



THE MAN BEHIND THE MASKS

Make yourself comfortable for Model & Collectors Mart exclusive interview with Star Wars prop creator Andrew Ainsworth



me they WERE Star Wars. What made them so cool had to be that G.I. Imperial uniform. The plastic, futuristic armour and the blaster both looked fantastic, but it was that great Stormtrooper helmet that elevated your average clone minion to hero status in my eyes.

The Stormtrooper helmet has become synonymous with the Star Wars universe. It needs no introduction for millions whether they are fans of the films or not, and over the past 30 years or so it has rightfully secured its place as an icon of popular culture. Something that generates so much emotion for so many can only be described as a work of art and now, thanks to the people behind the original, screen used helmets, you have the opportunity to own a 'blood brother' of these iconic originals, which are the closest thing you are EVER going to get to a screen used helmet, without parting with thousands.

Shepperton Design Studios (SDS), the people behind the original armour and helmets, have brushed off the original moulds to create a series of 'new original,' hyper-authentic collectables. They are using as near to the original materials as possible; employing original techniques and even producing them in exactly the same place where the original screen used helmets were created back in 1976. Now that's an original ideal



Andrew Ainsworth of SDS may not have his name on the credits of the original Star Wars film, but to anyone who has ever lusted after a Stormtrooper helmet his name will be very well known indeed. It was Andrew, and his talent with plastics, that the studio turned to to bring the Stormtrooper that we all know and love to the big screen. I went on a pilgrimage to what has to be the unsung Mecca of Star Wars production to talk with Andrew to see how it all began and where it's all going...

M&CM

You studied Industrial Design at Ealing Art School, at the same time as Freddy Mercury. I know

Picture the scene, it's the summer of 1978 and my two elder brothers, fresh from a family visit to the local, smoke-filled cinema to see a certain film based a long time ago in a Galaxy far, far away (which was somewhere down the M1, I assumed at the time), are bouncing toy lightsabres off my still delicate, 8 year old skull. As the younger sibling it was my task to always be the bad guy in any role playing re-enactments of screen violence. In this case, I didn't care because in the recesses of my young (and increasingly damaged) mind I got to be one of the coolest characters of the whole Star Wars universe - an Imperial Stormtrooper! Okay, they couldn't shoot a womp rat at two paces and they had a tendency to bump their heads on blast doors, but to



A whole battalion of Stormtrooper costumes cooling off outside the studio in Twickenham in 1976

that Bryan May is huge Star Wars fan, has he been in touch to get one of your helmets yet?

Andrew

(laughs) Is he? No, he hasn't got one yet, but if he gets in touch I'm sure we can help him out.

M&CM

After you graduated from art school you set up SDS to produce sports cars. How did you get the work on Star Wars?

Andrew

I took on the work to subsidise the work on my cars, which took a lot of money. I used to give friends of mine a hand to paint scenery and one of them was a friend of John Mollo (costume designer on Star Wars). John asked him if he could make something three dimensional, which he didn't know how to do, but he knew a man who could... and I'm the man who could!

He brought over some images on colour plates from John Mollo and said, "Can you make this?" So I knocked him something up very quickly. I thought it was for his kids or something. It was a fairly early effort and I knocked out about half a dozen Stormtrooper helmets. My friend then said "Well actually they're not for me. They're for a film for John Mollo. Here's the contact if anything comes of it just buy me a drink. He certainly got that drink!



Andrew poses with his TIE fighter helmets with the burnt out remains of the studio behind!

I think what happened next was that George Lucas took them back to America. Got the film funded. Came back and said, "We like that. We'll have a lot more!" John Mollo then got in touch with us directly and realised we could produce anything in any format overnight, and away it went!

We used to have limos lined up outside the front of the shop. As two or three helmets were finished a driver would take them off to the set and we would carry on with more.

M&CM

At the time, were plastics a fairly new medium to use in prop making?

Andrew

Traditionally, film props were made by people in the plaster shops, who used plaster and hessian to create things. The only other alternative at the time was panel-beating metal. So the options were pretty thin. To have produced the armour in plaster wouldn't have worked and there wouldn't have been a film. A lot of time and money had been spent trying to produce these props in the plaster room with poor results.

There weren't a lot of plastics around at that time, and I knew a lot about plastics because I was already building my cars and I already had machinery to produce body panels and dashboards. So I walked in and said basically, yeah, I can do that and came back the next



day and actually did it! Which really upset the unions in the plaster room! But I solved a lot of problems for John Mollo and from there we became pretty close and he ironed out all of the political nonsense with the unions, which allowed us to produce the props for the film.

M&CM

Was vacuum forming a new technology back then?

Andrew

It was kind of new, 30 years ago. Not that using vacuums to form material was new. It's the fact that thermo-plastics were beginning to be made that could be manipulated easily.

M&CM

Which helmets did you create for the first film?

Andrew

We made most of the characters. There were several variations of the Stormtrooper helmets, and then we did the TIE pilot. One day George Lucas showed me a drawing showing a black helmet from behind looking out at a battleship. He said have you got a bit of plastic to re-create this? But knowing how they worked I went home, and instead of giving him a plastic part I sculpted up a TIE pilot with a whole new character. I went back the next day and said, "What about this?" and he loved it. Often, if you're smart enough, you can read what



Outside the studio in 1976. It's amazing that the new helmets are made in exactly the same place today!

they want and create something better. If you give more than you're asked for then things move on. And that happened for a lot of the characters.

M&CM

So did you have free reign with the designs?

Andrew

Well they didn't have a clue what to do anyway, so they were very happy for anything I could give them and, because I was so fast, things were made before the plaster shop knew what was happening.

For example, one time the Luke character needed a blanked out helmet for when he was practicing his lightsaber skills with the remote trainer. So we just quickly modified a pilot's helmet and went back the next day with what they needed. So as long as I kept working over night and coming back the next day with the products we would get another order. It was good business.

M&CM

Did you have any idea what you were creating would end up as such a cult icon?

Andrew

Well, we didn't even know it was a successful film until a year and half later. It's amazing how popular the helmets have become.

M&CM

Did you work on any of the following films in the trilogy?

Andrew

No. Once the first film was over I don't think George Lucas wanted to come back to the UK again. I think he had a really tough time with the unions when he was here. Also, at the time we had to move down to Shepperton Studios because we had a bit of an accident when we were working on Star Wars. This building where we are now actually caught fire!

Vacuum forming produces a lot of scrap. You have a big sheet of plastic and you only use the middle bit and you throw the rest away and it was all racking up out at the back. Well somehow it all went up. Someone came in and said your house is on fire! Well, my house was on fire, all the plastic scrap at the back was ablaze as well as six oxyacetylene bottles. Every bottle then blew up. It blew the roof off the pub two streets away, all the buildings around lost their roofs and we lost the whole building! So it was bit of a bonfire! And we hadn't even finished the film yet! Luckily the moulds survived, but we had to run around finding new machinery and set up the whole process again.

At that time we decided to move into the prop set business as we obviously had a niche in it. No one that we knew of in the industry knew how to manipulate plastics. Shepperton Studios down the road took us in and we set up in their old powerhouse. They had what they call a 'Four Waller', where film producers would come in, hire four walls and make the film. So anyone on the site who could feed the films with props got the work.



M&CM

How long were you involved in the prop making business?

Andrew

We continued in the prop set industry for around five years after Star Wars. We went on to do adverts, film and television. We did work for Jerry Anderson at Pinewood, and we did the thermo plastic front projection screen and the wind machines for Superman. We also worked on Flash Gordon, Outland and Space 1999. Then, after we worked on Alien for Ridley Scott, we thought we were a little long in tooth for the industry and we wanted to concentrate on our main business, which was product design.

M&CM

When did you first think "Hang on! I still have the moulds I created for Star Wars. I could produce a really special collectable?"

Andrew

Well... It was about a year ago, so almost 30 years after the first film was released. Until then we were concentrating on building our other business. In those 30 years we had forgotten we ever did films. Then about a year ago we noticed a couple of these helmets sitting on top of cupboard gathering dust. My partner, Bernadette, said, "I'm going to send those to Christie's. They have been sitting there for ages". I said, "They'll laugh at you. It's not worth the effort". But when we



The excellent, but sadly never used, designs SDS created for Ridley Scott's 'Alien'

put them for sale at Christie's the phone didn't stop ringing. We were so surprised at the number of people who wanted to work with us or sell them for us. So we reinstated the original company, 'Shepperton Design Studios' and now we are bringing this product line out exactly as it was thirty years ago.

Right here is where we made the originals, and this is where we make them now, in the cellar. It's the same people, the same building and the same bits of plastic! They haven't gone anywhere. They've just come home.

M&CM

Where were the moulds kept all these years?

Andrew

They were kept here in Twickenham, just sitting in the cellar doing nothing.

M&CM

When you brought out the moulds after 30 years, did you need to rework them in any way?

Andrew

No. There's no real pressure involved in vacuum forming. They are just static lumps of wood, resin or metal and they don't degrade, so once you make a mould it will pretty much last forever.



M&CM

Have the plastics available today made your life easier?

Andrew

Oh yes! The quality of finish you can get today is lovely. Before we used to have to use ABS (Acrylonitrile Butadiene Styrene), which is more of an engineering material, but it moulds well. Nowadays, plastics all have acrylic cap finishes and they mould easily because manufacturers have addressed the way the plastics are formulated to allow it to drape and to mould with vacuum forming.

Now we can make more precise items on the same moulds than we did before. Originally every pulling off from the mould would have been slightly different depending on the quality of the heating and the quality of the vacuum pump. We have better equipment now and better materials, so you get snappier more precise products from the same moulds.

M&CM

Apart from the quality of the new plastics, is the material the same as the originals?

Andrew

Yes. It's all identical. All the rubber extrusions for the brow and the neck are exactly the same which all come from the same dies as the originals. The blister eyes are even still produced in the same way

M&CM

After moulding are all the finishing processes still the same?

Andrew

Yes. It's all done by hand just as it was 30 years ago. There's no point in changing it because it wouldn't be

the same. They all have the same idiosyncrasies as the originals. There are lumps and bumps on the moulds and there are distortions. They are totally asymmetric; they are not symmetrical at all. Modern day toy manufacturing would automatically digitise them and make them perfect but these are exactly the same as the originals and completely asymmetric.

M&CM

So what do you have on offer at the moment?

Andrew

We've got the Stormtrooper Stunt helmets and we have just brought out the TIE pilot helmet. Later this year we also want to bring out the Hero version of the Stormtrooper. There were just six Hero version helmets produced for the film, which were used for the close up shots and are a little bit different to the stunt versions. After that we are probably going to produce the Rebel helmet. In all, I think there are about a dozen or so helmets we can do. So there is a bit to go yet.

Hopefully by the summer we will have produced all the characters we want. Then we will probably look into seeing if it's worth producing the full body armour or not, as we would like to give back the same, complete product.

M&CM

So you can't get any closer to the original screen used helmets than these?

Andrew

No, that's right. We are the only people who will have anything like the original. All the copies in the world will only be copies. So we have a unique product.

It was a great experience visiting SDS and I would like to thank Andrew and Bernadette for inviting me down to see where it all began and where it is all happening again. Both the Stunt Stormtrooper helmet and the TIE pilot helmet are available now directly via the SDS web-site (www.sdsprops.com) for £445 each.