetranger helicopter rather than a sports style model. It still has the toughness and detailing of its counterpart, and the handling qualities are almost identical being 4-channel also, but this body style may be more appealing to those who prefer a scale model rather than a sports type.

Z-Bruce is a bit of a lightweight at just 25 g, including rechargeable 3.7 V 130 mAh LiPo flight battery and, as with the Z-Century, a pair spare of tail rotor blades are supplied and for convenience a USB charge lead is also included. The Z-Century and Z-Bruce are available on one band only to accommodate the 4-function control facility.

Suggested retail price for the Z-Century and Z-Bruce is £39.99.

Twin Hurricane

The Twin Hurricane is Silverlit's latest version of their Chinook-style twin-rotor micro heli for 2010, and replaces the original Tandem-Z. The Twin Hurricane now incorporates a sophisticated electronic gyro directional stability system providing a much better specification and performance than the previous model. As with other types mention here, this latest design features an impressive injection moulded, rigid, plastic fuselage that is particularly detailed, and far more realistic than previously possible, featuring a sliding side door, drop down steps and scale-like tricycle undercarriage – albeit fixed. The main rotor diameters are 160 mm (6.25") with an overall fuselage body length of 200 mm (8"). The weight of the Twin Hurricane is only 49 g and that includes the 3.7 V 200 mAh LiPo flight battery.

Once again the Power-TX transmitter is a handy size and incorporates a pair of pitch and yaw two sub trim controls at the top of



Two spare tail rotors and a USB charge lead are supplied with both 'Z' models



The detail is far superior and it even has a sliding door



The simple 'trainer' set-up for the Twin Hurricane; just remove the control ring disc for advanced flying

each corner (forward/reverse trim or left/right trim). The right hand control stick for these functions has a removable remote stick training cap and allows advanced pilots more precise control whilst enabling the helicopter to be flown indoor or outside in calm conditions.

This model is offered on wide beam infrared bands A and B, potentially allowing a pair of these military style choppers to perform precision manoeuvres in perfect formation. This twin rotor helicopter is surprisingly stable for such a complex machine of its size, and may be easily flown by a beginner in a reasonable size room. The single lightweight LiPo flight battery will keep the helicopter operational for around five minutes or more before requiring a recharge, and can be back in active service again in less than half an hour, using the portable charger provided.

We tested the Twin Hurricane outdoors on a calm evening and found it very stable and easy to manoeuvre around the garden. Aggressive use of the throttle will result in a flyaway machine so careful, smooth control is called for.

There are two attractive military camouflage colour schemes to choose from and the Twin Hurricane is supplied complete and ready to fly (apart from six 1.5 V AA Alkaline transmitter batteries), and comes complete with an LED strobe light and switchable searchlight for night surveillance indoors, or outside in calm conditions.

Suggested retail price: £49.99 including VAT.

All of these helicopters previewed here are available from all 'Flying Toys' stockists. **RCMW**



The Twin Hurricane is a great improvement on the earlier Tandem-Z model



Flying the Twin Hurricane outdoors was a doddle and seemed natural for this model as it responded well to the controls even in a light breeze

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