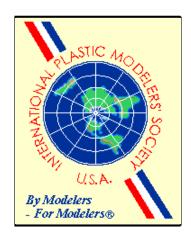
Chapter News



Seattle Chapter IPMS/USA September 2012

PREZNOTES



The "What's Missing" Game!

Whenever I go to a model show, one of my pastimes is playing the "what's missing" game. This involves traveling about the contest room, noticing not only what is there, but what **isn't** there. I go up to each category, be it ships, autos or armored vehicles, and admire all the excellent work put in by the various modelers who brought their works of art, but after I am done, I take a step back, and marvel at all the models that didn't make it to the show. I look at the Spitfire Mk.1 kit, and the Mk. Vb, but wonder where are all the other Spitfires? As there are dozens of Spitfire variants, almost all of them available as kits either straight from the box, or via aftermarket conversions, there is no real excuse for so many Spitfires to be missing. And people are clearly buying the various Spitfire kits, and the conversions. You know this because at the big shows, such as the IPMS USA Nationals which I just attended, you see them being sold by the various vendors, or see modelers walking past you, eyes all lit up, carrying the latest products from Airfix, Tamiya, Hasegawa, CMR, etc. Oh, and the decals, there are reams of them covering the Spitfire! Yet back to the contest tables, and there are only a half dozen or so Spitfires on display, and most are the Mk.1 or the

At the recent Orlando National Convention, I spied a lovely little display in one corner of the contest room, a 1/72nd KC-135 refueling a B-52. Both kits were from AMT Ertl, and I commented to a fellow admirer of this work that they were the first examples of these two kits I had seen at a contest, ANY contest, in a number of years. I also related to my fellow traveler the story as told to me by the head of design at AMT Ertl a number of years ago who I met at a similar event: that in the first six months of the KC-135 kit's release, AMT Ertl sold 20,000 units. Twenty thousand! They had managed to get the

Mk.Vb. Where are all the rest?

model into stores just before Christmas, including Toys R Us, and at a very good price. Grandmas and Granddads all across the nation must have thought "now this will impress young Johnny" under the tree! Yet despite these staggering numbers, why don't you see many at shows?

I know, you are saying, in the case of the KC-135, it is the size of the finished model, making it difficult to transport. But there are plenty of smaller sized models that are equally scarce on the ground. Tamiya has produced over 100 model kits in their 1/ 48th scale aircraft range. Next time you are at a model show, see how many of these 100 kits are in attendance. I guarantee it is under 10%. And what of Hasegawa's massive 1/48th scale aircraft range? Bet it's the same situation. And this for the world's largest, and most widely distributed model kit ranges. Next time you are at a show, see how many models you see from say the Blue Max series of WW1 aircraft kits, or Italeri 1/24th semi trucks. Or how many Century series aircraft models you see, in any scale. Play this game of mine, and you soon realize that no matter how many models turn up at a show, most of the models produced over the course of the past 50 years are MIA.

Cheers,

Andrew

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SEATTLE CHAPTER CONTACTS

President:	Vice President:	Treasurer:	Show Chair:
Andrew Birkbeck	Eric Christianson	Spencer Tom	Jon Fincher
P.O. Box 15983	18215 NE 95th Way #103	318 N.E. 81st St.	1819 S. 116th St. #307
Seattle, WA 98115	Redmond, WA 98052	Seattle, WA 98115	Seattle, WA 98166
Ph: 206-522-3539	Ph: 425-591-7385	Ph: 206-522-8414	Ph: 206-354-9682
acbirkbeck@comcast.ne	t ModelerEric@comcast.net	slt1298@seanet.com	jfincher42@hotmail.com

IPMS Seattle Web Site (Webmasters, Norm Filer & Tracy White): http://www.ipms-seattle.org

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 \$25 a year for regular mail delivery of the newsletter, and \$15 for e-mail delivery, and may be paid to Spencer Tom, 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. 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 425-823-4658 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 2012 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 accessable place.

September 8 October 13 November 10 December 8

IPMS No.:(leave blank) Address:	Name: PLA	STAC MO	2	LAST
City:Signature (require	d by PO):	State	S SO	Zip:
☐ Adult: \$25	D Junior (17 ye	ars old or youn	ger): \$12	
If recommender list his/her name	ues + \$5, one set may d by an IPMS member and member number S/USA	S P.O. Box	(name)	(IPMS#

Newsletter Editor:

Robert Allen 12534 NE 128th Way #E3 Kirkland, WA 98034 Ph: 425-823-4658 baclightning@yahoo.com

Building a Airbrush Booth, Revisited

by Eric Christianson

Several years ago Ted Holowchuk wrote a fine two-part article on how to construct an airbrush booth. This article can still be found on the IPMS-Seattle website.

I used that article as a basis for constructing my own (slightly larger) booth, relocating the blower motor from the top of the booth to the back, and incorporating several features that I thought would enhance the design first put forth by Ted.

I have been asked to write a new article on constructing an airbrush booth using my design and documenting what I've learned along the way.

The picture to the right shows a 1/48th scale Me 410 in the finished booth.

Key Features:

Large size – I scaled the booth to be able to easily fit a 1/48th Monogram B-17 on a turntable. This allows for plenty of storage room inside the booth for my airbrush supplies.



This picture shows the large size of the interior, emphasized with a very small tank!

Rear-mounted exhaust system – I chose to depart from the norm and mount the blower on the back of the booth. I did this to give me nearly six square feet of additional storage space in my model



room. I cannot stress how well this design works (for me), while allowing for a smooth, horizontal air flow from my airbrush directly out the back of the booth. I used a 345hp Grainger blower, venting the exhaust via a laundry-dryer hose through the wall behind the booth. The outside opening in my garage is covered with a flapper valve. Everything is out of sight and out of mind.



This picture shows the top of the booth being used to hold my 'mobile' weathering station.

Solid Construction – I did not want to worry about the heavy blower hanging off the back of the booth vibrating the whole

thing to pieces, yet I wanted to be able to move the entire booth around if I had to get behind it for some reason. As a consequence, I used ¾-inch plywood where appropriate, and ½-inch plywood when and where I could get away with it.

Doubles as a photo-booth - Internal lighting and additional lights attached to the outside edges create a suitable photobooth, incorporating a 'built-in' roll-down spool of background fabric. Painting the inside of the booth white helped brighten things up.

First – Figure out what size you need the booth to be...

The first step is to decide what size of spray booth is practical, considering where you intend to place it and what type of things you will paint in it. I chose to make my booth as large as possible, allowing for my 10x10 foot modeling room and the 36-inch deep table the booth would be sitting on.

Furthermore, since I build large scale aircraft from time to time, I went out to my stash and found the biggest plane I might build. This turned out to be Monogram's

big 1/48th B-17 Flying Fortress. I taped the fuselage halves together, and then attached the top wings to the fuselage with more tape. I then set this contraption on a turntable and spun it around on a table-top. Allowing room for trays and bottles and what-not on internal shelves I intended to run along each side, I came up with an inside measurement of 28.5 inches in width. I am a tall person, so I sat in a chair and thought about the most comfortable position to hold my head while airbrushing. This put the top of the front opening (which is the same as the bottom of the panel that hides the light) of the booth at about 18" off the table top (about nose-level), while looking straight ahead and sitting in my soon-to-be-airbrushbooth chair.

I have a 36-inch deep tabletop pushed up against the wall, and the blower motor and mounting would consume 12 inches in the back of the booth, so this left me a full 24 inches of depth inside the booth – perfect!

With these three dimensions I was able to sketch out a rough plan for the booth.



Second - Create a list of materials...

First off, I needed to find a blower that would be able to draw the air from the booth out through a vent.

I purchased this one from Grainger Associates (Bellevue – next to the old Eagle Hardware., now Lowe's) for about \$130. It is a Dayton-Brand Shaded Pole Blower Item # 4C445, Shipping weight 12.9 lbs.



Specs:

Shaded Pole Blower, Air Flow @ 0.000 Inch Static Pressure 495 CFM, Speed 1570, Voltage Rating 115 Volts, Power Rating 225 Watts, Current Rating 3.25 Amps, Frequency 60/50 Hertz, Thermal Protection Auto, Wheel Diameter 6 1/4 Inches, Wheel Width 4 1/4 Inches, Air Flow @ 0.100 Inch Static Pressure 476 CFM

If this item is no longer available, I am sure there are several others just like it at Grainger, or they can order one for you.

After getting the blower, the rest was easy. A quick trip to Home Depot and I was set. Since I do not own a table saw, I had them cut up a sheet of plywood for me. At the top of the opposite page is a list of what I used for this project.

Assembly

This is a big project that needs room, but not a lot of time, actually. I built the booth in a single evening, painted the inside the next evening and stained the outside the next. I then had to wait four days to let it dry and find someone to help me carry it into the house (it has to be tilted to make it through the doorway!)

The booth is basically built in two chunks: the first is mounting the blower on the back panel of the booth, the second encompasses everything else. After mounting the blower I left the back panel off to the side and attached it at the end of the project because the panel (with the blower) is heavy and wants to shift the center of gravity wherever it goes. I made sure that all the pieces of plywood were cut right and fit together and that I had the proper screws and glue and tools for the job. I set up two saw horse stations with plenty of work surfaces.

Step 1 – Cutting a hole in the back panel of the booth

I started by cutting a hole in the back panel of the booth that is sized to fit the round opening of the blower, and is cut in the right place to match up with the hole in the blower once it is mounted. This is tricky since you have to figure out how you will mount the blower to see where the intake will be when finished, and then cut the hole to match. As long as you make the hole the same size as the one on the blower you can fine tune the match-up fit later. I started the hole with a drill and then used a handheld jigsaw to carve out the rest.

The pictures below will help you in coming up with a plan of attack. I really wanted the blower attached securely and firmly to reduce vibration (and therefore, noise). For my booth, the bottom of the hole I cut was 8" from the bottom of the booth interior, and about 9.5 inches from the left-hand side of the booth interior.



This is a picture from the front of the booth with the air filter removed, showing the hole cut in the back panel that matches the intake opening in the blower. The hole that I cut is slightly off-center to the left

Qty	Description	SketchKey	Suggested Source	
1	Shaded Pole Blower	A	Grainger	
1	½" x 30" x 24" plywood, booth bottom	В	Home Depot	
2	3/4" x 21 1/4 x 23 1/4 plywood, booth sides	C,D	Home Depot	
1	3/4" x 30" x 24" plywood, booth top	E	Home Depot	
1	³ / ₄ " x 21" x 30" plywood, booth back	F	Home Depot	
1	½" x 30" x 4" plywood, front light cover	G	Home Depot	
1	3/4 "x 12" x 20" plywood, back addl. Blower support*	E	Home Depot	
1	22" GE 15w 'Warm White' florescent light, single bulb	F	Home Depot	
1	12" x 12" stiff foam	G	Garage?	
1	13/4" x 13/4" x (at least) 80" wood which will be cut up	E	Home Depot	
1	(Enough) dryer hose to reach from the booth to the wall	F	Home Depot	
1	Set of Dryer vent covers (inside and outside flapper) and wall runner (tube). This comes in a set.			
		G	Home Depot	
1	16" x 16" x 1 filter (they come singly or in packs of 2)	H	Home Depot	
1	Wooden Dryer Vent mounting block	J	Home Depot	
3	Brass handles (optional) for moving the booth		Home Depot	
1	Wooden Dowel (optional) for bolt of background cloth	K	Home Depot	
NA	White Paint & Stain for the inside and outside of the booth		Home Depot	
NA Appropriate hardware for attaching the blower to the back of the booth, and quality wood screws for assembling the booth,				
	and good wood glue for same.	_	Home Depot	

because I vented the exhaust off to that side.

Step 2 – Seating the blower on the back panel of the booth.

The blower has to match up with the hole that you cut. I found out that this is trickier than it looked, because you cannot see where the two line up and the motor/panel are too big and heavy to manipulate easily. But a modeler can figure it out. Once I marked up the back of the back panel, I was ready to get to work.



This is a close-up of the same hole shown above. The closer you match the hole to the intake of the blower, the stronger the current of air being drawn in will be. I put

an additional ³4-inch, 12" x 20" inch piece of plywood on the back (with a hole cut in it) and attached it to the back panel with the bottom flush with the bottom of the booth for added strength. This also pushed the blower back off the back panel to give the square lip of the exhaust outlet enough room to clear everything and provide the space I needed to mount it to the wooden dryer hose frame. (It's harder to explain than it is just to look at and figure out.)

I then covered that with a piece of stiff foam (again with a hole in it) to set the (steel) blower apart from the (wood) surface. I then set about attaching the blower to the back of the foam pad. The blower is heavy and it wants to fall off the back of the spray booth, so I needed to create a little 'home' for it using several pieces of 13/4 x 13/4 wood, as shown in the pictures. Unlike the pictures, however, which shows the finished product, I was doing this on a flat table top with the blower on top.

The blower comes with several mounting bolts on the back – it was just a matter of finding suitable hardware to use for attaching the blower to the back of the wooden booth – not unlike building a



model! I used galvanized steel L fittings and some strong banding and bolts to secure everything. Once I was satisfied that the blower was not going to come loose short of being hit by a bomb, I set it aside and assembled the rest of the booth.

Step 3 – Building the rest of the booth.

This was the fun part - just like a model! I'll try to explain in print what you will probably be able to figure out just by looking at the job in front of you.



Using my IKEA-sense of how these things should go together, I started with the bottom panel of the booth and attached the 1¾" x 1¾" runs of supports along the inside of the booth, leaving room for the thick sides to be attached and the back panel to be attached later.







Once these were secure, I flipped the bottom over and attached each side panel using glue and wood screws - first to the bottom and then to the wood support runs. After each side was attached, I did the same thing with the top panel: I used glue and wood screws to attach 134" x 134" support runs leaving enough room for the back and sides to fit. I then attached the light bar housing about 34" in from the front edge of the top panel, centered. I made sure to orient the plug end so that when in place, the cord would be nearest to an available wall outlet or, in my case, a switch console. Once that was done, I flipped the bottom-and-two-sides assembly right side up and dropped the top into place, securing the side panels to the support runs inside the top panel.









I now had a reasonably sturdy, four-sided box with no front or back. I carefully drilled a hole big enough to fit the light bar's electrical plug in the top-front of the right-hand side panel (I wanted the cord to wrap around the right-hand side of the booth). Once that was done, I attached a 4 x 30-inch front panel that hides the light bar and ...suddenly - my airbrush booth looked pretty darn good – and strong.

Step 4 – Painting and staining

Before putting on the back panel (heavy with the attached blower), I wanted to paint and stain the booth while I could still manhandle it by myself. I painted and stained the two pieces separately (back panel and the rest of the booth).

I wanted the inside of the booth to be bright white, but since I mostly use enamels and lacquers that would burn right through a painted surface, I wanted to be able to recover from spills and puddles of thinner without losing the white color. Being a modeler, I knew just what I had to do! I first masked the opening in the back and the light bar housing, and then used a can of Rustoleum White Primer to prime the interior surfaces white. Once that was dry, I sloshed a coat of Future, yes, Future (I am a modeler after all) onto the bottom surface of the booth. That took two days to dry enough to lose its stickiness. After that I sprayed on a final coat of White enamel from a rattle can. (As a side note - I have spilled stuff all over this booth and have always been able to clean up the mess with a wipe of a clean rag, leaving the surface gleaming white - magic!)

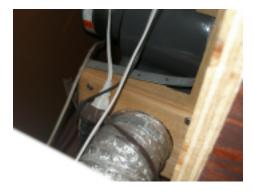
While the Future was drying I stained the outside surfaces to match the color of my model room. In three days most of the smell had gone away and the booth was ready to be assembled and brought inside. Just a few steps left.

Step 5 – Attaching the back panel with the blower to the rest of the booth

Now came the (physically) hard part. I say that because I live alone and I had to do this by myself. I cleared a spot on the sturdiest surface I had and set the booth on its front end, face down. I then lifted the back panel with the blower and carefully slipped it into place from above. And yes, like a true modeler, my first try was upside down. But once I had things sorted out I used glue and screws to secure the back to the bottom, sides, and front of the booth.

Then came the moment of truth: I carefully tipped the booth back onto its base and plugged the motor in. With a powerful whoosh and a hum my airbrush booth was moving air baby!

Step 6 – Connecting the blower to the dryer vent hose.



I picked up a block of wood that Home Depot sells specifically for mounting dryer exhaust hoses – it already has a round hole cut in the middle of it. You just need to mount it in such a way so that the square blower exhaust vent is centered in the round hole in the wood. Not perfect but it works. You can also make your own mounting block with a square hole that matches the blower exhaust vent. I guess Jim Schubert would say that this would be something a real modeler would do!

Step 7 – Attaching the paper filter, fabric roll, and accessory racks



While the booth was still out in the garage I did all the final assembly. I started with some metal brackets to hold the air filter over the hole in the back panel. I made a wooden dowel and rolled a small bolt of light blue fabric around it and wedged it into the top back of the booth. I attached the upper air filter brackets so that they would help keep the roll of fabric in place.

I next attached some racks I picked up at the drugstore to the inner panel on the lefthand side. These would hold all of my thinner bottles and other airbrush supplies. I set trays on the right hand side for Q-tips, toothpicks, and pipe-cleaners, leaving room for a small 'airbrush waste basket' box I use during my sessions. I drilled several holes to slide my Pasche allen wrench and other essential tools around the front edges of the booth, and attached four airbrush holders to the outside of the left panel.





Step 8 – Connecting the dryer vent hose to the wall.

The final step was to go inside my model room and cut a round hole in the wall to receive the dryer hose. There is a set of hardware that includes the indoor mounting bracket, the outdoor flapper and a plastic run that can be adjusted to the thickness of your wall. Drywall screws and mounting bands are included as well. I found a spot between the studs and cut away until I had a hole just short of the right diameter – I wanted a tight fit. I pushed the plastic run through the hole, attached the mounting plate on the inside and the flapper plate on the garage end. I left a little play in the hose between the

continued on page 16

Bronco Models 1/35th Scale Light Tank M-24 "Chaffee" (British Army)

by Andrew Birkbeck

For those who have been interested in building a 1/35th scale World War Two M-24 Chaffee light tank, the only game until very recently has been the Italeri kit from the mid 1980s. For the time, it was a pretty decent kit, but the original pressing of the model had some "issues" in terms of accuracy. Most notable was the inclusion of post-war rubber block T85E1 track, as well as a few hull and turret parts that again were more in keeping with post-war variants of the M-24.

More recently Italeri rereleased their kit as an "early" version, providing the modeler with the (correct) all-metal T-72 tracks, and removing a few of the other "errors" in the kit. The US firm Formations came out with a brilliantly detailed "upgrade" set for the Italeri kit, which had the modeler replacing over half the Italeri kit with state of the art resin parts. The problem was the price: the resin "upgrade" was two to three times what you could find the base Italeri kit for!

Earlier this year, the Hong Kong firm Bronco Models released a 21st century state of the art WW2 M-24 Chaffee, supplied with US Army markings. This had one (to me minor, but what do I know!) "error" in the shape of the turret roof layout. The second release of Bronco's kit, and the model under discussion in this review, is the "British Army" version. To Bronco's great credit, they have updated the turret tooling, and fixed the error. So kudos to Bronco on this matter.

The kit under review has me convinced that Bronco design engineers get paid on a per part basis: the more parts, and the smaller the parts, the more they get paid! This kit consists of over 700 injection molded parts in tan and clear plastic and a lovely photo-etched parts fret. The tracks in this kit are the all metal T-72 variety, and are individual link on 14 small sprues. The



detail on both the injection plastic and PE parts is breathtaking. Decals for five vehicles are included, four listing the vehicles as 1944-45 examples, and one from 1946. A length of "string" is included to provide the tow cable.

The initial sequences of the instruction sheet cover the lower hull and suspension construction. The suspension is "workable", which to me is rather annoying. Don't get me wrong. The detail is phenomenal, and sure enough, the set up allows the modeler to position the suspension and road wheels in various layouts. However, how many modelers really want "workable" suspension? To assemble Bronco's workable suspension requires the modeler to have two or three pairs of hands in order to properly assemble the parts. With my one pair of hands, I must admit to a fair number of curses as I got the parts into position, only to have them "work" themselves into another (not desired by me) position. In the end I aligned the parts as best I could, and glued them solidly, then quickly tweaked things as best I could before the glue set up. This worked, and I am very happy with the end result.

The link by link tracks are one of the highlights of this kit. They are beautifully and delicately detailed, there are no

ejection marks to clean up, and "only" three sprue attachment points per part, one part per link. They really weren't any hassle to clean up, and then simply "popped" into position link after link, for fully workable tracks! And the rest of the kit's parts are just as well detailed as the track links, and assemble just as easily (with the exception of that suspension!).

As mentioned, the kit comes with five markings options. The decals are very well printed, with good color saturation, and alignment. All naturally enough, given the title of this kit, are British Army units:

Option 1: HQ Troop, 5th RTR (Royal Tank Regiment), 22nd Armoured Brigade, 7th Armoured Div, Germany 1945

Option 2: C Squadron, Reconn Regiment, 5th Infantry Div, 1946

Option 3: trials vehicle, England, 1944

Option 4: 3rd RTR, 22nd Armoured Brigade, 7th Armoured Div., 1944-45

Option 5: 1st RTR, 22nd Armoured Brigade, 7th Armored Div., 1945

As always, check references if you are hyper sensitive to having the markings be 100% accurate.

All in all this is a brilliant model kit. If you take your time, and plan for the "working" suspension, it should assemble into a breathtakingly detailed model of this diminutive tank. I am half way through building mine, and apart from the challenge of the working assembly, everything is going swimmingly. I would like to thank DragonUSA for providing the review sample.

Evergreen Aviation & Space Museum Model Show and Contest 2012

Saturday, September 15, 2012

Presented by Oregon Historical Modelers Society (OHMS) and the Evergreen Aviation & Space Museum

Theme: The '60s

Muscle Cars, the Moon Race, & the

Vietnam War

Show will be in the Space Museum Building featuring space vehicles and modern jet displays including a Titan

missile and SR-71

Registration starts at 9:00 a.m. Judging

completed by 3:15 p.m.

Large Kit Raffle

30 vendor tables

Food available onsite

IMAX Theater (see museum webpage for schedule and prices) and Water Park

Call Brian Yee at **503-309-6137** for further information.

Visit the show web site at http://www.ipms-portland.org/show-main.htm

Located just east of McMinnville, Oregon along Highway 18 500 NE Michael King Smith Way McMinnville, OR 97128

Show Hours

9:00 a.m.: Open to Public 12:00 p.m.: Model Entry Closed 3:15 p.m.: Judging Complete 3:30 p.m.: Award Presentations 3:55 p.m.: Models may be removed 4:00 p.m.: Show Complete

Museum Admission:

(Note: all must pay museum admission) See museum Webpage for prices Free for Museum Members and Youth (under 5) Contest Entry Fees: Adult: \$5 for 1-5 models and \$1 each

additional model
Juniors 11-17: \$1 per model entry

Juniors 10 and Under: Free Display Entry: Free

Special Awards

Michael King Smith Memorial Award: Best of Show Judges' Choice

Best of Show: Peoples' Choice The Evergreen Award: Best Rotary

Wing Craft

Johnnie E. Johnson Memorial Award: Best

Royal Air Force Subject Best NATO (Non-US) Subject Best Falklands War Subject

Best '40s and 50's Jet Fighter Best WW1 Aircraft

Best WW2 Pacific Theater Subject

Best Natural Metal Finish

Best Soviet WW2 Aircraft Subject

Best Soviet WW2 Armor Subject

Best Anti-Aircraft Subject

Bob Guggemos Memorial Award: Best

Air-Cooled Automotive Subject

Best Muscle Car Subject

Best 60s Space Subject

Best 60s Sci Fi Subject

Best Vietnam War Air Subject

Best Vietnam War Land Subject

LOCATION:

The Evergreen Aviation & Space Museum is located one hour SW of Portland. From I-5 Take Highway 99W to Highway 18 and proceed to Cumulus Ave. in McMinnville, OR. The Museum is across the street from the McMinnville Airport on Capt. Michael King Smith Way.

Museum Website: www.sprucegoose.org

Upcoming Shows

9/15/2012

OHMS & Evergreen Aviation Museum Model Show and Contest 2012 - Oregon

Historical Modelers Society

Evergreen Aviation and Space Museum

500 NE Michael King Smith Way,

McMinnville, OR

Brian Yee 503-309-6137

(See this page for more details.)

10/6/2012

18th Annual "Show Off The Good Stuff" Model Show & Contest - Palouse Area

Modelers

Moscow Moose Lodge

210 N Main St., Moscow, ID

Scott Rowland 208-843-5137

10/6/2012

IPMS Vancouver 42nd Fall Show Bonsor Recreation Complex 6550 Bonsor Avenue, Burnaby, BC, Canada Peter Hickey 604-988-3253

10/7/2012

T.A.M.S. Fall Nationals Scale Automotive Contest Lakewood Elks 6313 75th St. W., Lakewood, WA Gary Davis 253-472-3447 Harold Conrad 253-770-9470

10/13/12

OrangeCom Model Contest and Vendor

Sponsored by IPMS Orange County Theme Award: "The Queen's Diamond Jubilee", plus a "Made in Britain" category

(British-produced model kits)

Cal State Fullerton

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Hasegawa 1/200th Scale Boeing 787-8 ANA

by Chris Banyai-Riepl

The Boeing 787 marks a dramatic shift in airliner manufacturing, with the aircraft featuring a significant portion of its construction from composites. This creates an aircraft that is lighter yet still strong, resulting in better fuel economy. The first 787 took to the air on December 15, 2009, and the first aircraft was delivered to ANA on September 26, 2011. The story of the 787 is a fascinating one, and telling it thoroughly would far exceed the space here, so I recommend reading any number of online or print sources should you want the complete story.

This is the first 787 kit in 1/200th, and the first new airliner kit from Hasegawa in quite some time. Molded in white plastic, the kit is nicely detailed, with recessed panel lines and a comprehensive decal sheet covering the launch customer. The kit also comes with a stand, should you wish to display the finished model in flight configuration.

Traditionally, aircraft model construction begins with the cockpit. While some airliner models have a rudimentary cockpit, there is no such assembly here. That's because the windscreen is solid, molded into the fuselage halves, with only a scribed line denoting their location. This will make building this kit much easier, but I would have liked to have seen the option of clear parts here. With no cockpit to build up, the only thing to do before buttoning the fuselage up is to screw in the bolt in the forward bulkhead (nose weight included, a very nice touch) and glue the front and rear bulkheads in place. The fuselage has a separate nose cone and tail cone, and with those in place, the assembly is done.

The wings and stabilizers are next. Both have similar construction, with the upper pieces having solid outer sections and trailing edges, with a separate lower inner section. For the wing, this separate section



is one piece and includes part of the lower fuselage. There is also a center keel piece that is separate, and the instructions denote some cutting in this part should you wish to use the stand. There are two separate flap track fairings, and with those in place attention can turn towards the engines.

The engines are really nicely done in this kit. The intake lip is molded as a solid piece, as is the tail cone with its sound-suppressing flutes. There are separate fan blades for the front and rear section, both of which are trapped between the two engine nacelle halves. A separate vane for the nacelle side finishes the assembly of the engine nacelle, and these then fit into slots in the wing. The entire assembly looks like it will go together with minimal effort and have no challenging seams to fill.

The final step in assembly is the landing gear. There are two options in this kit: gear up or gear down. The gear up option has separate one-piece wheel door assemblies for all three gear bays, greatly simplifying assembly. For the gear down option, the nose gear is simply the strut with separate wheels and separate doors. The main gear struts are a bit more complex, with four wheels on each strut and a separate retraction strut. The detail throughout here is quite good for the scale, and the finished landing gear will look nice once given a subtle wash.

The decal sheet is large and full of useful bits and pieces. Of course the big parts are there for the ANA scheme. This is the delivery scheme, which features large 787 titles on the forward fuselage. The decals include registrations for four aircraft: JA804A, JA805A, JA806A, and JA807A. In addition to the base livery decals, the decal sheet includes a lot of stencil and warning markings. It is these little decals that will really add to the realism of the finished model. The decals are nicely printed and those familiar with Hasegawa decals know what to expect here.

This is likely to be the only 1/200th 787 kit we'll see, and out of the box it will build up into a very nice model. For those wanting to do a bit of modification, stretching this into a 787-9 would be simple, as there are very few panel lines on the fuselage (composite construction limits those quite a bit). Hasegawa has already announced their next 787 release in JAL markings, and I am sure we will see this released several other times as more airlines take delivery. My thanks to Hasegawa USA for the review sample.

[Thanks to Chris Banyai-Riepl and www.internetmodeler.com for permission to use his, Andrew's, and Chellie's articles. - ED]

Mach 2 1/72nd Scale Beech 200/C-12 Super King Air/ Huron & RC-12K SIGINT

by Chellie M. Lynn

Launched by Beechcraft in 1969 as the Model 101, as a development of the Beech 100 King Air, the Super King Air featured a revised rear fuselage to accommodate a Ttail in place of the Model 100's conventional layout. The fuselage was also modified to withstand a higher pressure differential. The first flight was on October 27, 1972. Many different versions of the King Air were produced for multiple civil and military uses. There are at least 40 different military designations related to the Super King Air that I have been able to locate. The USAF is starting a search for a replacement for the C-12 Fleet, although the only bird that meets all the requirements is the current Hawker/Beechcraft King Air 350.

Opening the box reveals the typical Mach 2 single sprue for the color parts and a second smaller sprue for the clear parts. Parts are mostly well formed with decent engraved detail. The smaller parts suffer from large attachment points and significant flash. The only downside is the rough surface texture of all parts including the clear ones. I am uncertain as to how the molds are made or whether they are metal or ceramic.

Common flaws of the Mach 2 kits are visible mold cracks and a thing I call the Blort. The Blort is an area large or small somewhere on the main parts of the kit where a distortion has occurred leaving an irregular bulge, usually on an exterior surface. Finding the Blort is always one of my first goals when surveying a new Mach 2 kit, as its size and location will impact assembly of the kit. Between the rough surface texture and the Blort, Mach 2 kits always provide an interesting challenge. I do not hold these minor annoyances against Mach 2 as the small amount of sanding and polishing is quite worth it to



me to have kits that no one else would even consider. The previously mentioned Blort is to be found on the right wing leading edge at the nacelle juncture.

The kits include a very basic cockpit consisting of a floor, rear bulkhead with the door open, a very plain and somewhat misshaped instrument panel that is to be attached to an inner fuselage bit. Two rather crude control wheels and very basic seats complete the interior. There is no passenger/crew compartment detail in either kit, although the very thick cloudy transparencies likely won't allow much if anything to be seen.

The primary difference in these two kits lies in the two additional sprue sections that include the wing tip tanks and all the extra antennas for the Army Guardrail version. Also included on these sections are the four bladed propellers introduced on the C-12s from model D onwards. From my research it appears that the various U.S. military branches did not fully standardize on the prop configuration until the early 1980s. However, to this day, I still occasionally see C-12s with the three-bladed props. All of the additional antennas will need careful cleanup as the plastic is the typical Mach 2 brittle ivory.

The instructions are typical of Mach 2, meaning excruciatingly simplified with locations of many small parts left open to question. The best guidance I can give is to find pictures of your desired prototype

and mount the odds & bods based on personal research.

The Super King Air/ Huron comes with decent U. S. Navy markings for a staff transport C-12. The RC-12K features U. S. Army markings and all the extra bumps and blades for the Guardrail SIGINT version. As the durability and

ease of use of Mach 2 decals frequently leaves a bit to be desired, I try to have alternate backup markings available. I have some appropriate RAAF and RNZAF decals in store so one or both may end up with aftermarket markings.

Overall these kits scale out very close to published data from Hawker/Beechcraft and other sources. Wing chord might be a bit short, but is not serious enough to warrant correction. Overall it looks like a King Air and that is the important part to me.

Mach 2 kits are not for the beginner, and the more experience the better. I actually enjoy most of the Mach 2 kits I have built over the years and these two actually appear to be eminently buildable in a reasonable time. With the large number of military operators (at least 46 different countries) and the resultant plethora of possible markings, equipment, and color schemes, a significant fleet could be built up. However at about \$50 a pop, I may have to settle for a much more limited number.

I obtained my kits at Skyway Model Shop, as Emil seems to know my preferences quite well, and has the new Mach 2 kits as soon as they are available.

Cyber-Hobby (Dragon) 1/48th Scale Messerschmitt Bf 110D-3

by Walt Babst

In aviation it has been shown on many occasions that when engineers try to design an aircraft that is supposed to be good at many things, they often end up with a plane that is not good at anything. This is often the way the story of the Bf 110 was portrayed.



The idea of a Kampfzerstörer or Battle-Destroyer was that of an aircraft that could achieve aerial supremacy over enemy territory, have a long enough range to escort bombers, be able to intercept enemy bomber formations and also carry out ground attack and bombing missions on its own. This idea received favor with Herman Goering and led to the issuance of a directive in 1934 calling for the design of an aircraft that would be able to perform all these tasks. After design review three prototypes would be commissioned from three different companies, Focke-Wulf, Henschel and Fayerische Flugzeugwerke (BFW). Trial results quickly showed that Focke-Wulf's Fw 57 and Henschel's Hs 124 were not able to compete with BFW's Bf 110.

Finding favor with Goering the Bf 110 was rushed into production. The plane enjoyed initial success in Poland and France, but suffered unacceptably high loss rates when matched against the British Spitfires and Hawker Hurricanes. Instead of achieving air superiority the Bf 110s had to be escorted by their sister ships, the single-engine Bf 109s.

On December 17, 1939, a flight of 22 RAF Wellingtons flew out on a mission over Heligoland Bight, a bay in the North Sea at the mouth of the Elbe River. These bombers were intercepted by a flight of Bf 109s and Bf 110s, when the ensuing battle was over twelve of the Wellingtons had been shot down, nine of them credited to Bf 110s.

During the Battle of France though the Bf 110 faced modern single engine fighters and had higher loss rates than previously encountered, losing approximately 35 percent of the Bf 110s deployed in that battle. This situation would be repeated again when the Bf 110 was deployed against the Hurricane and Spitfire during the Battle of Britain. During the Month of August 1940 over 120 Bf 110s were lost, or about 40 percent of the Zerstöreregruppen aircraft deployed against England. It had become clear that the Bf 110 could not fight head-to-head with the more maneuverable single-engine fighters.

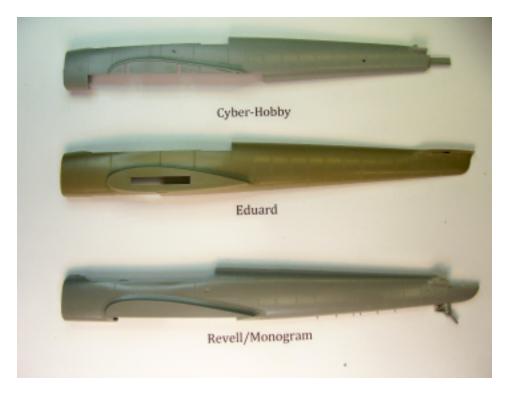
When the Americans entered the war and began their campaign of daylight strategic bombing it was an opportunity again for the Bf 110 to destroy the enemy the way it had at Heligoland Bight. The problem was that the Americans quickly learned to escort their bombers with single-engine fighters that could help keep the enemy fighters at bay. As long and as far as the single-engine fighter stayed with the bombers the Bf 110 could not be an effective weapon against the bombers.

One might think that the failure of the Bf 110 to fulfill any of the missions it was designed for would lead to it being phased out. It is true that production was halted in the expectation of it replacement the Me 210, but this aircraft performed so poorly that production lines quickly resumed production of the Bf 110. Soon after production resumed the ultimate version, the Bf 110G, started rolling off production lines. Production would continue until March 1945 even after its successor the Me 410 went into production. What spurred Germany to produce an aircraft for nine years when they had learned early on

that it really could not fulfill the roles it had originally been designed for? Adaptability would be one reason and no viable replacement another.

The Bf 110 continued to fight the American bombers during the day, using standoff weapons that enabled them to engage the bombers without getting as close in and having to tangle with the fighter coverage. As America continued to bomb during the day, the British would follow up with their own raids at night. Defending Germany from these nightly raids is really where the Bf 110 found its strength. At first early versions of the plane were painted black and sent up at night to shoot down bombers caught in the spot lights. Radar was used to guide the fighters into the bomber stream also. It was dangerous and deadly work, but the crews of the Bf 110 were highly successful. The size of the aircraft enabled the installation of radar on board the aircraft itself. This enabled the crews of the Bf 110 to be hunter aircraft capable of finding and tracking their own quarry. It proved to a role that Bf 110s would fill till the last days of the war. The Bf 110 found its stride, and its success, in a role that had not even been created before the war, that of a Night Fighter.

A major player in the Luftwaffe during World War II, today the Bf 110 is a popular modeling subject. Many kits of different versions of the Bf 110 have long been available in all the popular scales. Recently modelers have been blessed with new releases in all the popular scales. Eduard led off in recent years with their 1/48th scale C/D version that set a new mark class and detail for Bf 110 kits. Most recently Airfix and Eduard have released 1/72nd scale versions that have received favorable reviews also. In between Dragon waded in with their own 1/32nd scale kit and also a 1/48th scale kit marketed under the Cyber-Hobby label of the Bf 110D-3. I was given a Cyber-Hobby kit as payment for some automotive work performed for a fellow modeler. I love deals like that. When I opened the kit I knew it would move to the top of my to-do stack.



When you open the box you are greeted by a well packed and packaged stack of sprues. The base kit has eleven different sprues, three of which are doubles; one small photo etch fret, a piece of pre-bent stainless wire and a decal sheet for two different aircraft. Since this kit was a first production for the United States and Japan, there were two additional identical sprues containing parts to build the engines for each nacelle. It is really pretty creative engineering that the nacelle panel parts are the same with or without the engine. The instruction sheet does not reference the engine parts at all, they are addressed on a separate sheet. The engine parts look to build a nice representation of the DB 601A engine and with a little detailing should look quite realistic.

The decal sheet only offers two options and I was a little surprised to find that one of the choices matched one of the options in the Eduard kit of the E version. Both of the kits offer the markings for an Iraqi Bf 110 from 1941. Well, a little research led me to page 92 of *The Messerschmitt Bf 110 in Color Profile 1939-1945*, where there is a nice clear picture of this aircraft identified as an E, with the extended tail and the

release cable clearly visible. This does not match the Eduard fuselage options, but does match the Cyber-Hobby fuselage. If you want to build this aircraft it would probably be better represented with the Cyber-Hobby kit.

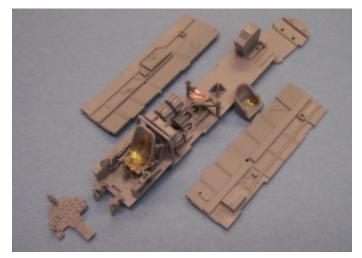
When it comes to modeling I worry about detail and accuracy but I do not let it consume me. I have seen guys get lost in a build moving panel lines and worrying if the shape of something exactly matches the latest scale diagrams. I want to enjoy myself and actually finish the model, and I build too slow to worry about certain things. Still though I respect those who focus on accuracy and I did lay the fuselage and wings up against scale drawings. I will not go into millimeters, but just say that the outline of the fuselage looked just about perfect and the wings were really close, maybe just a tad short in span. I did take a picture of the fuselages from the three main Bf 110 kits on the market, in a side by side comparison. They are all very close to the same and while you could probably almost join the Eduard to the Cyber-Hobby fuselages together they do not agree on the location of the fuselage segments.



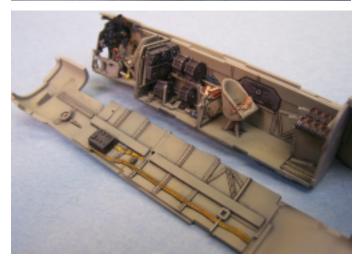
The engraving on all the exterior surfaces is fine and delicate, but I think it lacks the finesse of the Eduard kit. The control surfaces may be a little heavy handed for some but I think they will look okay when painted and weathered. The direction sheet looks complete but beware that there are a lot of steps covered in some of the pictures. It might be easy to miss something.

Beginning construction in the cockpit I deviated from the directions and glued the sidewalls to the side of the fuselage instead of building the cockpit first and trapping it in the fuselage. At this point you run into your first glitch in the directions. The directions show two locating sockets for the side of the fuselage to help set the side panels in the proper location. The sockets are on part A1, the port side of the fuselage, but one is missing on the starboard side. In the end it did not matter; the side panel was sufficiently located with just the one socket. As I built up some of the parts I ran into a few little things. One was the photoetch harness for the pilot's seat. The directions show it passing through the slot in backrest which was molded closed in the kit. Silly me, I drilled it out and folded up the photo-etch to get it to pass through and then unfolded it to glue it in place. Next time I would just cut it and make look like it passed through. There is also no call out in the directions for part F12, the trim wheel, to be glued to fuselage side A1.

All-in-all the cockpit builds up to be very complete and very attractive straight from the box. The one thing I will note is that while the parts are delicate and very intricate the fit of the items is not always very positive and secure. I also ran into an issue when I joined the fuselage halves together. The fuselage mold seems to be wide at the cockpit area. I had to clamp the







fuselage in order to get the side to touch the bulkheads. Part F35, which has the framework on it for the canopy and closes out the top of the cockpit, seems to be a little narrow, again requiring clamp, and I was still left with little gaps. On the positive side though, the fit of the fuselage halves was excellent.

The wheel wells are very nice and appropriately detailed. The individual side braces are supplied in plastic and in my opinion are nicer than photo-etch. I do warn you though that you should be careful with these as each of them is different just enough that if you try to put them in the wrong spot they do not fit correctly, yet they look almost identical (as you can imagine, I found this out the hard way).

The engine firewalls are handed for starboard and port wing, but it appears to me that the hoses for the starboard wing are on the wrong side of the firewall. That fact, plus it was my intention to save one engine for some other project, and I wanted to compare the assemblies of the nacelles with and without an engine, led me to build it with just the port engine. I say it was my plan to save one engine for another project, but my dog had other plans. The engine fell onto the floor without me noticing but not her. I heard crunching

sounds and found my engine looking like it had been hit by a few 30 mm cannon shells. The engines themselves are nice and without any enhancements make a reasonable presentation of the engine. In fact, much of the detail is lost under the rear panel of the nacelle that is not

removable in this kit. The assembly of the engine and nacelles is tricky, I did not follow the directions and it caused me many frustrations trying to get it all to fit. The problem is that if you assemble it as the instructions direct, you are trying to attach the wheel wells, firewall, engine, nacelle all at same time. I did not go this route, and still had issues with alignment.

The wings go together fairly well, you are given the option of building it with the leading edge slats deployed or stowed. Showing them deployed requires a little kit surgery, but it is relatively straight forward and I think adds a nice touch. You also are given the option of flaps up or down, I chose down. All of the flight controls are positional which I found to be a nice touch.

When it comes time to attach the wings to the fuselage you are aided by two wing spars which help insure a nice positive strong fit with the correct dihedral. Kudos to Dragon for engineering this feature into the kit; Revell/Monogram and Eduard do not have this feature. The tail also has a nice positive fit and alignment is very easy to achieve.

The nose gun bay is also nicely detailed and looks nice straight out of the box. The problem is the strange engineering of the nose piece. Instead of molding a solid onepiece for displaying it closed and a twopiece for displaying it open, Dragon chose to mold it as a two-piece for closed that has a piece missing where I do not believe it was separable on the actual aircraft. (See photo opposite). In order to display it open you have to cut part of the molded nose off and use another piece that slides on. The fit is good if not fiddly, but since I was building this as a review and wanted to take full advantage of what the kit offered I went this route.

After all the subassemblies were put together I was ready for paint. There was very little work that needed to be done after assembly, the only seams that gave me any real issues were the nose to the fuselage, and the underside fuselage to the main fuselage towards the front. Overall it

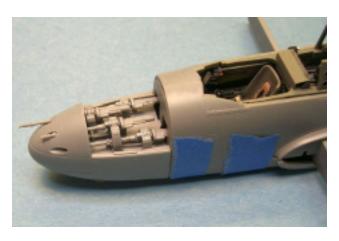
was not really too bad and required minimal amounts of putty. One word of warning though, throughout assembly I forgot to drill out the holes for various items, like the drop tanks and the cable holders for the dingy release cable. It took some work but I was able to locate and drill them from the outside, sure would have been easier to do it before assembly though!

Now ready for paint, I used my photo references to get the scheme right for my bird. I love the German 02/71/65 paint scheme, although I did lighten my 65 blue with some 76 blue to lighten it up a little bit. I used the kit decals and found that they generally worked well although it did take a few applications of Microsol and Solveset to get them to snuggle down completely. The shark mouth is supplied in two pieces and I ended up with open parts where the decal did not come together in the relief cuts. I ended up touching them up with some red paint. If I had it to do over I would probably paint the mouth and then cut the teeth from the decal. I have done it that way before and it worked well.

I put on some of the detail parts after all this and weathered the bird. I found the photo etch loop antenna to be more trouble than it was worth. If I looked at it wrong it bent and when it bent the paint tended to flake. I guess I am somewhat photo-etch challenged. Overall though I would say this was a very enjoyable, well detailed kit that gives you a lot in the box. Having built the Revell/Monogram kit I can say that it is definitely a much more advanced and better kit. I have not yet







built the Eduard kit, but having read other's reviews and looked at the plastic in the box I am guessing that these two kits would be very close in quality. I would highly recommend the Dragon kit to anyone who likes the Bf 110 and wants an enjoyable build that will give you a really nice build straight out of the box.

1-10 Scale Ratings

Value- 10 (lots of options, photo etch, positional flight controls, optional canopies)

Fit- 7 (generally very good, but some parts location points not very positive)
Decals -8 (nice good color and registry but take some effort to get them to settle down)

Directions- 6 (no real directions just pictures with high parts count assemblies in each)

Molding - 9 (no flash or sink marks to speak of, crisp details and fine engraving).







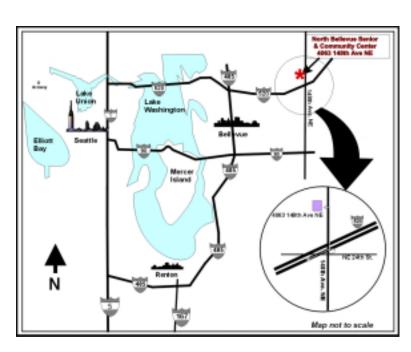
Airbrush Booth

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booth and the wall just in case I needed to move the booth one way or the other. Once installed, the flow of air outward will open the outside flapper - all will be good. Once I found an able-bodied human to help me carry this contraption inside, we set it on the table top, carefully slid the dryer hose into place and tightened the metal connecting band. I ran the cords around to the electrical switch box I have in my model room and flipped the switch. Voila! Lights! Hum! Air Flow! SNAP!!

Meeting Reminder

September 8



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

Directions: 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.