

## Trumpeter's 1/35 German Kanonen und Flakwagen

by Eric Christianson

**Scale:** 1/35

**Company:** Trumpeter

**Price:** \$119.95

**Product/Stock #:** 01511

**Website:** Trumpeter

**Product Web Page:** View

**Product provided by:**

Steven's International

### Summary

Trumpeter is back with another addition to their 1/35th scale armored train cars; this version sports a four-barreled 'Flakvierling' anti-aircraft weapon as well as a 105mm howitzer.

### Background

As far back as World War One, Germany employed armored trains to protect rail shipments of war materiel across enemy-held territory. Many times these trains contained cars that were nothing more than crude combinations of open stock cars and/or armored tank turrets fixed to flatcars. Near the end of World War Two these trains began to contain more sophisticated, purpose-built cars that boasted impressive armor and an array of anti-tank and anti-aircraft weapons. The German Kanonen und Flakwagen was such a car, heavily armored, fitted with numerous light-weapon gun slits, an armored turret mounting a 10cm l.e.F.H. 14/19(p) field artillery gun and an shielded platform



### The contents of this box include:

*336 Soft Plastic Parts on 8 sprues plus five track sections*

*Hull, RR Track, Base and turret packaged separately*

*3 photo-etch sheets: One for the gun mantle bracket and lifting rings, and two for the quad-2cm Flakveirling 38.*

containing the Flakvierling 38 which combined four FlaK 38 20cm anti-aircraft guns in a single carriage.

### The Kit

Trumpeter's latest addition to its catalog of 1/35 train stock comes in a large, sturdy box containing eight separately bagged trees of light-gray plastic parts and a separate compartment for the single piece upper section of the rolling stock. The parts are crisp and flash-free, and effort has been made to restrict the many ejector pin marks to areas that are not visible from the outside. The flak gun platform and the protective

armor around the car-coupling hardware are the only areas that will need these marks cleaned up. The plastic is soft and sands easily.

Also included is a decent set of decals and white stencils for a single version of the car and three sheets of photo-etch. The 16-page instruction booklet is well illustrated and easy to follow for the most part. A separate glossy color Painting and Marking Guide is included and provides a late-war standard color scheme of Dark Yellow base under Red-Brown and Dark Green camouflage, as shown on the box-top.

There is no interior provided, but there is a lot of wide-open-space to scratch-build one – the car is basically a hollow show-box! Three sets of double doors can be assembled in the open position to expose the interior if desired.

As with previous Trumpeter offerings, there is considerable effort put into the railroad roadbed, railroad ties, track and base. These are manufactured in such a way as to be able to be added to other tracks for possible additional rolling stock released in the future - a real potential for diorama enthusiasts. (The car can already be mated with Trumpeter's excellent 1/35 BR86 Armored Steam Locomotive.) The wood-texture of the 26 ties is beautiful, and comes wrapped in a separate sheet of soft-foam packaging material. The ties themselves are ingeniously molded and connected in such a way that they are removed from the sprue and attached as a single piece. This aids considerably during assembly and painting – everything lines up tidy. The rails themselves are so delicately molded that they slide effortlessly into the tiny brackets molded into each tie along the entire length of the roadbed. The ejector pin marks run along the inside of each rail – out of view. Nice!

One downside of the kit, at least with my box, is that there





was a considerable amount of mold-release agent that was pretty stubborn in coming off, even with 409 and soap. I even tried using tire-cleaner on it to no avail. I ended up spraying a coat of Future acrylic on the model prior to painting – that did the trick.

### The Build

I started with the road bed. This is a multi-step (yet separate) process so I kept coming back to it as I built up the rest of the kit. Trumpeter gives you an option to add this track to another set of track so the first thing I had to do was to remove a section of one of the end pieces so the base would be the right length for just this kit. There are deep scribed marks on the inside of

each side for doing this and after 20 seconds with my razor saw I was done. The rest of the base is snapped together and then glued. These parts are very large and I found I had to glue and clamp each section individually to minimize the seams – which are significant when viewed up close. With more time I would have sanded and filled the seams on the base, but I felt they looked ok after painting them black. The seams on the roadbed itself disappeared after painting and weathering.

The four wheel trucks went together without a problem. There isn't much detail provided here, but 99% of it is out of sight anyway.

### Trumpeter 'Wiggle Fit'

Trumpeter kits seem to always have a peculiar fit issue, at least in my experience. The parts fit together – that's not the problem. The problem is that they have wiggle-room after being attached – just enough so that things may not line up if you just let them be after gluing. You have to fiddle with everything until the glue has had a chance to set up a little. I clean and bag all the parts of a model (by step) before I start assembly, and that approach really pays off for kits like this. A prime example of the problem is encountered in Step 3, when the two wheel trucks are assembled. There are 44 parts in all, 22 for each truck. If any one of those 22 parts is glued fast before you have all them together, you may end up with a crooked set of wheels, or a set of wheels that do not sit properly on the track. I encountered this with the previous Geschutzwagen build so I was ready for it this time. If you use slow-drying glue, such as Testors Liquid Cement, you should be fine.

In Steps 4 and 5, the double doors do not have any locator pins or other mechanism to insure they line up and fit (and stay!) in the doorways – the hinges are glued on after the doors are in place. I recommend that you glue each pair of doors together on your

workbench before attaching the assemblies to the upper portion of the car. I tried setting an assembly in the doorway where it was supposed to go, taping it from behind and then applying liquid glue to attach it. But when I went to attach the hinges, it popped off into the interior of the car. The only way I could insure that the doors stayed where they were supposed to was to glue a piece of plastic styrene across the opening for each set of doors, and then glue the doors to the styrene. It isn't pretty (from the interior) but it works. I feel this could have been designed better.

Also, the hinges are molded to have a 'wide' side and a 'narrow' side – they can easily be installed upside down. Easily I say! A little pre-fitting will help to insure the actual hinge falls along the edge of the door and the superstructure correctly.

### Flakvierling & Platform Assembly

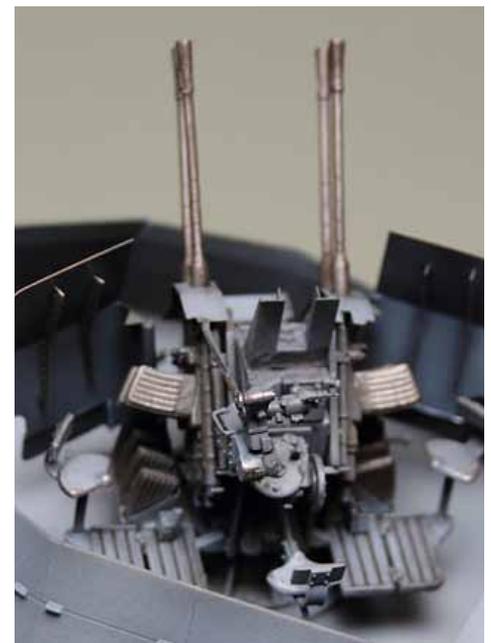
The platform for the Flakvierling 38 consists of six parts, a base and five wall sections. These wall sections have prominent ejector pin marks that will have to be filled and sanded if you wish to make your build competitive.

The fit is surprisingly good considering there are no connecting aides or pins/holes or anything to use – disheartening since this will be the main visual focus of the kit. Luckily, I found that if I departed from the instructions and attached the floor of the platform to the upper part of the train superstructure I gained two tiny spots that could anchor one of the long side panels. After letting that first piece dry, I glued each panel to the one next to it around the base and everything came together just fine – whew!

The assembly of the quad 2cm gun consists of 79 plastic and 48 photo-etch parts. I easily spent more time on this assembly than the whole rest of the kit combined. While most of the parts came together well, there were several exceptions.

First: Parts K15 and F9 should be test fitted before doing anything. I had to file the connection stub on Part F9 to seat the final assembly correctly. Discovering and fixing this AFTER attaching all the delicate parts and photo-etch was a real challenge.

Second: The main guns (the very first step in the instructions!) had no positive attachment points – in fact, there are two posts that stick out preventing even a sloppy blob of glue to suffice. I did not want to remove the posts as they look like they were deliberate and removing them





might have caused some other fit problem down the line. Consequently, it seemed like every time I applied any pressure to the assembly whatsoever, one or more of the guns popped off and had to be re-attached. Much later, after putting together the entire assembly, did I learn that I should have just filed these posts off to begin with. I'm not sure where Trumpeter was going with this design.

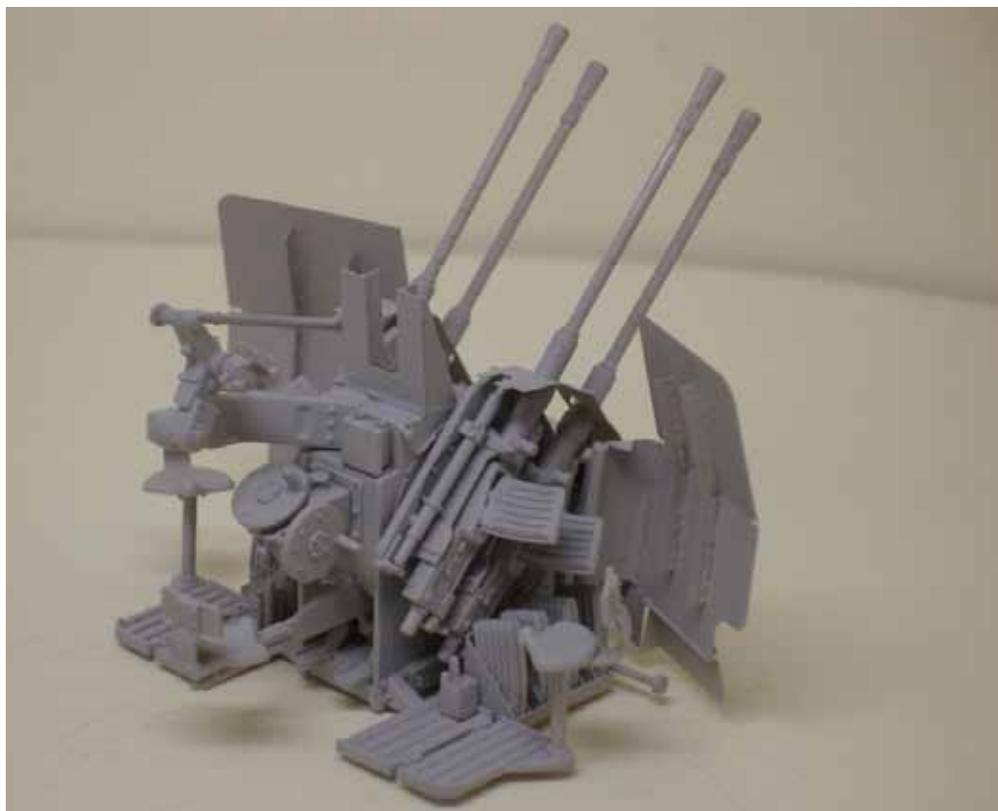
Third: The drawings for attaching many of the photo-etch pieces that made up the four main parts of the gun shield were ambiguous at best. I ended up attaching some parts simply based on where I thought they looked best.

Fourth: There are two vertical posts (Parts L15) that the instructions would have you attach long before you use them as the SOLE attachment points for the main photo-etch gun shields. The problem is that the slots that receive the photo-etch must line up perfectly so the shields will look right. Do not glue these two (L15) parts until the shields are assembled. Then, instead of gluing those to the base of the platform as directed, glue them to the shields themselves, and then insert them into the holes provided on the platform. This approach will also provide you with a way to hold the delicate photo-etch shields for painting.

Fifth: There are twelve cases that hold the 20mm ammunition – eight of which go

into two PE racks and four get attached to the sides of the main weapon. All of these cases have a tiny tab on each side and a small post purposely molded on them for reasons I could not understand. These protrusions must be cut and sanded off in order for any of the cases to fit where they are supposed to go. In addition, I had to sand off some of the ridged detail on one side of each of the 8 cases that are inserted into the two PE racks to make them fit. The beautifully designed 7-piece photo-etch racks literally split apart without doing this minor surgery first.

Finally: The three-piece seats (3 of them) must be reworked in order to fit properly. They are engineered about 75% of



the way; the rest is up to the builder I guess. There's not even a 'wobble-fit' here.

Fortunately, with a little effort, I think the final result looks pretty good when sitting proud on the top of the model where all eyes will be focused.

### **The 105mm Cupola Assembly**

In Step 9, as with the Flakvierling above, the keyword is patience. Go slowly here – the 10-sided cupola is built up using a base containing five sides, with five additional sides attached to fill the gaps. The final assembly needs to be relatively strong because there are many items that need to be attached to it. A little filling and sanding

cleaned up the rough edges left behind. The main 10cm armament is attached via a single three-sided slot – a very weak arrangement as the gun (in my kit) kept slipping out of the slot as soon as I set it in. I decided to guess at which elevation would look the best and used a whole lot of Testor's (black bottle) liquid glue to secure it to the base. I did not want that gun coming loose and rattling around after I glued the cupola to the base. I had to carefully fiddle with the gun elevation and horizontal angle for 15 minutes before it stayed where I wanted it to. Super glue would not have been practical here due to the ubiquitous wobble-fit described above.

The main assembly of the 10cm cannon is, unfortunately, constructed of two halves which creates a stubborn seam line that will need to be filled before attaching the (hollowed out) end nub. The photo-etched bracket that slides onto the main gun assembly has a very tight fit. I had a lot of trouble with this PE on the Geschutzwagen build, and since you cannot see it when the gun shroud is added, I left it off of this kit. (The problem I encountered on the previous build is that I had to remove the bottom molded-on bolts from the gun assembly in order to slide the bracket on. I then had to whittle a little plastic away from the inside of the shroud to make it fit around the photo-etch bracket and still mate with the gun housing - unnerving with the knowledge of how precariously the cannon is attached to the base!)

### **The bumpers and walkway housings**

I decided to assemble and attach both bumper panel assemblies on the lower car base before attempting to mate the upper and lower halves of the train car. I did this to give the two halves more surface area to use for gluing. After the panels were dry I put the whole base on a lazy susan so I could apply liquid cement around the entire car without handling it too much.

After the upper and lower halves were completely dry I tackled the armored covers to the train couplings in Steps 12 and 13. I ran into trouble with these in the Geschützwagen build and the design hasn't changed with this kit. Ignore the part number call-outs and use the images instead. How the small tabs on the vertical plates are supposed to line up with the horizontal plate, and how all three are supposed to fit to the bumper plates is ambiguous. I decided to glue the horizontal plate on the train car first, let it dry, and then glue the vertical plates on, one at a time. One side of the train car is slightly beveled so make sure to test each vertical plate before gluing. As with everything else, there is no 'positive fit' anywhere. You have to nurse each piece to make sure it lines up true. This could also have been designed better.

### Painting and Finish

The base and road bed: I airbrushed the railroad ties using Model Master Enamel Burnt Umber. The ties are linked together so they were easy to paint as one piece. I then painted the base using Gunze Mr. Color Black, a lacquer, which produced the satin finish I was looking for. I painted the rails a base coat of Tamiya NATO Black and then highlighted them with some Rub&Buff Silver to bring out the worn areas. Once the base



was dry, I masked off the edges to leave just the road bed exposed. I painted the road bed Tamiya NATO Black. Once that was dry, I used a spray bottle to wet the surface with a mixture of white glue, diluted dishwashing soap and warm water. I then sprinkled on a coat of ash from my fireplace and let it dry. A quick brush off and blast from some compressed air and the base was complete. Then I slipped the ties up into the base from below so that just the wooden upper surfaces were exposed when viewed from above – very handy. Finally I slid the rails through ties and attached the four rail connectors provided. With more time I would have added several other colors for highlighting and grime, followed by a dusting of various Mig powders.

The rolling stock: I usually assemble armor kits completely before painting, leaving only the machine guns and antenna off until the end. Even though the Geschützwagen appears to be one big box, it has many protruding edges and handles, etc., so in order to wash the completed model I placed it in a small plastic tub and covered it with a heavy layer of 'No Touch Tire Care' product used for cleaning car tires. Once the foam had completely dissolved I thoroughly rinsed the car with warm water and set it aside to dry for a couple days.

Still, even after this tried-and-true approach, I noticed a chemical sheen on several areas on the car. I decided to coat the whole thing with a layer of Future acrylic to make sure I had a consistent surface to start with.

I gave the whole model a base coat of Tamiya NATO Black, thinned 50/50 with Gunze Self Leveling Thinner. I like using this as a base coat for armor because it gives me the color of Floquil Grimy Black but is less fussy to use and feels a little more 'grimy and grainy' to me.

I was in a quandary regarding the camouflage of the main car itself. The instructions would have me paint the car using late war colors (Panzer Yellow, red-brown and dark green). I wondered, however, how often whole trains were actually camouflaged in such a manner. In the movie 'The Train', starring Burt Lancaster, the Geschutzwagen I built prior to this kit was prominently featured – and it wore a dull, war-like beaten-up gray scheme. Doing a little research

I found that these trains were sometimes camouflaged, sometimes left in plain Panzer yellow, sometimes left as bare metal with some sort of primer on it. There are also pictures of whitewashed trains used during winter campaigns. When I think of trains, especially late-war trains, I think gray and dirty, so that's the scheme I decided to use on this kit as well.

After the Tamiya acrylic dried, I applied a coat of Model Master Intermediate Blue Enamel following the vertical pattern that would be created over time by rain on steel. I worked up the paint until I felt just enough black was showing through along the seams and lower areas.

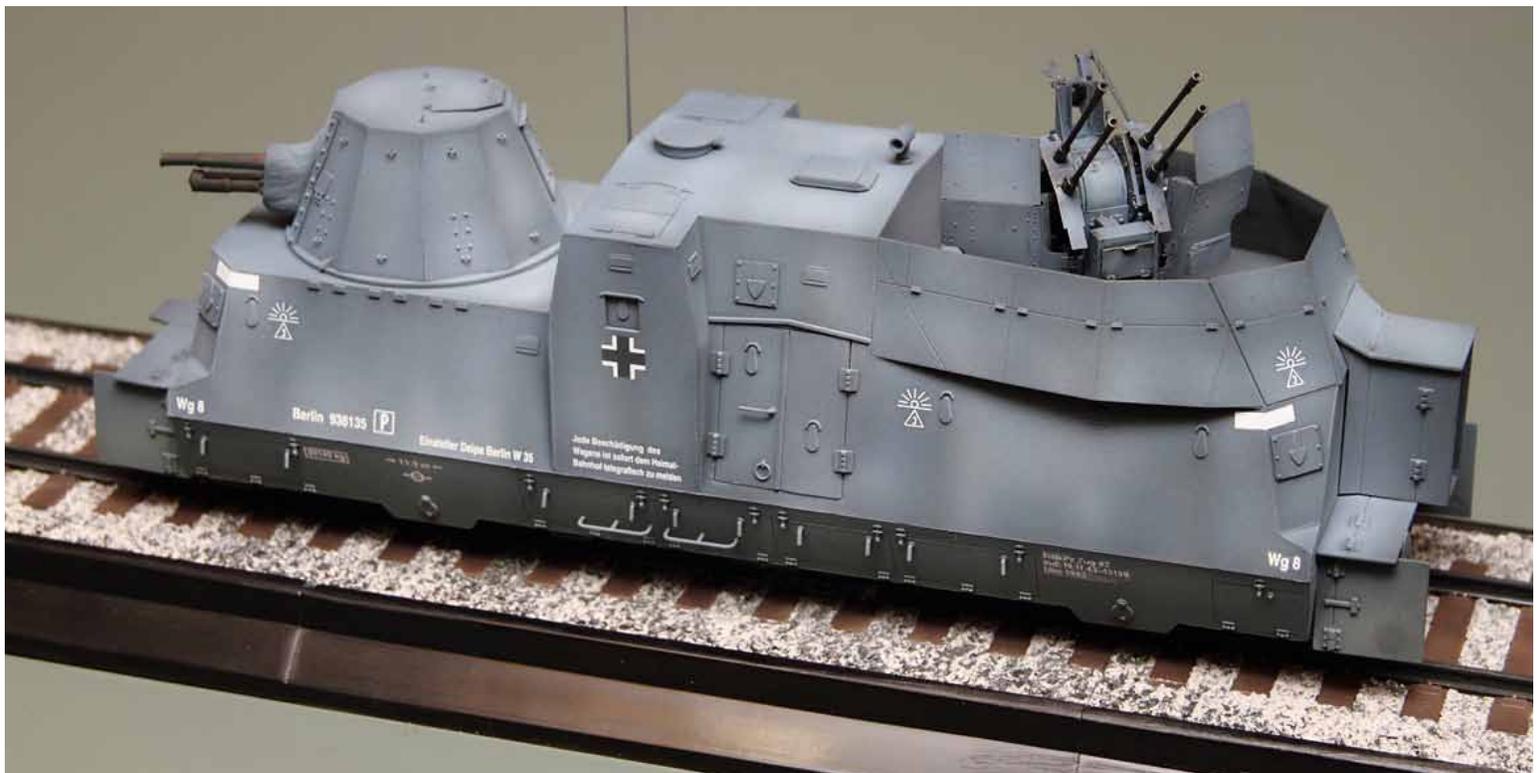
I followed this with a number of light passes using Model Master

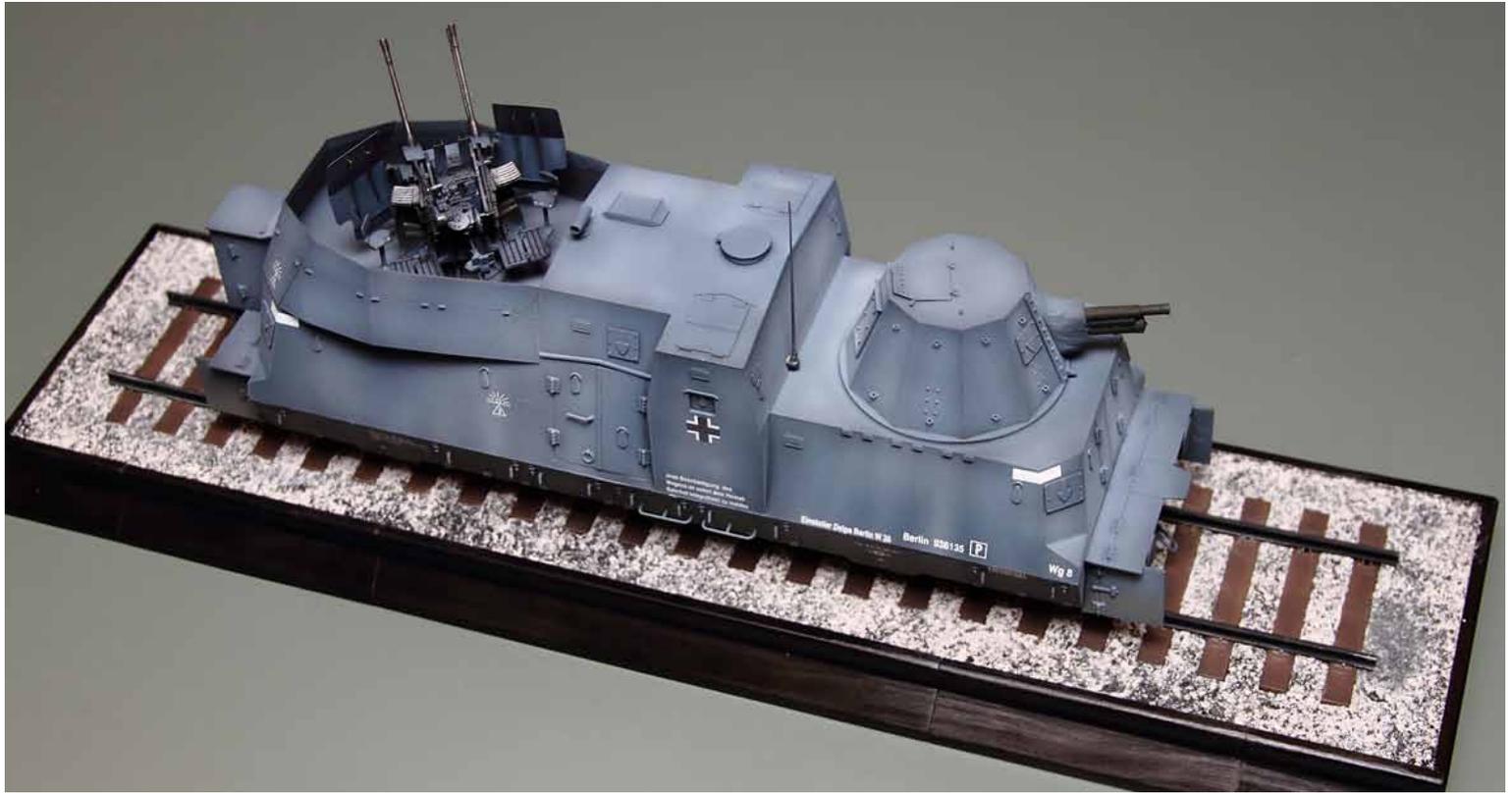
Light Grey to lighten up the blue to produce the worn color I was looking for.

Finally I gave the entire car a heavily-thinned dusting of Vallejo Model Air 1027 Light Brown, working from the bottom up until I could just barely distinguish the dist from the dark background grey.

If I had more time I would have really went to town adding additional Mig Powders, oil stains and grimy streaks – there is nothing clean about a working train during wartime.

The Flakvierling 38: I painted the two larger photo-etch shields and the remaining gun assembly separately. I first gave everything a primer coat of Gunze Mr. Surfacer 1200. I followed this with a base coat





of Tamiya NATO Black. I used a primer coat to give the photo-etch a bite for the Tamiya paint to hold on to. Both of these layers are very thin and (I feel) did not detract from the look of all the delicate parts making up the gun.

I followed this by carefully airbrushing the Model Master Intermediate Blue, following it with a dusting of Model Master Light Grey, just like the train car. I tried my best to avoid the actual guns and ammunition cases – leaving them NATO Black. I then gave everything a coat of Future to prepare the surface for washes and filters.

Once the Future acrylic dried for 2 days, I applied (first) a very thin filter of Mig Dark Brown. I use Mona Lisa White Spirits to thin my oil paints. Mona Lisa is about as mellow as paint thinner can get while still actually thinning the paint. Once that was thoroughly dry, I applied a pin wash, mixing Winsor Newton Burnt Umber and Ivory Black oils with Mona Lisa. The last step was to (very carefully) touch up everything with Mig P231 Metallic Gun Metal pigment using my finger to give these parts a proper metallic 'glint'.

**Decals:** The decals supplied with the kit were thin and in-register. There are 30 markings altogether, 2 Balkan crosses and 28 white stencils.

Even though the decals are thin they are **STRONG**, which is good thing because the glue is also strong – make sure you get the decals pretty well where they need to go the first time because they are difficult to move once they are down. I coated the areas to receive decals with Future before and after applying the decals. I used the Microscale system (Micro Sol and Micro Set) without any problems.

Once the decals were dry, I gave the model a thorough coat of Testors Dullcoat to even everything out.

The build took me about 15 hours to complete, most of the time spent on the Flakvierling 38.

## Conclusion

This was an unusual project, no doubt. I grew up with an HO-scale train set, so the train-guy in me provided the motivation to do a full-build article rather than just an in-the-box write up. When I attend model shows I always like the big, bold dioramas in 1/35th scale encompassing many kits and figures, and trains fit into such a scenario like a hand in a glove.

I applaud Trumpeter for coming out with this kit and I hope to see some similar releases in the future.

I felt that the problems encountered when building the Flakvierling 38, attaching the doors and other parts such as the walkway housings were minor annoyances and offset by the brilliant design of the roadbed and track. Overall, this kit provided

me with an opportunity to knock out something quick and enjoyable.

I would recommend this kit to modelers with some experience in solving problems due to the fit issues. That said, however, the kit builds into a very nice and unique representation.

I'd like to thank Steven's International for providing the review sample.

