

# Seattle Chapter News



Seattle Chapter IPMS/USA  
August 2017

## PREZNOTES



[Andrew is taking a short break from writing PrezNotes, so I'm filling in for him this month. – ED]

### When Expectations Fail

It's been said that we're living in a Golden Age of modeling, with kits, decals, and accessories of fantastic quality being available for a dizzying array of subjects, and it's true. Unfortunately, sometimes expectations don't work out. The Martin-Baker M.B.5 has long been a favorite aircraft of mine, a British fighter prototype developed at the end of WW2 that combined excellent performance with an attention to the maintenance aspects that was second to none. William Green calls it "perhaps the best all-around fighter evolved during the war years." Because it didn't go into production, the M.B.5 has never been kitted in 1/72nd by a major manufacturer, although numerous limited run and vacuform kits have appeared over the years.

I've always wanted to build an M.B.5, but have never seen a kit that I felt my limited building skills could do justice to. The best, by far, is the Skybirds '86 kit that came out 30 years ago, one with limited run injection molded parts, a vac canopy, and almost all details in cast metal parts. I bought it at the time, decided it was beyond my capabilities, and packed it away. Therefore, I was thrilled to hear last year that AZmodel was bringing out a new kit of the type. The only kit I had of theirs was their Handley Page Hampden, which is a nice kit that looks quite buildable.

The M.B.5 is a different kettle of fish. To be fair, it says "limited run technology" on the box, which I guess is truth in advertising. Upon opening the box, the box completely fell apart, which isn't a good start. Impressions didn't get better. One would expect the panel lines on the fuselage and wing to be fully formed, instead of the scribing mysteriously disappearing for a quarter inch or so. The

wings and vertical tail are butt joints, which look very tricky, and while the horizontal stabilizers have tabs, the starboard slot looks lower on the fuselage than the port.

But what gets me most is the claim "decalsheet for 3 versions" on the box. What this means is that there is one set of decals (with just national insignia, serial, and prototype marking, which is fine, because that's all the real aircraft wore), and painting instructions for three versions. All three versions actually use the same decals. But two of the three are the original version of the M.B.5, with a fin and rudder first used on the earlier M.B.3; the other has the higher, more familiar tail fitted later. However, the instruction sheet fails to mention the difference between the two tails, and completely ignores the inclusion of a set of smaller horizontal stabilizers to be used with the earlier version. It does mention a hypothetical shipboard tail that's also included but not applicable to any of the decal schemes.

Oh, and the historical section on the instruction sheet is copied word for word from Wikipedia. Maybe I'm too critical. But first impressions linger - the whole kit seems badly thought out and presented. I have little confidence in building it. If I ever do an M.B.5, I'd rather try the Skybirds kit than this one...

Robert

### In This Issue

<b>Dragon Panther Auf. G</b>	<b>3</b>
<b>Spitfire Movie Review:</b>	
<b>Hollywood Miracle</b>	<b>6</b>
<b>Terry Moore Builds B-24s!</b>	<b>8</b>
<b>The Art of the Illusion</b>	<b>10</b>
<b>Four Easy Steps to Fine-Line</b>	
<b>Airbrushing</b>	<b>12</b>
<b>M40 Gun Motor Carriage</b>	<b>13</b>
<b>Takom Krupp 420mm</b>	
<b>Big Bertha</b>	<b>15</b>

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**Public Disclaimers, Information, and Appeals for Help**

This is the official publication of the Seattle Chapter, IPMS-USA. As such, it serves as the voice for our Chapter, and depends largely upon the generous contributions of our members for articles, comments, club news, and anything else involving plastic scale modeling and associated subjects. Our meetings are generally held on the second Saturday of each month, (see below for actual meeting dates), at the **North Bellevue Community/Senior Center, 4063-148th Ave NE**, in Bellevue. See the back page for a map. Our meetings begin at 10:00 AM, except as noted, and usually last for two to three hours. Our meetings are very informal, and are open to any interested modeler, regardless of interests. Modelers are encouraged to bring their models to the meetings. Subscriptions to the newsletter are included with the Chapter dues. Dues are \$15 per annum, and may be paid to Twyla Birkbeck, our Treasurer. (See address above). We also highly recommend our members join and support IPMS-USA, the national organization. See below for form. Any of the members listed above will gladly assist you with further information about the Chapter or Society.

The views and opinions expressed in this newsletter are those of the individual writers, and do not constitute the official position of the Chapter or IPMS-USA. You are encouraged to submit any material for this newsletter to the editor. He will gladly work with you and see that your material is put into print and included in the newsletter, no matter your level of writing experience or computer expertise. The newsletter is currently being edited using a PC, and PageMaker 6.5. Any Word, WordPerfect, or text document for the PC would be suitable for publication. Please do not embed photos or graphics in the text file. Photos and graphics should be submitted as single, separate files. Articles can also be submitted via e-mail, to the editor's address above. Deadline for submission of articles is generally twelve days prior to the next meeting - earlier would be appreciated! Please call me at 425-885-3671 if you have any questions.

If you use or reprint the material contained in the newsletter, we would appreciate attribution both to the author and the source document. Our newsletter is prepared with one thing in mind; this is information for our members, and all fellow modelers, and is prepared and printed in the newsletter in order to expand the skills and knowledge of those fellow modelers.

**Upcoming Meeting Dates**

The IPMS Seattle 2017 meeting schedule is as follows. All meetings are from **10 AM to 1 PM**, except as indicated. To avoid conflicts with other groups using our meeting facility, we must **NOT** be in the building before our scheduled start times, and **MUST** be finished and have the room restored to its proper layout by our scheduled finish time. We suggest that you keep this information in a readily accessible place.

**August 12**  
**October 14**

**September 9**  
**November 11**

**IPMS/USA MEMBERSHIP FORM**

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## Dragon 1/35th Scale Befels Panther Auf. G

by David Dodge

*[Editor's note – this abridged version has been edited for use in our newsletter – mostly by removing the specific build notes. You can see the full article posted in the 'Reviews' section of the IPMS USA website or on our own IPMS Seattle website.]*

Dragon has recently released the Befels (Command) version of the Panther Auf. G. This kit is a fairly extensively equipped with many parts trees, clear, photo-etch and wire cables. Though externally identifiable at distance as a Panther, there are subtle details close up that identify this as a special version of the venerable combat variant. Germany has a history of command versions of many of their combat vehicles, primarily equipped with extra radios and operators for long range and multi command and control networks. This kit brings into the fold another variant of one of those vehicles.

The Panther version of the Panzerbefelswagen was primarily derived from vehicles returned for repair or refit. From May '43 to February '45, up to 329 Panther Auf. A and Auf. G vehicles were converted to Panzerbefelswagen used primarily as Battalion and Regimental Command vehicles as well as air ground liaison. The main differences in the Befels variants was the retention of the KwK42 L/70 main gun. The coaxial machinegun and ammo were removed. An additional radio was installed, with a corresponding reduction in main gun ammo stowage. The FuG5 radio was in the turret and a FuG7 or FuG8 in the hull up front next to the driver.



The kit has 12 individual poly bags containing 21 soft grey sprues. Tracks are DS and separately bagged. Several consisted of individual antennas including the reversed conical elements, PE parts, cables, clear parts, and decals. The parts were tightly packed but no parts appeared to be warped including the very fine antennas. It was evident that this kit consisted of parts for multiple versions of other Panthers as at least three gun mantlets were included as well as more than the required road wheel arms and other suspension components. I counted parts and estimated that there were around 458 parts included. You will have a lot of leftover parts for the parts bin as you will not use them all. There was an eight-page instruction sheet printed in blue and black on white paper. There are 17 assembly steps with multiple sub component assembly steps like for road wheels suspension components, pioneer tools, deck components and such.

There were four "E" sprues with suspension components, two "A" sprues with back deck pieces, and the rest of the sprues are singles that cover multiple assembly steps. There are two braided steel cables that are for the coiled up cable loop and a 400mm cable for the two tow cables. This must be cut in half, but use caution and have a sharp pair of wire cutters since the cable will crush and flatten out, if you can't cut it through in one motion. There are two PE sheets. One is for the back deck grills and one for cupula parts (that are for an optional variant)

There is a small decal sheet printed by Cartograph/Italy, but only two color schemes, one for an unknown unit in Germany 1945 and the other for the Fallschirm Panzer Division "Herman Goering" in Germany 1944. The colors are DunkelGelb, RedBrown, and Khaki Green. Paints called out are GSI Creos Aqueous Hobby Color, Mr Colour, and Model Master.

The instructions are generally very good and any unknown parts called out by number but unidentified by sprue callout can be located from the sprue layouts on the first page. There are a multitude of "Options". Many suspension, back deck, hull, and turret assemblies

have variations using alternate parts. These are called out by a blue and white double arrow symbol on the sheet. Pay close attention to those as it matters when you remove parts since many of the parts are very close in appearance but with subtle differences. Not all bumper springs are the same. If you “Tag and Bag” components for organizing your builds, these callouts will help with the build, since you will already have the correct parts cut off the sprues for assembly.



Things to consider before building:

- The suspension of the Panther has the left side suspension arms facing forward and the right side facing to the rear (like most modern armor); the road wheel arms look almost identical. If you remove the arms from the sprues, mark them with a sharpie with dots so you don't intermix them. There are bump stops for each one and they won't line up if the sides are reversed and the suspension will not be able to be leveled.
- The torsion bars of the road wheel arms are anchored in the opposite side hull by a special cap arm that spans the interior of the hull and anchors on the adjacent housing. Parts E1 and E8 are the culprits so pay close attention to the smaller diagram in Step 2 as these show positioning of the arms and anchors. Be especially careful of which side of the diagram is forward. Step 2 is critical for getting the suspension to look right
- The Road wheels are somewhat difficult in the fact that they are separated by inner pairs and outer pairs. The inner pairs ride inside the track guides and the outer pairs ride outside the track guides. The inner wheels of the outer pairs have to be placed first, then the inner pairs and then last the outer wheels of the outer pairs. These essentially interleave and if you put the first set of outer wheels together first, you can't get the inner pair inside. Leave the outer pair wheels off entirely, paint them separately as once the wheels are installed, there are places you cannot get access to for painting, even though you can see them. These are a tight fit. I can't imagine the actual crews doing maintenance on this setup. You would have to pull the adjacent wheels in order to get to the inner pair to fix bearings or replace damaged wheels. So put Part E12 inside, then put Assembly “B” on, then leave Part E10 off for painting and later assembly after painting and before the track is placed.
- There are three antennas in this variant. One whip on the forward back deck, one whip on the turret, and the reversed conical element antenna can be either placed on the back deck or on the right rear stowage box with the longer antenna poles. These all have a selection for antenna and mount or some sort of cap. Make those choices early.

Primer and Pre-Shade: I started by applying a primer consisting of Krylon Color Master with Durable ColorMax Technology rattlecan (Flat Black) paint. This was recommended to me by our club Vice President for simplicity, great thin coverage and quick drying time. I left it to dry overnight to make sure it was fully cured.

Airbrushing Mission Models Acrylics with a Harder and Steenbeck Infinity Airbrush: Since my return to modeling I have been somewhat handicapped by lack of a good airbrushing setup and a good air compressor. So it was time to splurge. I had researched many airbrushes on YouTube and narrowed down my search to a couple and decided to go with the Harder and Steenbeck Infinity. It comes with two nozzles and needles (.15mm and, 4mm) and has a quick clear feature that allows you to set rear travel limits on the double action trigger so you have finer control of the paint for fine work, but you can release the travel stop to clear the tip and then push a detent to return to the previously set stop.

This was my first foray painting with a new airbrush and my second foray with acrylics. However the paint was different than the first encounter. The Mission Models Paint (<https://www.missionmodelsus.com/>) is much different than the Vallejo. The paint is very thick and requires a different thinning ratio. They recommend 2-3 drops of thinner to 10 drops of paint and also a Polyurethane intermix agent that acts like a reducer (1-2 drops to 10 drops paint). In a nutshell, even though this is an acrylic paint, it almost sprays just like Model Master Enamel. Has very good coverage and is more opaque than other acrylics. The paint sprays with almost no tip dry and the paint seems to just go on and on. I think I completely coated the Panther with 30 drops of paint (hull and turret). So once I started, I realized the .15mm tip was in and I changed to the .4mm tip to get the faster coverage after the first paint cup finished (doh!). You should also use their thinner and polymix as they are designed to work together. Their thinner is more active, so you don't need as much compared to other manufacturers.

Camouflage: I started with covering the Krylon primer with the Mission Models Paint (MMP) DunkelGelb MMP-011. Once complete I let it dry overnight. My first attempt at starting the camouflage was to use the MMP Olivgrun MMP-009 and hand spray the pattern.

That was not good judgment on my part since this particular vehicle actually had a very sharp color demarcation with little overspray, and my lack of experience with the new airbrush was less than desired. I resprayed the Dunkelgelb and dropped back five yards and punted. I reassessed the desired result and decided that I needed to mask. Instead of using tape, I got a tip to use "Panzer Putty" ([www.MXpression.com](http://www.MXpression.com)). This is interesting stuff. It is very like Silly Putty, but does not leave a residue and does not stick to anything but itself. I let gravity work the draping and did some shaping to get the pattern I wanted and then just sprayed the coat. Once the green was down and dry, I tackled the Rotbraun MMP-012. The instructions as a painting guide was incomplete. There are no right side views or top views, so I used the box art as a right side guide and just winged it for the top. I tried to balance the distribution so all three colors were close to being evenly spread across the surface area.

Decals: I let the paint dry and then sprayed Pledge Floor Care-Multi Surface Finish (Long lasting shine and Acrylic Protection) more commonly referred to as "Future". This was the decal prep coat to give the decals a good surface to adhere to the model. That dried overnight and then the decals went on and I used Micro Set/Micro Sol Red/blue two part system to adhere and conform the decals to some of the irregular surfaces. I then added another coat later to seal the decals and to ensure a glossy surface for the washes and other weathering treatments.

I painted the pioneer tools and other equipment before applying any washes and things to make it look grimy. This step actually was done between the "Future" coats.

Weathering: After the final gloss coat, I applied Vallejo Model Air 71.027 Light Brown as a dust coat to dull some of the gloss finish and to tone down the colors a bit. This also put a surface that would take some filters more easily. A final matt coating (Vallejo 70.520) was used to get the last traces of the gloss finish. This pretty much finished the kit.

This Panther variant is an interesting addition to any enthusiast's collection. The fit is precise, mostly clean from flash and if present is very minimal. The sprues are very prevalent and will need to be cleaned from most parts. This is problematic for the finer parts like the antennas and the locking pins and some of the smaller detailed parts. A sharp No. 11 blade is essential. Paying close attention to the instructions will help make part and build decisions before you have the wrong combinations of parts removed from the trees. I had a fun time building this kit because the engineering is so precise it makes it essential that I put the time into this kit out of respect for the engineering effort that went into its production. This kit is appropriate for intermediate to advanced builders but since the fit is not complicated, advanced novices could also build this kit with help from an experienced modeler.

I would like to thank Dragon Models for providing this kit for review, and to IPMS USA for giving me the opportunity to review it.



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## Hurricane Spitfire Movie Review - [Hollywood] Miracle

by Scott Kruize

The Dunkirk evacuation story is found everywhere in the mass of literature about modern world history. I have reference to it on many books of my Bookshelf: *Sea War 1939-1945* by Janusz Piekalkiewicz; Heinze Gudarian's autobiographical *Panzer Leader*; Peter Townsend's *Duel of Eagles*; and Winston Churchill's *Their Finest Hour* volume from his Second World War history.

The latter book has a whole chapter devoted to 'The Deliverance of Dunkirk' and includes the following statistics: 861 Allied ships joined, including 693 small craft. Of these, 243 were sunk during 'Operation Dynamo'. Nevertheless, those nine days saw the rescue of 338,226 men. 112 thousand of them were French, and while most returned to France to fight the last losing battles against the Nazi juggernaut there, some stayed in England to form the core of the Free French army.

Overhead, hundreds of warplanes dueled. The victorious (till then), but badly-worn German Air Force was ordered to annihilate the trapped troops and the evacuation fleet. The Royal Air Force desperately contested the attempt.

The battle marked "Spitfire début", actually the title of a World War II air history I read. Only Hurricanes were sent to fight the battle of France. Sturdy as they were, they had serviceability issues enough at the improvised, rough French airfields. Spitfires would have broken their "knock-kneed" undercarriages, right and left. But they were hoarded, back in Britain, until the desperate days of the evacuation.

In his *History of the Luftwaffe*, John Killen observes:

"Dunkirk was undoubtedly a bitter blow to Hermann Goering, but it came as no surprise to the more cautious Kesselring [*commander of the three air corps that fought this battle-SHK*], who had foreseen the failure of the Luftwaffe if used as decisive strategic weapon against shipping and harbor installations. Operating under difficult conditions, and already seriously weakened by the intensive fighting, it had been confronted for the first time over Dunkirk by a determined and skillful enemy air force—and found wanting. The Supermarine Spitfire had proved itself to be a match for the Messerschmitt Bf 109; the Boulton-Paul Defiant, new British two-seater turret fighter, had shown itself to be an excellent destroyer of bombers; and, given certain advantages of height, the sturdy Hawker Hurricane had outflown everything the Luftwaffe put into the air. Since 10th of May the Royal Air Force had lost a thousand aircraft, but twice that number of German aircraft had been shot down."

Afterwards, Churchill commented in Parliament: "We must be very careful not to assign to this deliverance the attributes of a victory. Wars are not won by evacuations. But there was a victory inside this deliverance, which should be noted...". And it's hard to imagine how Great Britain could've carried on trying to fight the war at all, back in late 1940, had the entire Army been lost...

Nine days and nights of desperate fighting...two large air forces over a small port, with nearly a thousand ships of every size coming in and out, losing a quarter of their number trying to carry away a third of a million men, with fifteen percent of them lost: bombed, strafed, and drowned. On the busiest day, in the teeth of the blockade of a very determined Wehrmacht, more than 68,000 men crammed into the ships large and small, and were taken off to southern England.

You can't make a movie about this. No matter how big your budget, how much of a 'cast of thousands' you're able to hire, how prolific your CGI artists are, how industrious your cinematographers, and how skillful your editor, you can't possibly make a comprehensive Hollywood movie out of all this.

Oh, you can make a documentary. It's been done. My wife Sandy and I watched the BBC's Thames Production *World at War*, narrated by Sir Laurence Olivier. Of course one episode of the documentary was about the Dunkirk evacuation. We saw aerial views of the crowded southern English ports, with the horde of small ships coming in and out, and the enormous queues of desperate but patient soldiers on the beaches, filing their way into the surf for pickup and safety. There were snippets of the aerial combats overhead. The whole was as well done as any documentary of the war could be. The fact remains there's no way to do full justice to the enormity of the event.

This new movie *Dunkirk* hints at this epic sweep of events, but doesn't attempt the impossible task of bringing it all to the screen. Instead, it tells three small stories. There's the young infantryman, whose squad fails to retreat fast enough from better-armed pursuing German infantry. There's a fishing boat owner back in England, no military skill or knowledge of naval warfare, who only knows

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countrymen of his need rescuing from France. His two sons board, and they head off across the Channel. They're overflown by a Royal Air Force fighter pilot who sets out with his flight leader and a squadron mate, in a 'vic' of three which doesn't make it intact all the way to Dunkirk.

SEMI-SPOILER ALERT: these three key people and their individual stories gradually come together, as the movie progresses, with several foreshadowing 'clues', until finally we see what I'll call 'The Incident'. A small incident, to be sure, in the overall huge drama, but critical to these three...

As a member of the newsgroup on Yahoo, I got an e-mail with a link to an early review of this movie. I read it but didn't get much out of it. After seeing the movie I went back and reread it, and then understood more of what the critic had been trying to explain.

Christopher Nolan was one of this movie's producers, and its director, and screenplay writer. With his editor's skill added, little 'vignettes' play in a variety of order and duration in time, and points of view, leading up to and then showing 'The Incident'. It's a strange and creative way to tell the story. I was a bit baffled while I watched, but as the movie got past 'The Incident' and wound down to a conclusion—and most especially as I've thought about the movie since—I've grown to appreciate the creativity. I say to all potential moviegoers: pay close attention, and 'go with the flow'...

I can't tell if your Significant Other will enjoy seeing the movie with you, but be aware that my wife knows only such combat history as I inflict on her, and she liked it. She says the movie shows how individual people can 'get outside themselves' and even ordinary and 'small' as they are, can do good things to help their fellow human beings. She gave it her highest compliment for a war drama, saying that it was done as well as 'Gettysburg'.

Since my readers here are modelers, knowledgeable and quite sophisticated about history and technology, permit comments on the aerial fighting sequences. The people who did them clearly did their homework: the useless 'vic' of three the RAF used...the tendency of 'green' combat pilots to gawp at distracting irrelevancies when they should be guarding their own tails...just how short-ranged British fighters were at this time. All there, all accurate. On the other hand, the choice of actor to play the central pilot figure was odd: the actor's twice as old as the kids who actually flew fighters back then. I guess he was picked because he'd worked with Mr. Nolan. Then there's the equipping of his aircraft with 'Hollywood guns'. You know, like the Sundance Kid's six-guns, or Arnold Schwarzenegger's submachine guns...they can fire an almost infinite number of bullets without being reloaded. In Real Life, the eight-machine-gun battery of the Spitfire Mark I fired for only about 12 seconds.

But the last quirk was the most conspicuous. Modern high-performance sailplanes are able to reach glide ratios of even 70:1. That is: they can go 70 feet for each foot of altitude lost. That's with a wing loading of about 13 pounds per square foot. So I would've thought that an all-metal warplane like the Spitfire, with its wing loading of 24 pounds per square foot, would do much less. Silly me! They can do ANYTHING in Hollywood! See for yourself what happens to our hero pilot in his Spitfire, at the end of 'The Incident'. That's all I'll say here...except: Enjoy the movie!



*Sorry: neither model accurately represents fighters shown in the movie. I don't have a built Mark I Spitfire right now, only in my unbuilt stash. And the moviemakers didn't have an actual Bf 109E, but had to make do with one of the Spanish 'clones' we first saw in The Battle of Britain movie. ~ SHK*

## Terry Moore Builds B-24s!

by Terry D. Moore

After having built a half dozen or so Monogram/Revell B-17s over the last few decades, I found it time to take on the "other" American heavy, the Consolidated B-24. The Monogram/Revell B-24 was released later than the B-17 kit but was issued in two variants, the B-24D and B-24J. The kit is considerably simpler than modern kits with hundreds (and hundreds) of parts. It has raised panel lines and other simplified details. The weakest part of the J version are the nose and tail turrets, due to molding limitations of the time - they are molded in front and back halves, leaving a seam where there should be none. The other major issue has to deal with the bomb bay doors. If you choose to build the model with the closed bomb door option you're going to have a problem - they don't fit very well! The model also requires a prodigious amount of weight in the nose, the bane of tricycle gear model aircraft everywhere. Another issue with the kit is that the wing to fuselage fit isn't that great, requiring a 10 thou shim on the lower half of the wing to make the wings fit better.

One of the B-24 models was a commission build and since I had multiple B-24s available I decided that I would build one for myself as well. The commission was a nearly OOB build and the one I built for me was a collection of mostly garage sale half-builts (three to make one).

The B-24 kit is a very straightforward build out of the box. The only additional details I added to the model were seat belts and throttle controls in the cockpit. The commission build had open waist gun positions so I added some minor details to enhance the area. The engine nacelles required a considerable amount of work and a lot of putty to fill some rather nasty seams. As mentioned earlier, the kit nose and tail turrets are practically useless, so I substituted them with Koster B-24 turret replacement set for the commission model. As usual, the Koster vac bits are flawless, but I had issues with the resin turret interiors and had to do some scratch building to enhance the details. The B-24 I built for myself had all turrets removed so I had to fill all the holes.

Painting the B-24 is a challenge as the wingspan is greater than the width of my booth so I had to paint the models with the wings off and then attach them after painting. Only a minimal amount of putty was needed and it was rather easy to touch up.

The OD and grey B-24 was an 8th AF, 464th BG B-24, named "The Green Hornet". I had an artist create the nose art for me and I was able to source the remainder of the markings from my "box O' decals". I used the 30-year-old kit decals for the national insignia and they worked just fine with Solva-Set. The natural metal B-24 was cobbled together from multiple pre built kit parts, so I had to remove old decals and some paint. I filled in the turrets and the rest was a straight forward build and paint. I used a variety of Alclads for the finish and the red/yellow markings are Tamiya paint. The model is painted in the colors of the All Weather Flying Center which flew a variety of aircraft after the war for weather research.





## The “Art of the Illusion” and Our Subconscious

by John DeRosia

There is a subconscious mental game our mind does called the ‘Art of the Illusion’ as we not only work on models, but especially when we view them. This subconscious game works in viewing models built by others as well as ones we have made. ‘Completed’ models fool the mind the best.

Okay John, just what are you talking about? What is this thing you call the ‘Art of the Illusion’?

Let me see if I can provide a few examples. I have randomly used model pictures from our very own Seattle IPMS monthly meetings from the show and tell tables we display our works on.

Example 1: Let’s look at an airplane model. The brain does not distinguish as much about the quality of the completed model as it does ‘filling in items not apparent’. First of all - can you visualize the airplane flying? Taking off or landing? Oh - the flaps, rudder seem to be moving in our minds. And just listen to that sound of that beautiful aircraft engine running. Well, well - now we actually seem to be sitting in the pilot’s seat in front of all those working instruments. Rats - we see some oil stains and wonder where that is coming from outside the airplane. And of course - without ever seeing any internal structure - we can see the ribs, frames, cables, and tons of details inside the fuselage and wings. Do you see what I mean about the ‘Art of the Illusion’? The ‘fill-in-the-blanks’ in our subconscious comes into play from all that we have read about airplanes, movies we have seen, airshows attended, talking to others about airplanes and so forth. Any model airplane falls into this illusion – give it a test. Look at Figure 1 and what is it that you don’t physically see but ‘experience’ in your mind?



Example 2: Tanks for reading about this one. Nothing like armor on our display tables. Not only are the tank models great - but now our mind is taking us to another mental illusion. I would bet most guys like me can first of all hear the engine rumble and feel the vibrations of this vehicle moving right by us on the street. Yes - see that gun barrel moving up and down? And whatever the era of that tank model is - we can see it plowing through the fields, the jungles, the snow, the streams and so on. Wow - that mud is getting on everything! Oh, shoot - a road wheel just came off! Now we can envision the heavy work ahead for the crew - and you are one of them. Not only is the heat oppressive inside the tank, but we are also very nervous about the enemy lurking just on the other side of the hill. Are you feeling the way this ‘Art of the Illusion’ is working in your brain? A lot of it you cannot control...so there! Enjoy the mental ride as you keep looking at Figure 2.

Example 3: Ships and subs. There is just something about seeing a water vessel. The mystique of the seas I suppose. Our brain automatically kicks in with a respect for this sub in Figure 3 plowing along in the open ocean. The brain is trying to calculate the ‘small sub’ compared to the huge immeasurable vast size of the seas we will be roaming around in. Of course we already have it in our minds we most likely will be underwater at hundreds of feet down for maybe two or three months without surfacing. We keep thinking “will I complete this journey in a metal tub and not go bonkers?” We hope the selection process and training will keep being us in line. Oh, and the cramped spaces. Everywhere on a sub. Did you almost hit your head going through that small hatch? Amazing how very little

vibration you can feel in these modern subs. Just great - the Captain just announced 'Battle Stations"! We can feel our heart rate going through the roof. And look at all those missile tubes. Just the feeling of this immense power is beyond description perhaps.

Do you see what looking at a model causes? The very model you are viewing causes the 'Art of the Illusion' to happen. I would easily say that 89.999% of what we imagine looking at a model has no physical part of the models. The sub has no interior - yet we were inside of it. We were up in the sub's sail watching the water rush by. The tank hatches were glued shut and the turret does not revolve, nor do the wheels and track turn - but we knew it all worked. And the airplane - we even smelled the 'jet fuel'. What? - There were no engines in the models but we 'saw them' and heard them. Our imaginations are so spectacular.

Models! Keep having fun with them and causing that endless imagination in the mind - the 'Art of the Illusion'.



Figure 2: The Art of the Illusion



Figure 3: The Art of the Illusion

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## Four Easy Steps to Fine-Line Airbrushing

by John Miller

Even experienced modelers can sometimes have difficulties getting fine-line performance from their airbrushes. This is due, in part, to the multiple variables such as air pressure, paint dilution, and working distance that have to be balanced against each other in order to “dial in” an airbrush for fine-line work. In an attempt to take some of the guessing out of this process I’d like to suggest the following four easy steps to fine-line airbrushing happiness.

### 1) Dial in 10 psi:

Fine-line airbrushing requires very low air pressures. As a starting point reduce the air pressure to ~10 psi. Most airbrush compressor regulators can be dialed down to 10 psi, however this is about the limit of their performance. In addition, a compressor with a tank is best used for fine-line work, as it won’t have the pressure pulsations common to non-tanked compressors.

### 2) Set the Airbrush Lever for ~1/4 or less Travel:

Most airbrushes have a lever limiter function that can be used to set the lever travel at a specific point. A good starting place for fine-line work is about 1/4 the total lever travel. To estimate ~1/4 travel, actuate your airbrush lever from full forward (zero - no paint) to all the way back (full open - lots of paint). The center point of this travel is ~ 1/2 open. Halve that again to get ~1/4 travel. Screw in the limiter (usually on the tail of the brush) until when the lever is pulled back it stops at ~1/4 the total distance. I find that the best fine-line result is usually obtained with more like 1/6 or even 1/8 lever travel but 1/4 is a good starting point.

### 3) Dilute Acrylic Paints Sufficiently for Fine-Line Work:

This could be the topic of a multi-volume book or at least a major motion picture. With so many paints utilizing so many different chemistries, it’s difficult to make generalized suggestions but I’m willing to try. For many acrylics I find 20-30% paint, 70-80% thinner is a good starting point for fine-line dilution. This ratio of ~1:4 should give you a viscosity similar to thin milk (1% not whole - seriously). I might decrease this to 10-15% paint depending on the brand of paint and if I’m doing micro-fine (less than 1mm) work. To decrease the inevitable tip-dry associated with fine-line spraying, the inclusion of a wetting agent or flow enhancer to the thinner being used is good idea. Most acrylic paints respond well to the addition of Liquitex “Flow Aid” to ~5% by volume.

### 4) Find the Ideal Working Distance:

Before you start to shoot, it’s a good idea to set up a micro-bush soaking in whatever thinner you’ll be using. This should be close at hand so you can quickly and easily wipe the tip of the brush every one to two minutes while spraying. No matter what type of paint you’re shooting, tip-dry will be an issue to some degree.

With 10 psi dialed in on the ye olde compressor, the lever limiter set for ~1/4 travel (or a bit less), and a fine-line dilution of paint in the paint cup, it’s time to determine the ideal working distance for this combination of pressure, travel, and dilution. Start by spraying lines on a scrap piece of cardboard or sheet plastic while moving the airbrush closer than farther away from the surface. Too far from the surface and the pattern is diffuse: too close and the paint runs and/or “spiders.” By trial and error find that distance that gives you a nice controlled line from ~2-3mm wide. This is the ideal working distance. If you want a thinner line, start by decreasing the lever travel with the limiter function than re-test for the best working distance. If you want to shoot micro-fine lines, you’ll probably need to decrease the air pressure to 5-7 psi which is best accomplished using an in-line air valve (or similar) and increase the paint dilution by adding thinner to the paint cup.

In general the working distance will get smaller (or shorter) as the air pressure is lowered. Likewise, as the air pressure is lowered, the paint will have to be thinned more to achieve atomization at the nozzle. By learning to balance these variables (along with lever travel) and throwing a fair amount of practice into the mix, you’ll become adept at achieving more reliable fine-line performance from your airbrush.

### Don’t Run It Dry

This recommendation is based on the simple idea that wet paint is easier to clean than is dry paint. Before adding paint to the airbrush paint cup, spray a little thinner through the brush.

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By doing so the internal components (needle/nozzle) become wet with thinner before they are exposed to paint. Much like a bristle brush that's best cared for by first dipping it into thinner before paint, wetting the internals of your airbrush decreases the amount of paint that sticks to these components making clean up easier. Likewise, when spraying keep the internal components of the airbrush wet by never running it dry. Try and resist the temptation to empty that last ¼ cup of paint into the trash can till nothing but the hiss of air can be heard passing through the brush. At that point, paint is drying onto the internals of your brush and will require additional effort to remove. Try and always leave a small amount of paint in the bottom of the cup or in other words, don't run it dry.

#### Clean Up with Three Soaks:

When you're done spraying, pour the remaining paint out and wipe the inside of the cup with a clean tissue or paper towel. Add thinner to the cup and loosen any dry paint from the cup wall with a micro brush. If there are particles of dried paint in the cup, it is best to pour them out. Don't force them through the nozzle by spraying it through the brush. After a quick wipe with a towel, add thinner to the cup, vigorously move the airbrush action (trigger, lever, or button) back and forth multiple times to work thinner into the nozzle. Spray some of the dirty thinner through the brush and if need be, stop and add more thinner so you don't run the brush dry. With thinner in the cup, place the brush in a holder and allow it to soak for 15 minutes then spray this through the brush. Add more thinner, work the action, and set aside for another 15 minutes (#2). Repeat this process until the brush is clean: usually three to four cycles. If the paint has a specific cleaning solution as does Vallejo and LifeColor, I will switch to this after one to two cycles with the appropriate thinner. As a last step, I spray a little Tamiya Airbrush Cleaner (#87089) through the brush and call it done.

Well, I hope you found something helpful there. If you have questions drop me a line at [john@modelpaintsol.com](mailto:john@modelpaintsol.com)

Now go paint something!

[Thanks to Scott Kruize for his help in arranging for this article to be published. – ED]

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## **Book Review: *M40 Gun Motor Carriage and M43 Howitzer Motor Carriage in WWII and Korea*, by David Doyle**

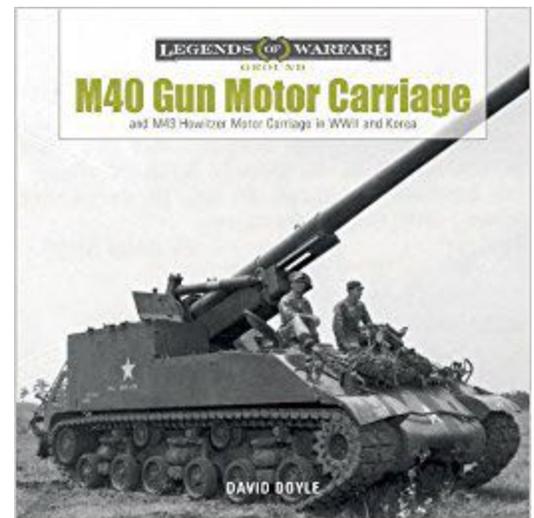
**reviewed by Eric Christianson**

DavidDoyleBooks.com (Schiffer Publishing) out of Memphis TN, has just announced a new offering in the widely regarded *Legends of Ground Warfare* series, called *M40 Gun Motor Carriage and M43 Howitzer Motor Carriage in WWII and Korea*, by popular author David Doyle. Anyone familiar with Mr. Doyle's previous work will recognize this authoritative combination, and this latest release won't disappoint.

*M40 Gun Motor Carriage* comes as a hardcover, 9.5-inch square book, following the format of Mr. Doyle's previous 'Legends' volumes, containing high-resolution images printed on heavy, high quality stock paper. Like most of his other works, Mr. Doyle's M40 is reasonably priced, and a great value.

The book opens with a table of contents and a brief, two-page introduction to the various vehicles covered in the book, as well as a comparison chart of the two main types; the M40 155mm Self-Propelled Gun (SPG), and the M43 8-in. Self-Propelled Howitzer (SPH).

From there, the book moves through several chapters on the development of both weapons before moving on to how each was used in combat. While the book is loaded with images throughout, Doyle ends with two chapters devoted to excellent detailed pictures of existing vehicles that will surely come in handy to modelers of these impressive weapons.



Each page in the entire book contains large-format, black & white or color images, each with a detailed caption that covers setting, unusual equipment and/or markings found.

I've been reading books and perusing the Internet for some twenty-five years and have yet to encounter the majority of the photographs contained in this book. Mr. Doyle has been able to gain access to, and work with, resources that together have produced quite a startling collection of images for this venerable 1950s workhorse of American self-propelled artillery. For example, even though only a single M40 was used in combat in the ETO, there are several images of that deployment, including one behind a crashed Ju 87 Stuka!



Sections include:

Development of the T83 (M40)

Development of the T30 (M40 Cargo Carrier – short lived)

Development of the T89 (M43)

Further Developments (T94 250mm Mortar Carrier, Deep Fording and Armored Cab versions – all short lived)

The M40 and M43 In-Service

M40 In Detail

M43 In Detail

I highly recommend this latest offering from David Doyle by Schiffer Publishing. The images contained in this book are of the highest quality - crisp, in focus, and carefully selected to be useful for modelers and historians alike. The research is top-notch throughout, and a bargain at the price offered. Along with his previous releases, Mr. Doyle's M40 Gun Motor Carriage and M43 Howitzer Motor Carriage belongs on any armor modeler's book shelf.

I would like to thank DavidDoyleBooks.com for this review copy, and IPMS/USA for the opportunity to review this book.

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ISBN #: 978-0-7643-5402-1

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Other Publication Information: Hard cover, 112-pp, 9 x 9", 209 color and B&W photos

Product Web Page: <http://daviddoylebooks.com/Detail-LOW-2001.htm>



## Takom 1/35th Scale Krupp 420mm Big Bertha

by Bob LaBouy

Instruction Sheet Notes: Big Bertha ('Dicke Berta') was the name given to the massive 42cm (16.5 in.) howitzer designed for the German Army after the end of the Russo-Japanese War of 1904. Weighing in at 43 tons, they were nicknamed for the wife of Gustav Krupp, owner of the Krupp arms works. These giant howitzers, with a firing of 15km, were first used by Germany as they advanced through Belgium in 1914. Transported in pieces, moved by rail, and assembled in place, their 820kg shells proved devastating against the Belgian forts, but were somewhat less effective against the sturdier French forts. These howitzers were also used as siege weapons on the eastern front. By 1917, they were less accurate due to wear on the barrels, and were extremely vulnerable to counter battery fire once located by the enemy, and were decommissioned after the battle of Verdun.



A Very Brief History: This cannon, which saw limited use in both World War I and II (at the Battle of Sevastopol in the Far East), was a major development in the use of howitzers.

The overall size and engineering of these guns resulted in two of them being shipped to the Aberdeen Proving Grounds, where they were studied at some length, though they were eventually scrapped. I urge those interested in this aspect of military history to pick up this great kit.

Key specifications include:

No. built: 12  
Weight: 47 tons (97,000 lbs.)  
Length: 19.3 ft. (5.9 m)  
Shell weight: 1,807 lbs. (820 kg)  
Caliber: 16.5 inches (420 mm)  
Elevation: 40° - 75°  
Muzzle velocity: 1,312 ft/s (400 m/s)  
Effective range: 7.8 miles (12 km)

The Takom Kit and Building the 'Big Bertha':

Building this kit was a pleasant experience, as it added to my meager knowledge of field artillery, and comparing it to my few prior artillery pieces certainly makes for an interesting comparison. It's a relatively quick build, requiring approximately 30 hours construction time and approximately another three-to-four for painting and six for weathering and dry brushing. It's a straightforward and simple build.

One of the aspects is just how few modelers are aware of the range of Takom's kits - over approximately 60 kits (in 1/16th, 1/35th and 1/144th scales). In general, I find them to be well engineered, with great surface detail and when completed stand up well in comparison to the overall high level quality and finish of the other major competition on the market today. I have also previously finished their Skoda PA-11, T-55 AMV, and the V-2 rocket, tractor and trailer.

Painting and finishing the kit:

As with most of my recent builds, this kit was entirely painted using acrylics, which if for no other reason aside from their 'user friendly' nature I like very much.

My color choices included Mission Models MMP-009 Olivegrün (RAL 6003), with the 'speckled' dots created using MIG's Warm Sand Yellow (MIG-061), Brown Soil (MIG-076), Vallejo's Model Air Concrete (71.131) and Sand Yellow (71.028). And I realize my work doesn't reflect the painting skills of the models I see every month at our meetings, I did create a wash using Winsor & Newton Burnt Sienna (#074), pin washed with Burnt Umber (#076), and finally highlighted the edges and rivets with Naples Yellow Light (#426).

References:

In general, images and information about 'Big Bertha' and somewhat scarce, with a great of repetitious material seemingly copied from article to article. Photographic evidence is even more scarce, with no color images at all known to exist (aside from color images of models, each of which appear to reflect the individual artist's impressions of the big gun itself.

There is one excellent publication entitled *42cm "Big Bertha" and German Siege Artillery of World War I*, an Osprey *New Vanguard* series book, no. 205, written by Marc Romanych and Martin Rupp, published in 2013.

Other key research sites include:

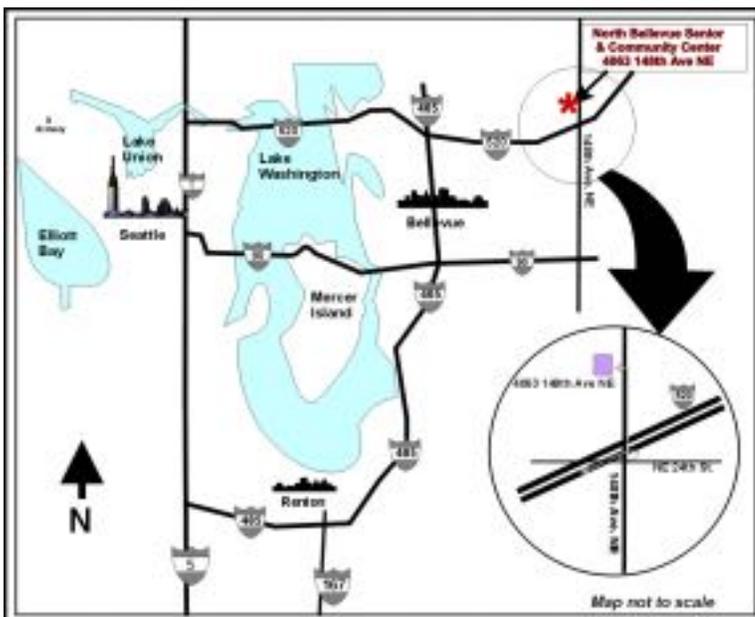
(a) A series of excellent photos of the guns themselves and the supporting equipment is located at: <http://www.kaisersbunker.com/cc/cc16.htm>

(b) Excellent model photos are exhibited at two sites: [http://www.pienoismallit.net/galleria/malli\\_13565/](http://www.pienoismallit.net/galleria/malli_13565/)

And, <http://www.modellversium.de/galerie/25-militaer-ww1/12509-dicke-bertha-.html>

## Meeting Reminder

## Meeting: August 12



### **North Bellevue Community/Senior Center 4063-148th Ave NE, Bellevue**

**Directions to NBCSC:** From Seattle or from I-405, take 520 East to the 148th Ave NE exit. Take the 148th Ave North exit (the second of the two 148th Ave. exits) and continue north on 148th until you reach the Senior Center. The Senior Center will be on your left. The Center itself is not easily visible from the road, but there is a signpost in the median.