IPMS Seattle News
Seattle Chapter IPMS USA
November 2023

Quality vs Quantity

I have just finished possibly one of the worst models I've ever tried to build. The short-run, multi-media kit suffered from a variety of manufacturing, design, and packaging issues.

But the build is finished. It is not perfect, it is not complete, in fact - it has a tear across the paper-thin resin back of the turret you can stick a pencil through. As a review, however, there is a deadline, and it has been posted, warts and all.

But that's ok. In fact, for me, I prefer things this way. Back in school I was on a quarter system, and whenever I had a bad professor, I thought, no worries, I'll be rid of this yahoo in a matter of weeks. And so, it is with models like this.

I think we are all in agreement that we build models to please ourselves, and the result, like the process, is a personal thing. Some of us accept the challenge (and risk) to compete in model contests. Others simply want to get to that next model, to pull those sprues out, to fall asleep at night thinking about color schemes and build options. For me, that next kit is always waiting. Impatiently.

Wagging fingers have scolded; "you should replace the antenna with a sturdier, metal one"; "you should paint those areas that can't be seen"; you should make the propeller spin"; "you should (whatever) so the result is more accurate" – the list is endless. Hmmmm. Nope. Once I feel I am done, this beauty, this proxy child of mine, will be relegated to the big glass case to stay, sandwiched between two other fond memories. Or not so fond. If only seven of the wheels on my eight-wheeled APC actually touch the ground, so be it. There are just too many models yet to build to freak out about it.

I remember, there was a time when my approach was different, when my 'closet-o-unfinished-projects' filled up with my problem children. I got hung up on fixing flaws, or simply passed on starting expensive kits until the time came 'when I knew what the

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hell I was doing'. Those days are long gone. I can now just as easily pull down my 1/48th Tamiya Fairey Swordfish floatplane as I can my old 1/72nd Lindberg Me-410 (that's such a cool model).

Don't call me fearless – I fear all sorts of things. But I am not encumbered by a need for perfection, and the beautiful takeaway from this approach is that, as I build more and more models, I get better and better at building them. Go figure.

In the end, I say: build for yourself, enjoy the heck out of this fantastic hobby, and embrace your relationships with fellow modelers. We are the lucky ones!

Model On! *Eric*

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AR-2 (43105) Special Fire Hose Truck

By Chris Martin

Summary

The kit is an extremely well detailed version of the civilian AR-2 (43105) 6x6 in service as a special fire hose truck. The model has a complete chassis with a full engine, a well detailed cab, and a fire hose box with outstanding exterior detail. The fire hose box itself is empty. So if one wanted to display the doors open an interior would need to be fabricated.

Background

The following is excerpted from the instruction sheet.

The special fire hose truck AR-2 (43105) is designed for mechanized laying of fire hose lines from the fire site to a water source. The vehicle is based on the off-road KAMAZ-43105 6x6 chassis. A specially prepared chassis is fitted with an all-metal body with side and rear doors. Inside, the body is divided into two compartments. The front one houses fire-fighting equipment, while the rear one holds fire hoses. The body is also fitted with adjustable racks that form sections of different sizes. The vehicle operates with a three-man crew, a driver and two operators. The first operator is responsible for controlling the fire hose assembly mechanism, while the second operator monitors the laying out of the hoses. The vehicle carries enough hoses for a line of up to 2.5-kilometers in length. This operator also controls the placement of the hoses in the box after use.

What's in the Box

1 large bag with 6 sprues of light gray plastic.

1 medium-size bag with 1 sprue of clear parts.

2 small bags of clear parts.

I medium-size bag with seven rubber tires.

1 small sheet of decals, with markings for three vehicles

An 8-inch by 11.5-inch instruction booklet with five view images for painting and decal placement for the three vehicles that can be modeled.

The Instructions

The instructions consist of a 32-page glossy 8-inch by 11.5-inch instruction booklet. The front cover provides a brief description/history of the vehicle, including technical data. ICM paint colors and descriptions of the various pictorial symbol/notes are also on this page. Pages 2 thru 5 are parts maps for each of the six sprues. These drawings also note unused parts (suggesting the possibility of other versions of the KAMAZ-43105 vehicle to come). Pages 6 thru 29 are the assembly instructions. The images are sharp and show the assembly as an exploded ¾ view. The final three pages (030 thru 32) have three exterior five view painting guides for the three vehicle decal options provided.

Things to consider before starting

There are four areas where options are available. The front axle can be modeled solidly forward or turned. The cab doors can be modeled opened or closed. The cab itself can be modeled tilted forward or down. And, finally the widows of the hose box can be modeled as clear or painted over (depending on which vehicle is modeled). Decisions on what you want can be made at the correct step in the instructions. But once made cannot be undone.

Another item to watch is mold seams. The instruction drawings are actually very detailed. I noticed that after assembly many of those parts were shown in other steps actually show a separation line along the mold or joint lines. I made the assumption that these separation lines are real and attributed to poorer manufacturing methods. So, before going off and removing all mold and seam lines, check future steps to see if they show up as "real" separation lines. Some things, such as radiator hoses and exhaust pipes I did clean up. But most other items I left the seams alone.

Construction

I start all my builds by scrubbing the sprues with an old toothbrush in warm water and dish soap (Dawn) to remove any residual mold release residue.

Chassis, Engine, and Wheels.

Like most vehicle models, assembly starts with the main chassis. This is made up of two side rails and four cross-members. There is also a winch assembly and rear cross-brace that also act as cross

members. As with any model with separate side rails keeping the frame true and square is critical to a well-fitting kit.

Steps 1 through 3 cover construction of the winch assembly and rear cross-brace. Step 4 adds these items as well as separate cross-members to the right-hand main rail. The leaf springs for the front wheels are molded as part of the side rails, saving the frustration of fitting and alignment. Steps 5 and 6 cover assembly of small parts that are added later. In step 6 check part A33 to make sure all the holes are open. I had to drill out the hole for the engine drive shaft. Step 7 adds the left hand side rail to complete the main chassis frame. Steps 8 thru 10 add parts to the frame such as a rear towing hook, front cross-brace, and the assemblies from Steps 5 and 6. Note that parts A12 and A57 are shown attaching to the wrong side rails. Because of the shape of the attachment points this is pretty obvious during construction.

Steps 11 thru 13 start assembly of the rear suspension. Steps 14 and 15 assemble the front bumper and attach it to the frame. I deviated from the instructions and left the front bumper off until I had painted the completed chassis.

Steps 11 thru 26 cover assembly of the engine. This is a well detailed mini-model, but I was unable to find any reference photos to add any additional detail, such as electrical wires. I deviated slightly from the instructions here as well, preferring to assemble all the steel parts and paint them before attaching the other parts. I also pre-painted those parts either flat black or rubber black for hoses. Step 27 mounts the engine to the frame. Be aware that the engine mounts have triangular notches that fit over the triangular part of the frame mounts, giving a good solid gluing surface. Steps 28 and 29 assembly and mount the radiator. Steps 30 thru 33 assemble and mounts the exhaust pipe to the frame. Once again, I deviated from the instructions leaving off the engine and exhaust until after the chassis was painted. I did attach the radiator though. Leaving off the engine and exhaust until after the chassis is completed and painted required a little bit of careful threading under/over/around parts, but was not difficult.

Steps 34 thru 44 assemble the rear suspension components and attach it to the chassis. Step 45 builds the rear differential and drive-shaft. Note if you are painting the completed chassis then do not attach this as called out in step 50, but wait until the chassis is painted and the exhaust is installed. Leaving this part off makes installation of the exhaust much easier.

The first optional step comes at step 46. The options are split into left-side/right-side configuration. Steps 46 thru 52 left-side build a front axle with the wheels solidly held straight. Steps 46 thru 52 right-side builds a front axle that can be modeled turned to one side or the other. And, with a minor bit of surgery, can be made to function, as I will explain later. Whether modeling the turned wheels glued or functioning the groove in the completed axle (parts F22 and F23) must be filed deeper for the control arms to fit properly. Special care should be used in steps 46 and 47 as parts F20 and F21, while looking the same, are very different.

Steps 53 thru 64 complete the chassis with the addition of fuel tank supports, fuel tanks, battery box, and compressed air cylinders. Note that in step 55, if the wheels are assemble turned then part F13 need to be modified, (either shortened or lengthened). I built the mudguards in Steps 61 and 63, pre-painted them dark red on top and black underneath and left them off until after the chassis was painted. In step 58 pay attention to the clamps on the straps around the compressed air cylinders. The clamps should point down and to the front of the chassis. This requires some dry fitting to make sure they are installed correctly.

To make painting easier I built the majority of the chassis (as well as the box attachment frame (Steps 70 thru 72). There are no paint callouts for any of the chassis or suspension parts, other than the exhaust pipes. Referring to the painting guides it is clear the chassis is black, even though it is not called out. I went a step further and, assuming that fire trucks tend to be well maintained, paint the chassis semi-gloss black. After that had dried, I attached the engine and exhaust pipe. Another deviation I made here was noting the attachment of the mudguards to the chassis. It is by way of two small pins. Looking at them they just cried out to be installed so that they could be broken off multiple times. Therefore, I left them off until near the completion of the build. This turned out to be a good thing. Another caveat I will put forward here is that the compressed air cylinders should also be left off until near the end. They also have a small attachment point and I broke off both during construction and only got them reattached using CA glue.

Steps 65 thru 68 assemble the wheels, while step 69 attaches the completed wheels to the chassis. Although the rear wheels (Steps 65 and 66) and front wheels (Steps 67 and 68) use the same parts, it is critically important to pay attention to the tread pattern. The reason the hubs are shown attaching from opposite sides is so that when the wheels are attached the tread patterns on both side are the same. If this were not done the tires on one-side would end up backward to the tires on the other side. So, pay attention. It is also very important to note that in Step 69 the chassis/frame is bottom up. As with the tires, if the wheels are put on the chassis when it is right side up the tread pattern will be backwards. As an aside, the kit comes with seven tires even though only six are used. My guess is that the seventh tire is for a spare in an upcoming kit.

Fire Hose Box

Steps 70 through 101 assemble the hose box, while step 102 attaches the completed box to the chassis. I deviated a bit here for painting. To ensure things lined up when attaching the box to the chassis I assemble the attaching frame (steps 70 thru 72) and temporarily attached that using white glue to the chassis and painted the whole thing.

Because of the different paint colors, I bounced around a bit to facilitate easier painting. I removed the attaching frame and temporarily glued it to the box floor (step 73). I then painted this gloss black. I then removed the frame to make masking the black underbody later easier. I then assembled the under-floor storage boxes (steps 74, 85, and 86), the ends (Steps 75, 78, and 79), and the sides (steps 80 and 81) attaching them all together as shown in Step 82. To avoid gaps in the under-floor storage boxes I found the installing the inner walls (step 74) and the front and sides to the floor (step 82) first, followed by the front panel (Step 86) and the top (step 85), then cementing the box rear provided a much better “seal”

around the under-floor boxes. After assembling the fire hose box, I sprayed the interior of the open box and underside of the top (part K1) with the top hatch (part L35) attached with sky gray. When that had dried, I installed the windows into the top (Step 83). At this time, I also temporarily attached (again with white glue) the top to the box. I then installed all exterior parts from steps 85 through 101 on the assembled box that would be painted either red or white. I attached part L45 to the top as shown in step 97, but left the clear blue light off until after painting. I also left off the front mud guards (part L18), the wheel chokes (step 88 and their hold-downs (step 89), most of the small silver handles (part L41) and the top railings (part L2). Most of these parts were pre-painted and attached after painting of the main box.

Once all but the small handles and roof rails are attached and painted the completed fire hose box is glued to the chassis.

Cab

Steps 103 thru 141 covers assemble of the cab. In step 106 the option being called out highlights the one serious error in the instructions. Steps 143 and 144 although labeled “Assembly Variant 1” and “Assembly Variant 2” the drawings are identical. Step 143 is in error and should show the cab installed down on the frame. If you have decided to model the cab closed (down on the frame) then install part F18 to the cab floor now and do not use part F52 in step 143. Alternatively, if you want to model the cab tilted forward, I would recommend carefully removing the plastic from where part F18 would attach. Although really a minor nit, I think doing this results in a more realistic look at step 144 where the gear shift goes through the floor into the cab instead of having the gear shift on the engine and a solid cab floor above it.

Once more to facilitate painting I deviated a bit from the assembly instructions. I followed steps 103 through 114, skipping step 113 to leave the seat separate. I also did step 116, 117, and 137 thru 138, but left the glass out of the windows (step 115). In step 138 be careful that the upper bracket of the air intake is below the step at the top of the cab wall or else the roof will not sit properly. I also attached part B29 to the cab roof (part B30). Although only the seats have a paint call-out the entire cab interior (rear wall, roof, floor) (except for the cab front) is neutral gray. After assembly I sprayed the interior and seats neutral gray. When that had dried, I installed the seats onto the cab floor (step 113).

I assemble the dashboard (without the decal) (Step 121) and used white glue to attach it to the cab front (step 122). I also completed the steering wheel (step 124). I then painted the interior of the cab front, dashboard, and steering wheel semi-gloss black. After the paint had dried, and with some judicious dry fitting I found I could install the dash board with the cab front attached to the rest of the cab. I pre-painted the cab underside (part B22) before attaching it as shown in Step 118. I added parts B4 and B5 in step 119 to the cab front before attaching the cab front to the cab (step 123). Once glue on this assembly was dry using blue painters' tape, I masked the rear window and windshield openings from the inside. I also masked the door openings with blue painters' tape. Using white glue, I temporarily attached the cab roof (as shown in step 127). I then painted the cab deep red. After the paint dried completely (I left it overnight) I removed the roof and window and door masks. I then installed the rear window glass (step 115), windshield (step 120), dashboard (step 122), and steering wheel (Step 125) into the cab interior. I also completed steps 119 and 126 by adding the clear parts.

To complete the doors, I first painted the interiors of parts B20 and B21 sky gray, and pr-painted parts B2 and B3 neutral gray. After the interior paint had dried, I painted the exterior of both doors white. I painted the door while they were still attached to the sprue so I had something other than the door itself to hold onto. After the white paint had dried, I applied a coat of gloss varnish to the doors. When this dried, I applied the decals for the version I wanted to model (Vehicle 3, Kharkiv, 2015). After a day I applied a second gloss cost to seal the decals. I then completed the doors as shown in steps 128, 129, and 133, 134. I left the mirrors off until final completion. I modeled one of each type of door. I modeled the driver's side door is open while the passenger's side door is closed. Note that to model the door closed the hinges must be removed from the door.

Final Assembly

Step 142 is the first step in the final option available. The cab can be modeled down on the frame or tilted forward (to show off the engine). It is clear in the instructions that parts F3 and F4 are for the cab tilted and that F46 and F47 are for the cab closed. As noted, earlier step 143 is incorrect. For Step 143, Part F52 SHOULD NOT be installed and the cab should sit flat on the frame. Step 144 IS correct and part F52 IS to be installed.

With the cab mounted I then went back and installed all the small (aka highly breakable and/or losable) parts. This included the handles (parts L41) on the fire hose box and the top railing (part L2), and the mirrors (steps 130, 131, and 135, light lenses (steps 119, and 126), and searchlight and windshield wipers (step 140 and 141) on the cab.

And with that I had a completed model of a very interesting fire truck.

How to Make the Front Wheel Steerable

With some careful surgery and replacement, the front wheels using the right-side option for steps 46 thru 52 can be made to be not just turned, but steerable. To start with replace the outer pin on part F49 (Step 5) with a short length of similar sized stiff wire. Next replace the tie arm pins on parts F20 and F21 with a similar sized wire. Also replace the control arm pin on part F20 with stiff wire. Carefully drill out the ends of part F17 (tie rod) where it goes over the ball joint pins (F20 and F21). Place the ball joints on the balls at the ends of the axle. Put the tie rod over the ball joint pins and make sure the wheels are square to one another. Very carefully place a small drop of thick CA glue on the top of the ball joint pins to "lock" the tie rod down. Be really careful to not cement the tie rod to the ball joint pins or all is for naught.

The next step is to modify the control linkage (part F13). First, drill out the connecting bolt between the short and long arms of the control linkage. Using a very thin razor saw (or similar tool) separate the long arm from the shorter control arm. Saw between the arms so that there is a "knob" on both parts when

done. Drill out the connection at the top of the short arm. Use care to preserve the bolt detail. Glue a short length of stiff wire into the lower hole of the short arm of part F13. Slide the long arm over the wire pin and secure with a small drop of thick CA on top of the wire, being careful not to glue the long arm. Next, insert the wire pin on part F49 into the top of the short arm of part F13 until it is flush with the top of the molded bolt. No glue is need here as the motion is only forward and back, and not side to side. Attach the long arm of part F13 to the control pin on part F20, and you're done.

Painting and Finish

The chassis assembly and suspension, engine and engine parts, fire hose box mounting frame and floor, and the entire F sprue where first primed with Krylon Fusion All-In-One Matte Black paint + primer. All other assemblies were primed with Krylon Fusion All-In-One Matte Glacier Gray paint + primer.

After priming the completed chassis was sprayed with Tamiya Semi-Gloss Black (X-18) as was the box attaching frame and box under floor (part K4). The assembled engine was brush painted Model Master Steel (1420), while the black parts were brush painted Model Master Acryl Flat Black 4768. The assemble exhaust was primed with the Krylon flat black and brush painted with Model Master Enamel Rust 1785. Door handles, window handles, and windshield wipers were brush painted Model Master Enamel Chrome Silver Trim.

The windows on the Fire hose box were masked with painters' tape and Micro Mask. The black under floor was masked off with frog tape.

The white stripe was roughly masked and spray painted with ICMs White (1001) from their Fire Trucks Acrylic Paint Set. After allowing that dry for 24-huors the white stripes were masked and the box was painted ICM Deep Red (1007) also from their Fire Trucks set. To get as bright a white and red as possible it is advisable to use a light-colored primer. I used a light gray, but believe white would have been a better choice. After the red was dry to the touch the white stripe and window masks were removed. The rubber seal around the box windows was painted ICM Rubber Black (1039), again from the ICM Fire Trucks paint set, as were the wheel chocks and engine radiator hoses. Finally, the top rails were primed with Krylon Glacier Gray and brush painted with ICM Aluminum (1023), also from the Fire Truck set.

The interior of the fire hose box and the inner cab door panels were spray painted with Tamiya Sky Grey (XF-19). The cab interior was spray painted Tamiya Neutral Grey (XF-53).

Lenses were brush painted as called out with Model Master Acryl Transparent Red (4630) and Clear Orange (4625). The ICM Fire Truck set supplied the Clear Blue (1012).

Decals

I used the Red and Blue MicroSol/MicroSet products to apply the decals without any problems. Once dry, I gave the entire vehicle a coat of Humbrol Gloss Varnish to seal the decals and give the vehicle a gloss finish.

Conclusion

I recommend this kit for any modeler with a couple of kits under their belt. The build was easy and straight forward with only a couple of easily caught glitches.

By carefully reviewing the assembly sequence laid out in the instructions it is easy to see where sub-assemblies can be created to help with painting and masking. This applies to the three main sub-assemblies of chassis and engine, fire hose box, and cab.

I would like to thank ICM for providing this kit for review, and **IPMS/USA** for giving me the opportunity to build it.

Meng F-4G Phantom II

By Bob LaBouy

A Very Brief History the F-4G

As usual, I look to Wikipedia for some insight into the operation of Wild Weasels (as well as the entire F-4 family of aircraft), at: https://en.wikipedia.org/wiki/McDonnell_Douglas_F-4_Phantom_II

"On 15 August 1990, 24 F-4G Wild Weasel Vs and six RF-4Cs were deployed to Shaikh Isa AB, Bahrain, for Operation Desert Storm. The F-4G was the only aircraft in the USAF inventory equipped for the Suppression of Enemy Air Defenses (SEAD) role, and was needed to protect coalition aircraft from Iraq's extensive air defense system. The RF-4C was the only aircraft equipped with the ultra-long-range KS-127 LOROP (long-range oblique photography) camera and was used for a variety of reconnaissance missions. In spite of flying almost daily missions, only one RF-4C was lost in a fatal accident before the start of hostilities. One F-4G was lost when enemy fire damaged the fuel tanks, and the aircraft ran out of fuel near a friendly airbase. The last USAF Phantoms, F-4G Wild Weasel Vs from 561st Fighter Squadron, were retired on 26 March 1996. The last operational flight of the F-4G Wild Weasel was from the 190th Fighter Squadron, Idaho Air National Guard, in April 1996.[78] The last operational USAF/ANG F-4 to land was flown by Maj Mike Webb and Maj Gary Leeder of the Idaho ANG.

The Military Analysis Network provides an excellent overview for both the F-4G, its dimensions, line drawings and a sizeable number of photo images. Here is their summary:

The F-4G "Advanced Wild Weasel," was the last model still in the active Air Force inventory, until it was replaced by the F-16CJ/DJ in the role of increasing the survivability of tactical strike forces by seeking out and suppressing or

destroying enemy radar-directed anti-aircraft artillery batteries and surface-to-air missile sites. F-4G's were E models modified with sophisticated electronic warfare equipment in place of the internally mounted 20mm gun. The F-4G could carry more weapons than previous Wild Weasel aircraft and a greater variety of missiles as well as conventional bombs. The primary weapon of the F-4G, however, was the AGM-88 HARM (high speed anti-radiation missile). Other munitions included cluster bombs, and AIM-65 Maverick and air-to-air missiles.

The F-4G "Advanced Wild Weasel," which inherited most of the features of the F-4E, was capable of passing real-time target information to the aircraft's missiles prior to launch. Working in "hunter-killer" teams of two aircraft, such as F-4G and F-16C, the F-4G "hunter" could detect, identify, and locate enemy radars then direct weapons that will ensure destruction or suppression of the radars. The technique was effectively used during Operation Desert Storm against enemy surface-to-air missile batteries. Primary armament included HARM (AGM-88) and Maverick (AGM-65). F-4G's deployed to Saudi Arabia also were equipped with ALQ-131 and ALQ-184 electronic countermeasures pods."

https://man.fas.org/dod-101/sys/ac/f-4.htm

Additionally, some of many online research references can be found at the:

(a) USAF Museum's site: https://www.nationalmuseum.af.mil/Visit/Museum-Exhibits/Fact-Sheets/Display/Article/196736/mcdonnell-douglas-f-4g-wild-weasel/,
(b) the Aviation Geeks: https://theaviationgeekclub.com/former-electronic-warfare-officer-explains-why-the-f-4g-was-the-best-wild-weasel-aircraft-usaf-has-ever-had/,
(c) a most interest article on U.S Navy's testing and use of the F-4G: https://theaviationgeekclub.com/remembering-u-s-navy-f-4g-phantom-perform-automatic-carrier-landings/
(d) the Defense Media site: https://www.defensemedianetwork.com/stories/gulf-war-20th-desert-storm-was-the-first-and-last-war-for-the-f-4g-advanced-wild-weasel/
(e) And Joe Baugher's excellent summary history about the F-4G including each of serial numbers of the 133 aircraft modified to the 'G' configuration: https://www.joebaugher.com/usaf_fighters/f4_19.html'

The Kit

This kit instructions have 34 pages (in eight languages) and is comprised of 32 sprue sections, one photo etch section, a metal pitot tube (missing in my kit package), a painting mask and a decal sheet with the individual markings for three aircraft. The paint references include only Meng acrylics, AK acrylics and Mr Hobby GSI Creos Acrysion colors (see my notes below about painting my F-4G). It is also interesting to note that Boeing claims this kit and the aircraft itself as a Boeing product, a claim that continues to puzzle me. In response, I offer my favorite F-4G crew comments: "*YGBSM*."

Scalemates shows an updated kit (# LS 017) with new parts should be coming soon; and no, there is nothing indicating what these new parts may be. The box art teaser shows another camouflage scheme, though the Spangdahlem tail code and the 480th FS is still shown. This same site also introduces many of the after-market accessories available for this kit and other F-4G kits in this same scale.

The Build

The F-4G kit box is large and provides everything you'll need to construct an accurate model.

This kit construction is straight forward, with very few bumps enroute. The overall kit is very well engineered, panel lines match up nicely, it has what I believe to be nicely engraved recessed panel markings, and the overall kit shape and dimensions appear to be right on. I encountered a few fit issues, which may have been my fault which closer observations and dry fitting might have eliminated. I was please in the case of the cowlings that the tolerances were very tight, unlike those encountered in several other F-4 models. I found the flaps to be a bit too wide and required a small amount to sanding to ensure a better fit. Each of these were, in my opinion very small hurdles. While the metal pitot tube was missing in my kit, the plastic version fit precisely and was used. Also noteworthy, I did not observe any instruction sheet errors (see note below).

The F-4G build begins with the interior including the side consoles cockpit tub. Panel #6 drawings, in my opinion, are not as clear as they could be and led me to having to remove the horizontal tail sections and then carefully reattaching them. Panel #15 is where you first encounter pieces identifiable as specific to the 'G' version.

The next specific 'G' panels start at Panel #25 and continue through #27 (covering the weapons, pylons, laser designator and ECM pods). Since there are a wide variety of weapons stores including AGM-65 Maverick, AGM-78 Standard Arm, AGM-88 HARM, and AIM-7M Sparrow missiles, as a modeler you have an array of ordnance, ECM devices and fuel tank considerations available in this build. As you can see in one of images, I used what I believe to be a representative loadout, leaving me with about several extra fuel tanks, numerus missiles and an ECM device.

Painting

At the 2023 IPMS/USA National Convention, I heard a presentation workshop narrated by Scott 'Nemo' Samo, during which covered the topic: "Painting "Gouge" for Modern USN Tactical Paint Schemes."

Following that presentation, I've begun to use Mr. Hobby Aqueous colors. While not everything from his presentation was related to this project, the techniques and paint types intrigued me

I recently sampled several of the Mr. Hobby Aqueous paints, in my never-ending search for a paint which is less harmful to our atmosphere and hopefully enrich our mutual interest—modelling. For anyone interested, drop an email to me and I'll send you a PDF summary of Scott's presentation which I believe you'll find is a great outline and techniques.

Following Scott's lead, I painted my entire F-4G kit using two overall colors, based solely on what the kit box art and the instruction art works looks in my eye prospective. I know this is a bit of a gamble, but it looks right to me, and I hope you might agree. These two colors are Aircraft Gray Mr. Hobby Aqueous H-57 and Mr. Hobby Aqueous Gray H-22. And while you can use water or Mr. Color Leveling Thinner, I chose Gunze Sangyo Mr. Hobby Aqueous Color Thinner #T-111, to insure full compatibility.

These Aqueous colors did everything I had heard about them. They sprayed beautifully (in both my Harder & Steenbeck Infinity and my Grex Tritium airbrushes). They laid down evenly, dried to touch within a few minutes, provided a very hard durable finish, and didn't seem to be affected when I used Tamiya masking tape over the paint. I was further impressed with these paints when I tried to do some small amounts of brush touch-ups. They seemed very easily accept the kit's decals with the resulting surface is almost a semi-gloss finish. As for a source for these Mr. Hobby Aqueous paints, I found that Burbank House of Hobbies carries almost every color and provides terrific service with my orders. Some smaller details were picked out using the appropriate colors including Vallejo, Lifecolor acrylic,

and AK Real Color paints. I completed my dry brushings, using my old standby Winsor & Newton's Artist Oil color Naples Yellow Light, No. 426 and my overall final finish using Testors Dullcoat Lacquer (#1160).

Decals

There are several hundred decals, covering each of aircraft on two sheets, and I suspect many third-party sheets as well. Those on the a/c's top side were for the most part visible and not really on the underside. My favored marking scheme is the 'B', because it's more colorful, not only with the Wing Commander's three-color on the vertical tail cap but also the vicious shark mouth and eyes on both sides of the nose.

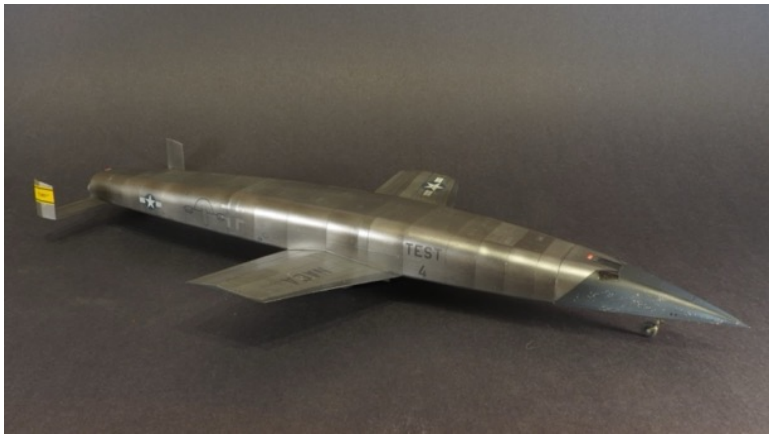
I omitted almost all of pylon specific decals for two reasons, after the first pylon my Mk I's were getting lost in the weeds and more importantly, the small decals really weren't visible against the overall gray paint scheme.

Overall Evaluation

I highly recommend this kit of the Meng F-4G Phantom. I really enjoyed building this kit. While I purchased this kit myself, it represents a significant place of the history of aerial combat history and in our modeling collection. Once again as modelers, I suspect many of us fail to realize just how significant the support SEAD activity has been. This Meng F-4G kit builds into a beautiful representation of a significant part of this conflict and aircraft in the 1/35th scales of this era.

Sänger Antipodal Bomber DECLASSIFIED: "Kilroy" Revealed

Text & Photos by Tim Nelson



(Editor's Note: This article was to run in the October issue, but due to timing and logistical issues was inadvertently left out. After reading you will understand why. Our apologies to the author. Also, no identification with actual persons or aliens (living or dead), places, buildings, and products are intended or should be inferred. No animals were harmed during the construction of this model.)

Introduction

There is continuing fascination with German advanced projects from the World War II era. Most of these innovative concepts remained "paper projects," existing only on drawing boards or in the minds of desperate engineers. A handful of designs made it to mockup or prototype stage, and a few (e.g., Messerschmitt Me-163, Me-262, Heinkel He-162, Arado Ar-234, A-4 (V-2) missile, etc.) made it into limited production. The consensus view among historians has been that most information about these projects has long been made public. However, even well into the 21st Century, new and shocking information has come to light about a project much more tangible than realized.

Background

The advanced *Rakotenbomber* (rocket bomber) design by Eugen Sänger and Irene Bredt had its origins in the late 1930s. They submitted a proposal to the German Reichsluftfahrtministerium (RLM) in December 1941 for an advanced vehicle that would enable bombing of the U.S.A. The concept was to launch the machine on a long horizontal rail using a powerful expendable booster; the vehicle would continue to climb and accelerate under its own rocket power to the fringe of space and high sub-orbital velocity. In a series of encounters with the upper atmosphere, it would continue to skip and glide to its target (assumed to be New York City). Post-mission recovery in an aligned nation such as Japan was mentioned but was likely a dubious possibility. It was variously referred to as the "Amerika Bomber," "Antipodal Bomber," or "*Silbervogel*" (Silver Bird). The proposal was quickly dismissed by the RLM as impractical, although briefly (it was believed) revisited in 1944 as the tides of

war turned against Germany. Recently declassified materials have entirely changed the narrative on this famous design.

We now know that in March 1945, as Soviet troops were advancing into eastern Germany, informants were able to send word to senior Allied commanders that advanced hardware was taking shape in the vast tunnel complex of the Messerschmitt facility at Walpersberg. To prevent this unknown technology from falling into Soviet hands, a special mission was launched to seize and transport the materials to the west. After the facility fell to U.S. troops on 12–13 April 1945, the hardware was quickly extracted from an area that would soon be ceded to Soviet control and become part of East Germany.

A top-secret part of Operation Lusty, the post-war Allied appropriation of advanced German technology, the strange hardware obtained at Walpersberg turned out to be special indeed – elements of three *Silbervogel* airframes in work. Arrangements were made to surreptitiously transport all these components across the Atlantic to an extremely remote, secret facility within the White Sands Proving Ground in New Mexico. This site was far from any significant population, more secure than Muroc Field in California, and the locals there had been made accustomed to strange happenings during the wartime Manhattan Project and postwar V-2 test launches.

***Silbervogel* Flight Test**

Detailed examination in the Fall of 1945, in conjunction with a small number of expatriate Messerschmitt engineers brought to White Sands under Operation Paperclip, established that the hardware in hand could, with effort, support fabrication of a single complete airframe. Augmented by a select group of engineers and machinists from North American and Los Alamos, this work proceeded through 1946. Recognizing the extreme secrecy of the program, but also the advanced potential of the design, the goal was a flying prototype in early 1947.

The Sänger/Bredt technical papers were reviewed, and a critical error was found – the aerodynamic heat loads the vehicle would experience (proportional to Mach number squared) were far greater than originally anticipated. That realization, coupled with the limitations of wartime metallurgy and slave labor production in Walpersberg, led to a decision to conduct a limited envelope and light weight flight test program. The original launch rail concept was abandoned in favor of self-propelled takeoff using only the onboard engines. These engines (upsized versions of the V-2 missile ethanol/liquid oxygen engines designed by Dr. Walter Thiel) were subjected to a brief ground test program near the White Sands V-2 missile range. Speed would be restricted to low Mach numbers. Any noise complaints from the sparse population would be blamed on the ongoing V-2 test program.

A small team of sequestered U.S. Army Air Force (USAAF), U.S. Navy (USN), and National Advisory Committee for Aeronautics (NACA) personnel developed flight test plans. Airframe assembly proceeded apace. Performance data was calculated and tabulated. Ground support equipment was designed and fabricated. By Spring 1947, the *Silbervogel*, now christened “Kilroy” by the team, was ready to take flight. The bird had been adorned with Kilroy markings over the remaining ghost Luftwaffe insignia, as well as the first use of the future iconic yellow NACA tail band and modified standard NACA logo. The Frankenstein airframe was considered article number 4 and labelled accordingly.

The flight crew for Kilroy’s evaluation was elite. The pilot-in-command was USN Lt. Commander I.B. Fulinya, Sr., an Anacostia and Patuxent River flight test veteran (his namesake son would gain notoriety 19 years later flying the Convair XFY-1 Pogo over Viet Nam – see References). In the right seat was USAAF Maj. Johnny Doolots, a pre-war air racer and WW II veteran (also involved in the clandestine effort to ferry P-47s to Israel, and later participant in the 1949 Schneider Trophy Race – see References).

Also onboard to manage systems was NACA flight engineer U.R. Fullovitt (otherwise unknown to history). The crew chief in charge of maintenance and airworthiness was seasoned Messerschmitt engineer R.U. Schittenmee (who years later would dabble as an author in obscure aviation history – see References).

Taxi tests were conducted during March 1947, building up to high speed. The vehicle was never designed for a runway takeoff, and a bad nose wheel shimmy developed at moderate speed. A damper device was quickly designed and installed to solve the problem.

On April 1, 1947, after a lengthy walk-around and preflight, Fulinya and crew lit the engines and Kilroy slowly began a long takeoff run on an unnamed dry lakebed. Thus began Kilroy's secret, brief, and harrowing flight test program.

The first flight exceeded 60,000 ft and Mach 1, several months before Chuck Yeager's famous X-1 flight. Control at high altitude and speed was marginal. Subsonic handling qualities were woefully deficient, characterized by general wallowing and excessive Dutch Roll. Pilot-induced oscillations in pitch were a continuing issue due to the undersized and sluggish elevator control system. (The machine would have benefited from stability augmentation but the technology was only in its infancy at the time.) Forward visibility was extremely limited. Approach speed was extreme, since the machine incorporated simple but ineffective trailing edge flaps and landing attitude was severely constrained by tail strike considerations. The only runway deceleration devices were wheel brakes, which were woefully undersized.

After an extremely challenging deadstick approach and landing back on the lakebed, Kilroy finally came to rest. The crew was sobered by the first flight experience but committed to proceed with further testing. The machine was thoroughly inspected, and repairs were made in three problem areas - hydraulic leaks, loose & damaged access panels, and complete brake replacement. By April 14, Kilroy was launched on its second flight.

Photo 1: The only known image – thus far - of the Silbervogel "Kilroy" at White Sands, April 1947 (photographer unknown)

It was previously determined that Mach 2.2 would be the maximum speed, taking the limitations of the airframe materials into account. In too flat of a trajectory, Flight Two overshot the maximum Mach target and exceeded Mach 3 (years before Scott Crossfield and Mel Apt) - but the airframe was irreparably weakened. The vehicle also exhibited the first signs of inertia coupling, which would plague supersonic aircraft designs for years afterward. After another hair-raising deadstick descent, approach and landing, this time flown by Doolots, a charred, battered, and smoking Kilroy rolled to a stop in the desert. Following inspection, Schittenmee and the maintenance team declared the airframe no longer airworthy and beyond practical repair.

Test reports were written and filed under special access classification, to be forgotten under the pressures of the upcoming Korean War, the pressing need for air-breathing jet aircraft, and fiscal constraints. All participants were sworn to utmost secrecy, and valuable lessons learned were locked in secrecy.

In early July 1947, Kilroy was unceremoniously scrapped at White Sands and quietly dumped in the desert near Roswell, N.M., where it could cause no further trouble.

The Kit

For decades, the only kits of the Sänger/Bredt spaceplane were limited run resin affairs such as Part Time Models or Sharkit, or paper models. That changed in 2021 with the release of a mainstream injection-molded kit by AMP of Ukraine. This author quickly snapped one up and was then shocked by the release of another (and probably better) 1/72 *Silbervogel* by Takom in 2022. These kits not being cheap, I lived with AMP alone.

The AMP kit is a sizeable model – 16 inches long when completed. It exhibits typical limited run issues such as flash, vague panel lines, sink marks, indifferent fit, and rough surface texture. Some kit parts such as landing gear oleo scissors were unusable due to excessive flash and replaced with scratchbuilt versions. I buffed the entire surface area with steel wool, then sanded with successively lighter grades to deal with most of the surface roughness. Since my intent was a weathered metallic finish, I didn't sweat getting to a mirror-smooth glossy surface. I rescribed vague lines and added a couple of full-length

longitudinal lines just because I thought it would look better. I added speculative reaction control thruster pairs at strategic locations – this is a spaceplane design, after all.

The Build

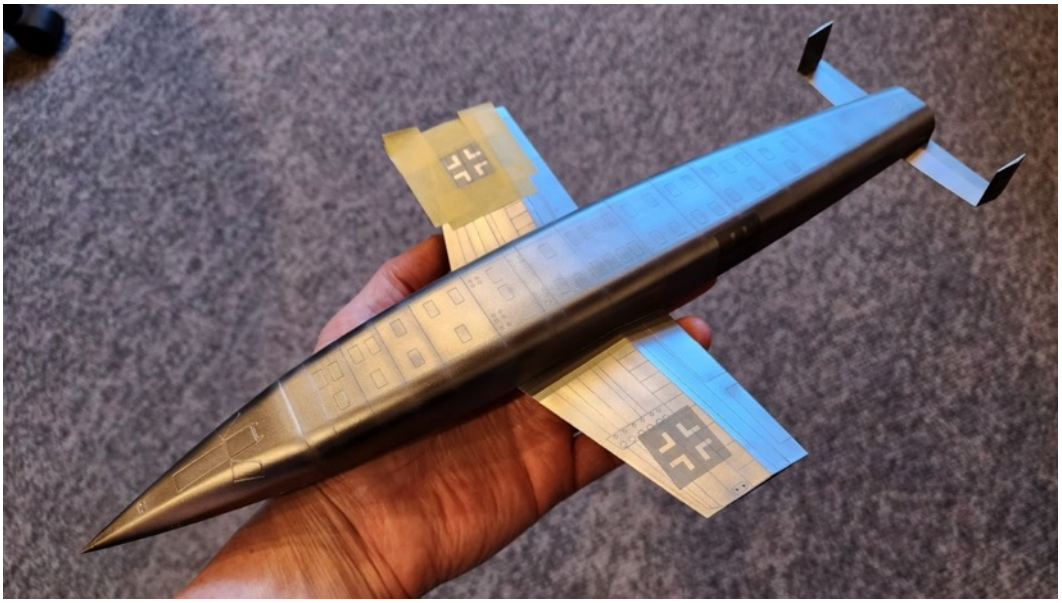
This model showed clear signs of being a tail sitter, so I added some ballast weight to the nose. The nose top section is clear and fit to the body is poor. Some grinding, sanding, and filling was required here. Fit of the wings to the fuselage is vague but I figured it out, using historical drawings as a reference for something like the right dihedral.

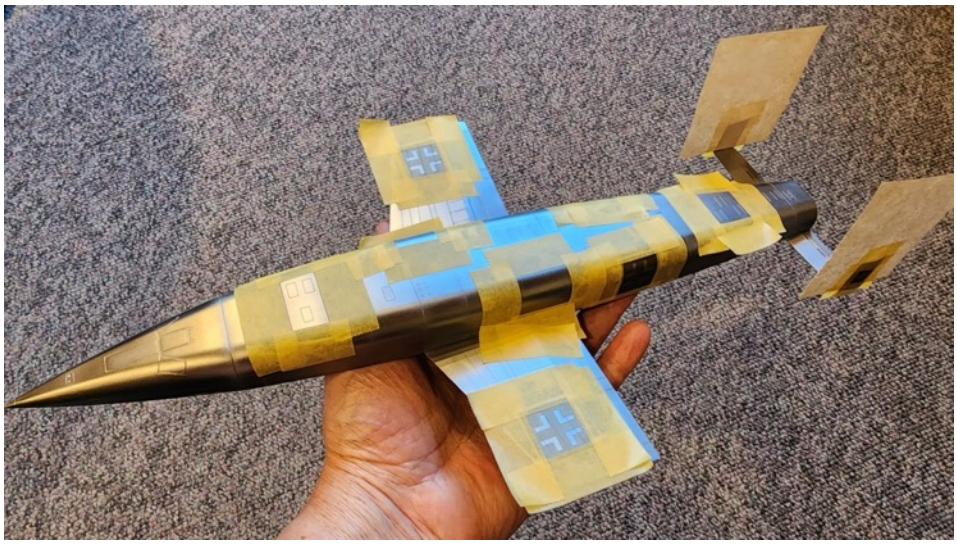
After this elbow grease phase, my least favorite aspect of modeling, the model was ready for priming. AMP thoughtfully provided cockpit window masks.

I typically use Mission MMS-001 Black Primer these days (thinned 50/50 with Mission Thinner and a dash of Liquitex Flow Aid and Tamiya Acrylic Retarder), which lays down a beautiful, robust, eggshell finish. The first round of priming really highlighted the sink marks I'd previously overlooked, so those were addressed before a second coat.

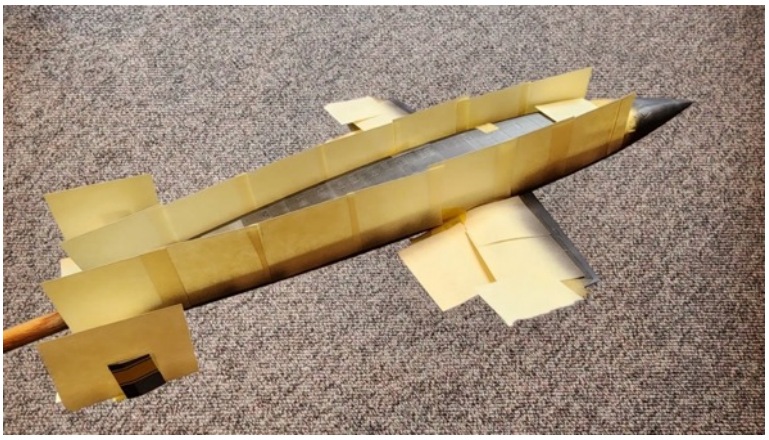
Pondering possible liveries of this mysterious bird, I seized upon the recently declassified Kilroy saga. Markings are based on apparently contemporary descriptions from the flight test crew and are an educated guess - the only known photo of the prototype is inconclusive. Time will tell if more documentation comes to light. I did some experimentation on a side test mule using Vallejo Satin or Matt as a "pre-shade" for a metallic finish – the idea being to change the reflectivity around panel lines. This mix is about 30% stock to 70% Vallejo thinner, with //no// retarder. I liked the results, so I gave Kilroy similar treatment. Next came the metallics.

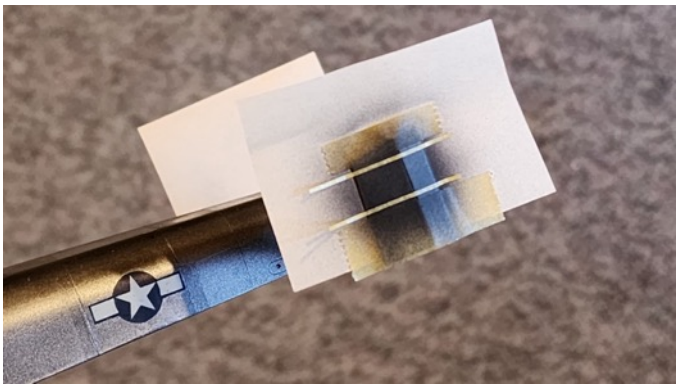
The first round of metallics was applied using AK Real Colors RC 479 Xtreme Aluminum, about 70% paint to 30% AK Nitro thinner. This was followed on selectively masked panels by AK RC 488 Matt Aluminum, thinned the same way. I made custom masks using the Silhouette Cameo for “ghost” Luftwaffe markings, which were applied at this stage as well. A few masked panels were also hit with Mission MMM-02 Cold Rolled Steel thinned about 70% paint and 30% thinner mixture (this thinner mixture itself is 30% Mission MMS-007 Clear Primer to 70% Mission Thinner, dubbed “CP30” by John Miller, with flow aid and retarder added). This completed basic airframe metallic treatment.



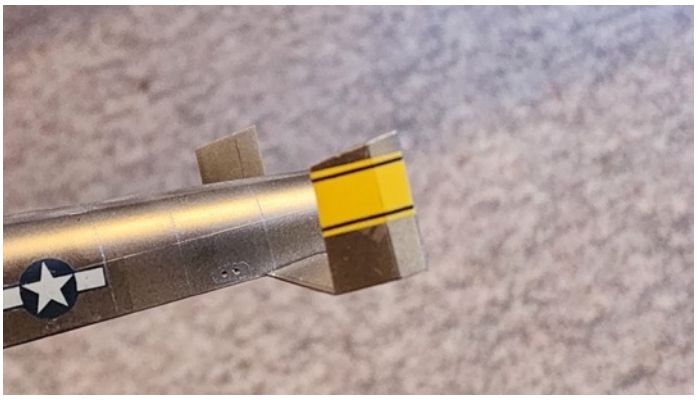


We then moved to the yellow NACA tail bands, which were painted AK RC 082 NATO Black, masked to retain stripes, then AK RC 004 Flat White, then AK RC 007 Yellow. All thinned about 50/50 with AK High Compatibility Thinner.

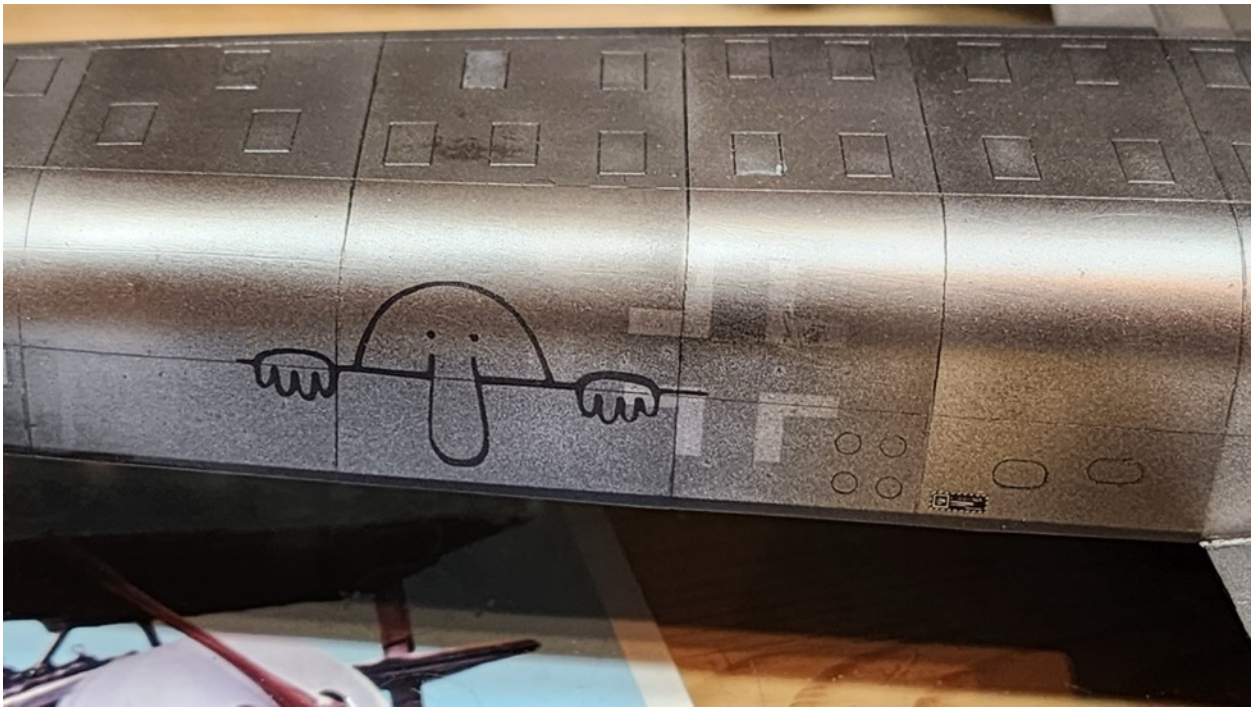




More masking was needed to treat the bottom edges of the fuselage, wing leading edges, and my custom Silhouette Cameo NACA and "Kilroy" markings using AK RC 082 NATO Black. U.S. "stars and bars" were also painted using masks.



Having completed all basic painting, with some “baked in” weathering, I applied a light coat of “CP30” (defined above) as a protective layer. Next came Tamiya Black Panel liner treatment on top, and Gray on bottom. Final selective “charring” effects were applied with AK RC 083 NATO black thinned about 30% to 70% High Compatibility Thinner over a series of Post-It Note masks, moving over the model in real time. Pressure and flow were dialed down here with just a quick pass of each area. Similar charring treatment was applied to the dark fuselage bottom in the same way using AK RC 289 RAF Medium Sea Grey. All was sealed with another coat of “CP



30,” which provides a very pleasing and durable satin finish.

(All paints above were delivered by airbrush, powered by a CO2 tank with regulated pressure output: Primers and colors using Harder & Steenbeck Infinity with 0.2 mm tip, clears with H & S Evolution with 0.2 mm tip, and Metallics with AK airbrush and its standard 0.3 mm tip.)

All that remained was the installation of spindly landing gear and doors, and Kilroy lived again.

Epilogue and Dedication

The achievements of Fulinya, Doolots, and the Kilroy team remained locked in a government vault until recently obtained via a Freedom of Information Act request. Although the *Silbervogel* spaceplane did

not become operational, it certainly inspired a generation of designers to consider the many problems hypersonic flight and potential solutions. The later designs of the Boeing X-20 Dyna-Soar, North American X-15, and Rockwell International Space Shuttle can all trace ancestry to this advanced 1930s concept, which secretly thundered over the New Mexico desert in 1947.

This article is dedicated to the memory of my friends Terry Moore and Stephen Tontoni, who delighted for many years in creating a series of spoof or "whiffer" builds with companion stories. During this *Dia de Los Muertes* (Day of the Dead) time of year, let us remember the great fun they provided us and continue their tradition.

References

Silbervogel (Wikipedia)

Saenger Antipodal Bomber (Encyclopedia Astronautica)

Operation Lusty (Wikipedia)

"The Pogo Experiment: Lindberg's 1/48 Convair XFY-1 Pogo," Internet Modeler, April 1, 2009, Terry Moore

"Jugs Over the Sinai; Israeli Thunderbolts," Internet Modeler, April 2003, Chaim Joshen

"*Miss Chiquita*," IPMS-Seattle Newsletter, February 2005 (p. 10), Tim Nelson

"A 1/48 1918 Fokker E.V Racer 'Frieden'", R.U. Schittenmee

Resources

Mission Models Paint

AK Interactive Real Colors Paint

Silhouette Cameo, available from the manufacturer, Micro-Mark, and other outlets.

Nebelwerfer 41 Towed German Rocket Launcher

By Eric Christianson

Vargas Scale Models has historically occupied a niche specializing in unusual, 3-D printed, limited-run armor models, mostly pre- and between World Wars. So far this has been a winning strategy for this prolific company, fleshing out all those subjects ignored by others. Lately, however, Vargas has been entering more well-trodden areas, as well as experimenting in other scales. such as 1/72nd, and even the odd 1/16th aftermarket item. One such release (in 1/35th) is a late-WWII-era German Nebelwerfer 41 towed rocket launcher; the subject of this review.

The Nebelwerfer (roughly translated as 'smoke thrower') was a German multiple rocket launcher that served with German Chemical Corps units, which had the responsibility for poison gas and smoke weapons that were also used to deliver high-explosives during the war.

The 150mm, spin-stabilized rocket ammunition was fired from a variety of different launchers, the more unusual 'square cage' version being the subject of this Vargas release. Like the more ubiquitous six-tube version, it was mounted on a towed carriage adapted from that used by the 3.7 cm PaK 36 anti-tank gun, and had a range of 7,500 yds. Later the rockets were also mounted on a Sd. Kfz.251 halftrack as *Panzerwerfer 42*. Almost five and a half million 150mm rockets and six thousand launchers were manufactured over the course of the war.

The Kit

As with most 3-D printed kits, the Vargas sprues do not have any old-school poured-resin blocks to remove; instead, each sprue contains dozens of very thin connecting rods that are part of the printing process. This makes the parts very simple to remove from the sprues. Most of the smaller parts are printed within a flexible, protective 'cage' of resin. There are very few actual parts (26, plus nameplate), and these are exquisitely detailed – the single-piece cage that holds the six ammunition rounds is itself a wonder to behold.

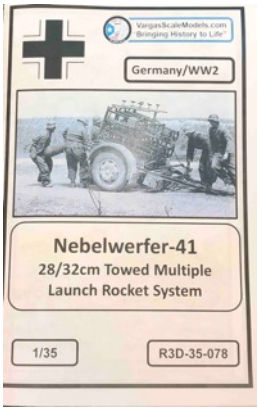
There is cleanup required, to be sure, but nothing like what I would normally expect for limited-run, resin subjects. Some extra parts are thrown in as well, which serve to replace some of the smaller items that might go on walkabout. Four of these extra parts are fully constructed, 'wooden' ammunition crates – a very welcome addition for dioramas.

The dark-grey resin is firm, but sands easily enough, and there are some very slight surface striations on some of the curved parts that require attention, making preparation more important than with typical styrene kits. Comparatively, however, this work from Vargas is pretty darn good as delivered. There are very few, if any, surface flaws and the molding is excellent with no noticeable defects. The detail overall is crisp, and while many of the parts are very delicate, Vargas pulls everything together without resorting to using photo-etch or other finicky mediums, which is a big plus (for me, at least). The small instruction booklet uses up a full two pages cautioning the modeler about removing the support structures without damaging the kit parts. I managed to get everything separated without mishap, so go slowly here!

The contents of the box include:

- A single, ammunition cage sprue, packaged separately.
- A single chassis and nameplate sprue, packaged separately.
- The single dual fender sprue, packaged separately.
- A single sprue of all the remaining parts, packaged separately.
- A single bag containing the wheels, ammunition rounds, and four 'wooden' cases.
- A 12-page, color instruction booklet consisting of six full-size sheets, folded in half. All text and label information are printed in English.

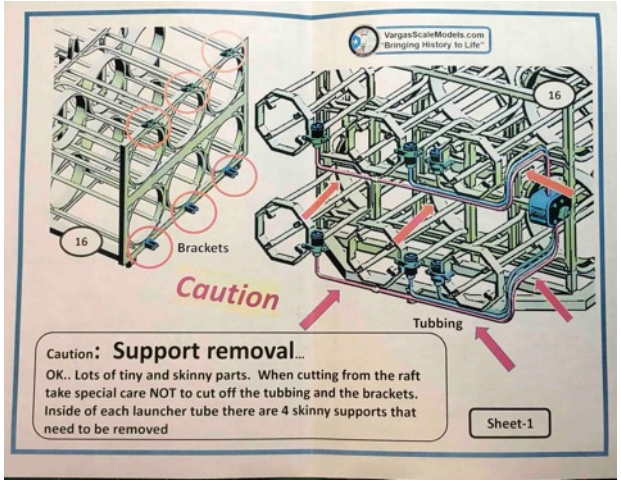
There are no markings included in the kit; those in the images of the completed model were pulled from my spares box.



The Instructions

As with most limited-run resin kits, the instructions are brief and not always 'enough'. Assembly requires test fitting and comparing what you have to drawings and images of the real thing, easily found on-line. In place of text, Vargas provides simple CAD images from the printing process itself for use as a rough go-by to start with. Fortunately, each piece is shown assembled and printed in a different color from the one adjoining it, which makes things a little easier to follow – but only a little. If you have built limited-run kits before, this one is typical – a lot of testing and sometimes adjusting surfaces to fit.

Fortunately, the images are rendered from several angles so you are rarely forced to guess about how things go on 'the other side.'



Clean Before You Start

Even though there are relatively few parts in this kit, a 3-D printed model requires a good amount of preparation before assembly. After unwrapping all the parts, and carefully snipping (not pulling) the parts printed inside the protective sprue 'frames,' I carefully shaved and sanded the surfaces of everything to remove any remaining vestiges of the thin resin posts that held the parts to the sprues.

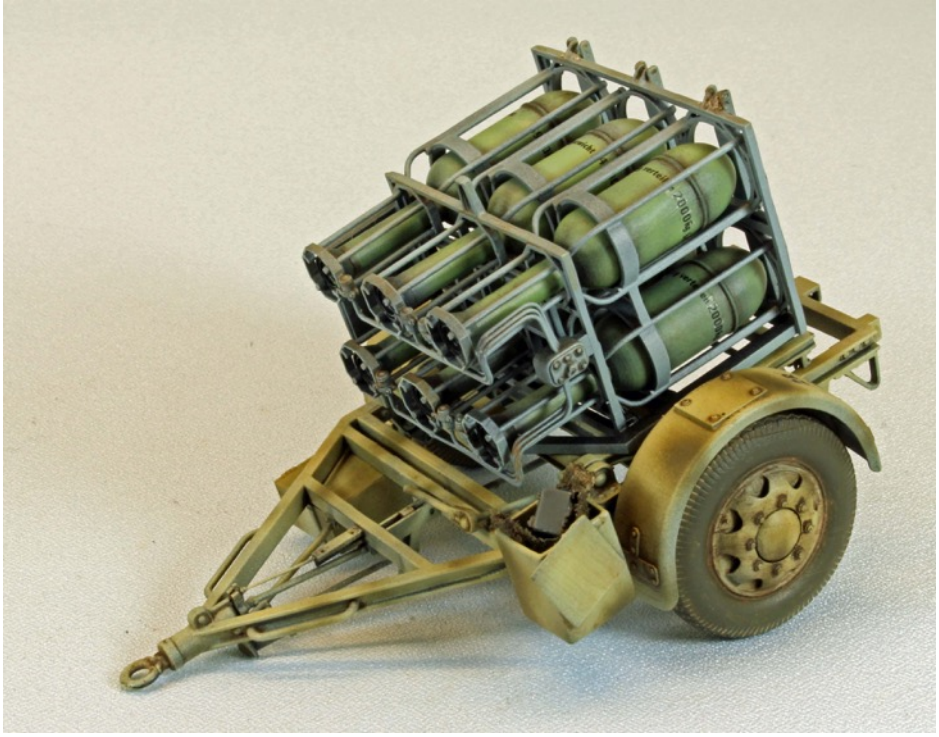
Next, I went to work smoothing out some minor (but noticeable) grooves on the surfaces of the round parts, such as the two wheels. The resin is not soft, but it works away with a little effort, resulting in a smooth surface relatively quickly.

Once I thought I had everything pretty well cleaned up, I gave the parts a warm bath in soapy water, rinsing them in warm water. After drying I felt the surfaces with my fingers, and, if I found anything tacky, I repeated the wash, rinse, and dry steps until all the tackiness was gone. With all the parts clean and free of defects, I was ready for assembly.

The Build

The Nebelwerfer instructions start with some good advice – carefully remove the trailer chassis and ammunition cage from their sprues. The connection points are all slightly thinner than the 'real' parts, and must be accessed from a variety of different angles to remove all of them. Go slow and tread lightly. In my mind, I likened this part of the build to that of a bomb-disposal task, cutting only the 'correct' wires, or boom! Somehow, I found myself at the end with an unbelievable set of 3-D printed parts. Exquisite.

Assembly was straightforward and nearly hassle-free. The ammunition cage swivels on an axis that lifts from the main chassis frame. Test fitting this assembly takes finesse since I did not want to damage any of the fine detail on either piece. You can model the cage in firing mode or travel mode (I chose the latter) but I left off the locking mechanism so I could show the raised firing cage in pictures.
The firing cage has a door that flips down when in travel mode. This door stood a little proud of the front of the cage, bumping up against the tiny fuses on the front of the ammunition rounds. Since the door effectively covers the fuses when in place, I carefully snipped the fuses off so that the door would sit correctly when closed.

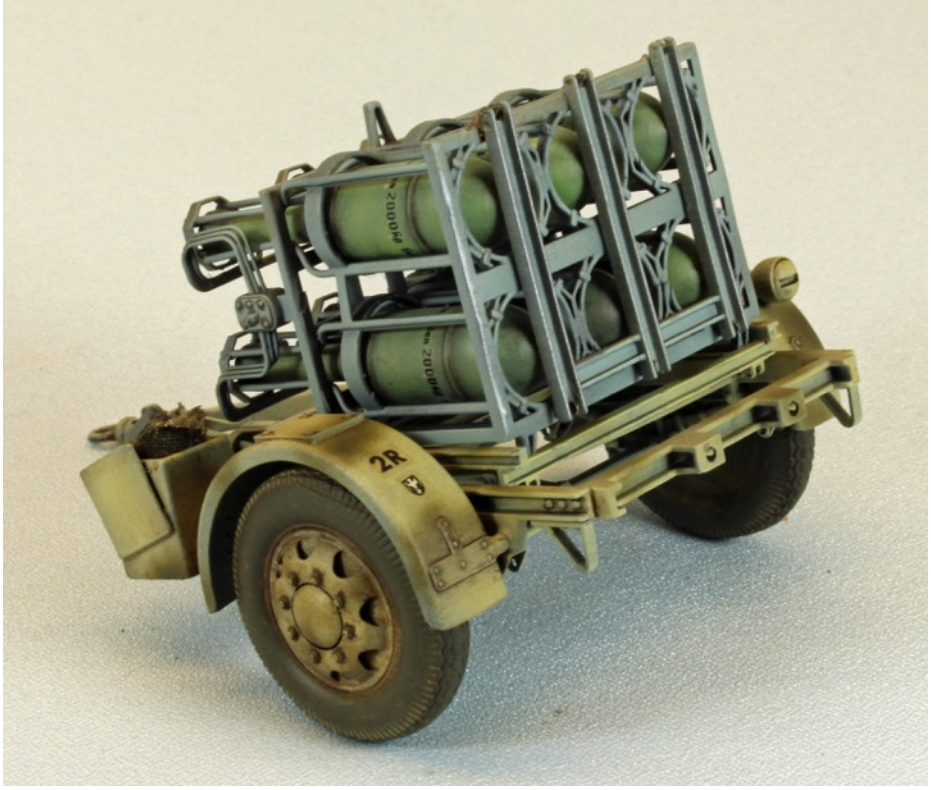


There is a large box with a lid just forward of the left fender that I just could not leave empty and closed, so I left the lid attached to the side, and filled the box with a rag and a control box I pulled from my spares. Vargas thoughtfully designed the wheel attachment points with deep shafts and receiving holes to ensure that the wheels, once attached, would remain robust when handling – thank you! I cannot tell you how many times I have snapped a resin wheel off during finishing and had to nurse everything along from that point forward.

And that was that – assembly complete, with the major parts still separated for painting (chassis, wheels, ammunition, and firing cage). Vargas models are perfect for modelers like me, who enjoy the 'finishing' steps to those involving assembly!

Painting and Finish

There are not many pictures of the box-version of the Nebelwerfer 41 online; most are grainy black and white images, or simply images of the trailer being pulled behind a prime mover. While it might have been more accurate to choose an overall dark German-grey scheme for my build, I wanted to highlight the incredible detail found in the Vargas kit, so I chose a 'summer Kursk' scheme of dark green mottling over light German yellow, with some minor weathering to match whatever prime mover I will set it up with in the future.



Here is a breakdown of the colors and materials I used to finish the build:

Painting:

Overall Primer - Mr. Hobby Mr. Finishing Surfacer Black 1500

Chassis and Wheels -

- Base Coat – 80/20 mix of Tamiya XF-60 Dark Yellow and XF-1 Flat White
- Post Shade Mottling – Tamiya XF-61 Dark Green

Ammunition Rounds and Wooden Containers

- AKI Real Colors RC232 Pale Green
- AKI Real Colors RC056 Dark Brown, drybrushed with Tamiya XF-57 Buff

Rocket Cage and remaining detail

- AKI Real Colors RC256 Blue Grey cage
- Mission Models MMP040 Tire Black tires

Weathering

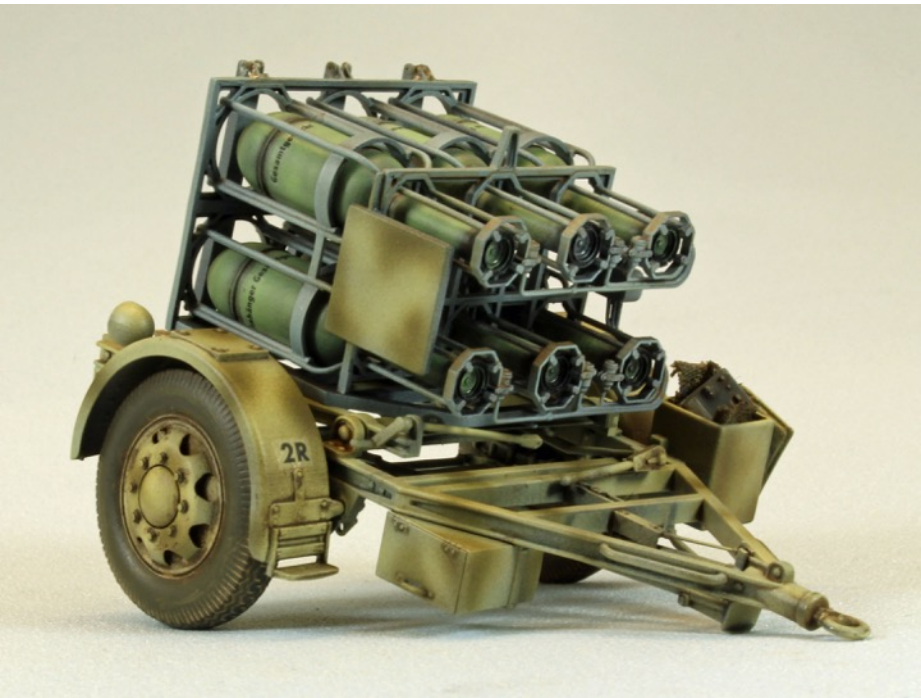
- A.MIG Dark Wash pin wash overall
- A.MIG-1510 Tan for 3-Tone Camo Filter overall
- Vallejo 77.716 Semi-Matt Aluminum and Uschi Chrome pigment bling overall

Decals:

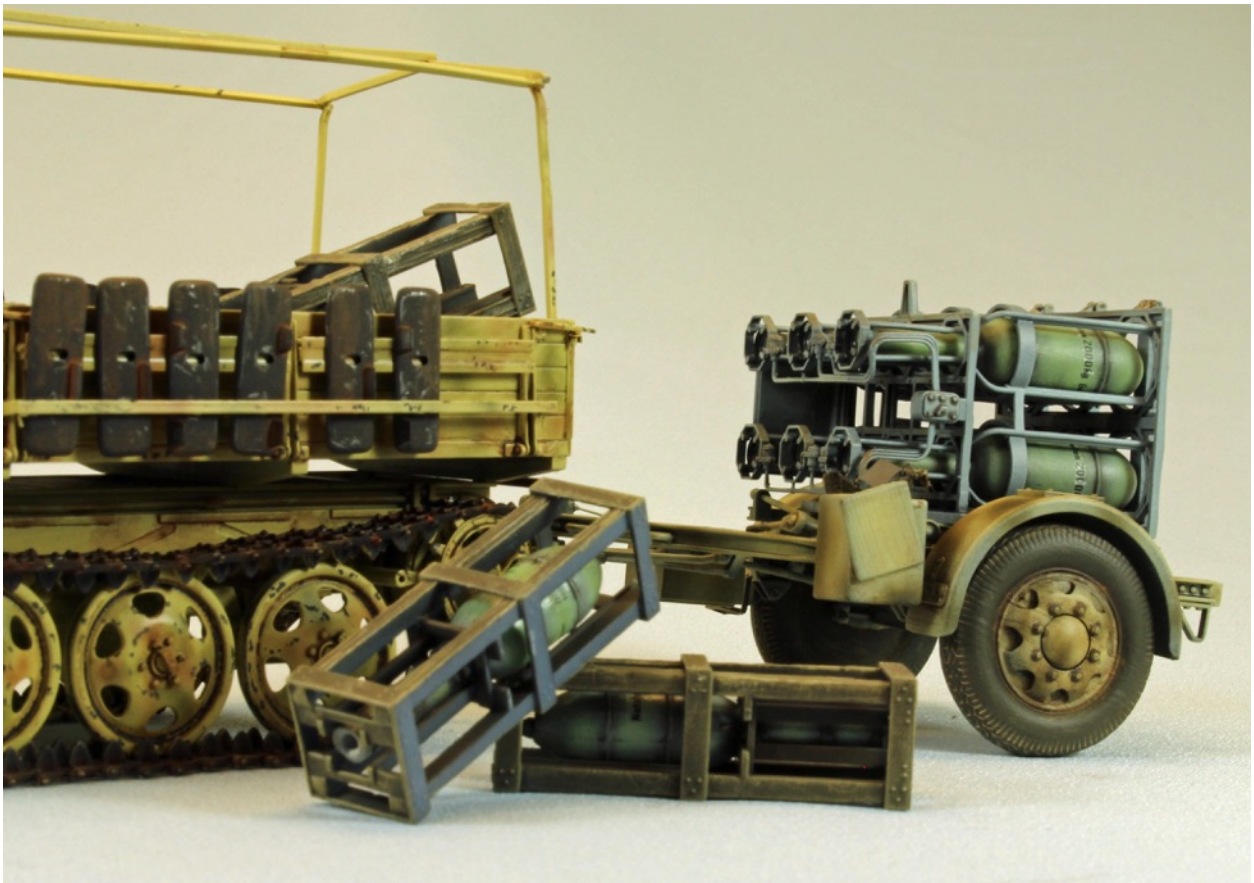
The Vargas kit did not come with any markings so I added stenciling on the rounds and unit markings from my spares box, using images from the internet as a go-by.

Conclusion

This is my sixth 3-D printed model from Vargas and, as always, the build was a breeze. Luis Vargas does a solid job researching his subjects, and the design and engineering that went into his kits is readily apparent. As I said with the most recent (and every) Vargas project – each one makes me want to build another.

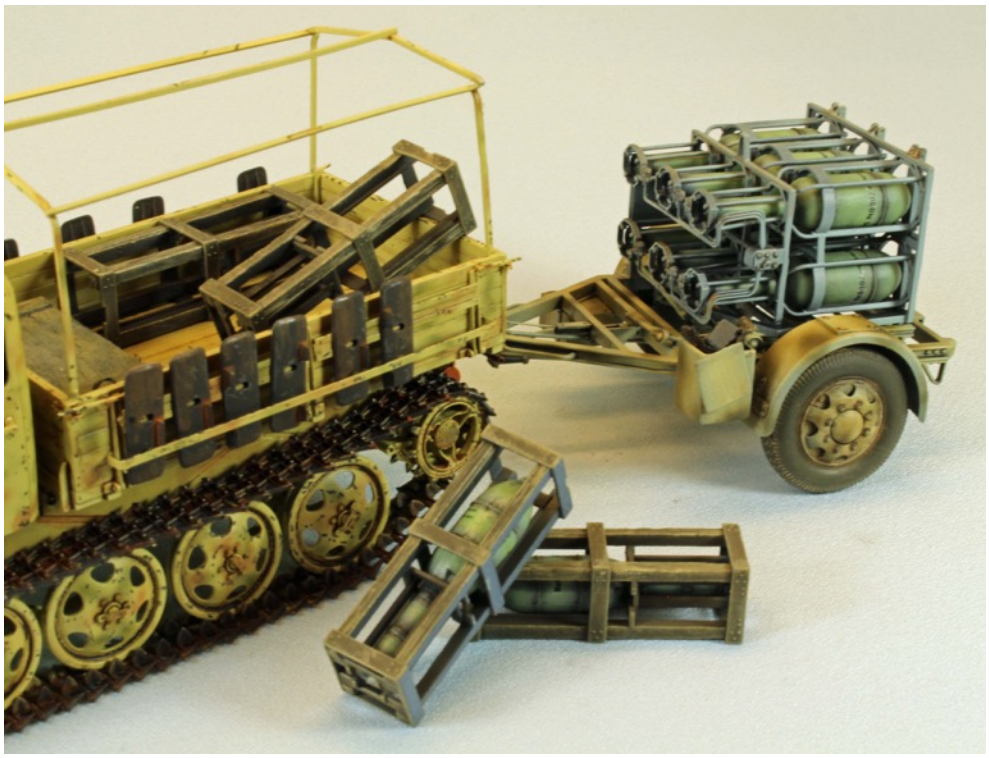


As with any all-resin project, this kit has its challenges, especially with separating the 'real' parts from the 3-D support structures. I managed to get everything the way it needed to be, however, without a single mishap. I think the build was straightforward enough, however, for any modeler to finish. Having a solid working knowledge of alternative adhesives (CA Glue, e



poxy, and/or 'fortified' white glues) would certainly be a plus.

I would like to heartedly thank Luis Vargas at **Vargas Scale Models** for providing this kit for review, and to **IPMS USA** for giving me the opportunity to build it.



Other Modeling from Around the Sound…

Northwest Scale Modelers (NWSM)

The Northwest Scale Modelers meet monthly at the Museum of Flight in Renton. Modelers of all genres are welcome to attend. Please see their website for more information: NorthWest Scale Modelers (nwsm.club)

Seattle Armor Modeling and Preservation Society (AMPS)

The Seattle Chapter of AMPS holds monthly meetings and occasional build sessions that modelers of all genres are welcome to attend. Please see their Facebook page for more information.

Galaxy Exiles Sci-Fi Modelers

The local Sci-Fi modeling community is served by this club located in the North End. Modelers of all genres are welcome to attend. For more information, please contact John Morel at johncmorel@gmail.com or see their Facebook page for more information.

ZOOM!

During (and since) the Pandemic, modelers from all over have been meeting online via Zoom sessions. Between our two local clubs, (IPMS and NWSM), the TNI group, the Galaxy Exiles, plus IPMS clubs in Oregon, there are Zoom meetings just about every night. These sessions are joined by other modelers from across the country, as well as overseas – I think St. Petersburg is the farthest way? These are less meetings than simply build sessions where we share ideas, techniques, etc. – like a bunch of little old modeling ladies. We discuss our current projects, how to solve modeling problems, new techniques, tools, paints, and kits. We try to keep politics and religion out of the conversations, and that really makes the sessions fun and relaxing. These Zoom sessions are open to everyone.

The Monday/Wednesday/Thursday sessions normally have between 8 and 15 attendees at any given time, and the big (Thursday) build sessions last 7 hours (2pm through 9:00pm). Modelers come and go, break for dinner, or to walk the dog, etc. The build sessions continue in the background, allowing modelers to join at their convenience. A lot of modelers with a wealth of experience who can help solve just about any model-related issue. And a great group of people! Joining a Zoom session takes a single click of a mouse, once you are all set up. First, it is recommended that you download a free copy of Zoom and install it on your device first. Having a local copy is not required but makes everything a little easier to use. Once that is done, all you need is a very basic setup that includes camera, microphone, and speakers (normally all built-in, especially with newer devices). Then just click on one of the links below!

Mondays: Seattle. WA IPMS 2pm – 5pm LINK

Tuesdays: Salem, OR IPMS 6pm – 10pm LINK

Wednesdays: Seattle. WA IPMS 2pm – 5pm LINK

Thursdays: Seattle. WA IPMS 2pm – 9pm LINK

Albany, OR IPMS - Odd-numbered Thursdays (i.e., 1st, 3rd, and 5th) from 6pm - 10pm. LINK

Saturdays: Salem, OR IPMS 6pm – 10pm. LINK

Upcoming Meeting Dates

The IPMS Seattle 2023 meeting schedule is as follows. All meetings are on Saturdays at North Bellevue Community Center from 10:30 AM to 1:30 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.

November 11 **December 9** **January 13, 2024** **February 10, 2024**

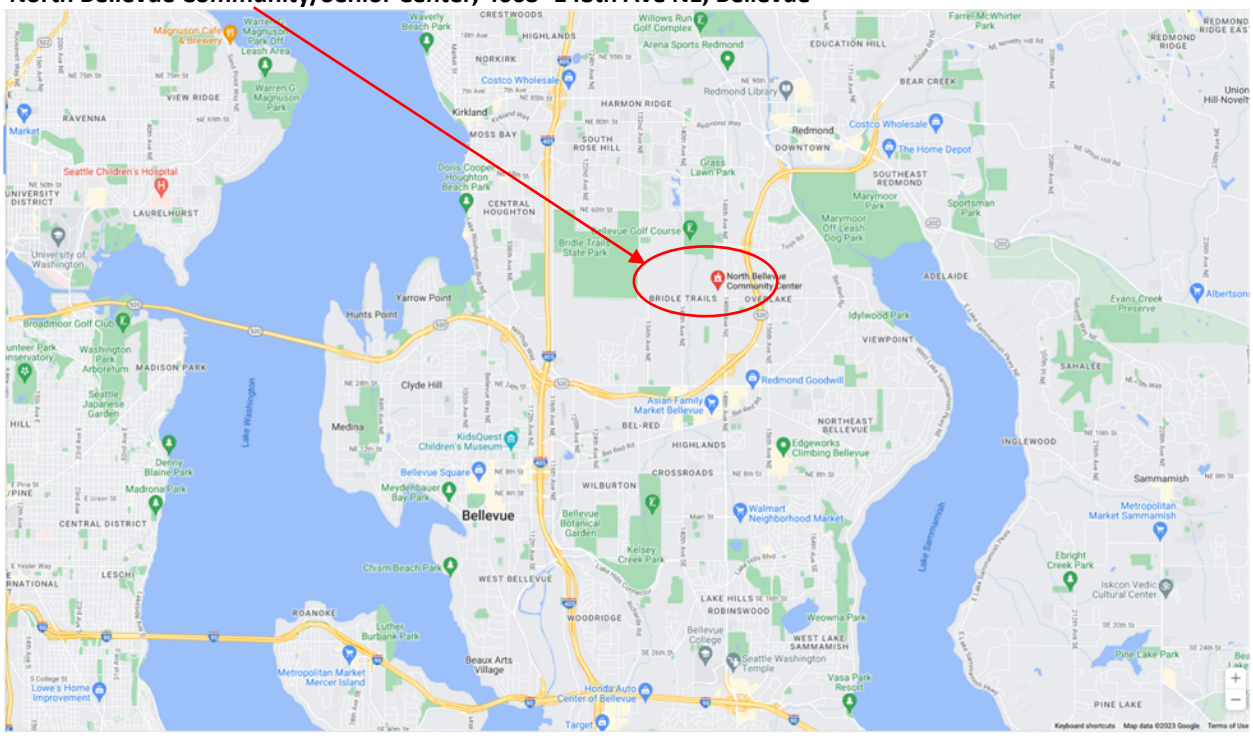
Next Meeting: November 11 – 10:30 AM to 1:30 PM

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

Map Link: https://goo.gl/maps/RSgcMggWNBmTUe6T9

Site Link: North Bellevue Community Center | City of Bellevue (bellevuewa.gov)

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.

Join IPMS/USA

Why Join IPMS/USA?

IPMS/USA is the United States Branch of the International Plastic Modelers' Society, whose roots can be traced to the startup of the first IPMS National Branch during the 1960's in Great Britain. In 1964 a US-based modeler applied for a charter to start the US Branch. In the ensuing five decades, IPMS/USA has become a 4,600-member, all-volunteer organization dedicated to promoting the modeling hobby while providing a venue for modelers to share their skills in a social setting, along with friendly but spirited competition in the form of local, regional, and national contests and conventions. As this is written, there are over 220 active US chapters (including groups in Canada and the Philippines as well as one "cyber-chapter" existing entirely on the internet). These chapters are organized into 13 geographically-determined Regions, overseen by Regional Coordinators. The IPMS/USA Executive Board, made up of elected and appointed members, serves as the overall governing body for IPMS/USA.

Join Online (https://myipmsusa.org/join-us)

Model Paint Solutions specializes in tools for handling, storing, mixing, spraying, and finishing model paints. We carry quality scribing tools, abrasives, Mission Models Paint, the full line of AK Real Colors, and German-manufactured Harder & Steenbeck airbrushes and parts. All Seattle IPMS members can take advantage of 5% off and Free-Shipping on any orders delivered during the monthly IPMS meetings. Details provided at the meetings.

Model Paint Solutions (https://modelpaintsol.com/)