

By David Boddington

# The Next Generation

## Getting 21st Century Aeromodellers started?

Can you remember your first experience of seeing a model/toy aeroplane flying? My first memories go back to the beginning of WW2 when my brother and I visited our local village store, which sold everything from bananas to bicycles, and bought a couple of chuck gliders. They were not known as chuck gliders then, but they were manufactured from wood, brightly coloured and imported from Japan. They were, of course, RTF models. Charles and I took our prized possessions, bought from many saved 'Saturday pennies', to the field behind our house and made our first tentative steps into the world of aeronautics. Fortunately the field had a gentle slope down to a small brook and I can only think that the wind, if there was any, was blowing in the right direction, because our first attempts at glider flying were successful. It was not long before we were in competitive mode with the aim of being the first to get the glider to land on the other side of the brook and not short of it - or,

worse still, in it. I can't remember who achieved this win, so I guess it must have been Charles, or I would have remembered the success. From these small beginnings started our abiding love of aviation, I wonder if it would have been different if our 'toy' aeroplanes had failed to fly?

Fast forward nearly 70 years and we have a completely different world. Sure, some of the ready-to-fly models still come from Japan, although most are from China and it is still possible to buy slot-together chuck gliders but, for the most part, the toys for children, of all ages, are much more sophisticated. Now we are in the age of instant everything, where there seems to be less and less time for making things with your own fair hands and this applies to model aeroplanes as much as it does to other aspects of our lives. This may be of concern to many 'traditional' aeromodellers, but I do not share in the 'doom and gloom' attitudes regarding our hobby. I believe that a proportion of people with enquiring minds and 'itchy' fingers will always gravitate to our

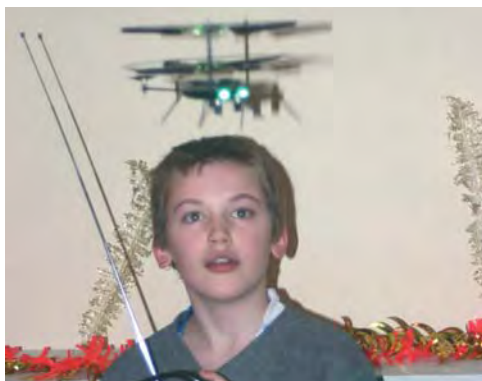
great pastime. But for this to happen, there has to be an introduction to the hobby, it may be more sophisticated than our little wooden gliders, but it is equally important.

### Creating the interest

So what is likely to create a lasting interest in a hobby that we, with decades of aeromodelling, know to be worthwhile? The introduction has to be an instant form and it has to result in successful flying - gone are the days of building a Keil Kraft 3s 9p scale model, not managing to finish it, making another one and not managing to fly it and finally progressing to an Achilles, where the success of flying depended on how well you could carve the propeller.

I can think of no better introductory range of models than those distributed by Flying Toys - they have a fantastic range of ready to fly aircraft, plus a few more where a modest input of building skills are required.

With Christmas approaching I thought that it was time to lead our three grandsons into



Douglas took to the Micro Mosquito like the proverbial duck...



...even Dad was allowed a go, after everyone else!



### Recap...

**A few reminders to ensure a successful introduction to the wonderful world of model flying this Christmas:**

**#1** - If you are responsible for the buying of the Flying Toys, do your homework first. Try to select a good mix of products - not just the ones that appeal to you. Start with the simple models, but if you are catering for two or more youngsters, remember that the competitive element is important, you can even devise simple contests yourself, e.g. who can keep the model airborne for the longest time before striking an object.

**#2** - Patience, a degree of discipline and an adult presence at the unpacking and preparation stage is virtually essential so that models are not damaged, parts lost or flying attempts are made before the controls are understood. Take a look at the packaging before the presents are wrapped, so that you can help to extract the models in a minimum of time. Have some small sharp scissors handy and a pair of wire cutters to free the transmitters, etc.



Just what they wanted. Douglas, Rory and George with Father Christmas proxy, Dad Andrew.

**#3** - Batteries, batteries and more batteries! Do make sure there is a good supply, most of the equipment uses AA sized batteries, but some will require a PP9 battery. Where mains chargers are required, they are supplied.

**#4** - Excellent instructions are included with the products and I know that it can be a bore reading them when you want to get airborne, but do take the trouble to read the salient points before committing aviation - you do have a period during the first charging when this can be done.

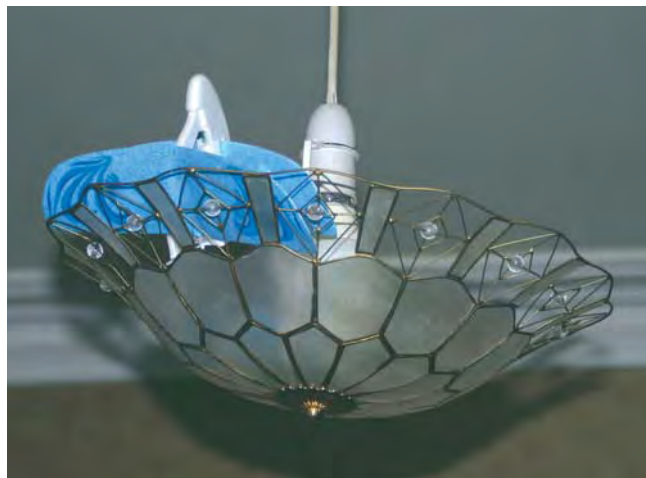
**#4** - With most of the infrared models being available on three different 'frequencies', don't buy all the same products on the same band - and do let the young ones have a go, no hogging the controls!



The Gyro is two channel, on 27mhz and has a mains operated charger. Available on three different frequencies.



If we had come up with something like this fifty years ago we would have been burnt at the stake for being a wizard! Palm Z fliers on different channels, charging up from their trannies.



The dangers of flying indoors - until you get the hang of it!



The old boy was trusted with the transmitter outdoors & watch out for the bushes!



The Blade Runner series have long been popular for indoor and calm outdoor flying. Pitch trim can be changed with small amounts of Bluetack. Spare rotors are available.

✱ the fascinations of our hobby (eldest son, Andrew has long been indoctrinated in aeromodelling) and the Flying Toys approach seemed ideal for the experiment. So, Douglas, almost 13 years old, Rory 12 and George 9, were presented with a selection of small R/C helicopters and biplanes by a knowing 'Father Christmas'. As the sack was opened and the contents revealed, the lads eyes lit-up and it wasn't long before the LED eyes of the fascinating Micro Mosquito helicopter were also lit-up. Douglas, who had previous experience of this style of heli, carried out the test flights ad even allowed his dad to have a go and then it was time to explain a difficult decision. Because of all of the other family Christmas activities, it was necessary to postpone the flying activities with the other Flying Toys models to a time when the three lads could all meet up again. I must say that they took the news of the delay very well!

### Window of Opportunity

Although we were still in the cold winter weather of February, the schools half term coincided with

a totally calm period, with lovely sunny conditions. This gave us the options of flying both indoors and outdoors, a fairly rare occurrence at any time of the year. Before rushing out with their 'toys' it was necessary to have a briefing, with the first emphasis on taking great care on removing these little gems from their packing - arguably a more difficult operation than the flying. It is, of course, vital to have a supply of new batteries to hand, particularly if they are presents to be opened on Christmas day, when the shops are closed. With three of the helicopters and three of the biplanes being on different frequencies (great for three - up fun flying) it was important to point out that the correct transmitters were always used and that care should be taken not to inadvertently switch the frequency change instead of the on/off switch (they are both at the front of the transmitter). Some of the aircraft are charged with a mains charger and these are obviously less suited to outdoor flying, unless it happens to be in your garden, close to the house.

With the models checked out and the lads raring to go, it was out into a local playing field and position

ourselves where we thought would be best for the flying patterns. Further patience was required so that the models could be flown one at a time to check the trimming. This is where the assistance of a 'safe pair of hands' is invaluable, to give a sound launch - it is a lot to expect a young person, with no experience of model aircraft, to be able to cope, but for the initial attempt a little experienced help will almost guarantee success. Also, if they want to fly three models at a time, it is helpful to have launchers so that they all get away together. The range of these small infra-red guided 'planes is limited and for outdoor flying, the purchase of an infra-red booster for the transmitter to improve the range, is a worthwhile investment. You may think that the number of really calm days we have barely justifies the extra expense (only a few pounds) but we do have those lovely quiet summer evenings. Even with an apparently windless day you will get some drift and with the two function biplanes you may have to accept that they will fail to penetrate against the drift - a small piece of 'Bluetaek' stuck to the nose might help.

Why bother to fly outdoors? Well, it is most unlikely that you are going to bump into anything and the fresh air is good for you! Of course, if you have access to a large indoor hall, you've got it made. So, the boys got their initial experiences of the Flying Toys offering and we decided that the little Picoo Z heli would be more suited to indoor work, even though, they are OK outside. Certainly the Gyrotor benefited from the extra space in the open, even on the 'normal' transmitter control setting it was quite responsive and being two-function, needs a little extra space.

Back indoors we were going to fly the little 'foamies' in a reasonably-sized living room with the normal furniture obstructions, not to mention three kids and a couple of adults. The Palm Z biplanes needed some nifty work on the transmitters to keep them clear of the walls and other impedimenta, a certain degree of anticipation in control was necessary, but none of the models suffered any damage due to the inevitable contacts. The little Picoo Z helicopters were absolutely in their elements and all



All set for some major fun - pilots dead keen for some action, helpers not too sure what they've let themselves in for!

the lads took to flying them like the proverbial ducks to water. Having the three models on different frequencies was a real bonus as it allowed the boys to do their own thing, learn to manoeuvre the helis and they rapidly learned to accurately position them. Many flights were made and again, no damage was sustained; although the helis may look vulnerable, they are very light and bounce well.

A quick trip into the garden saw the Gyroto disappear into next-door (guess who was at the controls!) fortunately the locals are friendly. I was also allowed a go with the Palm Z biplane and we all had fun flying it around the telephone lines. Perhaps we should have expected it, but the greatest hit, in more ways than one, were the Sky Challenger Micro Combat Choppers. These Pico Z helis are sold in pairs and incorporate laser beams, which allow you to shoot down your opposite number by temporarily disabling his heli-accompanied by sound effects to add to the excitement. It was voted 'Topmen's Toy' on Channel 5's Gadget Show, all I can say is that this top man never got a look-in. Many successful hits were made, accompanied by excited cheering, but I did have to step in and ban the unsporting practice of holding the heli, after it had been shot down and aiming it at the other one from the hand. When you consider that buying pairs as a set only costs 1p more than buying two standard Picoo Z helis, it is great value.

After this first session with the lads I can honestly say that they were never bored for one moment over a long afternoon. It was best summed up by young George, who announced "When I grow up I want a job like granddad, reviewing and playing with these smashing toys!".

### Take two

Our next session was quite a few months later and on this occasion there was time to take a look and photograph some of the items before the enthusiasts got their hands on the goodies. I cannot over emphasise the need for patience and care when removing the models and transmitters from their very attractive packaging. One of the worst scenarios I can imagine is to leave one of these lovely Flying Toys in the top of the Xmas stocking and allow a youngster to 'attack' it at six o'clock on Xmas morning the chances are that something will be damaged. The boxes do not all open in the same way, but there will almost certainly be some transparent adhesive tape securing the lids, start by cutting through this. Then find out whether it is a flap retainer, or simple folded end to remove to get at the inner package. With this removed you can get at the model, which may be held in position with clear tape, a thin plastic band, or a transparent cover held in position with moulded 'poppers'. Just take care if you are having to cut close to the model and to hold the package securely

when releasing the 'poppers'. Other items may be retained by plastic covered wire, which is bent over at the back of the card. If you think I am over-reacting to these 'obvious' operations, please believe me that a little time doing it properly can save a lot of tears.

Next on the list is to locate - and read - the instructions. Yes, there will be pressures to get the model airborne (you did buy the batteries, didn't you?) but a read through the excellent instructions will save further heartache. Not all of the models are charged in the same way and control methods and trimming will also vary. Now, at last, you can get to the interesting part, although a 30 minute charging time might seem a lifetime to a young pilot-to-be. Having one of the simple and inexpensive Palm Z biplanes - with a quicker charge rate - as a standby might be a good idea to complement a more sophisticated type.

### Who Flies?

Most dads, buying the Flying Toys for their offspring, will believe that they would be the better choice for carrying out the test flights, but don't be too sure. Any youngster, from 8 upward, with plenty of experience on computer games and especially flight simulators, may well cope better than the older generation. Their reactions are better than the older generation. Their reactions are quicker and, providing they understand the rudiments of control and response,

they may be quicker to become competent flyers than their seniors (but not better!). Fortunately the Flying Toys are mostly surprisingly damage-proof, thanks to their light weights and seem to have built-in bouncability. However, the larger the flying space and the fewer the obstructions, the better.

### Flapping, whirling and winging

First on the list for flying was the iFly Vamp, a 12" wing span R/C ornithopter operating on 27mHz rather than the now more common, infra-red systems. A minimum area of 16ft by 16ft is recommended, which is certainly larger than our sitting room, so it was with some trepidation that the Vamp, with its semi-transparent wings and eerie appearance, was launched. Although the controls, in both wing beat speed and turning were positive, the room was a little too small to avoid collisions at all times. However, a number of successful flights were achieved and I have no doubt that it will give a great account of itself in more bat like environments, but night time flying would require external lights, the glowing eyes wouldn't be sufficient for guidance. Only one pair of wings are required for flight and directional control is achieved by a rocker arm moving the trailing edges up and down. A spare pair of wings is included. ❀



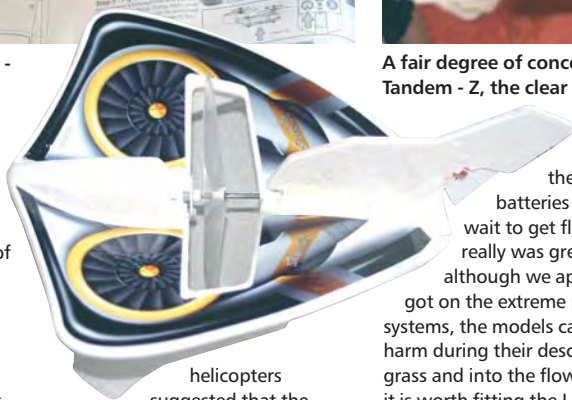
Instructions are there to be read - before flying!

Way out and wonderful, the Stingray. Could you design something like this?

✱ Silverlit I-Bird ornithopter is infrared operated, uses two pairs of flapping wings and a conventional ten and pulse magnetic rudder for directional control. This made for a greater degree of control than the Vamp and all three lads could cope with the flying characteristics, although this bird also had a seemingly 'magnetic' attraction for the lampshade. By pulsing the power it was also possible to produce a swooping flight pattern and the fin and rudder were barely noticeable in flight.

Strange flying shapes appeal to modellers and kids alike and the 'Stingray' is certainly something different. I have a tremendous admiration for the designers of these way-out machines, if you think its easy just try producing an unconventional model from sheets of foam - and then imagine trying to develop it into a commercial product. Take a look at the underside of the stingray and note how the fin is offset to counteract torque. The magnetic actuator operating the rudder of the infrared system is not proportional, but trims are provided on the transmitter. One small point - on the instructions it states that the double-sided adhesive tape for the landing gear is fitted on the legs. I thought that my eyesight was even worse than it was, as I couldn't see it, the lads realised that it was actually fixed to the model. After a couple of hand launched trimming flights to prove the controllability of the Stingray, it was time to try a take-off. A glass-topped table proved to give a long enough take-off run and it would also take-off from the carpet! Flying in a nose high attitude, the Stingray has a few tricks up its sleeve and is very manoeuvrable - the lads loved this one.

Previous experience with the Pico Z Sky Challenger and Gyrotor



helicopters suggested that the new three-channel Uranus heli would be popular and so it proved to be. The addition channel is for forward flight, with buttons on the top of the transmitter to actuate normal and fast forward flight, or, by pressing both left and right hand buttons for continuous forward flight. This additional feature, at a further cost of only a fiver, is well worth the extra and increases the versatility of these helis, particularly outdoors in calmish conditions. All of the boys could control this machine well - George put it at the top of his list.

When it came to the Pico Z Tandem Z-1, opinions differed, Douglas, with his greater experience, coped well (better than the two senior generations) and enjoyed the challenge and variation on the single rotor theme. For Rory and George the take-off proved to be rather tricky, the Chinook style heli tending to scoot sideways, although once in the air the control was easier. In common with most of the other infrared controlled helicopters and 'planes, they are available in three different control bands, the models being colour coded, so that more than one model can be flown at a time.

A calm evening, with just a little air drift, was too tempting and with just the light from the sitting room and next doors anti-burglary lamp, we took the I-Bird and the Uranus, with its forward facing LED headlight, to test in the dark conditions. I suppose that we should have taken the I-Vamp, with its bat features, but we had



A fair degree of concentration is required for controlled flight of the Tandem - Z, the clear plastic nose and tail extensions help.

'borrowed' the transmitter batteries and couldn't wait to get flying. It really was great fun and although we apparently got on the extreme range of the systems, the models came to no harm during their descents onto the grass and into the flowers. Certainly it is worth fitting the I.R. booster for these nocturnal outdoor sessions, and the same applies to daytime outdoor flying.

### Find out more?

With the Lipo flight batteries, the flying times are very good and if you have a couple of models to play around with, you can be flying virtually continuously. We had flying experience with a good proportion of the Flying Toys products, but there are still many more to try. They have a superb full colour glossy catalogue and their products can be ordered direct, by mail order, although many model and toy stores stock them. Costs of the models, including the transmitters, chargers and flight batteries, range from a very inexpensive £19.99 for the Palm Z biplanes to under £60 for the more sophisticated helis and delivery is free for orders over £24.99 for U.K. mainland.

For more details contact Flying Toys Ltd units 7-9 The Vanguard, Vanguard Way, Shoeburyness, Essex, SS3 9QJ, the website is [www.flyingtoys.com](http://www.flyingtoys.com) where you will be able to find details of the extensive television coverage for Christmas.

### Onwards and upwards

When the first flush of excitement has passed, use your imagination to get more value out of the models. I have already suggested a simple duration competition and the Micro Combat Choppers have their own natural contesting element, but what about an obstacle course for the helis, or limbo for the fixed wing models? Most of these Flying Toys

will finish up in the hands of school children and it would be great if they could meet up with other owners and fly them in the school gym or assembly hall. It shouldn't be too difficult to arrange such a meeting, it just needs someone to take the initiative and organise it with the school authorities.

Great as these ready to fly toys are, they are only an introduction to a larger world of model aircraft flying - and building. Flying Toys also have a range of pre-fabricated kits to suit beginners and more traditional modellers and these include a degree of assembly and preparation - a first step to building your own model. Again, very modestly priced at £24.99 and £29.99, even senior citizens should be able to cope with assembling these - perhaps with a little help from the juniors!

What will the next step be? The BMFA Dart is a brilliant introduction to building in the traditional balsawood and tissue form. It is so good because, with a little guidance from an experienced modeller, the model is easily built and it is almost guaranteed to fly - with all the satisfaction that this can give. In our hobby there are many ways to obtain pleasure and satisfaction, there is no absolute 'right' way, the more avenues you explore, the greater the rewards.

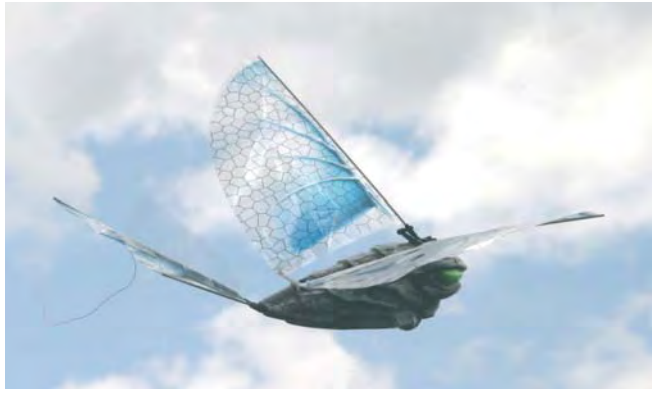
Have a great Christmas and one final thought for all of us at this time of giving and receiving gifts "It is not getting what you want that is important, but wanting what you get" (Ruby Wax). 🍷



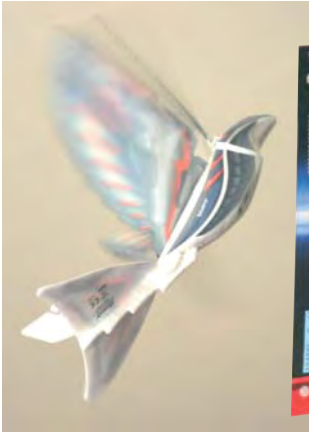
Superbly attractive artwork and packing for all of the Silverlit products. This is the Tandem twin rotor heli.



The Silverlit range comes in very good packaging - take care in cutting away the retaining tape and wire pieces.



The iVamp is a single surface ornithopter that glowing eyes and flaps and flutters very spookily!



The iBird is one of three double surface ornithopters that fly great - something really out of the ordinary!



The Silverlit DIY range contains all the pieces needed to build an RC electric twin aircraft - you have to put it together yourself - the next step in developing a budding aeromodeller?



Attractive DIY range designs give practical flight performance with the satisfaction of self-assembly.



Why not get your budding aviators onto building and flying the BMFA Dart as a next step. Only a modest amount of tuition in the building and flying is necessary and it can involve the whole family.