

# Still flying high

Andy Myall goes behind the scenes of the success of the Picoo Z helicopter, visiting Silverlit's Hong Kong showroom and Chinese factory.

**H**ow does a toy product become truly ubiquitous? It's somewhere in the middle of a combination of timing, cost, quality, promotion and luck, with – it could be said. luck proving the most important. But quality is a major factor and certainly one which is necessary for long term success.

So before we meet Silverlit Toys, a quick story. The company's UK representative, Tom Mullen appeared in the pages of this magazine in September 2007, talking about the early success of the Picoo Z and the efforts behind protecting patents and policing knock-off products (more of that later). He very kindly left us a few helicopters to play with, all of which were rigorously tested by various members of Lema Publishing staff as part of our commitment to excellence in trade press magazines. Anyway, one such helicopter was lost – presumed dead – after landing out of view on a garage roof. But after being blown back down to ground level three weeks later, it was rescued and still worked perfectly. Okay, so it's not a scientific study by any means, but the robustness, quality and low return rate of the Picoo Z is a major factor in its continued success. And after a visit to Silverlit's Chinese factory, it's easy to understand where this quality comes from.

The Picoo Z success story starts in the summer of 2006, with the launch of the first Picoo Z, made from EPP (expanded polypropylene) and weighing just 10 grams. The secret



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*Silverlit Toys managing director Kevin Choi*

to the stable flight is in the patented rotor design which features a stabiliser bar above the main blades. Protecting this patent, and its position at the head of the rapidly burgeoning mini-helicopter market has been a focus

for the company. Silverlit has spent large sums defending its rights in the product and one early raid in Hong Kong was tied in with the Hong Kong media to ensure maximum publicity. Silverlit's own site lists details of no less than 14 different Court Summons against manufacturers, not to mention action taken against retailers around the world.

"Silverlit invests greatly in product development, quality assurance and also product copyright," comments the company's managing director Kevin Choi. "We believe it's important that copyright is well-protected that an original product's technology should not be infringed; it's the only way to encourage manufacturers to invest in R&D. Of course there are always some copy-cat manufacturers; for example with the Picoo Z. It has



affected us in two ways: First, many consumers were confused as the packages looked alike, but the copies inside were of much inferior quality. Secondly, some buyers used the copy prices as a reference and tried to force us to match those low prices. Since we could not match those prices with our costs covering extra testing, QC and additional safety measures, we have lost orders. We have done all the required registration in copyright and patents. And since 2006, we have tried to stop those copies globally through lawyers and the courts. Although it has cost us immensely in legal fees, we feel it's important to uphold our rights otherwise our future development will be easily copied as well."

From the first product a huge Picoo Z range has grown, at first into new colourways, then into insect



A display of just some of the Picoo Z range at Silverlit's Hong Kong showroom.



New product developments for the Picoo Z range include the Picoo Z XL (above left) and Zbot (above right).



body styles, twin rotor copters, and twin-packs of battling helicopters firing infra-red beams. Supporting Silverlit's focus on innovation to drive its products forward, the latest developments for this year are a move into three-channel giving more control. (Two channel 'copters can go up or down, and spin left and right, the addition of a third channel and motor allows forward and backward movement with the tilting of the main rotors). There's also injection moulded bodies, allowing for more colour and detail, new designs such as the twin rotor V22, licensed Black Hawk and Apache designs, Air Slide, with landing skids, the wheeled Sky Auto which can also be used on the ground, ZBot flying robots with twin rotors and Heli Mission, a Picoo Z stored and launched from an R/C vehicle with both controlled from the same handset.

The simpleness of the two-channel control system, allied to the tri-band system meaning three could be flown together meant the toy was both easy to control (although it gets easier with practice!) and social. And success in the toy market was quickly mirrored by strong sales through gadget sites and electronics stores, where the low price meant it was almost an impulse purchase for adults. All this adds up to a major success, which has seen an incredible 10 million Picoo Zs sold around the world.

The company's Dongguan factory houses just over 3,000 workers, although this can jump as high as

5,300 in peak season during the summer. The attributes that make the Picoo Z in particular such a great product are its lightness and balance, so the manufacturing process is key. It starts of course with design, creating a product which is as simple as possible while still delivering great play. The first step is soldering and checking circuit boards, all done in rooms where temperature and humidity are closely controlled and cleanliness is a must. A recent investment in machinery means the checking of the circuit boards can take place 24 hours a day. Quality control is a constant presence, all the motors used are checked before during and after assembly and at the very end of the production line each and every product is flight tested to ensure stability and the correct battery life. Outside of the assembly line too, all products are constantly being tested for safety and to see where improvements can be made.

The company's workers are key, and to provide for them and retain the workers it trains, the company has recently invested in a new canteen, and is renovating the dormitories and living areas for migrant workers. Kevin Choi comments: "For zero defects we demand concentration and good work, but that is two-way traffic so we look after our workers. People are very important, machines we can buy, but we invest in our workers and try to give them a career not just a job."

The company's other ranges are still worthy of attention, particularly in the electronics sector. Silverlit has a

strong and growing R/C sector with cars and bikes, including a Ferrari licence in the 1:16th scale along with vehicles like Subarus and the McLaren Mercedes. All have variable speed control, lights and indicators and hobby grade detail – as with the Picoo Z – bring hobby type products down to



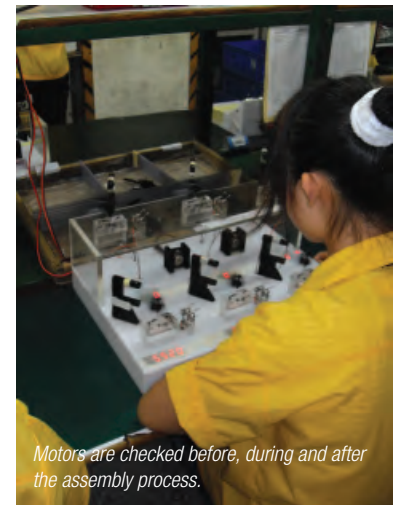
Press-N-Go toys were Silverlit's first big success in the 1970s.

toy trade retail prices. There's also an innovative range of R/C bikes, where the steering control moves the rider figure, with the movement of weight activating the steering. More innovative concepts in Silverlit's Hong Kong showroom include the X Trek range of R/C vehicles on their own track, the technologically advanced V Beat range of electronic musical instruments and Hip Pop Pet mp3 speakers. All have one thing in common, using technology to cross normal toy trade borders and break into other areas or retail and reaching new consumers.

Innovation has been key to the company's success, taking pride of place in the showroom are two of Silverlit's past successes, the I-Cybie electronic dog (sold in the UK through Tiger Electronics, and awarded Innovative Toy of the Year by the then BATR in 2001) and the Turbo Z, a programmable R/C vehicle.

Kevin Choi remembers: "I remember back in the 1970s, our first product was a small vehicle with a simple gear box but everyone could make it. At that time, I knew we needed innovation. So I came up with a totally new concept other than the existing mechanisms of pull-back or free-wheel. It was the Press-N-Go mechanism and Silverlit has sold over 100 million pieces so far. In 2000, we have reached another milestone, launching i-Cybie – a robot with over 16 motors and voice control, and it was awarded 'Toy of the Year' in many countries. With the shrinking market size and keener competition, we knew we had to expand our market, and chose the mass adult market which had never been developed. In the old days, R/C for adults were high end and expensive, which led us to launch the Picoo Z."

So what will Silverlit bring us next? Understandably Kevin is keeping his cards close to his chest, but his answer sums up his company's philosophy. "We have a long term product development programme for the next three years in different



Motors are checked before, during and after the assembly process.

product areas. Unfortunately we can not share at this moment our future developments but we are sure that the market will receive them very positively. A common denominator of all our products will keep being a high level of technology and innovation together with a lot of play value for the user.

"We always want to be forward looking: what is NOT out there that can excite the consumers; what kind of play features never existed before. We do not put in the technology just because it's high-tech. For the consumers they do not care or do not understand the technology. It's the game play which the technology brings that is important for us to consider."



Circuit boards are built and checked in a temperature and humidity controlled environment.