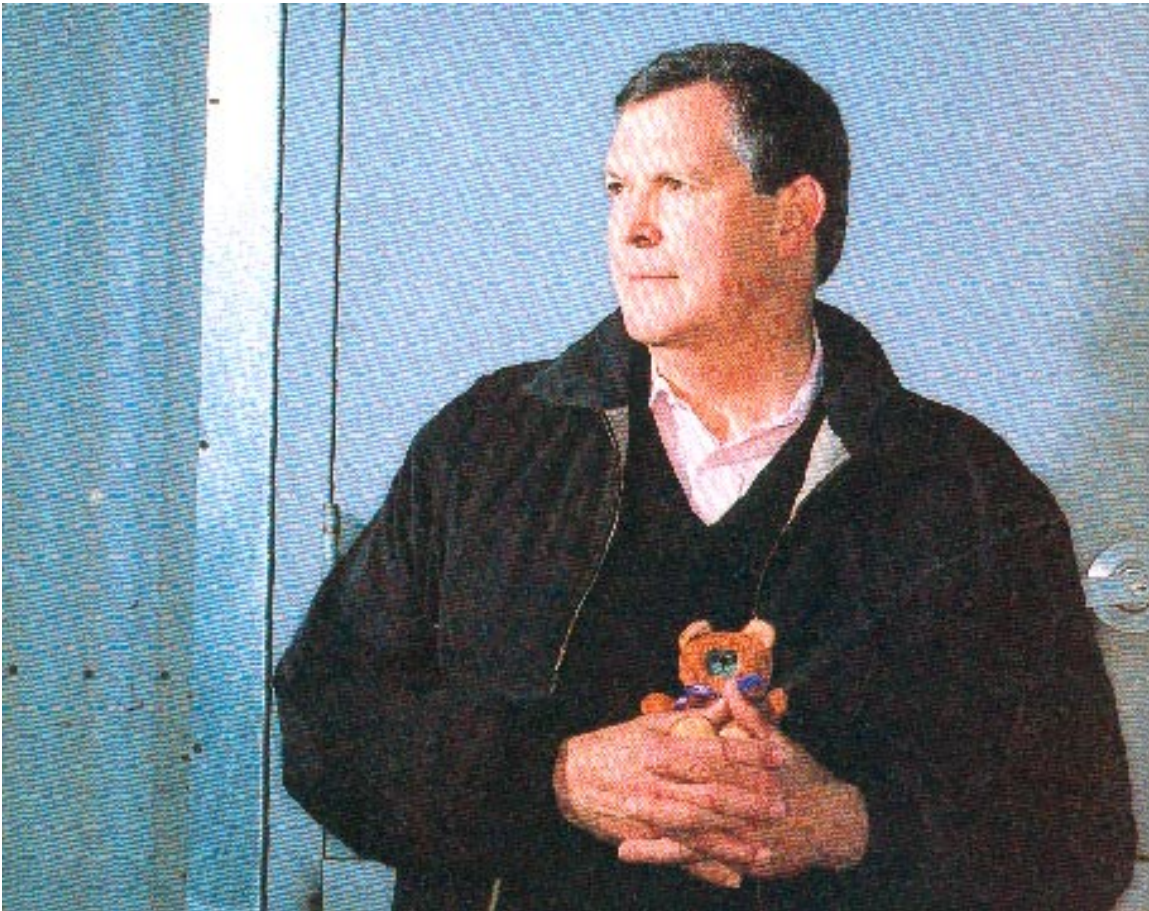


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### Child's Play

Opinion Interview – With Ralph Osterhout



Parents want toys that make their kids think. But all kids want are talking Barbies and Kens that can kill. So who will toy companies hire to fashion tomorrow's toys? An educational psychologist, or a weapons designer? The choice is clear. They'll go for someone like Ralph Osterhout. He spent his childhood making real guns and cut his professional teeth designing diving equipment for the US Navy Seals and Gulf War night-vision equipment. Osterhout has now been recruited by the likes of Mattel and Sega as a designer in the fiercely competitive world of children's toys. Justin Mullins caught up with this turbocharged toy maker

**I get a sense that your military gadgets were just big toys for bigger boys . .**

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A Seal field team operator or one of your SAS operators would take a very dim view of that statement. You cannot function and survive without this equipment. You'd die. They are not toys

**What have you learned from designing military equipment that gives you an edge in toy design?**

Three things: reliability, reliability and reliability. Children are unbelievably destructive. Children don't want a toy that lets them down, and a special operations commando has to have a piece of equipment that never lets him down.

**What do kids want from the ultimate toy?**

Boys and girls are so different. It is virtually impossible to say what the ultimate toy is for them both. Boys want to chop it, smack it, whack it, blow it up, run over it and set it on fire. Girls like to strategise, to share, to talk and negotiate. If I had to summarise it, I'd say that for girls, it's about conversation, communication and sharing. With boys it's all about the acquisition and demonstration of skill.

**Isn't that a stereotypical view of boys and girls? Surely it's a bit out of date .**

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Don't confuse the play patterns of children with the behavioural trends of adults. My opinions come from observing and interacting with very large numbers of children at play. How many girls play with action figures and transformers? How many boys sport an extensive collection of dolls and accessories? I believe many of these play patterns are genetically based, not culturally based. I also believe that it is both healthy and necessary for the survival of the species, or we would have probably disappeared long ago.

**Do you think good toys should also be educational?**

I think parents long for toys that are educational, but the educational component rapidly becomes less effective as kids get older. I have never heard a child say, "Mommy, could you take me to Toys R Us so I can buy a learning toy?" Never!

**Is technology changing how children play?**

I don't think so. We are making children aware of the power of technology. Children are being assaulted by extraordinarily complex visual imagery on TV, in comic books and in movies. And because the imagery is so complex, the expectation in children is much higher. The result is that they become rapidly bored with toys that have very little going for them in terms of technology.

**It's often said that children are getting older, younger. What does that mean for toy makers?**

The length of time that a toy will appeal to a child has become significantly less. For example: Barbie used to be aimed at 4 to 10-year-olds. Now it's 4 to 6. Lego has also been appealing to younger and younger kids. To increase the longevity of Lego, the company created Lego MindStorms: building blocks with little microprocessors, motor control units and interesting mechanisms that allow you to build robotic devices or other moving devices.

### **Will children need the Internet to play with tomorrow's toys?**

Here's what will happen with the Internet. A child will buy a doll and instead of sitting there and trying to ascribe her mum's personality to one doll and her sister's personality to another doll, she will go online. There she'll select personality types and voice types, and download them into the doll. Then she'll talk to her doll, the doll talks back, the dolls talk to each other, the dolls have arguments with each other. They argue with her, she argues with them, they become happy and forgive each other, she forgives them. The child will be able to infinitely customise the personality, voice, memories and tastes, even the choices that their toys will make.

### **Isn't there a danger in giving kids even more electronically advanced toys?**

That idea is absolute nonsense. I don't think any toy company wants to make anything that is unsafe or dangerous. And the number of injuries that occur due to toys is trivial because there are very strict guidelines on the design, engineering and manufacturing processes surrounding toys. Parents, retailers and toy companies are obsessed with safety. I think if you have "My-Little-Paedophile" dolls or are making junior serial killer kits, you've got a problem. But when you are talking about the world of toys as we know them, and I don't care if they've got microprocessors or robotic dogs, or whatever, I don't believe there is any evidence that it is in any way damaging. Some parents say: "When I was a kid we had plain wooden blocks and we were really encouraged to use our imagination." But I think we are much more creative today. Give a child complex three-dimensional puzzles that are very sophisticated and you stimulate a higher level of creativity. How do you expect a kid who plays with wooden blocks to come up with a new receptor blocker for HIV later in life?

### **So you're saying that the toys of today contribute to the science of tomorrow?**

Let me give you a perfect example. We know beyond a shadow of a doubt that fighter pilots going into flight-training programmes have wildly better reaction times and scores in flight simulation than they did 20 or 30 years ago. The reason is that generations of kids are growing up on video games that dramatically improve reaction time, colour and depth perception and pattern recognition skills. The same thing happens with other aspects of our lives.

### **But on the other hand, people blame video games for the increase in child obesity . . .**

Here's the harsh reality. When I was 6 years old I could get on my scooter and ride all around Los Angeles. Would you let your kids do that in London right now, all by themselves? Instead, it is up to the parent to engage their child fully in life no matter how much they love video games. For example, pack them off on a trip, deep into

the woods and show them how to track animals or make food out of things they would never have expected in the forest, or how to build rafts at the beach. I have never known a kid who didn't find this fully engaging.

### **What's the measure of a successful toy? Is it sales?**

Yes, sales, sales and sales.

### **And how do you know if your idea for a toy will be a sales success?**

Lots of people believe in focus groups. But if you really want to know the truth, it's instinct. I once tried to convince a toy executive to come out with a line of tiny little hand-held recorders for kids that I'd developed. He said: "You're nuts, kids don't care about that." So I told him a story, about a friend who had two identical twin boys about nine years of age. They were driving back across the country from Miami, slugging each other, tickling each other, pinching each other, doing everything but dismantling the car. Finally, out of desperation, he reached into his briefcase and threw a little hand-held recorder that I had given him over the back of his seat. It only had three buttons: record, play and erase. Very quickly they figured out you could record your voice and play it back. They started recording insults and making farting sounds. For five and a half hours straight they recorded each other's voices and insults and passed it back and forth. He called me at the end of the trip and said, "You saved my life!"

### **Did the recorder hit the shops?**

After hearing that, the toy executive agreed to try it and we produced a line of hand-held recorders for kids called Yackback that became famous. They generated about \$20 to \$25 million a year in sales for six years. Why? Because I understood instinctively that kids were enamoured with the sound of their own voice, that they would be empowered by the ability to record anything they want, and hear it played back.

### **What were the best toys of your childhood?**

The toys I made myself. I made bombs, blowguns and bows and arrows. I made rockets, and all kinds of flares.

### **So you were popular in the neighbourhood . . .**

Oh God! I blew up so much stuff. I sent a rocket through a dump truck one summer, which was a little distressing for the owner. I would go down to the beach and make rockets out of bamboo, load them up with black powder, and launch them out over the water. Fortunately I didn't injure anybody or myself very severely. But it was a time in the 1960s when rockets were big.

### **How did you end up designing underwater equipment for the US Navy Seals?**

When I was 11 or 12 years old, my life seemed pretty grim. So I used to read James Bond novels. I imagined being extraordinarily accomplished with a bow and arrow,

and blowguns and weaponry of all sorts. I got my hands on weapons through gun dealers, and I apprenticed in gunsmithing at a gun shop. I became an extremely accomplished shot with small arms and, oh my God, knife throwing. It was ridiculous. When I finally met people in the military, they were so impressed with my skills that they just assumed I must have been trained by this agency or that. No one bothered to ask. Then I was approached by a US Navy Seal team, called Naval Special Warfare, to help modernise their equipment.

**What did you build for the Seals?**

I built closed-circuit electronic re-breathers. They're backpacks that weigh about 25 kilos and allow you to walk out of a nuclear submarine and function for up to 8 hours, at depths in excess of 100 metres, with no bubbles, no noise and no measurable magnetic signature. When the Soviets were a threat, the idea was that Seal team operators could go underneath ice flows and attach destructive devices to submarines in times of warfare. I also built night-vision goggles that were used by all the different forces in Desert Storm. I built multiwavelength waterproof laser aiming devices. Also a thing called a diver active thermal protection system, which was a specialised dry suit containing an array of tubes that cover 25 per cent of your body. We diverted some oxygen out of the re-breather into a special chamber, where we burnt magnesium to heat water that replenished the heat lost when the diver is in freezing water.

**You've said that a holy grail in toy design is a powered aircraft weighing less than 20 grams. Why is that?**

Let me tell you a sure-fire way to become a multimillionaire overnight. Build a tiny remote-controlled helicopter that can take off from your coffee table, fly around your kitchen and land back on the table in front of you. I can guarantee you right now that if you could make it for less than \$50, you would make \$50 million out of it in the first year. I have no idea how to do it. But if you could do it, it would make you a millionaire.

**So what are you working on now?**

If I told you the toy companies would kill me. But let me put it this way, think robotics and communication. They're going to be huge.

**Justin Mullins**

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