

by Mark Jones

**Mark is a long standing member of the 'Eavy Metal team, and is mainly responsible for producing the wonderful scenery pieces you see in White Dwarf and our army books.**

**You can see plenty of his work in Town Cryer, as Mark was responsible for lots of the Mordheim terrain. Mark maintains that the more bizarre and frightening elements of the Mordheim scenery were all part of his brief, and are in no way a reflection of his mental state.**

**While we were painting up armies for Codex Eldar, Mark was inspired by the flurry of eldritch activity to create this fantastic conversion. He's very kindly allowed it to be added to our Biel-Tan army, but has warned us that he might want to steal it back, as he is thinking about entering it into the Open Competition at the U.K. Golden Demon.**

**Because of the vagaries of warp travel and magazine publishing, by the time you read this, anyone going to the U.K. Games Day will already know if he won!**

# 'EAVY METAL MASTERCLASS

Welcome to 'Eavy Metal Masterclass, an irregular series of articles, where we intend to unlock the darkest secrets of painting and modeling. This month we look at Mark Jones' wonderful Eldar Wave Serpent conversion.

The Wave Serpent is an Eldar transport vehicle, which mounts twin shuriken cannons to provide fearsome covering fire for the squad it carries. Games Workshop doesn't currently produce a model kit for the Wave Serpent, so Mark decided to do a conversion based on the Falcon Grav Tank kit. As inspiration, Mark used several illustrations of Wave Serpents, Tim Adcock's Epic 40,000 model, and he also had a chat with model kit supremo Jes Goodwin. The rest is down to Mark's own fevered imagination. Take it away, Mark...

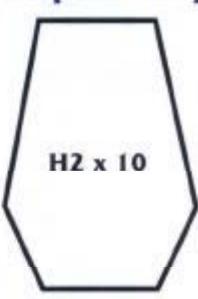
## Before Construction...

**Mark:** If you are going to attempt this conversion, you should read through the whole article once to get an overview, before starting each section. This is not a particularly difficult model to make, but I would recommend that only more experienced modelers have a go at it.

I've listed a number of tools and materials which you will find useful when constructing the Wave Serpent, but you may be able to substitute some of them for other equipment you have at hand. Remember, this is a guide to the model I made – feel free to experiment and try your own ideas.

### Wave Serpent Templates

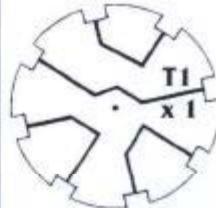
Hull pieces



H3 x 10

H4 x 10

Tr1 x 1



Turret pieces



Transport pieces

Tr2 x 1

Tr3 x 2

Permission to photocopy for personal use only.  
Templates at actual size.



## WAVE SERPENT

By Mark Jones. Painted in the colors of the Biel-Tan craftworld.



**Painting Thorns...**

by Martin Footit

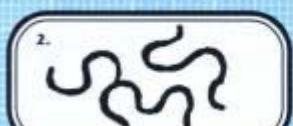
How do they manage to paint all those thorns on the side of the Biel-Tan vehicles? Well we asked 'Easy Metal' painter Martin Footit, who was closely involved in developing the Biel-Tan color scheme, to show us how it's done...

**Martin:** When we first started to look into painting the Biel-Tan army we felt it needed a device that we could incorporate into the already striking green and white color scheme (check out the Aspects of War Eldar article featured in this White Dwarf for more pictures of this fantastic army – Far Bloke).

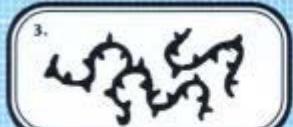
We experimented with many of the Eldar runes, shapes, and patterns, until we came across a thorn pattern featured in many of Jes Goodwin's early Eldar concept sketches. I tried this pattern first on a jetbike and it looked just right. I found I could use this pattern to add variation to the Biel-Tan units and to break up the large flat areas that you find on Eldar vehicles.

Painting the thorns, like most detail painting work, takes a little bit of practice to get right. Take your time and don't worry if you make a mistake. The way we build up the thorn pattern means you can easily rectify any mistakes later.

**1.** When doing detail work I always thin down the paint I am using with water, as this allows the paint to flow off the brush easier. To start painting the thorn patterns you should first paint a thin line where you want the thorns to go. Try to keep the pattern looking random. Always keep the lines curved, no straight lines, and aim to keep them a uniform distance from each other.



**2.** When you are happy with the way your pattern looks you should then increase the thickness of the lines.



**3.** Finally, to finish off the pattern, you should paint the thorns. This is not complicated at all – just paint little triangles with the point of your brush, on alternate sides of the lines. It is at this point that you can tidy up any blemishes on your lines by turning them into thorns.

**CONSTRUCTING THE WAVE SERPENT**

Before you start constructing your Wave Serpent you should read through these instructions carefully and take careful note of the modeling materials and tools that you will need. Remember when cutting out the Wave Serpent templates to make cuts away from your body and fingers.

**Modeling Materials:** model filler (green stuff), plastic tea spoon, plasticard (1mm & 1.5mm), cocktail sticks, 0.9mm brass wire (or paper clips), a Falcon Grav Tank kit, and two sbrukien cannons.

**Tools:** scalpel, steel ruler, clippers, polystyrene cement, superglue, cocktail sticks, pin vice and drills, needle files/fine, wet and dry paper.

**Templates**

1. I used several pieces of plasticard for this model, and we've provided templates so you can copy them. The easiest way to do this is by tracing or photocopying them and then transferring them to your plasticard sheets.

You may have noticed that you need two different thicknesses of plasticard to build this model. The following templates should be cut out on the 1mm thick card: **H1**, **H3**, **H4** & **T1**. The remaining templates, **H2**, **Tr1**, **Tr2**, **Tr3** & **T2**, should be cut out on 1.5mm thick plasticard. Once you have done this you can start on the next stage of the conversion.

**Transport Bay**

2. Start by constructing the extended crew transport bay.



Take the two 'dog leg' shaped plasticard pieces (**Tr3**) and glue one to each side of the Falcon rear crew compartment piece **No.8**. You should test fit these pieces first to make sure they fit correctly. To strengthen the join between **Tr3** and the crew compartment cut out four smaller pieces of scrap plasticard. Glue them over the joins between the crew compartment and **Tr3** on the inside of the compartment.

Finally, to complete the extended transport bay, take piece **Tr1** and glue it to the top of the crew

compartment piece **No.8**. Then glue the Falcon rear hatch **No.9** to the back of the crew compartment. Once this is dry, take piece **Tr2** and glue it into position underneath the crew compartment piece **No.8** next to the rear hatch.

This should complete the extended transport bay ready to be fitted to the back of the Falcon hull. You should now put the assembly to one side and start building the Falcon Grav Tank. You can ignore the turret assembly stage. The extended transport bay should be fitted to the model at the lower hull assembly stage, and don't glue any of the probes into place.

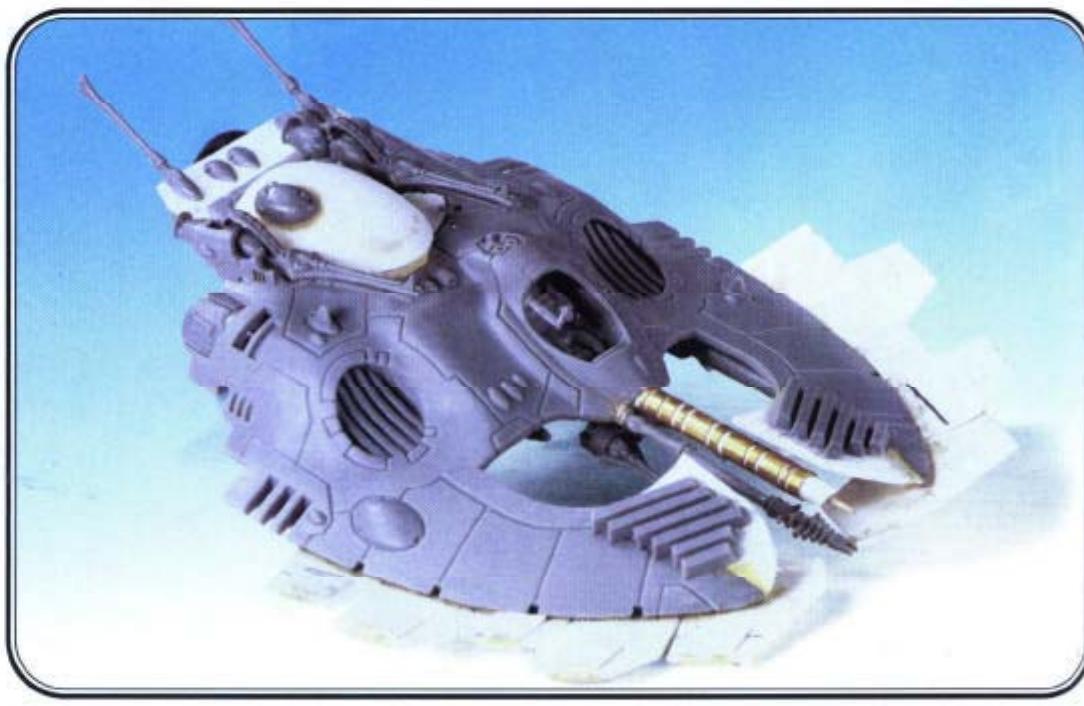
*Please note, the rear of the Falcon lower hull **No.3** half will need to be modified slightly to allow a good fit with the extended piece, so test fit it before gluing in place. After you have fitted the extended transport bay into place you are ready for the next stage.*

**Turret Filler**

3. Glue the circular turret filler **T1** to the top of the Falcon upper hull **No.14** to cover up the original turret mount. If you want you can carefully bore out the tram lines shown on the template to give the multi-part panel effect that is on the rest of the Falcon Grav Tank.

**Front Fins**

5. Round off the front of the Wave Serpent by adding fins to the Falcon's upper hull piece **No.14**. These two 'Fin' shaped pieces **H1** are each made from two pieces of 1mm plasticard glued together. Glue these onto the front of the upper hull (see picture below for position). When the glue has dried and the front fins are secure, they will need to be filed or sanded until they match the profile of the front hull. Once this is done, glue the Falcon upper hull into place.



### The Turret

6. The new turret was made by carefully trimming away the handle from a plastic spoon. Drill a hole on each side of the new turret so a cocktail stick can be glued in place. This will form the mounts for your shuriken cannons or any other heavy weapons you want to put on the turret. Then place your turret on a piece of 1.5mm plasticard, draw round it and cut this shape out. This is the base of your turret – glue it into place and then use filler and sand paper until you have a seamless join between the two pieces. Glue your weapons into place on the ends of the cocktail stick.

Glue piece **T2** into place on the upper hull (see picture above for position) and then drill a hole big enough to fit a cocktail stick.

Finally, to finish off the turret assembly, drill another hole roughly in the center of the base of the turret and glue a cocktail stick into place. This is so we can mount the turret on the hull and allows it to turn.

### Hull Field Generator Plates



7. Now for the tricky bit! Before gluing the hull field generator plates **H2** into place, take a file and roughen up the lower hull and the edges of the upper hull slightly. This is to make gluing the plates on easier. For a final check to make sure the pieces line up well and sit in place, do a dry run, sticking them in place with blue tac. Stagger the fit as

shown in the picture above. Once you are happy that all the plates fit, glue them into place.

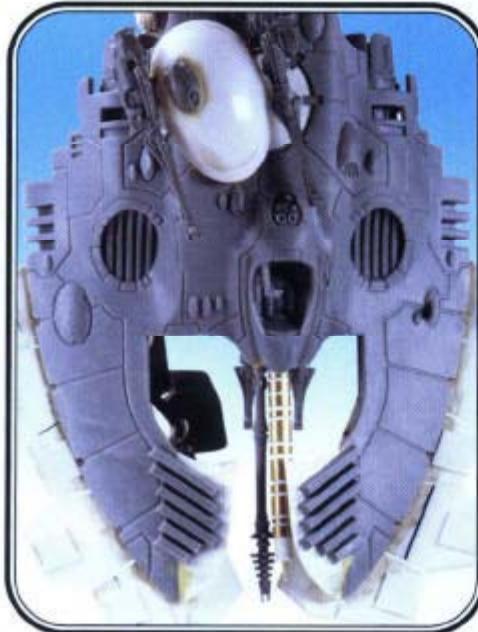
**Quick tip:** *Mark glued the plates on one at a time. After being stuck into place with blue tac, be pulled off one plate at a time and then glued that plate back on. This way be ensured the fit of the plates did not change.*

### The Probes & Finishing Off

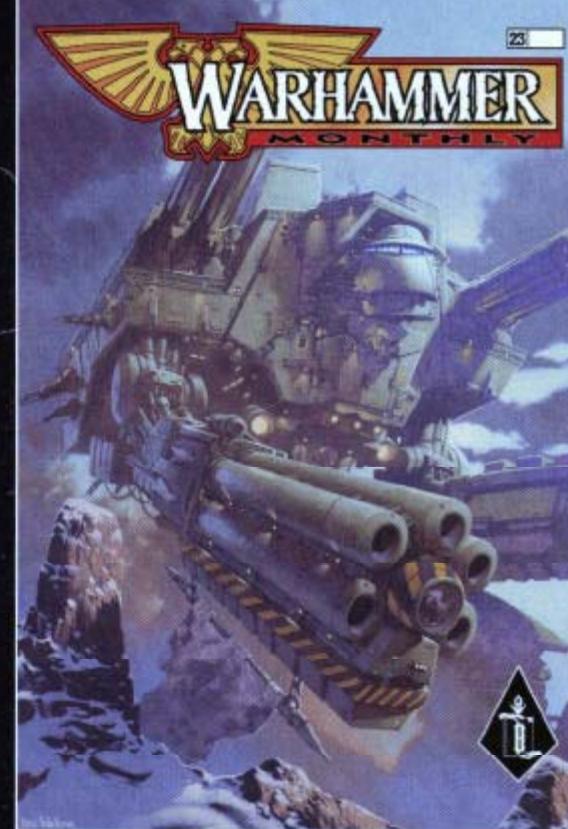
8. The two probes at the front were easy to make, but quite tricky to glue into place, so I would consider them as an optional extra. The larger one was made with pieces from my bits box, the core is a piece of thin plastic tubing, with varying lengths of brass tube glued along its length (you could wrap wire around it instead). The spike at the end is made from yet another cocktail stick. The smaller probe is made from the original Falcon sensory array piece **No.6**, cut up and glued back together.

All the final detail can now be added if you want. The thick ribbed pieces on the front of the wave serpent were made from pieces of plastic sprue frame from the Falcon kit. The piping on the generator plates was made from pieces of thin wire and the small discs are cut from round plastic sprue (spear shafts or plastic banner poles). The hull generator plates were thickened up by gluing pieces **H3** & **H4** to the plates. The rest of the detail is made up from bits and pieces left over from the original plastic Falcon kit.

Congratulations you have built your Wave Serpent – now paint it in your chosen Craftworld colors. I built my Wave Serpent as a show piece, and I am thinking about adding it to a diorama and entering it in this year's U.K. Golden Demon Open category. However there is nothing to stop you from using your Wave Serpent in battle. Have fun...



# ALL-ACTION TWICE A MONTH



This month's awesome issue features an absolutely great cover by none other than Kev Walker. The cover heralds the start of a brand new story from the incredibly popular Titan series. Princeps Hekate commands the Titan Imperius Dictatio, mighty war machine. This time they face one of the most deadly enemies in the galaxy, a species so violent it threatens to consume every living thing – the Tyranids.

Also in this issue is another episode of evil deeds from Malus Darkblade. Having escaped from the clutches of the Dark Prince, Malus has uncovered a vital clue to Tz'arkan's whereabouts. Meanwhile there's more intrigue and insidious Chaos plots in Inquisitor. And finally there's the second episode of Kal Jerico – The Motherlode.

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