



Welcome to our third special issue.

We welcome the very talented, and innovative modeller, David Eaves, who not only has submitted his works with the main group and our magazine, but has now shared more complete builds for this special issue.

I would like to sincerely thank David for his articles and I am sure you will enjoy them immensely and more importantly ...learn from them!



I first found an interest in scale models at the ripe old age of seven – my godfather "Uncle Pete" had a number of builds he'd done and I was fascinated by the precision & detail.

It wasn't long before he bought me my first kit, the old Airfix Saturn 5 Rocket. Of course, I didn't paint it and there was glue everywhere, but I had a lot of fun building it.

A few kits followed, subjects including WWII fighters & bombers. I remember my first Sci-Fi kits too – the old Aurora "Star Trek" Enterprise & Klingon Cruiser.

After that, my modelling work occurred in spurts, usually during periods of redundancy. I'd actually begun painting them at this stage, using a point-and-shoot spray brush and compressed air cans.

Subjects from Gerry Anderson shows were favourite (Captain Scarlet, Space:1999 etc.) as well as a continued interest in the now more prevalent Star Trek models from the movies.

Fast-forward to around three years ago. I've moved from the UK to Australia, I'm no longer working in the computer games industry, so I'm experiencing a creative drought.

I'd become a huge fan of the re-imagined Battlestar Galactica series and loved the MKII Viper....so I decided to buy the Moebius kit, a few brushes & paints and a cheap Chinese airbrush & compressor package.

I set myself up in the garage with a table, a chair and a couple of desk lamps...

Since then I've joined a lot of Facebook groups, asked for and been given a lot of help and advice from a bunch of awesome people (you know who you are guys!), watched a lot of YouTube videos and tutorials....and three years later, I still have the same compressor, a better airbrush, a shelf full of builds and a to-build stash of more than twenty kits – and I'm being asked if my work can be published in magazines.



# 6 Incredible builds start to finish!

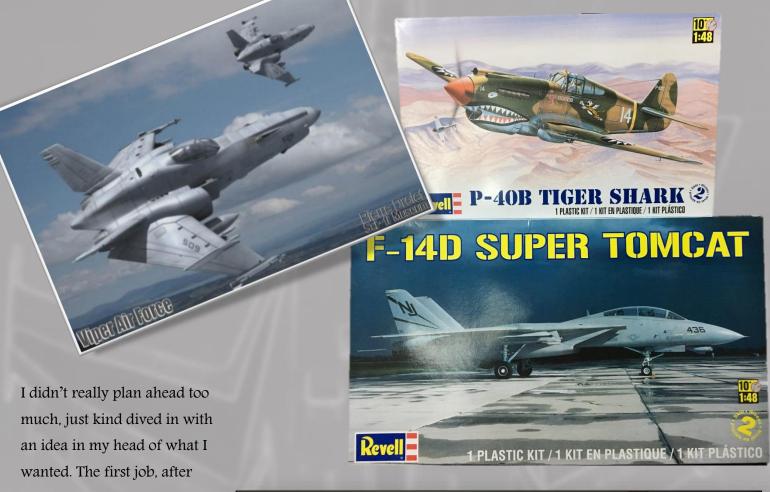


#### Colonial Air Industries PF-54/C "Kittycat" Multi Roll Combat Aircraft.

This build was inspired by Pierre Drolet's Caprica Air Force jet concept. I wanted to build my own version, but a two-seater variant.

Using a P40 Kittyhawk for the nose was a given, but I wanted an aircraft with a fairly flat fuselage for the rest. I looked at F15's and F18's initially, but then decided on the F14 Tomcat.

Price was a factor from the beginning – it could all have ended up in the bin, so I chose two reasonably priced Revell kits for the build. No point in using expensive Tamiya kits for something that might turn into a disaster.

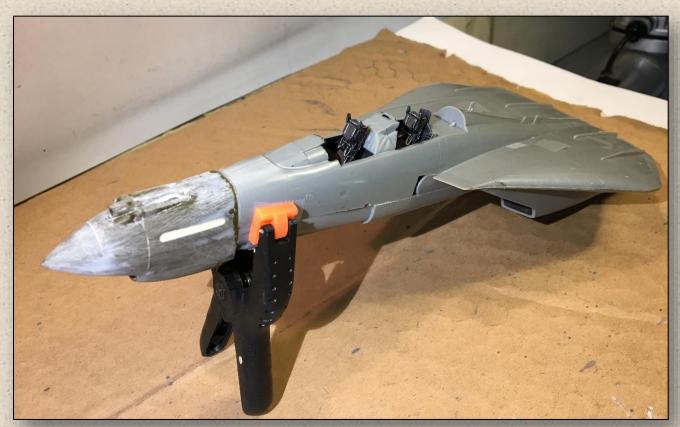


much, just kind dived in with an idea in my head of what I wanted. The first job, after putting the F14's fuselage together, was shortening it. So out came the mini saw and I removed a large chunk just after the end of the swing wing openings. I chopped up that piece in half again, so I could keep the engine housings for re-attaching later.

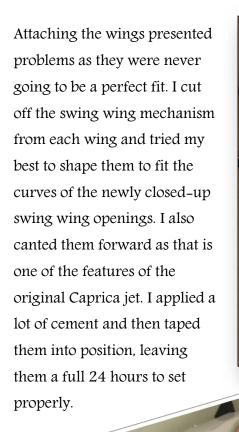


I then assembled the front section of the P40, blending in the prop & exhaust openings, and attaching it to the front of the Tomcat. I had to clamp the fuselage quite tightly, actually compressing it from the sides, so it would better match the cross section of the P40.

Once this was all dry, I removed some material from the swing wing openings, so I could effectively clamp then shut and provide an edge to attach the wings to. This was to be a fixed wing aircraft.







Next job was to angle the ends of the wings downward, another Caprica fighter feature. Again, I used the mini saw to cut them off, then used pieces of shaped sprue to make attachment points. Then I cut the wingtips to the correct angle and added the sidewinder missile mounts.



Once all this had dried properly, it was filler time...and boy, there was a lot of filler! I used Milliput Superfine to do the initial gap filling and shaping, followed by Mr White Putty for final fitting of all the little gaps and blemishes. I by no means achieved a perfect finish, but as a first real kitbash, this was still a learning curve for me.















After attaching the tail fins and lots & lots of sanding with various grades of wet and dry, I moved onto primer.

I'd been watching YouTube videos on black basing and saw this as a good opportunity to have a crack at it. I sprayed the entire aircraft with Stynylrez black primer. After trying this stuff before, I now won't use anything else. It sprays easily and self– levels. Pretty much a perfect finish every time.

Black basing is a technique used to create variations in the paint so you get a lot of subtle tonal changes instead of a flat plain colour. I mixed up a thin version of my top colour, a Mr Color Aqueous light blue/grey, and thinned approx. 75/25 with Mr Levelling Thinner. The very thin paint allows you to use a small needle (0.2) and set the compressor very low (about 10 psi). Then basically you spray the entire surface, with the airbrush fairly close, making random spiral patterns. I did this in a few layers until I got a level of coverage and modulation I was happy with.

Once this had dried, I mixed up some more of the same top colour at around 80/20 and applied a few light mist coats over the mottled paint. At this point, you put on as many layers as you feel you need to achieve the level of modulation you want to show through. You have to be careful not to cover up all the hard work though! When you think "I'll just give it one more coat" ...stop there because you've probably done enough!

With the top coat done and left for a week to cure properly, I airbrushed on the red markings. These were masked with Tamiya tape for curves and then airbrushed in red using a similar "mottling" technique. No point in having perfect flat colour stripes when the rest of the fuselage is modulated.





I then fitted & painted the landing gear so it could finally sit on its wheels....and then consigned it to a box for a few months while I worked on other things, having got a little bored with it!



Eventually, I forced myself to continue. Out came the ordnance (put together previously), which was primed and painted a ghost grey. The stripes on the missiles and drop tanks were done with black nail art tape, one of my very useful discoveries! You'll no doubt hear more about this stuff if I do any more build stories – it's starting to feature quite a lot in my building techniques.

I painted the exhaust nozzles with titanium silver and then gave them a black oil wash and once dry gave everything a coat of satin gloss before applying the decals. These were made up from various sets, including a MKVII viper, a MKII viper, the P40 and the F14! The P40's shark mouth looked particularly effective.

After leaving the surface for a week to cure properly, I attached all the ordnance with super glue.









Weathering came next. I didn't go overboard on this as I wanted the aircraft fairly clean. I used ground up pastels for the dirt streaks which give quite a subtle effect on a satin finish. I also used a pencil to draw in some of the panel lines that had faded and, in some cases, virtually disappeared during the filling and sanding process. This was all then sealed with a final coat of satin clear.

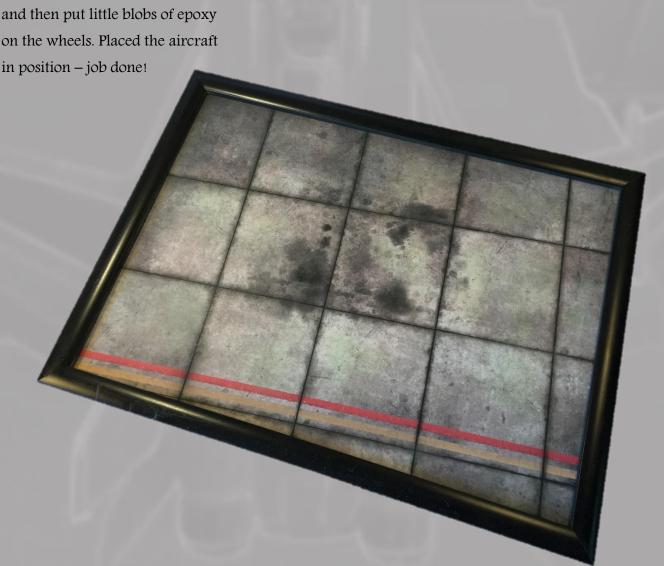
I'm not particularly good at painting canopies – I usually paint them freehand, with mixed results. So on this occasion, I spent time masking it properly with Tamiya tape for curves and standard Tamiya tape. The result was a definite improvement on my usual efforts.

Unfortunately, while gluing the canopy into place, I managed to get a gluey finger mark right on the top of it! So I tried a little experiment using Autosol chrome polish, applied with the end of a cotton tip. I used to use this stuff for cleaning chrome bumpers on old cars, so I know it has abrasive properties....and it worked! A little polish up with some wax to finish and the finger print was gone!



At this point, I thought it needed something to sit on, maybe just a simple hard standing. The easy option was to buy a printed version from Coastal Kits, but I didn't want to spend any more money. So I made up a paved hard standing in an online Photoshop style package and printed it out in colour. I bought a cheap frame from a local bargain shop, bolstered it up with a few sheets of card and then fitted the print.

I added a little weathering to soften the paving edges a little and then put little blobs of epoxy on the wheels. Placed the aircraft





I was pleased with the end result. Definitely a one-off build and I think it works as a variant to the Caprica jet. It was well received in the modelling groups and I was asked to write a little back story for it...which I did.

If I had to build it again, I'd probably use the same methods but spend a little more time with the filling & smoothing. There are places where you can see the fill, if you look hard enough. Overall though, a successful kitbash that looks at home in the BSG universe.



### Moebius Cylon Centurion 1/6



Shopping around the stalls at WASMex in 2017, I found a Cylon Centurion kit going for the bargain price of \$45 AUD. I hadn't actually thought about building one of these before but, for such a good price, it would have been wrong not to buy it!

After posting my purchase, on my Facebook models page "Daveiant's Model Madness" one of my friends suggested that, now a few of us had the kit, we should do a buddy build. It would be very interesting to see the results of 5 different modellers all building the same kit.

The first thing I decided, even before I opened the box, was that I would have to change the standard pose allowed by the kit. It looks very awkward and a bit unrealistic, in my opinion. I considered just having it upright and standard in "sentry mode" but, again, not very dynamic.

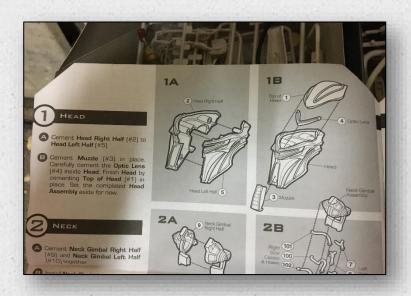
Previously, my partner in crime Stuart Jackson and I had been discussing the possibility of making a damaged version, dragging itself along the ground. This seemed a good way to go so I checked with Stuart first to make sure I wasn't stepping on his toes, then made a start...



Upon opening the box, it seemed like an awful lot of parts and a little daunting...but once you start breaking it down into sub-assemblies, the kit is fairly straight forward.

Once I'd put together the two halves of the head, I encountered my first problem with the instructions. Moebius tells you to insert the "mouth" grill after you've cemented the two halves of the head together. Trouble is, it doesn't fit. I expected it to slide in...nope. I ended up having to trim & sand it down to get it in place. There's a lesson here in test fitting items before gluing them together. Now, if you've bought the Revell version of the kit, it tells you to insert the grill *before* you glue the two halves together (Stuart has the Revell kit). Strange that they differ, but there you go.



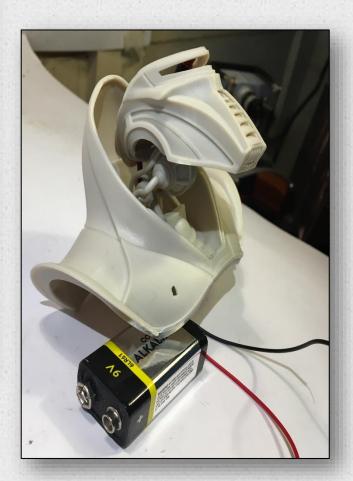


Once all that was corrected, I used a Dremel to remove a lot of material from the head interior to make room for the "red eye" light. I opted for a single, non-moving light as I couldn't afford to buy an off-the-shelf moving eye kit. Plus, although I can do basic soldering, I'm not an electronics wiz capable of building one from scratch.

So, I installed a "flickering" red light, supplied



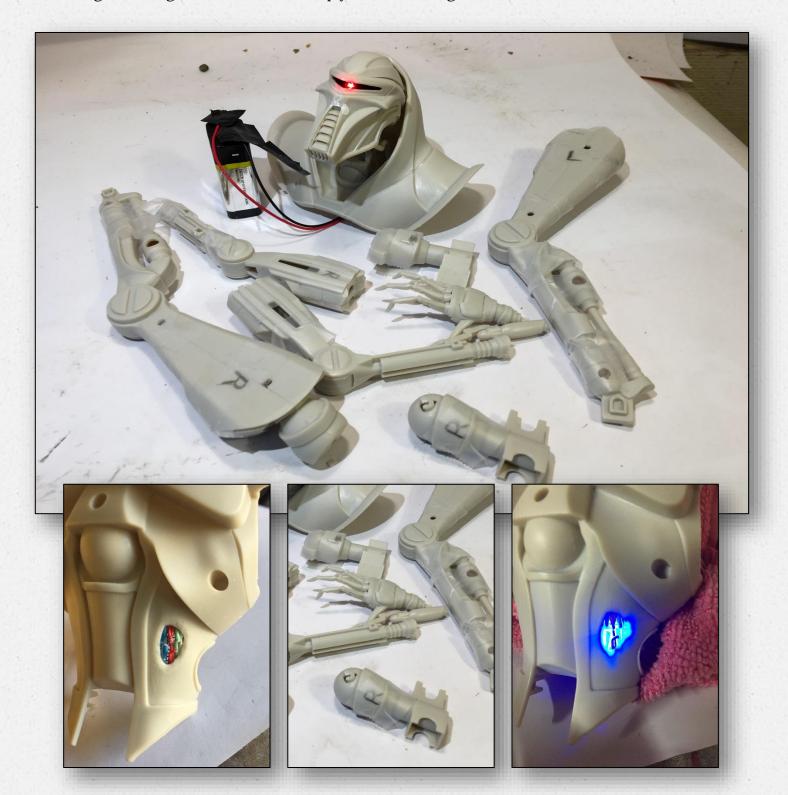
So, I installed a "flickering" red light, supplied complete with resistor & wires purchased off eBay, painted all the head inner surfaces flat black to eliminate any light bleed, fitted the clear visor and closed up the head.



Next job was to alter the angle of the head. This is fixed for the centurion in an upright position. Mine was going to be leaning forward so the head had to be angled further back. So, I drilled out the mounting hole inside the head, cut off the mount on the neck and added a new one allowing a better angle.

Unfortunately, the head being angled further back meant a lot more of the neck joint was visible than would be in standard position, which kinda highlighted where I modified it. So, I made some extra tubes & pipes from Milliput, solder wire and electric cable to try & dress it up a bit.

Assembling the arms & legs is fairly simple basically they're just moulded in 2 halves for both the upper & lower sections with a simple elbow or knee joint. All the outer armour comes in separate pieces designed to be added later. The kit allows for a limited amount of posing for the elbow joints, but I didn't think this would be enough. They are limited by plastic lugs within the elbow joint, so it was easy to cut the lugs off, allowing a full range of movement and simply fill the resulting holes.







The angles of the arms themselves are set in one position on the kit, attaching via mounting plates inside the torso. This wasn't going to work for me, so I cut them off. After talking to another of my friends, his comments inspired another way to mount the arms that would allow 360-degree movement, at least in the axis I needed. I bought some styrene tube in two diameters (one fitting inside the3 other) and some styrene sheet from a local model shop. I used the larger diameter tube as a kind of axle running through the centre of the torso, held in place by two blanking plates cut from the sheet styrene. Then I attached the sections of the smaller diameter tube to the ends of the arms. Hey presto! Full movement achieved.



Before I cemented the torso together, I cut a damage hole into it, added some fake wiring and brass mesh and fitted a blue flickering light. All this was sealed with black duct tape and then the torso closed up. Addition of a few non-penetrating bullet scars added to the in-combat look.



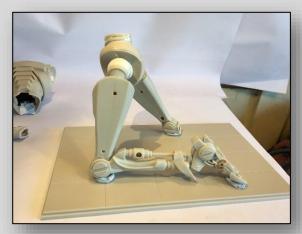
















I treated the knee joints in the leg exactly the same as the arms, cutting off the plastic stops to allow full movement. Again, the legs are supposed to be fixed solid inside the torso via mounting plates. I used a similar method as before to change this, running a styrene tube axle through the leg holes in the lower torso. I had to cut off the ball joints on the leg tops and make new ones with Milliput, then add short lengths of the smaller diameter tube. So, pretty much the same set up as with the arms.

The feet are also set at a fixed angle (nothing about this kit allows for multi posing) so again, I drilled & cut off the mounts inside the feet and on the end of the legs. I then drilled holes through the feet and the remaining parts of the lower leg mounts and inserted a plastic "pin" made from a cut section of cotton bud stem. Now the feet could move further forward & backward.

I'd decided that the right leg was going to be blast damaged and being dragged along, so I cut the leg into two just below the knee joint and fitted a bunch of wires and tubes (those cotton bud stems again) into the holes and finally cemented it back together with a suitable gap.

After this, there was considerable messing around with arm & leg positions, within the confines of the movement now available, to get something I was happy with. Once this was decided, it was on to priming.







The head, torso arms and legs (minus the outer armour shell) were all primed with black Stynylrez. Once dry the arms & legs were given a top coat of a dark aluminium mixed from Mr Metal metallic paints I had in stock. These were then sealed with a satin clear coat.

The head & torso were first airbrushed with Mr Color Aqueous gloss black, followed by a top coat of Mr Color Super Metallic Chrome Silver. I'd read good things about this paint and really wanted to give it a try on this build...and I wasn't disappointed. Plus, it doesn't require a clear coat, in fact, is specifies not to as it dulls the reflectivity of the chrome paint.

The same treatment was given to all the outer armour sections. Prime, Gloss Black and then Chrome Silver, doing one side (i.e.; right arm & right leg) at a time.



Once dry, the armour pieces were fitted to the limbs and then the limbs were glued solid onto the rest of the model. I then gave the model a selective oil pin wash only on the limbs and avoiding the chrome sections – I wasn't sure how the chrome paint would react to an oil wash, so I left that well alone! I also blackened & scorched the damaged leg by airbrushing on some Tamiya flat black.









I did have to fix a couple of very obvious seams at this point. I was going to leave them alone as all the painting was done...but they kinda annoyed me. So, I sanded them, filled & smoothed them out and then repainted them. Not a perfect job and you can still see a few imperfections if you look hard enough. Unfortunately, all the attention to these areas highlighted a massive mistake I'd made! Now the instructions are pretty clear as to which parts are for the left side and which are for the right side, with everything numbered on the sprues.



However, the top sections of leg armour were not on sprues and I managed to mix left & right over...so his upper leg shields are on backwards! (There's that test fit everything rearing its ugly head again). How did they fit that way around? I really don't know, but they did! Unfortunately, they'd been super glued into place so there was no way I could get them off to change them around! Oh well. Thing is, unless you're an aficionado of Cylon centurions, you probably wouldn't notice.... unless you've read this admission, in which case it's probably the first thing you'll look at and make loud tutting sounds. Don't worry; I've admonished myself plenty for this schoolboy error! But you have to draw a line under it & move on, rather than trying to pull it apart and potentially do even more damage.









Also found in our works yard, the perfect material for making long, dead grass – an old and worn-out broom...or at least, the bristle part – the broom itself was nowhere to be seen! I basically pulled it apart into clumps and used a hot glue gun to attach it to the base. Finally, a sprinkling of thin leaves from one of our garden trees and the last dregs of the forest litter I had left over, and the base was virtually complete. I just needed to drill holes for the electronics wires, so they would sit under the base and do a little hairdresser type feathering on the grass clumps to make them a little less uniform.











The final job was a bit of weathering. I have a can of Tamiya TS smoke left over from a Viper MKII canopy I tinted, so I decanted it into a pot and then put it through the airbrush. To be honest, I should have bought a pot of the acrylic lacquer version, so I could have thinned it more (not sure what you're supposed to thin aerosol TS with) as it was a bit thick to spray at low pressure, so I didn't have as much control as I would have preferred. I did try using some pastels too but, as suspected, they don't stick to a high gloss surface. I'd need proper weathering powder for that.

So then, wire him up the battery (hidden in a box covered with leaves) and final photos!

It was a fun build, especially with all the modifications that I managed to do. Hopefully this kneeling & damaged Cylon Centurion build is unique. I haven't seen another one...yet.







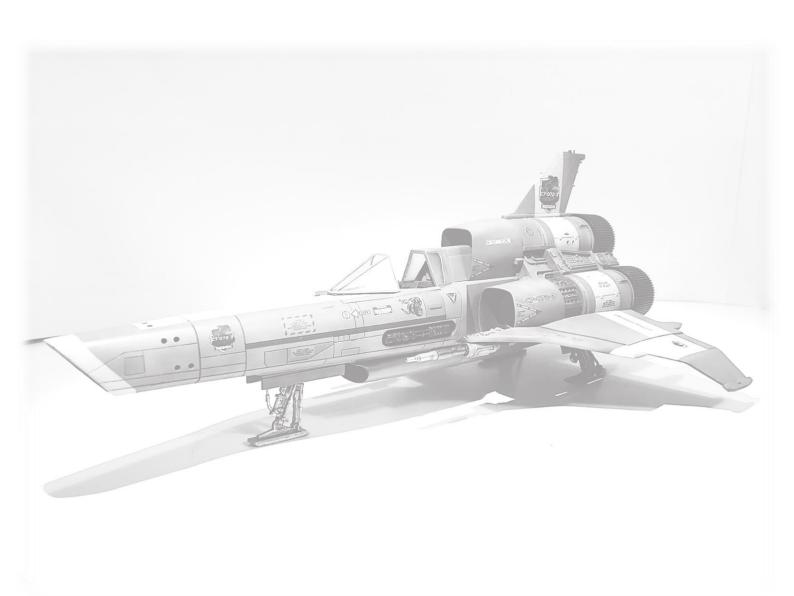


### MOEBIUS VIPER MIKI BUILD

## "PROJECT RATTLESNAKE"

My wife bought me the Moebius MKI Viper kit for Christmas (and yes, I did request it!) because, like the Cylons, I had a plan...

When compared to the new series MKII Viper, the old series MKI looks a bit clunky and less streamlined – older technology. So, I had this idea; what if there was a development model between the MKI and the MKII? A ship we'd never seen before because it was a prototype that never went into full production? I came up with back story which sounded plausible and set to work....



## PROJECT RATTLESNAKE



At the end of the first Cylon war, Colonial Fleet decided it was time to replace the ageing Viper MKI.

Unacceptable losses against its Cylon counterparts had shown a need for a more up-to-date replacement. Caprica Aero Industries tendered for the contract and the designers built a ship for testing. It was designated as The C-7 prototype, "Project Rattlesnake".

Initial tests, launched from a Battlestar, were encouraging. Increased fuel and ammunition capacity gave the Rattlesnake superior range and the ability to sustain combat for much longer periods than its predecessor.

However, there were a few issues, particularly during atmospheric flight. The increased weight and a number of design flaws caused significant vibration throughout the airframe during high speed manoeuvring, earning it the unfortunate nickname "The Rattler". Despite this, the Rattlesnake proved popular with test pilots whose superior flying skills enabled them to compensate for its faults.

Unfortunately, Colonial Fleet, woefully short of pilots after the war, wanted a "ready to fly" aircraft for training new pilots, so the Rattlesnake was rejected.

In all, only 5 models were produced, 4 of which were assigned to Battlestars as Raptor escorts for long range reconnaissance missions. These were re-designated as Viper MKIA, in an attempt to shake off the nickname. The remaining plane resides in the Fleet museum.

Caprica Aero Industries went back to the drawing board to iron out the faults. The extra fuel & ammunition were sacrificed in favour of manoeuvrability and so the Viper MKII was born.

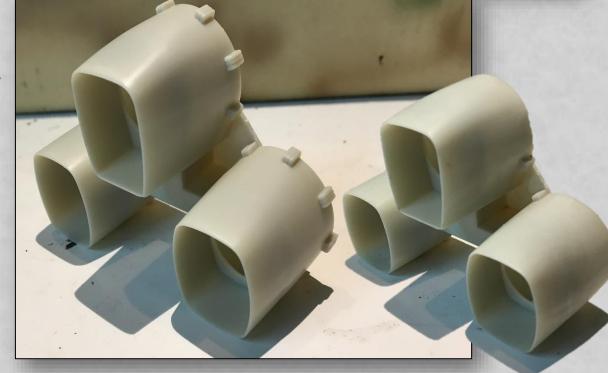
Although it needed to return, refuel & rearm more frequently than the Rattlesnake, The MKII outperformed its rival in every other way. Colonial Fleet immediately ordered mass production for distribution throughout the colonies.

Pilots heralded the Viper MKII as a true successor to the old MKI, but there were still a few who had a soft spot for the old Rattler.

The plane had to have features from both the MKI & MKII to make it believable as a concept, so my first decision was to purchase a donor kit. I could easily have bought a MKII kit but that would have literally doubled the cost of the project, so I rejected that idea. So, I searched around eBay for a cheap kit that would have the main part I wanted – an under-fuselage air intake (fitted to the MarkII but not the MKI). The obvious choice here was an F16. In the same 1/32 scale, it would have been too big, so I opted for 1/48 scale instead. I managed to find an F16C Night Falcon made by Hobby Kits (Chinese, I think) for a measly \$15AUD. Good enough. When the kit arrived, I could see why it was cheap – very poor quality, but ideal for my use.

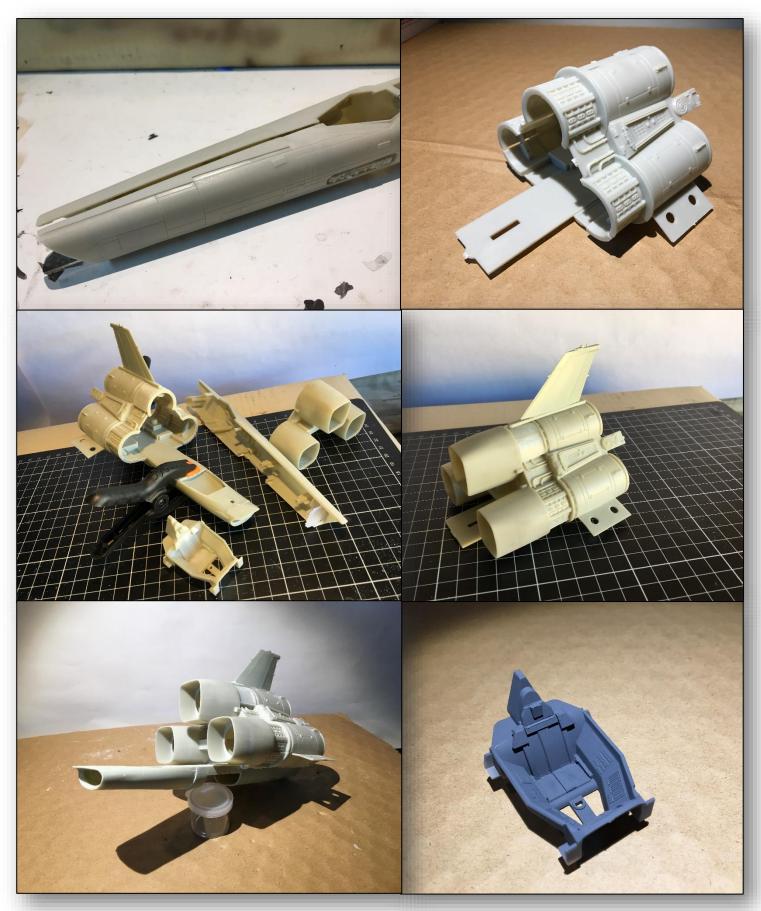


parts from the Moebius kit to create the subtle differences. I removed most of the raised details on the engine intake shrouds removed the raised detail on the top of the forward fuselage and removed some of the raised detail from the engines section and covered the top open engine with sheet plastic.



I then cut the lower section off the F16 tail, made a flat mount from a kit part and glued the new tail to the engine section. I also heated the wing mounting tabs and bent them upward slightly as the original angle for the MKI wings was too steep for my design.

I then cut the intake from the lower fuselage section of the F16, adding the front intake detail, trimmed it to the shape required and glued it to the MKI engine section. I attached the engine intake shrouds and added some seat detail to the cockpit using scrap plastic parts.



With the wings, the original plan was just to use the F16 wings and maybe cut them to shape. However, that presented a problem as they weren't really wide enough to cut to the shape I needed for mounting the guns in the right place. The solution was to cut the gun mounts and front sections from the Viper wings and glue them to the F16 wings. I also used half a drop tank mounted under the wing and blended in to the wing top to create a similar look to the MKII.

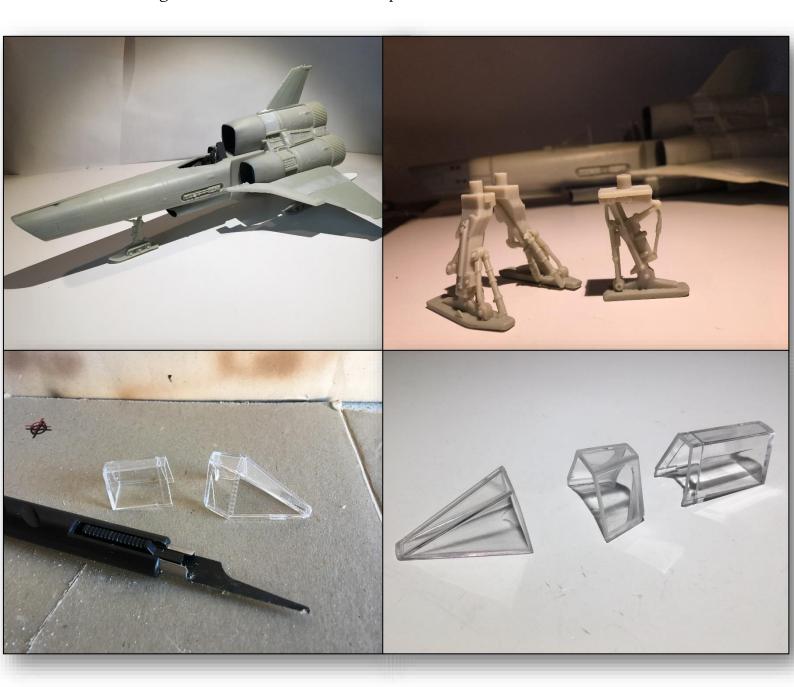


Now she was ready for main assembly. I painted & dry brushed the cockpit, cut the one-piece canopy into three sections using my mini saw, added some sheet plastic to the wings to create a little extra detail and assembled all the main sections. I used Milliput superfine to fill all the gaps and test fitted the landing gear.



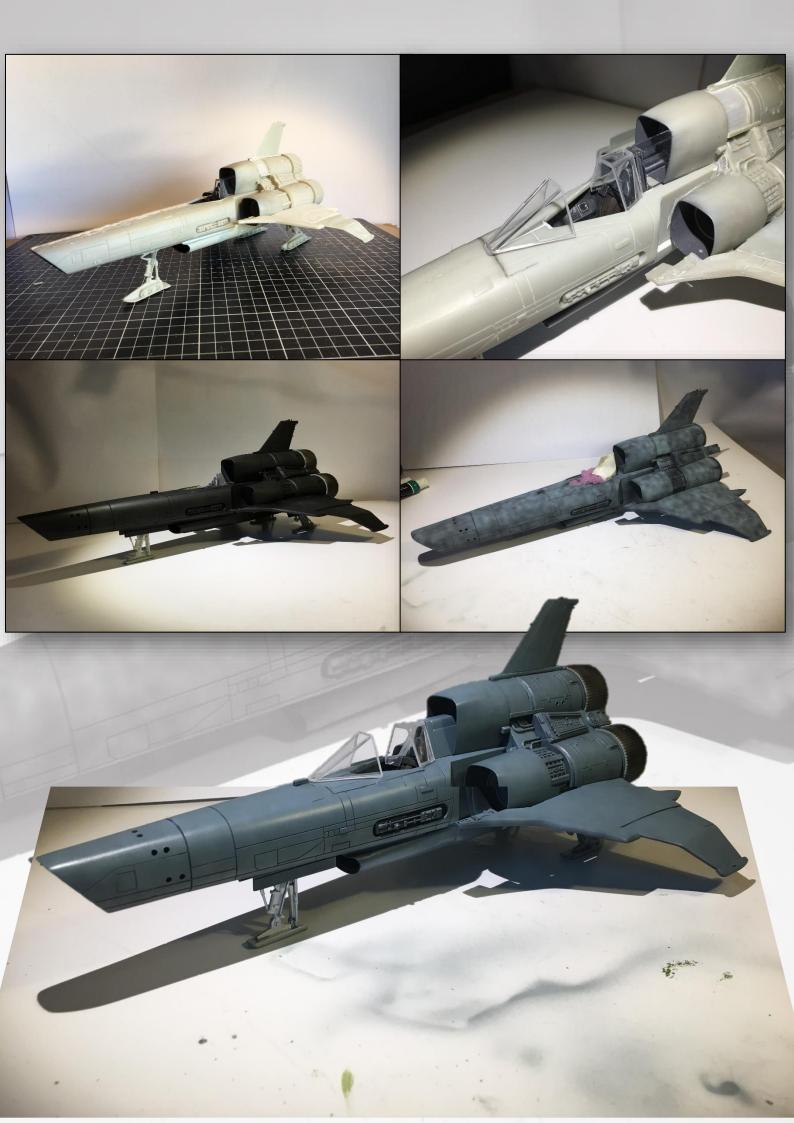


I decided to change two things – the landing gear and the cockpit opening. I wanted to modify the landing gear to get rid of the chunky MKI wheel sections. So I cut those sections off, fashioned skids from parts in the F16 kit and added a few extra details. The Cockpit on the MKI is hinged and opens upwards, so I wanted to change it to a sliding canopy, like the MKII. To do this and make it feasible, I had to add a groove in the centre of the fuselage and guide rails on either side. I scribed in the groove and added scrap plastic sections for the rails, on which I smoothed off the edges and blended them in with Milliput.



I then masked the cockpit area with cut up sponge and masking tape, removed the landing gear and drilled out all the holes for the manoeuvring thrusters. I then sprayed the entire ship with Mr Surfacer 1500 as a primer. Once that was dry, I attempted a little black basing mottle coat in the blue/grey chosen for the top coat – a mixture of Mr Hobby 42 Gloss Blue and Mr Hobby Gloss Light Gull Grey.

Once dry, a final top coat in the same blue, sprayed lightly to allow the modulation to show through. Not entirely as successful as I would have liked, but it's still there.



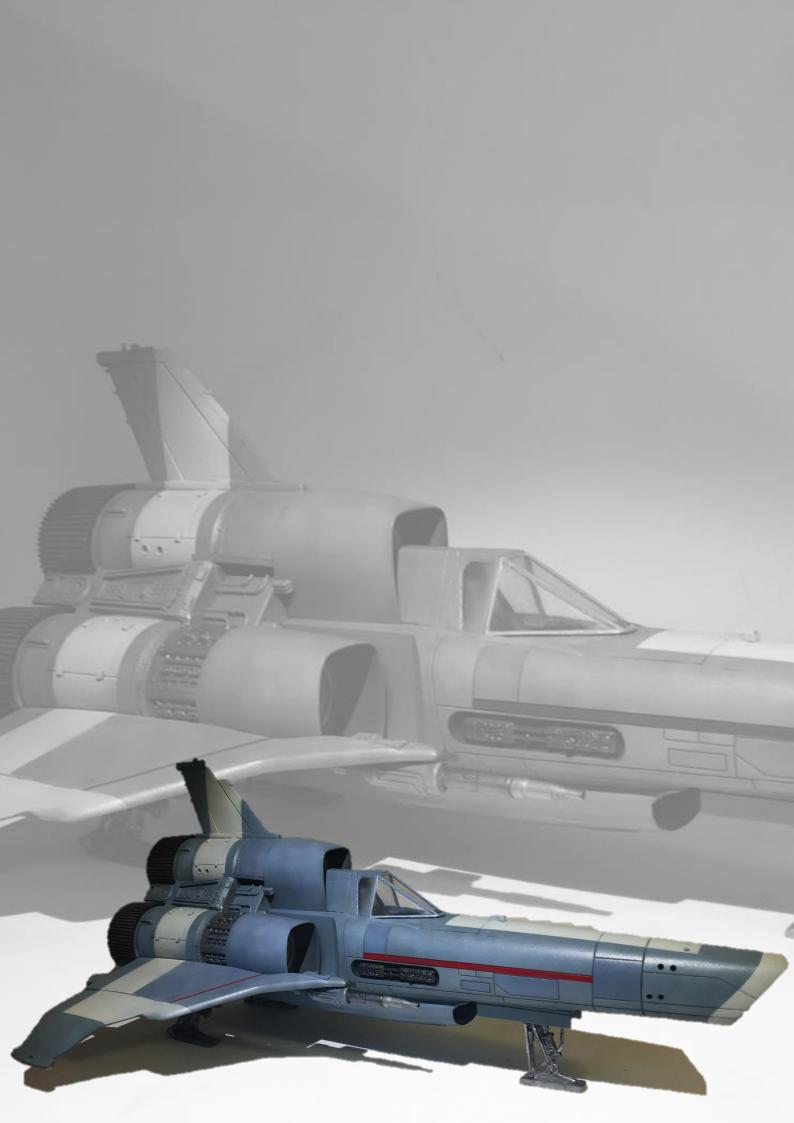
Next, masking all the striped areas, using Tamiya 5mm tape for curves and filling in with de-tacked Scotch magic tape. I like using this as you can still see what's underneath. These were all sprayed with the Mr Hobby Gloss Light gull Grey. I then painted the landing gear with aluminium silver and black oil washes, and painting in the pipework sections below the canopy in Tamiya Gunmetal grey. The rear engine detail was also airbrushed in gunmetal, oil washed with black and then dry brushed with Humbrol enamel chrome silver.

The beauty of making a one-off "what if" build is that no one can tell you the colour's not quite right or the



On to detailing. I decided the fronts of the wings looked a little plain...and to be honest, there was a slight seam showing where I'd joined the Viper front sections to the F16 wings. So, I masked off a pinstripe and airbrushed it in Mr Hobby Gloss Red on each wing.

In hindsight, I should have painted it white first as it took a few coats to cover the blue sufficiently. However, when it was done, it really popped...so I decided to add a stripe in the same colour to the fuselage too, following a thin panel section – kind of influenced by the X Wing fighter. I also picked out a couple of the panels in a slightly darker blue – not contrasting enough to make them look like replacement panels, more to create a little interest. I also fitted the guns – after hollowing out the ends with a mini drill these were primed & airbrushed with the Mr Metal aluminium and sealed with Tamiya Clear Gloss. The rear sections were then over painted in in the main blue and then an overall black oil wash.



The decals presented a problem. The set supplied with the kit are for the standard MKI and consist of nothing more than some red stripes – accurate to the original but not even close to what I wanted. I found a seller on eBay called DEK L's, run by a top bloke called Derek, who sell a few different sets of decals for the MKII. One of these sets looked ideal for my Rattlesnake – a set of upgraded stencils & warning signs. I contacted him about the possibility of adding on a few decals of my own design to personalise the ship and clearly define it as a Rattlesnake. He was pleased to help and produced a full sheet of decals for me, at no extra cost other than the price of the stencil sheet I was buying, with my designs together with his improved versions of my artwork! As I said, top bloke!

On to decal application: I'd worked in gloss paints for all the surfaces requiring decals, so I didn't need the customary coat of gloss clear. The DEK L's decal sheets are different from any others I've used in that they are reversed, so you apply them with the backing sheet facing you. I actually think this is a great idea! It eliminates any chance of the decal edges curling when you slide the backing sheet away as it's already in full contact. One thing though; the carrier film extends over the entire sheet so you have to trim as close as you can to the image. My eyes are not what they were, even with x3 magnifying specs...and I'm my own worst critic! I can see the carrier film edges on some of the decals and I wish I'd trimmed them closer.

Once applied, they were all airbrushed with Dullcote. I don't think I really needed to do this – force of habit I guess. And then an overall coat of gloss, ready for the oil pin washes.











I started with a thin black oil wash, putting the tip of the brush into all the panel lines. Once the oil wash was dry, I airbrushed on a coat of Tamiya flat clear for pastel weathering. I used ground up black pastels and brushed them lightly over areas to create some dirt streaks, working a little into some of the larger panel lines. I used a metallic silver watercolour pencil to highlight some of the smaller panel edges and then dry brushed other areas (engine intake shrouds etc.) with Humbrol chrome silver enamel. I also picked out the engine wiring & detail using Mr Metal Copper. Finally, a coat of satin clear to seal it all.

The pastel weathering didn't really go as dark as I wanted on the manoeuvring thruster ports, so I mixed up some very thin black Tamiya Matt black and airbrushed around the ports at 10psi. I continued this over the engines and onto the wings.



So the plane itself was finished. I bought a display base from Coastal Kits, known as "SciFi". I emailed the proprietor, Gary, about the possibility of customising their stock base to suit my needs...and he was only too happy to help! So I got a slightly re-designed base, complete with the "Recon" logo on the floor. That was going to be the extent of the display. However, I remembered reading a blog somewhere about how dead printers can yield useful parts for model building. It so happens I had a dead printer languishing in the garage, not yet binned. A little prising with a screw driver and.... I had bulkheads! But now I'd have to detail & paint them ...



I used some bits & pieces I had lying around to create some interest – my old faithful plastic cross stitch mesh for the grills, some old resin leftovers, some internal parts from an old serial mouse and some bits of old sprue & kit parts. These were all glued in place and I gave the whole thing a coat of Tamiya flat black to get everything the same colour. I know I should really have used a primer, but I was waiting for my new 0.5 airbrush to arrive...I didn't want to go anywhere near my daily user with primer! After an hour's drying time, I shot it with a Mr Color Metallic steel with a little blue mixed in. Final coat was a Mr Color grey, sprayed on unevenly to try to create a little modulation.

I then dry brushed the whole thing with some Humbrol Silver and applied a very thin black oil wash. I tried to streak this as much as possible and let in collect in the recesses.

A few of my friends (you know who you are!) applied peer pressure and convinced me to add some overhead lighting. This wasn't in the original plan so I had to work out a way to increase the bulkhead height (so as for overheads to clear the tail fin) and make up some girders that could be fitted with lights. I had an idea to use box section cable trunking very easy to install lighting in as it has a top section that clips/slides on & off. I managed to find a 2m long piece at Bunnings for the princely sum of \$4 and then set about cutting it into sections - some for the risers, some for strengthening the walls and some for the girders themselves. I worked out where the girders were going to go and then cut access holes for the lights into the piece for the side wall and then glued the risers into place. I added a couple of L shaped support brackets under the access holes as the girders would have no support on the other side of the dio. This was all then painted grey to match the rest.















So now I had a hangar, but the place was looking a little bare, so I decided to dress it up a little. I used various images I found online to make up posters, warning signs and some BSG colony banners specific to Leonis, as Cerberus is a Leonis ship. I also made the classic BSG shield with the Cerberus lettering and a status board, again using an online image as a starting point and the customised to suit the scene.

All these little accessories were basically just colour laser-printed, glued onto card with PVA and then cut out with a scalpel.

Next, onto the lighting. The small deck lights that were shown as flat print on the Coastal Kits base seemed the logical place. I used a 2mm bit to drill through the base and then fitted four 2mm optic fibres from the underside. I had to heat them up with a hair dryer to shape them as there was not a lot of clearance under the base. After cutting out a small groove in the back of the base, I fed the wires along the back of the dio and made a little area to place the 9V battery.

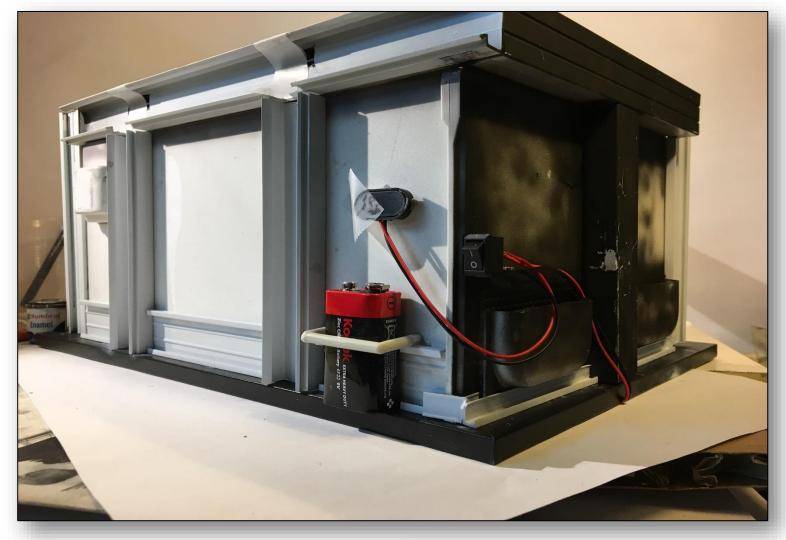
For the girder lights I used more household stuff in the form of my wife's painkiller blister packaging – It looks like an industrial light! So I cut the protective film with a blade & took the tablets out carefully so as not to crush the blister. I then drilled & cut appropriately sized holes in the bottom face of the girders and glued the "lenses" in. On the advice of a friend, I sprayed the inside of the lenses with Testors Dullcote so the light would have a diffused effect.











While I was waiting for my overhead lights to arrive, I decided to glue the beams into place, after adding some chevron style warning strips for a little extra detail. It was mentioned by one of my friends that a tool box might be a nice addition. I couldn't find one in 1/32 scale, so I made one using a flat printed image glued onto card and folded. A little paint & weathering and some rollers added to the base, it was good enough to sit in the scene – won't see much of it anyway with the viper in there!













As I'm not really adept with lighting & electric stuff, I opted to get a cheap set of LED Christmas lights, ready wired to a battery box. These went into the overhead girders very easily, held in position above the lenses with a little electrical tape, a small piece of tin foil over the top the reflect back as much light as possible then the whole inside of the girder sealed with black duct tape to stop any light bleed. In hindsight, I really should have spent a little more and got decent quality LED's, instead of buying cheap Chinese ones. They worked fine for the first photos but then one light decided it wasn't going to play nice....and, at this point, I wasn't going to take it all apart to replace it. Oh well, live & learn. (image 039)

With the roof primed, I gave the underside a little dry brushing with Mr Color Steel & they glued the sheets into place between the girders.

Finally, I primed the Shapeways access ladder, painted it in with Tamiya gloss yellow, weathered it with a black oil wash, dry brushed here & there with some Humbrol silver and then sealed it with some Tamiya satin clear.

Then all that remained was place the Rattlesnake & the accessories. Job done? Well, I may add a few other little accessories here & there when I get the time









## The P40 Story

I've had a long break from modelling (about 6 years) but earlier this year I decided to have another go, just to keep my eye in, so to speak.

I decided to have a go at something out of my comfort zone  $-a \frac{1}{32}$  WWII fighter plane.

However, it was not a random choice. My father in law, Gary Black, a top bloke who has done a lot for me was suffering from cancer so I wanted to give him something cool and unusual for his Christmas present, something no one else could give him.

His father, Joe Black, was a pilot serving in the RAAF and flew Curtis P40's out of Morotai, New Guinea, during the early part of WWII. He then moved to NSW to train new pilots in P40's and Hurricanes.



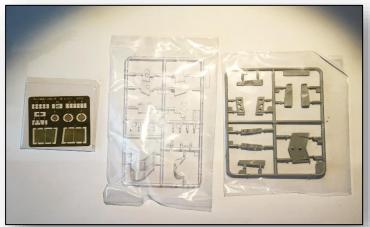
Having never built a P40 before (I have distant memories of building the old Airfix 1/24 Hurricane when I was a kid) the decision was made. So, this build would be a present for my father in law and also a tribute to his father...so it had to be the best I was capable of!

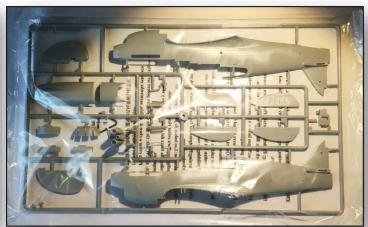
I scoured eBay for a suitable candidate and eventually decided on the Trumpeter P40B from BNA Model World as it came with RAAF decals in the box. It had to be 1/32 scale because wanted a large display that would create some impact. Plus, at the ripe old age of 51, my eyes and fingers are not what they once were when it comes to the fiddly bits!

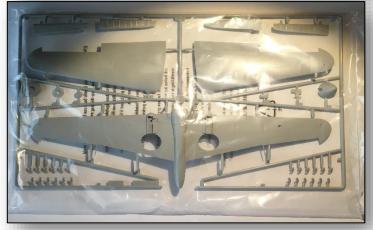
I also wanted to keep a record of each stage of the build, mainly so I could refer back to how I'd done things and how I could do things better in the future, but also so I could show Gary how his present had evolved from a box of grey plastic pieces.

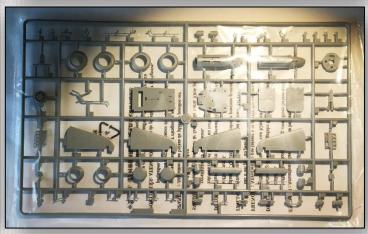


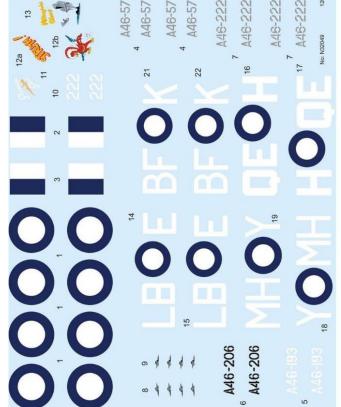
Starting off, the instructions were all pretty clear (excluding a few inevitable spelling mistakes) and everything was labelled clearly on the sprues (Sprue A, 34 etc). It also came with a small sheet of Photo etch parts. Personally, I'm not a huge fan of photo etch parts, but they do add some nice detail. The seat harness left a lot to be desired, but I'll get to that later. Decals allowed for the RAAF version or the US Army version.

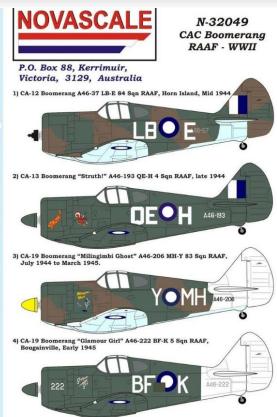












The moulding on the kit looked very good. Nice panel lines and rivet details all crisp and visible. Hardly any flash to sand down either. All in all, a nicely presented kit. Construction was pretty easy right from the outset. The engine could maybe have stood more detailing but, considering I planned to have the cowls fixed in situ anyway, it hardly mattered. Just a quick spray of flat black and some minimal detailing with dry-brushed chrome silver. I took a little time to make the exhausts look nice...I needn't have bothered though as I ended up painting over them when I sprayed the fuselage!



The choice of adhesives available for plastic modelling is mind boggling! I stick with the one I've used for as long as I can remember, which is the Revell Contacta Professional. The long, thin application tube makes applying very easy and you're unlikely to overdo it. One thing I do though is not bother with the cap. It's supposed to be there to stop the adhesive drying out in the tube between uses but, in my experience, it doesn't work. I use a piece of very thin wire, either old style fuse wire or strip the plastic from a piece of garden twine – it's the perfect diameter for the

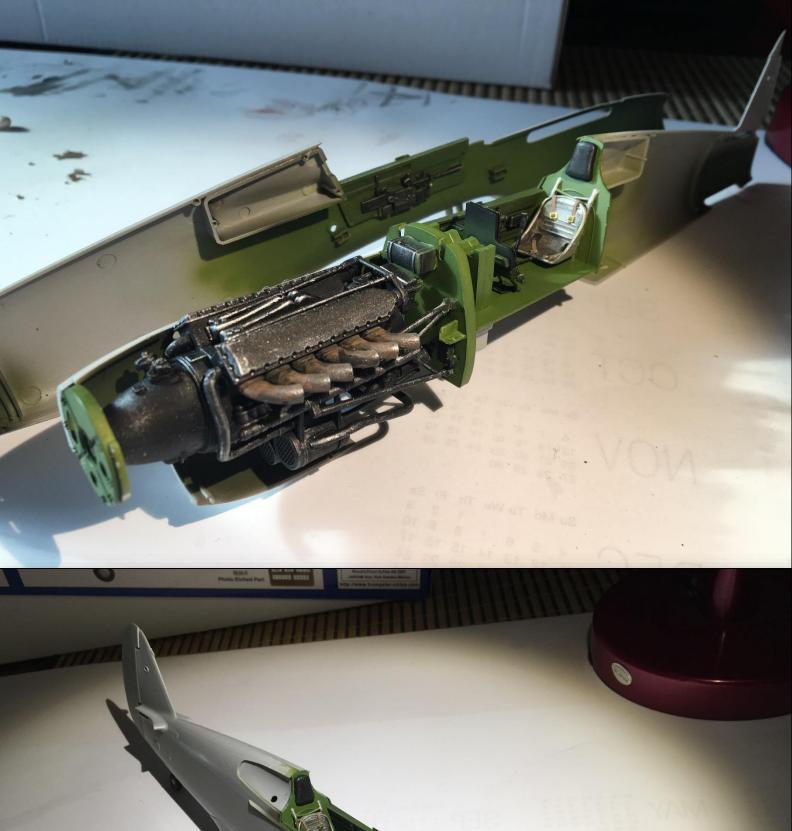
tube!

The interior and wheels wells were airbrushed using Testor's RAF Interior Green and then dirtied up with a little dark grey oil wash.

Some nice detail on the instrument panel (dials supplied in the form of a plastic sheet that needs trimming to fit) and, once the two halves of the fuselage were glued together, only a small amount of filler was needed for the top and bottom seams. I use Milliput Superfine White for my filling jobs as it's easy to work with and takes a while to go off. Also, it can be smoothed and sculpted with plain old water, making it ideal for pushing into panel gaps and wiping away most of the excess. You can even mix it into a runny paste, so I'm told.









The harnesses...very disappointing and has kinda put me off separate harness arrangements. Basically, you have to cut some grey tinted strips of paper from the actual instruction sheet and then thread the PE buckles on. I tried my best, I really did, but it wasn't happening. The paper inevitably broke and I ended up with two short straps over the top of the seat with buckles on the ends. By this time, I was very frustrated with it and considering leaving off the straps entirely. It looked crap and people said so, just more diplomatically! But this build was for my father in law and I couldn't leave something like that unfinished. So, I did what any sane person would do – I cheated.

I hunted eBay and modelling sites for a P40 aftermarket resin seat with the harness already moulded in place. It took a while, but I found one...kinda. So, it's not actually a P40 seat, it's the seat from an Me109, but don't tell anyone! It's virtually the same size & shape and it has all those lovely straps and buckles already there. It worked so I was happy! I'm sure there are aftermarket seat belts out there that are easier to work with, but I wasn't prepared to be disappointed twice!

The panel fit on the engine cowling could have been a little better – slightly uneven leaving an overhang on one side, but once it's sanded down a little, it's not really that noticeable. The wings, however, presented some problems. In the old days, I seemed to remember wings being joined onto the fuselage using the tab-into-the hole method, then tape it into the right position while the glue dries. Like I said, it's been a while. With this Trumpeter kit, as I'm sure a lot of kits are made now, the lower wings were a one piece and you glue the top halves of the wings on to this before offering the completed sub assembly up to the fuselage. Nice idea, I guess, At least your wings dry at the right angle. Unfortunately, where the top of the wings join the fuselage, there's a huge gap, much wider than a panel line, and the two joint edges were at different levels. This required heavy filling, sanding and then re-scribing to get the panel line back. Inevitably, I lost some the other adjoining line and rivet detail during the process.

Whether this was down to poor fitting parts or an error on my part in fitting them is unclear. I'll be kind to Trumpeter and blame myself!



Once the plane was in one piece, minus the prop and landing gear, I readied for primer...which is where I made my first monumental error. I'd read a lot about black basing and thought I'd give it a go, so I started with Vallejo black surface primer poured straight from the bottle into the airbrush cup. Initially, it seemed to go really well, giving a nice semi– gloss finish. But then my airbrush started to splutter and clog. Looking inside, a fair bit of gunk had started to build up around the needle.

I removed the needle and cleaned it and then persevered, rinsing with airbrush cleaner periodically until the priming was done. I only have one airbrush and it's not an expensive one. It came as a package deal with the compressor I bought (again from eBay). It's worked perfectly satisfactorily up to that point, but it didn't like VSP at all! Being out of the game for a long time, you miss out on "new" products and their pitfalls. Prior to this year's modelling revisit, I was always an enamels man.



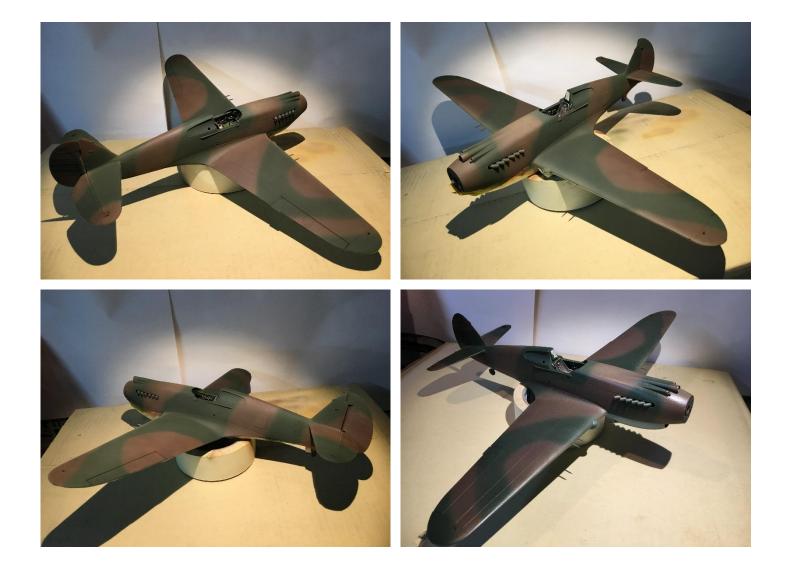




I've since been informed that the residue left behind by Tamiya & Mr Color paints reacts with Vallejo and creates the nasty gunk. So, a time-consuming strip down and clean of the airbrush was required before going any further.

The next monumental error I made was directly linked to the first one i.e.; the use of VSP. Basically, I didn't sand my primer. After posting pictures of the primer stage on a modelling page, I was told sanding it smooth for paint would be a nightmare. Some areas were pretty smooth anyway, but others, like the wing joints, were quite rough to the touch. I was then informed that VSP doesn't sand well...in fact, if you're not careful, it's likely to flake off in chunks! That was a bit of a blow. So, no sanding. The lesson here is, if you're uncertain about something, or it's a method or product you haven't used before, go on the pages and ask the question. There's dozens of people out there more than willing to share their knowledge and help you avoid the dangers. Modellers are a caring, sharing bunch of people!





After reviewing a huge amount of P40 images online, I chose my camouflage colours based on an image I liked. I picked Mr Color H406 Chocolate Brown and Tamiya XF-11 J.N Green for the top colours and Tamiya XF-23 Light Blue for the underside. Being new to painting camo and not wanting to use masks for fear of pulling off the primer. So, with the exception of masking the underside when it was dry, I did the top completely freehand. I didn't fit the canopy at this stage as I prefer to fit at the very end (usually painted with a hairy stick). So, I filled the cockpit with some cut up bits of sponge – a technique I'd seen someone else use.

I love spraying with Tamiya/Mr Color acrylic paints. They thin nicely with Tamiya acrylic thinners and spray without any drama, which is good as I'm still getting used to using a double action gravity airbrush (my old one, 6 years ago, was a cheap hobby point & spray). After painting the underside and sealing with a clear gloss coat, I carefully masked all the edges with de-tacked tape. I then sprayed the top camo – brown first and then filled in with the green. I turned the pressure really low on the compressor and thinned the paint quite heavily, lightly spraying the edges of the brown areas and then filling in gradually, trying to create some colour modulation. Then, once dry, used the same technique with the green. Finally, once it was all dry, I finished off with an overall blend coat of Tamiya XF-59 Desert Yellow, again heavily thinned. I think I actually surprised myself with the results! It looked great! I sealed that too with a coat of clear gloss in preparation for the decals.



Even though RAAF decals were supplied with the kit, I opted to buy some Novascale aftermarket decals from Aussie Decals. Basically, I wanted the RAAF blue & white ovals (without the red bullseye) and I also wanted a specific set of letters. I ended up buying a set designed for an RAAF Brewster Buffalo because among the variations supplied, it had the I.D. letters B, L and K that I wanted. My father in law and his father's surname is Black. So, personalisation won out over historical accuracy, I'm afraid.

These decals are ultra-thin, and they went on without much drama, making sure I kept my water nice & warm. You have to cut them very close to the letters as the carrier film covers the entire surface of the decal page. For the roundels that's easy but for the letters themselves I found trimming them square worked for ease of putting them on the surface and then, once in position, cut off the excess with a brand-new blade in the scalpel.

Unfortunately, the pre-existing error of non-sanded, non-smooth paint reared its head again. After the first decals went a little lumpy (as the Microsol forced them to adhere to the bumpy surface) I had to carefully sand the top coat flat with 1200 wet & dry soaked in water. After that, decal application was fairly simple. Another lesson learned here. Don't assume that giving your model a liberal coat of clear gloss will make your decals go on smoothly. The paint underneath has to be smooth as well! I know a lot of people swear by using a coat Future as a prelude to decal application, but I'm unable to get hold of it in Australia – unless I want to pay an exorbitant amount to have a bottle shipped over!

Once all the decals were set, I sprayed them with Testors Dullcote to lessen the gloss and then re-coated in gloss before weathering. I'm not sure if I really needed to do that though. It was all left for a few days to dry properly before starting on the weathering & detailing.



I then added the main undercarriage (already painted) so the plane would sit well for weathering. I added a quick black oil wash to tone down the silver on the struts and leave some oily dirt in the recessed areas.

The weathering was done first with dark grey oil washes over the entire wing & fuselage area and then wiped selectively. I followed this with darker pin washes in the panel lines. Still new to this method and didn't work as well as I anticipated. However, I'm told putting fresh, clean turps into the lines first and then adding the pin wash makes the process for more effective.

Again, the rough paint held a little more of the wash on the flat surfaces that it was supposed to but, in the end, I liked the result. It toned down the blue on the underside, giving a realistic grubby finish and on the top surfaces it gave a low contrast between the green & brown...it turned out almost exactly like the photo I liked from my reference. So, we'll call it a happy accident and leave it at that! After a day's drying time, an overall spray of Dullcote sealed the oil washes.

I then added a little depth and streaks with ground up pastels and a final overall coat of Dullcote. The fine highlights on the panel edges were done with a silver metallic water colour pencil sharpened to a fine point. Not something I've tried before but it worked very well. Then, finally a little dry brushing here and there with Humbrol enamel silver.



The prop had already been primed with the VSP black, so I just painted the spinner with a few coats of green, leaving the blades in primer. I then masked off the end of the spinner and the tips of the blades with Tamiya 2mm Tape for Curves. This is my favourite tape ever! I pretty much use it all the time for almost all my masking jobs, then fill in the surrounding areas with Scotch magic tape and Post It pads. You just have to remember to burnish down all the edges on the tape to ensure a good seal before spraying. I use a cotton bud for this. I gave it a few coats of Tamiya XF-2 flat white, let it dry and then weathered with pastels and dry brushed silver.



The canopy was added at the end, with the tiny bits & pieces, some of which never made it onto the model and will forever live somewhere on the garage floor. I masked the canopy vertical framing first, using the 2mm Tamiya tape for curves again and gave them three coats with a brush. I then repeated the process with the horizontals. At present, I'm not brave enough to try cutting a mask for the entire canopy. A few touches & scrapes with the silver pencil added a little wear.



The display base is a deep picture frame from a local seconds shop with Noch HO long grass mat in field yellow. I then mixed fine sand off our local beach with some fine cement snaffled from work. I used the end of a brush handle to put in the tyre ruts. A watered down coat of white hobby glue was then applied, and more fine sand & cement scattered over the top. Finally, a little airbrushing with Tamiya XF-64 Red Brown and the XF-Desert Yellow.

I gouged out a little of the surface where the wheels sit, just so it gave the appearance of weight. Then one of my friends noted that the tyres looked way too clean and that I really needed to add some pigment to tie them to the base. So, I brushed the tyres with a little diluted hobby glue and sprinkled on some of the fine sand/cement mixture. Much better!











I started the build in early October so, all told, it took me about 3 months, working usually for a few hours every Saturday & Sunday. Over the Christmas break, however, it turned into a few hours every day. Sadly, my father in law died before he got to see the plane, in fact before he even knew it was being made for him. I think that made me even more determined to produce something he would have been proud to display.

It's been a good build, just very time consuming. Sticking the parts together is the easy bit – making it look good with paints and detailing is what takes the time & skills. I have learned a great deal during this build, due in no small way to the help, advice and constructive criticism of likeminded people willing to take the time to share their knowledge & experience...and for no other reason than helping me to get better at my craft.

This P40 is a tribute to Gary Black, one of best men I have ever known, and his father, Joe Black, the RAAF fighter pilot. Heroes both, in my eyes.







## MOEBIUS VIPER MKVII BUILD – "ABANDONED ON CAPRICA

After a 6 year gap in modelling, I decided to come out of retirement and have another go.

The re-imagined Battlestar Galactica TV series inspired me to build one of the Moebius 1/32 MKII Vipers. It was an easy kit to put together and I managed to tackle the painting quite well – even built a little display base to go with it!

Of course, now I had paints, tools, a compressor and an airbrush, the building bug had got me in its grip once again!



I have never been thrilled with the design of the MKVII so I wanted to do something different with it – something that would make it stand out...not crashed, not perfect, not battle damaged....

And so was born the idea "Abandoned on Caprica". A google search of abandoned aircraft soon had a reference folder together, and then the modifying began

"Open panels" was the way I wanted to go, so I cut two sections from the forward fuselage, following the kit's panel lines. I also decided I wanted an engine either revealed or removed, so I cut a section out of the cowling, again following the panel lines.





Now I had the access panels open, I needed something to fill them with. I found some suitable stuff on BNA's website and emailed them to check the sizes/dimensions, since I had no idea what scale would fit. They were extremely helpful with info and I end up buying the following items:













I didn't need all the engine parts supplied, so I just used the main section with all the surface detail. On the kit, I had to cut out sections of plastic, including the mounting pins, to make the engine fit inside the recess. I also had to modify the resin electronics bay parts a little to make them fit inside the fuselage.

I had a few photo-etch control panel pieces in my stash, so I used those on the inner sides of the cockpit, then painted it up. I painted the ejection seat and fitted that too (all Tamiya Acrylics), before fitting the cockpit assembly into the fuselage



Next, I fitted the guns and completed all the small sub-assemblies. The landing struts, engines etc. It's important at this point, before you assemble the 3 main pieces of fuselage, that you decide when you're going to fit the engines. If you do it at this stage, it's not a problem with fit. Just a problem to mask for painting later. If you decide to fit the engines at the end, bear in mind they won't fit if you've glued the top & bottom engines together! I ended up having to cut the locator wedge off the top engine so I could slide that one into the main assembly first and then kinda squeeze in the bottom ones. Sounds like a pain, but it's a lot easier to paint the engines while they're separate!





All the main body assemblies (tail, cowls, top & bottom fuselage) were then glued, clamped & left 24 hours to dry completely. There was a little filling & sanding work to do, particularly around the nose and under the wings. Not exactly a perfect fit with an invisible join.

I also made some access hatch covers out of sheet plastic (the engine cover coming from a plastic milk bottle which comes ready curved). I ended up ditching the small ones but kept the engine cover to refit at the end. I mounted the plane, without glue, onto the kit stand and fitted the canopy (and masked) and she was ready for primer.

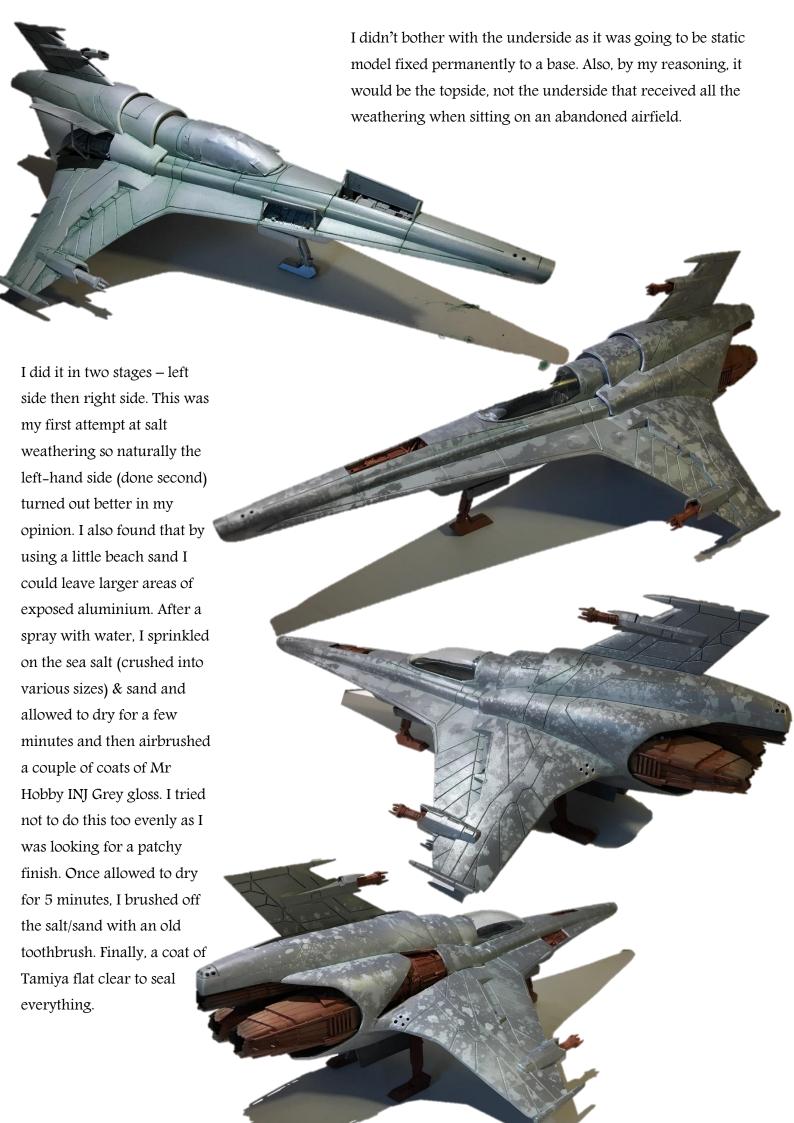


I primed the whole ship and sub-assemblies in one go, using several coats of Mr Surfacer 1500, mixed with Mr Levelling Thinner. It goes on like a dream and gives a nice finish...although I did end up leaving it for a week and then very gently wet sanding it with 1200 grade paper.

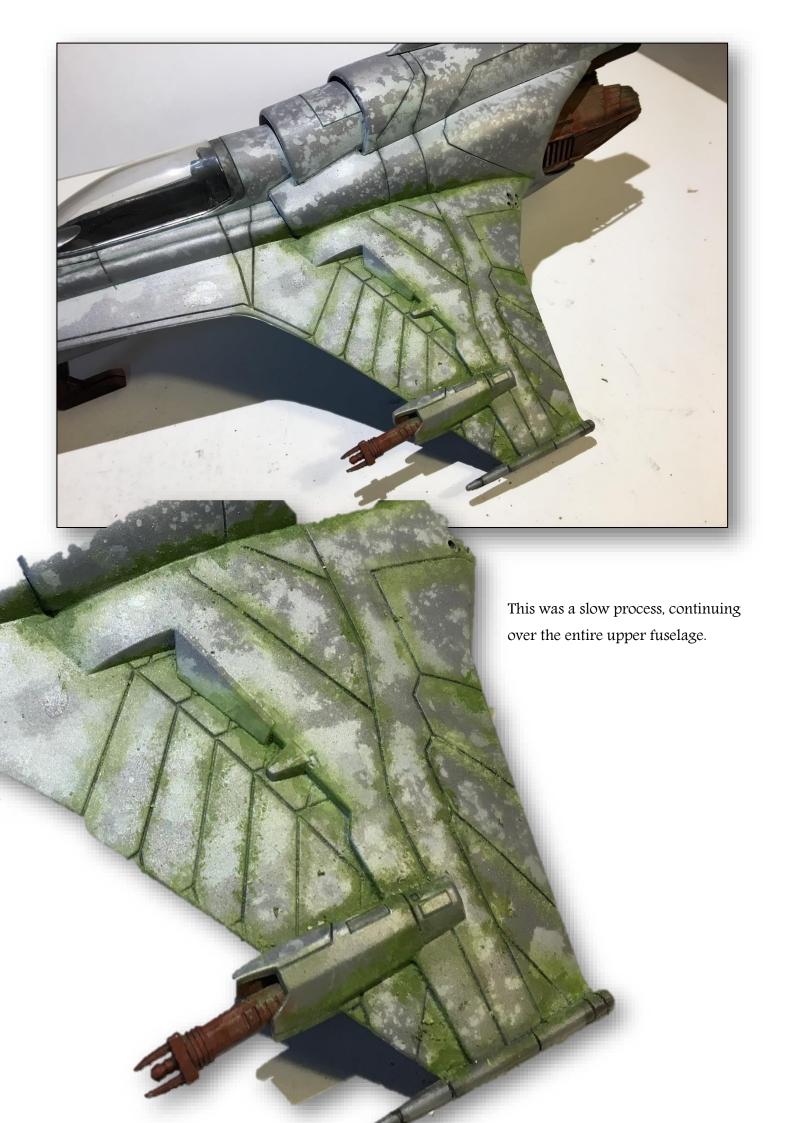
Once rinsed, it was allowed to dry, (15 minutes in the Australian sun will do that) before I gave it a few coats of Mr Metal Aluminium, again, mixed with a little Mr Levelling Thinner. As you can tell, this is my thinner of choice, when I can get hold of it. It basically does what it says on the bottle.



The Mr Metal gives a superb finish. The downside is that it will come off on your fingers. It is buffable to make it shine properly and should really be sealed with a gloss coat afterwards, if you want shiny aluminium. I, however, didn't want shiny. "Abandoned" means definitely not shiny! So, I gave it an overall coat of Tamiya satin clear and moved onto the next stage – salt weathering.





























I had decided earlier that I wanted to have a tarpaulin draped over the fuselage, as if it had been put there to cover the canopy at some point but had come loose and moved. This was a little daunting as I'd never made a tarp before!

I watched a couple of You Tube tutorials (several times) and then decided to have a crack at it. I did try putting cling film over the plane first so it would protect the model from any potential damage – also then I could remove it once dry to paint on its own – refit later. Unfortunately, that was unsuccessful as the tissue kept sliding off the cling film! So, I threw caution to the wind and put in straight onto the model.

I used triple thickness facial tissue, cut to size, laid it into position and then applied a watered-down mix of PVA wood glue. I tried to make it conform to the contours as best as I could and have some folds & creases.

Once left for 24 hours to dry thoroughly, I then airbrushed it with Mr Hobby Blue/Grey acrylic. I know tarps are traditionally grey or green, but I didn't want it to blend with the fuselage colours...plus a blue/grey would hopefully look like a faded version of the colour used on BSG uniforms. I left this to dry with a view to doing final weathering close to the end. I also re-fitted the open engine cowling at this point.

With the Viper pretty much finished, I moved on to the accessories and diorama. I bought two 1/32 scale resin fuel/oil barrels from a seller on eBay and the 1/32 scale small crew ladder from Shapeways.









Onto the accessories. I wanted them very rusty, as if they'd been exposed to the elements for a good few years. Firstly, the barrels – an airbrushing with my old faithful Testors Rust, salt applied for chipping, then an airbrushed coat of Mr Hobby Steel. Again, waited 5 minutes & brushed off the salt. Then I worked into the exposed rust colour with some red/yellow/brown oil mixes, applied neat, to give a little variation. Then a little Vallejo Old Rust pigment dotted onto the oils while still wet.



The ladder was handled slightly differently. I decided not to go with the small crew ladder. Instead, I used a full-size

ladder from my MKII display. I'd never been happy with the way it went together or the paint finish I managed to achieve....so after a few construction tweaks (mainly because it fell apart on me) I kinda did a reverse salt chipping on it. It was already aluminium silver, so I salt–chipped it and went over that with the Testors Rust. Again, once the salt was removed, I worked into the rust a little with oils and added a little pigment.







As a starting point for the base, I bought an A4 size "Abandoned Airfield" base from Coastal Kits. I know I could have made one from scratch, but these are great to build onto, or even just to use as a display if you're not into making dioramas.

The Viper was positioned on the base. Now that it wasn't going to be handled, I did a few more bits & pieces of detailing. I weathered the tarp using ground black pastels to add shadow, and a light brushing of ground white pastel for the highlights. I didn't go nuts on the highlights as they can easily look overdone.

I drilled some tiny pilot holes into the corners of the tarp and, with a blob of superglue, added the tarp ropes, which were basically just sewing cotton painted with a little black oil wash. I had to use a little PVA, applied with the point of a scalpel, to make them adhere to the fuselage contours. I also tried to paint the rusty rings the securing ropes went through as best as I could.

I added a few cables to the front access panel – these were thin wires stolen from and old VGA cable, glued in place with superglue and then painted with Testors Rust and a little pigment. I also added a couple of signage details, created on my computer and colour–printed on paper.





The "out of service sign" came from a google image. Printed, glued onto some thin card, sewing cotton added to attach it (as if hooked over) to the edge of the access panel and then weathered with thin oils and Vallejo Olive pigment.

The "unserviceable – scrap" sticker was inspired by a BSG episode. Chief Tyrol, working on a MKII, decided he couldn't save it and slapped a

"SCRAP" sticker on it. I wanted my viper to have the same. Again, the image was lifted from google, amended slightly, printed out in colour and then PVA'd direct to the fuselage. Then a little weathering over the top with black pastel to blend and a final coat of Tamiya flat clear.





On the base itself, I used some XXL grass tufts in dark green (2 packs, various heights) bought from BNA, along with some Noch white flower tufts bought from an eBay supplier. I placed the grass/flowers, initially following the gaps between the paving, and then more profusely on the overgrown side of the base. I then filled in the gaps on the overgrown area with some flocking material and finished off with a light sprinkling of Bombed Forest Ground Scatter (also from BNA) to add a little variation.













## Revell 1/125 Scale German U boat – U99

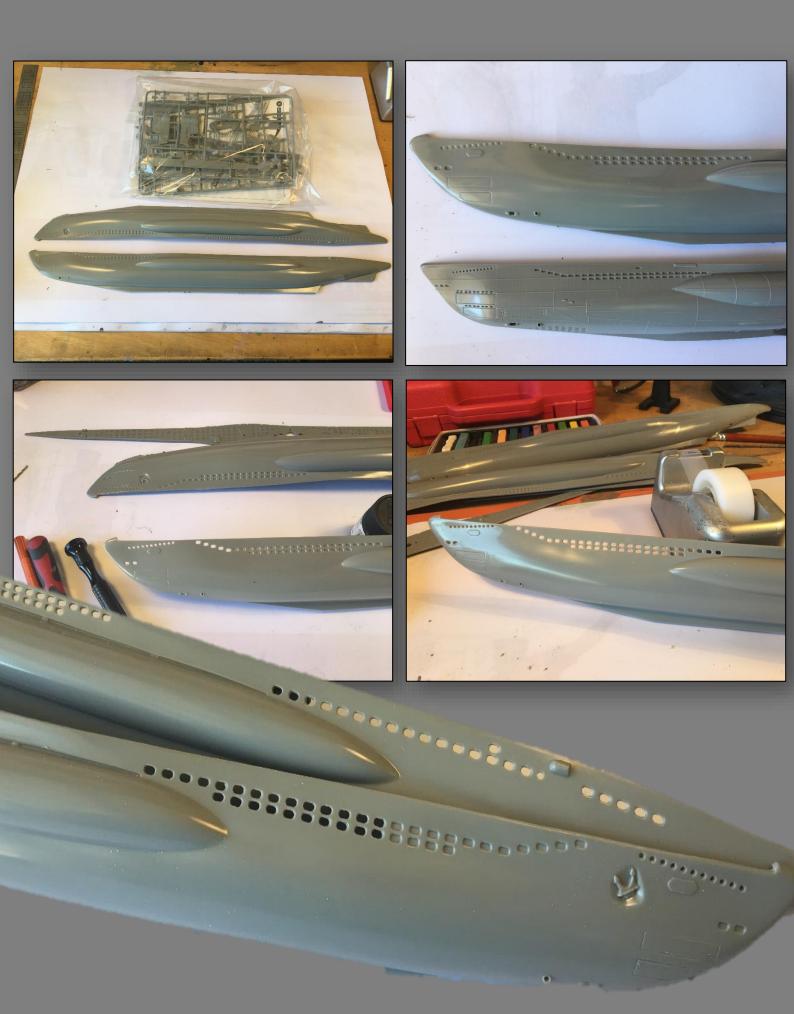


I've always been a fan of German U boats. To me, they look way cooler and more sinister than their allied counterparts, so it was only a matter of time before I build one.

I'd been itching to try some rust effect paint I bought from a seller on eBay, so I reckoned a sunken U boat would be the perfect test for it. Revell make a number of kits, ranging in scale from little 1/350 scale, all the way up to the metre-long 1/72 scale monsters! I already had a Revell 1/144 scale type VIIC/41 sitting on the shelf but didn't want to potentially ruin a nice kit with a rust effect that could go horribly wrong and end up with a kit in the bin!

So, I went with the older Revell release – the 1/125 scale type VII. I think this kit has been around since the '70's so although the familiar shape is accurate, the level of detail is quite poor – no detail of any kind on the sides of the hull. No great loss then if it turns into a disaster!

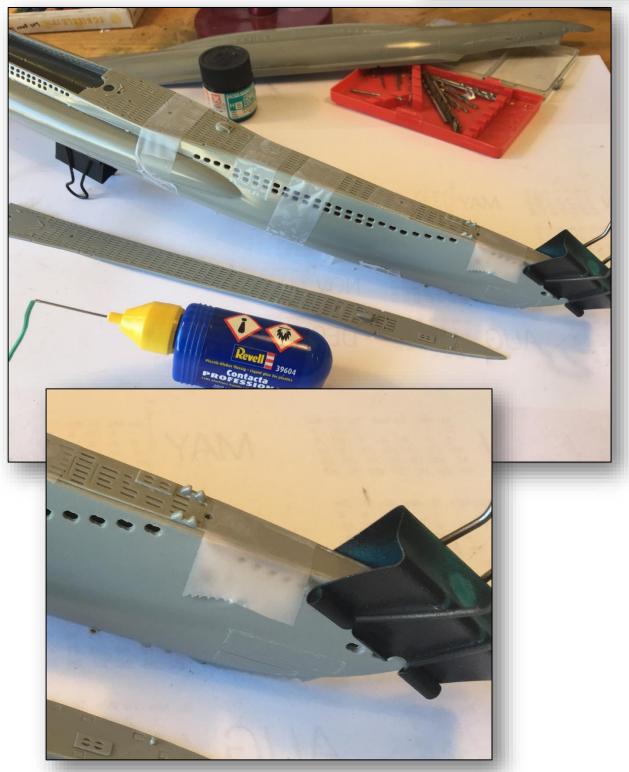
Having said all the above, I did want to lift the kit a little and add some extra detailing, so the first job was to drill out all the drain holes with a pin vice, as they're just recessed on the kit. Took quite a while, but the end result was worth it – gave some much needed depth.

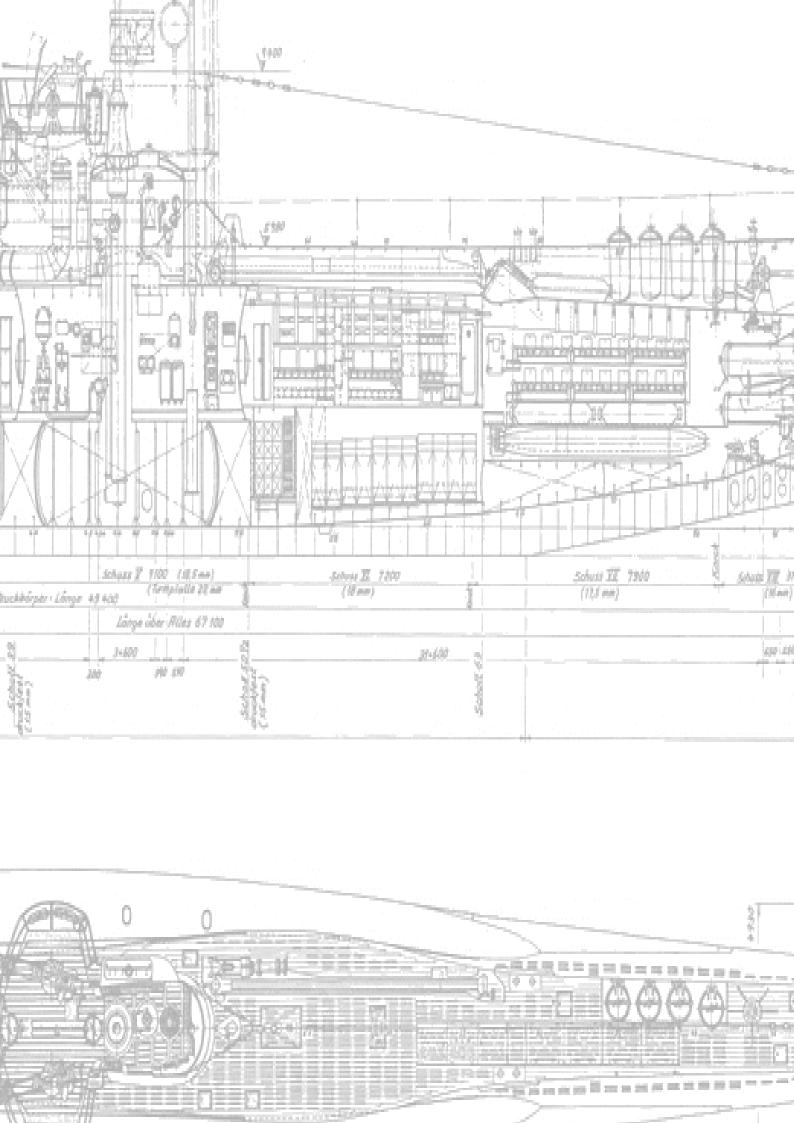


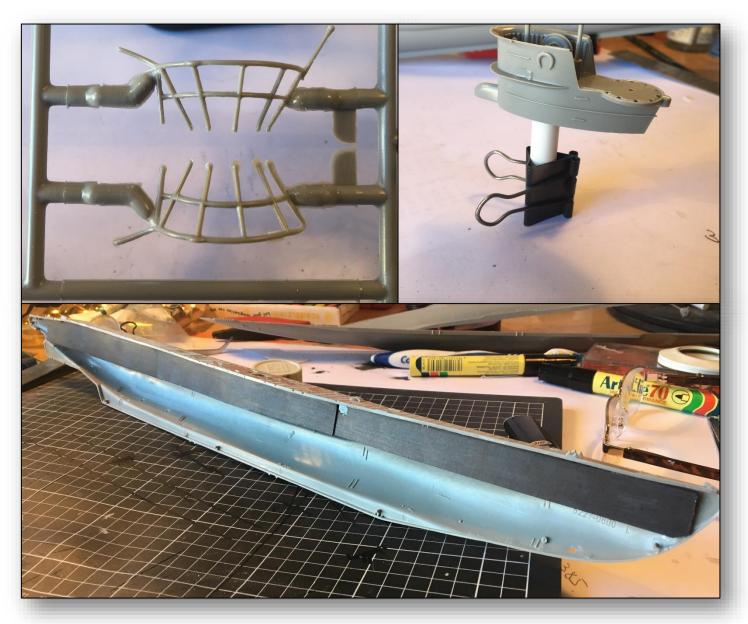
I also cut the plug off the end of the deck gun and drilled out the barrel slightly. This U boat, although on the bottom, would be undamaged, possibly scuttled.

I decided to attach the two halves of the deck only to one side of the hull first, clamping both sides of the hull together to ensure the deck sat correctly. The reason for doing it this way will be revealed....



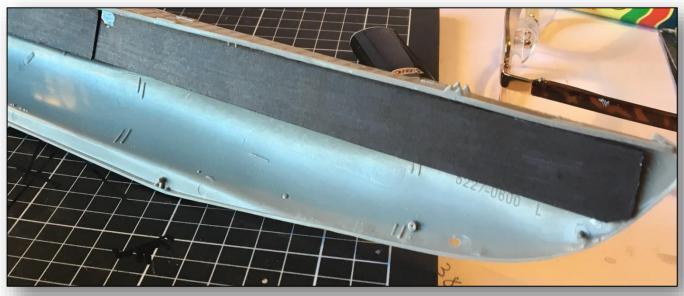






Moving onto to the conning tower, I spent a while cleaning all the flash off the railings. Pretty simple assembly which went together easily.

Now the reason for only cementing the deck to one side of the hull...once you've drilled out all the drainage holes, you can basically see right through to the other side of the model, because there's no pressure hull. So, my answer was a simple one – fit-strips of card, painted black, to the centreline of the deck, the full length of the hull. Blanking plates, basically. Now I could have fit a set to each side, fitted right behind the drain holes, but that would have countered some of the depth I'd managed to achieve by drilling. One centre mounted plate did the job perfectly.

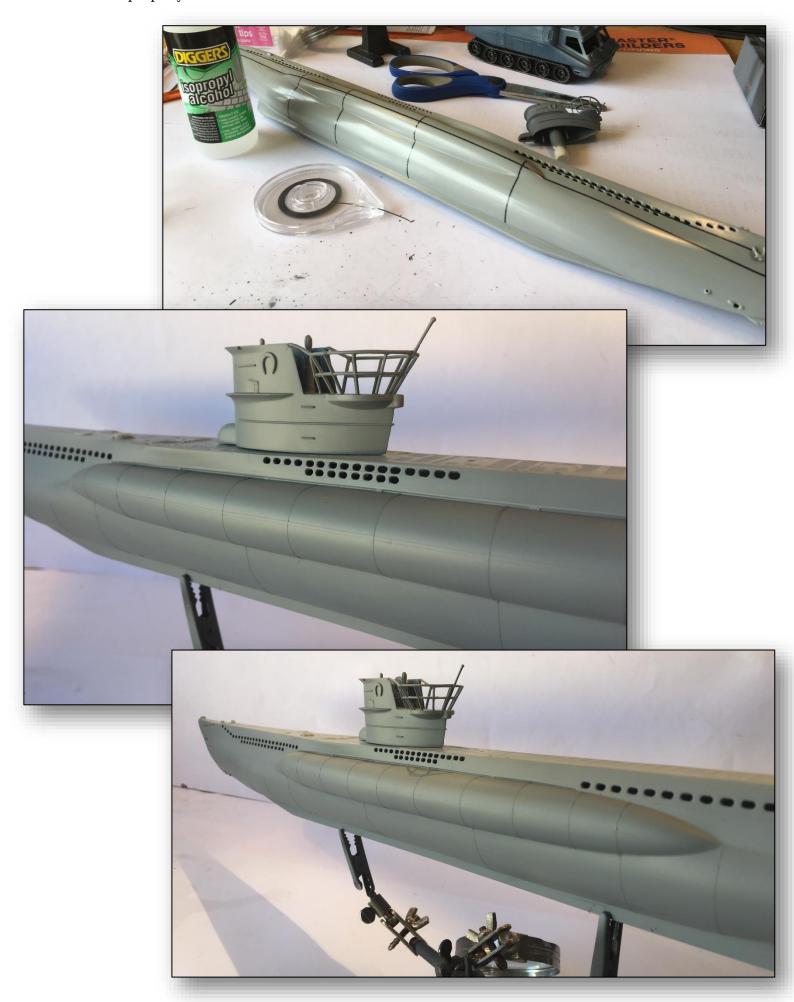




Once the blanking plate was fully dry, I cemented both halves of the hull together and filled the edges & gaps with Mr White putty.

Now then, on to the hull itself. It's devoid of any detail so I decided to try & add some of the weld lines. So, after wiping down the hull with isopropyl alcohol to remove any grease and referencing a basic line drawing of a type VII, I used self- adhesive 1mm nail art tape to add on the major panel welds on the port side. Once they were all on, I gave it a coat of Stynylrez grey primer to both test the result and seal the tape. Much improved! Not up to the standard of the later Revell releases obviously, but still a major lift for this kit.

After allowing the primer to dry, I repeated the same process on the starboard side, fitted the conning tower, net cutter, diving planes & rudder etc. Gave the whole lot another squirt of primer and then left everything a week to cure properly.



Next job was to paint the deck. This was painted a wood colour (Mr Color Aqueous) then streaked with white oil paint to add some variation. Once dry, I sealed it with clear gloss and then gave it a wash with very thin black oil paint to darken the recesses. Waited another full week for that to dry and then sealed again with flat clear. I did have problems with this as the Dullcote I normally use gave me a satin finish for some reason. Maybe it was because I was down to the dregs, I don't know, but I swapped to Tamiya flat clear thinned with X20A. Perfect result.

I added the deck gun and finally, on to the great experiment – rust effect paint system. I bought this from an eBay seller in Germany (the company is called TV farben) and it's made up of three products: stage 1 – rust primer. Stage 2 – Activator. Stage 3 – Inhibitor.

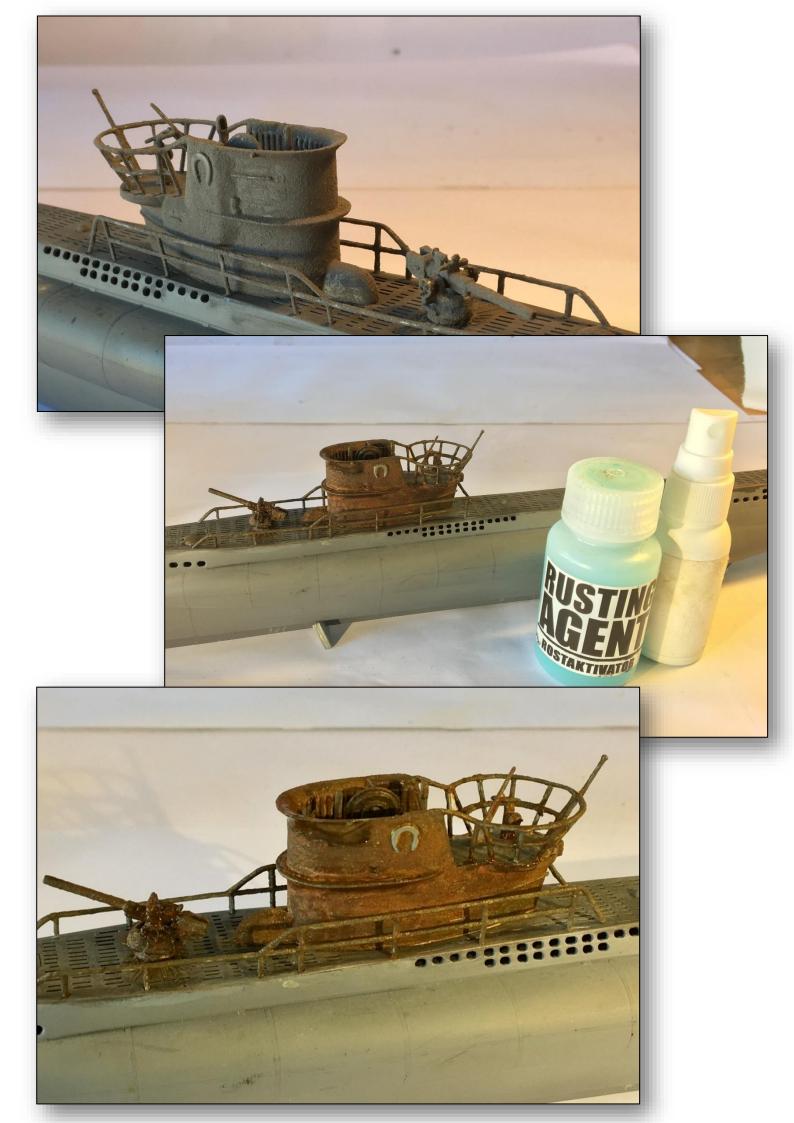
First, I painted the conning tower with the rust primer using a brush. It's grey in colour so it was difficult to see against the grey primer. I ended up giving it a couple of coats to ensure proper coverage. Now I have tried to airbrush this stuff before and it does work. You need to dilute it 50/50 with plain water and put through an airbrush with a 0.5 needle at 30–40 psi. it took about four coats on the previous paint mule to get coverage though. Applying with a brush is easier.

Next, I painted on a layer of the blue activator. This has visible results after about an hour, but it did require a few coats (the next few coats were diluted with water and sprayed from a small spritzer type bottle) over a period of a couple of days until it had given the level of rust I wanted.

Finally, with the right rust level achieved, I painted on a coat of the white inhibitor. This dries clear and halts the rusting process. If you don't apply it, the reaction will continue...which could be exactly what you want, but I decided to stop here.

I repeated this process on both sides of the hull (one side per week).







What I ended up with was a very realistically rusted U boat! The rust effect paint works beautifully. You'd have to be careful with scale though. The texture it creates is that of real rusted metal. On a 1/125 scale U boat that's been on the sea bed for a number of years, that level of texture is perfect. If you just want standard rust, this stuff would be more appropriate for larger scales. However, the longer you leave it, the more it rusts so it would pay to experiment – you may only need to leave it for a couple of hours to get what you want.

That being said, because of the texture created by the paint, the weld lines I'd added were now a little less prominent. So, I used coloured pencils to bring them back again. Applied gently and sparingly, I used black in areas that would be in shadow, and a mixture of red & orange for the highlights.



The next job to do was adding algae. For this I used Vallejo's green weathering powder and a little ground up green pastel. I added more to the deck, as it's wood and I assumed that algae would grow quickest there and added it sparingly to the sections of hull that would be facing whatever light would be available shining from above.

I had a lucky find, rummaging through our cupboard of forgotten & broken things. I came across an old picture frame with a broken glass that my wife had put in there. It turned out to be the perfect size for a display base. Score!







I wanted the boat to have her keel buried in the sand and be leaning to one side, so to prep the base I marked out where she would sit and then cut sections of cardboard box out and arranged them to create a recess. I then used a couple of layers of household DIY acrylic wall filler to make the sea bed.

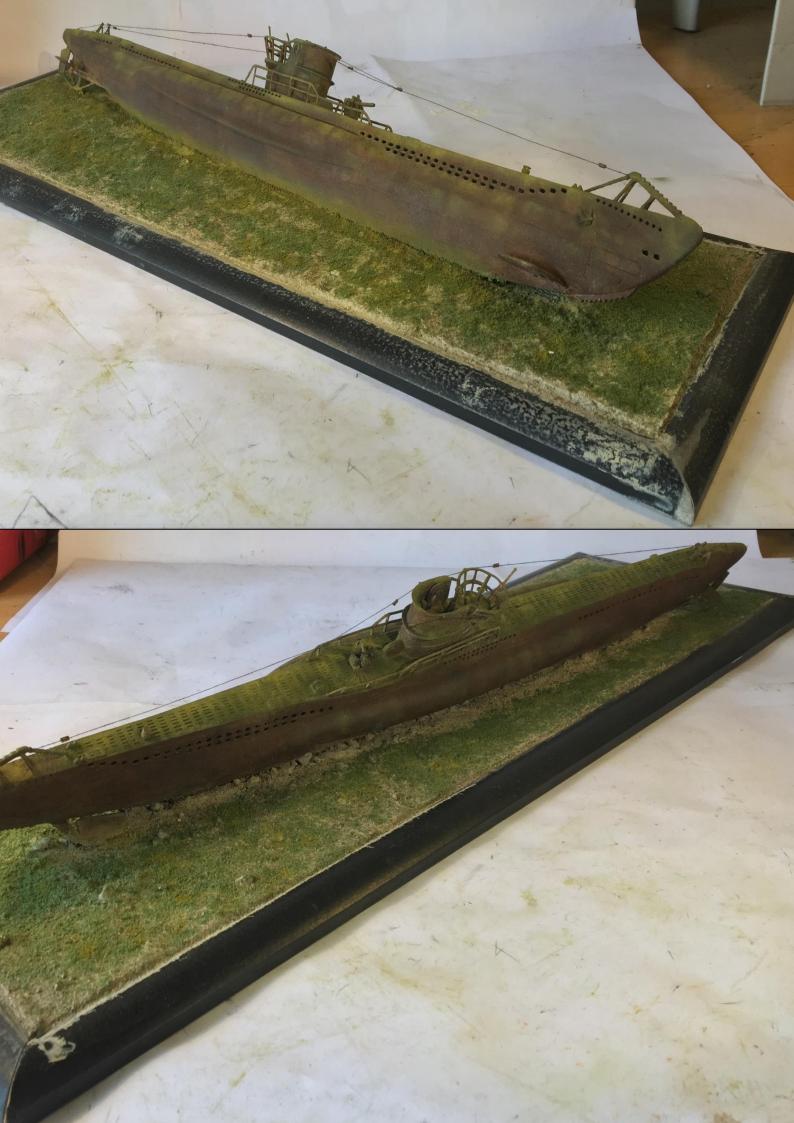
Before adding the U boat, I fitted her antenna wires as I didn't want to be trying to do it after she was fixed to the base. Once these were done, she was put in place and a few applications of white PVA glue were poured into the gap underneath. This both secured the boat and partially filled the gap around the recess. Once the glue had dried, I carefully applied more filler up the edge of the hull.



The sand texture was a mix of fine sand, cement and small stones I scooped off the ground at work – one of the benefits of working in a concrete pipe factory. I sieved out a lot of the larger stones to try & keep it fairly smooth. First, I added a layer of PVA glue to the base then sprinkled on the mixture. This initially didn't stick too well, so I mixed up a solution of PVA, water and a little detergent (to destroy surface tension) then dabbed on with a big brush to soak the entire base. This worked well and made everything solid.

I used a light sand paint from the Mr. Colour C range and airbrushed over the base, carrying up onto the model just slightly, before adding some green shredded foam for seabed growth. I didn't want to go very far with scenery, so I stayed away from further plants & accessories – I wanted this to be all about the boat, not the background.





So, all in all, the rust paint experiment was a success. This paint, plus a combination of other detailing techniques has, in my opinion, turned a rather old & mediocre kit into something more interesting and dynamic.

One of my colleagues said it looked like part of Operation Deadlight as it's intact. This refers to the Royal Navy taking out captured U boats and sinking them. So that's the name the build has now been given.

"Operation Deadlight".







