

DARK MAGENTA

Reach for the Sky

By Dave Knowles

Come with us, fellow inquisitors, as we probe the mind of a madman and his crazed schemes...

The Valkyrie

From a fairly early age I've been interested in aircraft, and as a child I built many models of them - mainly Airfix kits of things like Spitfires, B-17s, Vulcans and the like which hung from my bedroom ceiling for many years. That phase of my modelling 'career' died out when I got interested in miniature wargaming, but when I came across Forge World's range of 28mm aircraft I immediately set about saving up for one. Unfortunately it was around that time that I became interested in *Inquisitor* and gave up on 28mm models and started working at 54mm instead. Later, when rumours surfaced about a 28mm Valkyrie plastic kit, I built a 28mm version of Inquisitor Kaled, so I'd have an excuse to buy a Valkyrie when it was released. Fate intervened again though, and I became obsessed with the idea of building a 54mm Valkyrie instead. At first I kept dismissing the idea, a quick calculation told me that it would have to be about two feet long, but the idea stuck at the back of my head and refused to go away.

Then, with the Easter weekend approaching, I was faced with the prospect of four days off work with no real plans - originally I had been going to use the weekend to work on my kitchen, but with my parent's help I had finished that some weeks earlier. The 54mm Valkyrie plan surfaced again and I figured four days ought to be enough time to build one out of plasticard if I really concentrated on it.

Imperial Armour Volume 1 contained plan and side views of a Valkyrie, and these diagrams became my primary reference for the project. By scanning these and blowing them up to the right scale I could take measurements directly from them with no further calculations needed. When I printed them out (on about eight sheets of A4!), I almost gave up on the whole idea - the thing just looked enormous! I persevered however and decided I needed some more reference diagrams, so extrapolated front and rear views from the side and plan views.



Armed with these diagrams, I set about figuring out how I'd actually build a Valkyrie. Fortunately the vast majority of a Valkyrie is straight lines and sharp corners, there are very few curves (which would have been difficult to replicate using plasticard). My plan was to use 1mm plasticard for the main body, 0.5mm plasticard for adding the panel details, and 2mm plasticard for the tails and landing gear. The engines were the main parts that I would be unable to build from plasticard, but fortunately I realised that the diameter of the tubes I would need corresponded closely to that of plastic pipes used in household plumbing (and what's more, I had some left over from plumbing my bathroom a couple of years ago!).

Using my reference diagrams, I quickly estimated how much plasticard I would need, and armed with a shopping list, I set out to my local model shop to gather everything I needed. Unfortunately it seemed as if my plans would fail at the first hurdle as the first model shop I visited only had a small amount of 0.5mm plasticard and no 1mm or 2mm stuff. The second model and third model shops were closed as it was Good Friday, but fortunately the fourth and final model shop in Preston ([Transport Models](#)) was open, and better yet they had a large stock of plasticard. What's more, they also sold plastic strips in a large range of thicknesses which looked very useful, so I stocked up on those as well figuring they'd save me time in the long run. Perhaps the most useful thing I found was some lengths of plastic rod with a 4.5mm square cross-section, which looked like they would be perfect for strengthening key points in the structure. I also placed an order for all sorts of hatches, lamps, sensors etc from [BitzBox](#), a supplier of individual parts from GW plastic kits, to add some much needed detail.



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Technique 1: Cutting

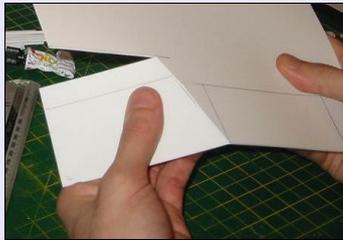
When cutting plasticard, the best approach is to simply mark the line with pencil, and then cut along the edge of a metal ruler using a sharp knife. A series of shallow cuts is preferable to trying to cut straight through in one go.



There are a couple of advantages to this method; the first is that you're less likely to slip and either cut the plasticard in the wrong place or away from the line; and the second is that it's not necessary to cut all the way through the plasticard. Instead it can be scored and then bent to break it along the line - this is far quicker than cutting right through every time.



My final tip when cutting along the edge of a metal ruler is to make sure your finger tips are nowhere near the edge - it may sound obvious, but it's all too easy to quickly run the knife along the edge of the ruler and slice into the end of your finger (easy and painful, as I found out!).



With thinner plasticard, such as 0.5mm, it is often quicker to cut it with a sharp pair of scissors. This does not really work with thicker plasticard as it bends and warps between the blades.

All in, I spent about £35-40 on supplies - roughly the same amount the 28mm plastic kit would have cost me (and considerably less than Forge World's original resin version!).*

It was now just after lunchtime on Good Friday and I was all set to begin, but was now faced with the question of where to start. In order to simplify the build, I decided I would approach the Valkyrie as a series of boxes which could be built separately and joined together later. My plan called for the cargo compartment to be the first box, followed by the front fuselage (and cockpit), the two tail booms, the two wings, the fuel tank (on top of the cargo compartment) and the two engines.

I measured the dimensions of the cargo section straight from my diagram, scored and cut the plasticard and started joining the bits together. The right angles were easy - I just cut any off-cuts into little triangles and used them to support my joins, cutting triangles to support the other joins took a bit more effort, but with the help of a protractor (something I hadn't used since school!) I got the angles right. With my first box almost complete I realised two things - firstly that it had taken me a lot longer than I had estimated, and secondly, that it was far too flimsy! Small

lengths of the plasticard were quite stiff, but given the size of the Valkyrie it was far too flexible, and so I was forced to go back and build up an internal structure to strengthen the cargo area. I did this by adding a simple 'honeycomb' structure using sections of plasticard. With this done, the cargo area felt much sturdier, and after my earlier setback, I was now thinking that this idea might actually work.

It was now Easter Saturday and all I had built so far was the basic shape of the cargo compartment**; but I figured that with what I'd learned the day before, progress ought to start speeding up. For the wings, I cut out the top and bottom surfaces from plasticard, and used the 4.5mm square rod to strengthen and support them. Most importantly, I made sure to leave about 40mm of plastic rod sticking out the end of the wing where with would join to the fuselage to support them.

I then started work on perhaps the most complex 'box', the front fuselage and cockpit. At one point I toyed with the idea of buying a 1/32 scale helicopter kit and using this cockpit area to detail the Valkyrie, but in the end I decided that while this would be very impressive, it would just take too long and the price of a suitable kit would almost double the cost of the Valkyrie.

Easter Sunday was spent building the two booms to support the tail, and the tails themselves. Unfortunately the booms needed to be a lot longer than any of the plasticard I had, so I had to join two pieces end-to-end and support them using more of the 4.5mm square rod. I also built the five tail pieces. These were made from a section of 2mm plasticard, and were the first parts to which I added

Technique 2: Joining

In my experience, the best glue to use on plasticard is liquid poly (such as that sold by Humbrol). Simply brush it along the edges to be joined and press the two parts together. Be careful however, the glue works by melting the plastic slightly so it can be 'welded' together, but if you let it run over the surface of the plastic it is all too easy to end up with a fingerprint imprinted in the plastic. After the join has hardened, more glue can be brushed along the edge to further strengthen the join.



In order to get the correct angle between parts, it is often essential to use small triangular brackets (as shown in the example above) - to this end, I found it very useful to mark any right-angles on off-cuts as many parts join at right-angles and by marking such angles you can



quickly make brackets without having to be constantly measuring plastic off-cuts.

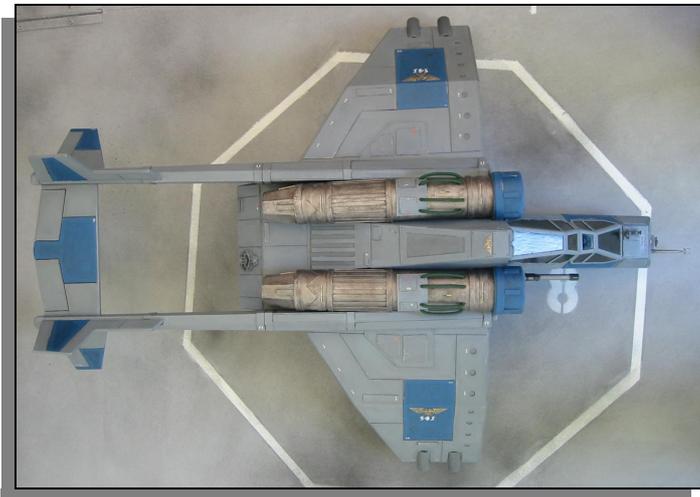
* As it turned out, I had overestimated the amount of 1mm plasticard I needed, so had plenty left over for other projects, so the actual cost of the Valkyrie was a bit less.

** I had also cut out some of the sections for the wings, but hadn't yet started them.

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the panel detail. This was done using 0.5mm plasticard, cut to size and glued in place with a small gap between sections. To neaten up the edges of the tails I used some of the plastic strip - the plastic strip was proving well worth the extra expense. I could have managed without it, but it saved me a lot of cutting and measuring.

Easter Monday was the last day of my estimated build time, and it was clear I would not be able to finish building the Valkyrie in the time I had planned. However, I took heart in the fact that I would have the basic shape done, and just have the detailing to do later. Monday's project was the engines and fuel tank - I cut lengths of 35mm pipe for the engines themselves, and short lengths of 40mm pipe for the inlet cowlings. The jet nozzles were built from plasticard, with a wheel from an Ork war buggy as the actual outlet. With these parts done, I was now ready to start the assembly process, and decided to join the cargo compartment, front fuselage and booms. I could then do a dry fit with the rest of the bits. This was the culmination of the weekend's work, and it was great to see the whole thing finally take shape.

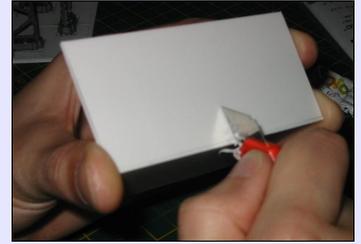


To add detail to the Valkyrie, I then started covering it in panels cut from 0.5mm plasticard - as with the tails, the panels were glued in place with a small gap between each one. This process, was anything but quick - measuring, cutting and gluing all of these panels seemed to take forever (and as I could only do a couple of hours each night after work, did in fact take a few weeks), but once done the Valkyrie was much improved. The extra layer added additional strength to the structure, and it was starting to look really good. Further detail was added using the plastic GW parts (such as the hatch on the side of the front fuselage and the air filter above the canopy, a handful of Forge World brass eagles I'd had in my bits box for a while, and yet more plasticard. Small rectangles of plasticard were added all over the Valkyrie to represent access panels and the like. I also used plasticard and guitar wire to detail the engines. For this, I found that the liquid poly did not stick well, and instead used a combination of superglue and impact adhesive. The turbine fans were made by cutting small triangles of plastic and sticking them to a circle cut to the correct diameter. The hub in the centre was a 'skirt ball' from an old Dalek kit, a model I'd built years ago which had since fallen off my shelf and smashed.

Once the detailing was complete, I was finally in a position to join the wings and engines to the fuselage. At this point,

Technique 3: Clean-Up

It is almost always necessary to tidy up the joints between two bits of plastic. This can be quickly done by scraping off any excess with a modelling knife, and any final tidying up can be done with a file. Always wait until the glue has dried and the plastic re-hardened before doing this.



I spent quite a while 'flying' the Valkyrie around the house and revelling in how cool it was looking! The final stage was to build and attach the landing gear - I left this until last so as to make sure the Valkyrie would sit level, and after an hour or two with a spirit level and a file to adjust the landing gear struts I finally got it just about perfect.

The completed Valkyrie measured about two feet in length and had a wingspan of over eighteen inches - it was big, and painting it would take ages if I went to the level of detail I would normally do. Instead, I decided that its size would mean less highlighting was necessary and so decided to leave the colours fairly 'flat'. After a black undercoat, I sprayed the whole thing grey (literally using up a whole can of paint on one and a half coats). Then, with a big brush, I painted the metallic areas, the blue panels and the black cockpit. I mixed up a load of grey paint, almost identical to the spray, and used that to touch up all the places I'd caught with one of the other colours and with the remainder I quickly went over some of the panels so the whole thing was a bit less uniform. A few washes and a bit of highlighting on selected areas, and the painting was done.

As well as things like tail numbers, unit insignia and other identification markings, real aircraft have all manner of warning labels, stencilled notices etc, and I wanted to replicate this on the Valkyrie. To this end I shopped around on eBay and got hold of a transfer sheet for a 1/32 scale Hawk jet trainer. This supplied me with more than enough warning triangles, 'do not step' markings, and other random labels and bits of text. Between these and some GW transfers, I managed to make the Valkyrie look reasonably detailed without having to spend too long on the paint job.



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The Arvus Lighter

After finishing the Valkyrie, and painting it in Inquisitorial colours, my Adeptus Mechanicus Explorator Magos was looking jealous and wanted his own transport. Thus I started work on a second aircraft, an Arvus Lighter (I'm obviously a glutton for punishment!). Having learned a few lessons from the Valkyrie build, I was sure I could build the Arvus a lot more quickly. The first thing I did different was rather than making my own plans, I started out using some templates designed to allow people to build 28mm cardboard vehicles, and simply doubled all measurements ([templates can be downloaded from the BWC Archive](#)). This alone sped things up a great deal, as someone else had already done a lot of the hard work and the templates allowed me to build the fuselage, cockpit and wings quite quickly (the engines and landing gear I built in the same way as on the Valkyrie).

The second thing I'd learned was that measuring and cutting out the panels from 0.5mm plasticard was one of the most time consuming parts of the build. This time, rather than measure and cut individual panels once the aircraft was assembled, when I cut a section out of 1mm plasticard, I also cut the 0.5mm plasticard for the panels at the same time. Then, when it came time to add the panel detail I simply had to cut the 0.5mm plasticard into sections and glue it in place - this alone saved me no end of effort.



The rest of the Arvus build was very similar to that for the Valkyrie - it probably cost less than £20 and the techniques are well within the ability of most even vaguely competent modellers so I hope some amongst you will have been inspired to have a go yourself (and if you do, please send in photos to *Dark Magenta* and we might even feature them in our letters page).

Baptism of Fire

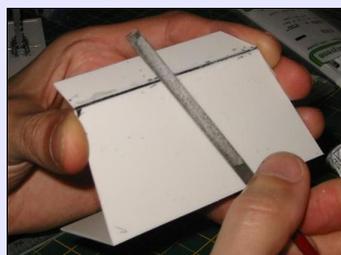
I finished the Valkyrie just in time for the Ten4Ten event in York, where it was a big hit with the other players. I didn't make up any rules for it (although if you wanted to, I guess the 'Put the Pedal to the Metal' or 'Feeling the Need For Speed' articles on using vehicles in *Inquisitor* would be a good place to start), instead I planned for it to be used as an objective or (occasionally mobile) scenery. Some players became obsessed with the idea of their characters 'stealing' the Valkyrie and escaping in it, and the GMs handled this admirably by making up rules on the spot. The first time someone tried to get onboard the Valkyrie

Technique 4: Filling Gaps

Where two pieces of plasticard join at a non-right-angle there will almost always be a slight gap left between the outside edges of the two parts. To eliminate these gaps, you could file down or trim the edges so the two pieces fit flush together, but this would be extremely time consuming. Filling the gaps with greenstuff is another option, and was the first thing I tried, but forcing greenstuff into the tiny gaps takes forever and I quickly became disillusioned with the slow progress I was making.



It was at this point I had a brainwave - when I fitted the new worktops in my kitchen I had bought some Colorfill joint sealant to fill the gaps where two sections of worktop join. I figured it couldn't hurt to give it a try, and it worked perfectly. The tube of sealant is simply squeezed along the join, and any excess can be scraped off later. An off-cut of plasticard is the best thing to use to scrape off the bulk of the excess as it will not scratch the surface of the plastic. After the sealant has hardened, and remaining excess can be filed off. This process is extremely quick (especially compared to the other options I tried) and even though the sealant is quite expensive (approx. £8 for a small tube) it is something I would definitely recommend.



their Rogue Trader got as far as opening the rear ramp when a stray missile deviated from its target and detonated inside the Valkyrie wrecking it. Later in the day however, the same Rogue Trader managed to climb inside, batten down the hatches and prepared for take-off. As the Valkyrie started to lift off, the opposing warbands attempted to stop it - a power-halberd armed Inquisitor sliced open one of the side doors and her lithe death cultist followers leapt inside; while at the same time a Skitarii attempted to cut his way into the cockpit using a breacher and a heavily-armed Praetorian servitor destroyed one engine with a super-krak missile. Ultimately they were



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unsuccessful, and the Valkyrie limped out of the combat zone trailing smoke (and in the process stranding the rest of the Rogue Trader's team at the mercy of some very angry members of the Inquisition and Adeptus Mechanicus).

However, the Valkyrie related highlight of the day was provided by one of our very own editors, Robey 'PrecinctOmega' Jenkins who was seen running around the hall 'flying' the Valkyrie and making jet engine noises like a small child - unfortunately no one was quick enough with their camera to capture the event!

I've since used both aircraft in a few more games and they have always proved very popular. At the very least, they look great on the tabletop, and they can be used to add

extra narrative options to a game. For example, NPCs (or even PCs) can deploy right into the middle of a game, appearing at an unexpected moment; or a character can attempt to summon his aircraft to transport him out of the combat zone if he needs to make a swift escape.

About the Author

Dave has been playing GW games for far more years than he'd care to reveal, and moved onto Inquisitor about five years ago. Since then he's built up an impressive collection of 54mm models (some of which featured in the very first issue of Dark Magenta), and always has more in the pipeline. When not battling for the Emperor's soul, he works as a software engineer in sunny Preston where he lives with his girlfriend and a tank full of tropical fishes.

