

Seattle Chapter News



Seattle Chapter IPMS/USA
July 2004

PREZNOTES



In order to not become too repetitious, I've taken to rereading some of my PrezNotes from the past. As a matter of fact, the template for this particular column is based on the July column of a year ago. It certainly (only to my mind's eye, perhaps) makes for an interesting read. I had mentioned a number of kits that were works in progress including a Bv 141, a handful of CraftMaster resin hydroplanes, a vacuform Seaview and a few others. You know what? They are **all** still on the bench! What I find interesting is the six or eight models I've finished since then were all started after I wrote the July column. Why do I have such an aversion to some of these models that are collecting dust on the shelf above my work area? A few of them are really close to completion. Is it because all of them had some problems at some point in time during construction? My guess is that is it; a problem model that I don't particularly want to work on because of something that went horribly wrong during construction. The interesting thing is that for most of these projects, I have corrected the problems I encountered and it's basically finish work that I need to do to get those models to their rightful place in the display case. I have even been contemplating trying to get one done (one of the hydros) to take to the National Convention in Phoenix. All I need is a little inspiration. Or just a swift kick in the rear end.

Another topic I talked about was concerning a forthcoming release of the Fonderie Miniatures H-21 Flying Banana. I hadn't realized it had been a whole year since the kit was announced. Hey guys, it's been a year! I'm ready. **Now!** Hmmn, perhaps I shouldn't sell my old Aurora H-21 kits quite yet...

Speaking of Fonderie, I've read some interesting reviews and heard a few comments concerning the quality of the Martin Maryland kit released a short time

ago. There have been a few suggestions that the Koster Vacuform kit is actually better due to some quality control issues. You would think that wouldn't be a problem in this day and age. Look at what similar small operations like Czech Model and others are turning out. And for the price being charged for the kit (\$60+) I think I'd rather take on the Koster kit. I know the quality of his work. Yes, it is a vacuform kit. No, it's not an issue. Most vacuforms are just as easy (if not more so) than any A-Model kit Bill Osborn has ever worked on. And if you are interested in taking on a vacuform kit some day, let me know. I can give you more information than you will ever need on building one. I've "rassled" some pretty bad ones into submission.

And as Homer Simpson once said: "If you really want something in this life, you have to work for it. Now, quiet! They're about to announce the lottery numbers..."

See you at the meeting,

Terry

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Public Disclaimers, Information, and Appeals for Help

This is the official publication of the Seattle Chapter, IPMS-USA. As such, it serves as the voice for our Chapter, and depends largely upon the generous contributions of our members for articles, comments, club news, and anything else involving plastic scale modeling and associated subjects. Our meetings are generally held on the second Saturday of each month, (see below for actual meeting dates), at the **North Bellevue Community/Senior Center, 4063-148th Ave NE**, in Bellevue. See the back page for a map. Our meetings begin at 10:00 AM, except as noted, and usually last for two to three hours. Our meetings are very informal, and are open to any interested plastic 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 \$24 a year, and may be paid to Norm Filer, 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 or WordPerfect 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 2004 meeting schedule is as follows. All meetings are from **10 AM to 1 PM**, except as indicated. To avoid conflicts with other groups using our meeting facility, we must **NOT** be in the building before our scheduled start times, and **MUST** be finished and have the room restored to its proper layout by our scheduled finish time. We suggest that you keep this information in a readily accessible place.

July 10
September 12

August 14
October 9

IPMS/USA NEW MEMBER APPLICATION

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 If recommended by an IPMS member, list his/her name and member number _____ (name) _____ (IPMS#)

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Check out our web page: www.ipmsusa.org

Academy 1/48th Scale Boeing Vertol CH-46E

by Chris Banyai-Riepl

The need for a reliable helicopter capable of carrying roughly 20 troops led to the development of the Vertol 107, a twin-rotor design with rear loading capabilities. Initially designated the HRB-1, the CH-46 entered combat operations in Vietnam in 1966, and the type soon found its way into service with several foreign countries, including Japan, Canada, and Sweden. The latest variant, the CH-46E, was slated to be replaced by the V-22 Osprey, but problems with that plane has virtually guaranteed that the CH-46 will continue to soldier on for many years to come.



Here is a kit that many modelers have been anxious to get a hold of for a long time. Until now, models of helicopters in 1/48th scale were generally limited to single-rotor aircraft. Academy has broken into the twin-rotor world with this kit, the first time the CH-46 has been kitted in this scale. In the large box you get several trees of light gray plastic, with a single tree of clear parts and a nicely-printed decal sheet rounding out the contents. The model features recessed panel lines throughout, and comes with plenty of detail. The decal sheet provides three options, including one interesting overall green helicopter.

Interestingly, the instructions start you off with the rotors first, which is probably a

good thing as it gets you warmed up before tackling the full interior. The rotors have separate blades that are pegged into a two-piece hub. To aid in detailing and positioning, the instruction sheet includes photos of the real thing, which is a nice touch.

With the rotor assembly together, it's now time to tackle the interior, and here is where the fun really begins. This kit comes with a full interior, both up front and in back. The cockpit has separate seats, a multi-piece bulkhead, separate collective and cyclic control sticks, and much more. While we will undoubtedly see aftermarket resin details for this kit, the stuff in the box will do quite nicely. Stepping back from the front office, this kit comes with a complete rear interior, including separate side walls and ceiling. To add to this, the kit comes with the option of stretchers or seats, which can be set up either stored or deployed. Additionally, you get several options for displaying hatches: fully open, partially open, or completely closed.

Although this kit includes many of the parts for earlier CH-46 variants, one of the defining features of the CH-46E is the larger sponsons. To get as many variants as possible, Academy has molded these separately, which means that part of the lower fuselage needed to be separate as well. This means that we will undoubtedly see a KV-107 with the large pontoons, and probably a CH-46B or D in the future. Other separate details include the exhaust pipes (earlier variants had a circular exhaust), armor plating, ECM antennae, and the windshield wipers.

The decal sheet is beautifully printed, with complete stenciling as well as the three marking options. Two of the marking options are for low-viz gray helicopters, while the last is an overall gloss green example. All three are from the U.S. Marines. The overall green example is from Marine Helicopter Squadron 1, the "Nighthawks," based at Quantico, Virginia. This helicopter has thin white stripes, outlined in gold, with "UNITED STATES MARINE CORPS" written on both sides of the fuselage. This one is definitely an interesting CH-46.

The two low-viz helicopters are finished in FS 36375 and 35237, with one from Marine Medium Helicopter Squadron 162, the "Golden Eagles," and the other from Marine Medium Helicopter Squadron 261, the "Raging Bulls." Both of these schemes have nothing special about them, being regular service birds. I am sure that we won't have to wait long, though, for aftermarket decals to come out with some of the more colorful and fancy one-off CH-46s.

This is an excellent kit of an important helicopter, and I will not be surprised to see several of these built up over the summer. The construction looks very straightforward and the potential for other variants means that CH-46s will be popular for quite a while.

My thanks to MRC for the review sample.



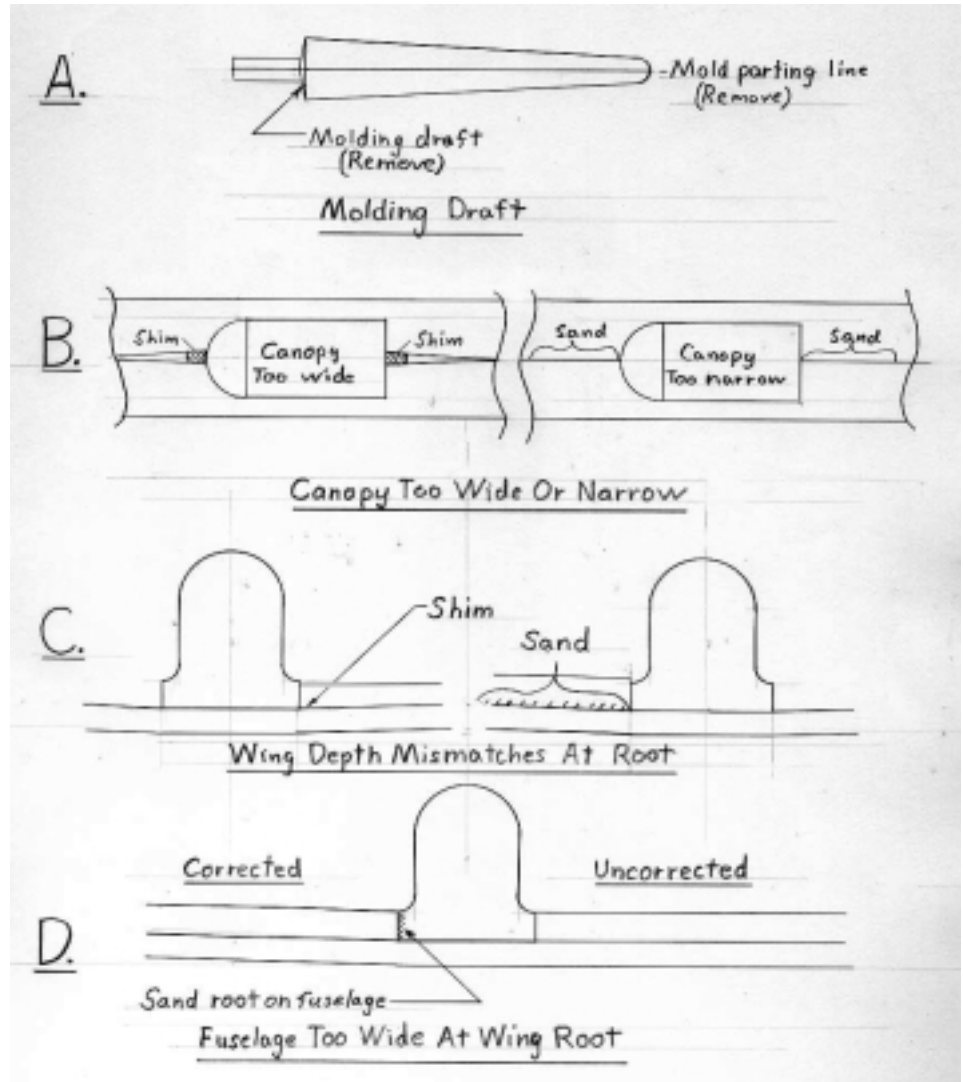
Hints, Tips, and Techniques

by Jim Schubert

This is the second in our series of how-to columns. The first appeared in the April issue. This installment was to have appeared in the May issue but I missed the deadline. Oops! In the absence of any complaints about the low-level of basics that I was addressing, I will continue in the same vein. We'll get into the arcana and super secrets as we get deeper into this thing - we have to start simple. Let me know what you think - especially if you disagree with anything I say or with my approach or if you have a different way of doing things that you like. Remember, we are doing this in three parts each month: **A. Build a Model** - being a walk-through of the step-by-step process of building a model from a typical kit, **B. Specifics** - where we discuss tools, their use, etc. and **C. Trivia and Oddments** - which is exactly what the heading says - i.e. anything.

A. Build a Model

In April we got all, or most, of the kit's parts removed from their sprue trees and cleaned up. It's time for test fitting. Never glue parts together on the blind faith that they'll fit - for at the most critical juncture - they won't. That's guaranteed, even if the kit is a Tamigawagram. If your kit has locating pegs, make sure they allow the surfaces to be mated to fit snugly together. If not, cut file, sand, etc. as required to get them to fit properly. In extremis, cut the d—d pegs off and eyeball alignment of the parts. A critical, chronic, fit problem occurs where a part has a mold parting line on the surface that is to butt flush against another surface. A good example is a tailplane half with a tab to fit into a slot in the fuselage. Typically these parts have what is called "molding draft" - a slight taper to facilitate separation from the mold during manufacture. See Sketch A. Remove the mold parting line and the molding draft and any fillet radii that interfere with perfect fit. This meticulous approach will frequently permit you to paint parts separately and not assemble them until



after the painting is finished. I prefer to paint sub-assemblies, others choose to assemble everything before painting. Different strokes.

Dry fitting will reveal other problems too. Typically the wing of a monoplane kit comes in three pieces, a one-piece bottom and two upper halves. Tape these together and test fit the wing to the taped-together fuselage. All too often, fit at the upper wing root is off. See Sketch C. Don't just slather on filler. In the first case illustrated, where the upper wing half sits below the fuselage wing root, shim the upper wing half up to mate properly with the wing root and fill the leading and trailing edges of the wing as required. In the second case,

sand down the faying surface of the upper wing half until it mates properly with the wing root. (NB "Faying Surface" refers to a surface to be joined to another surface and is a common term in engineering and manufacturing.)

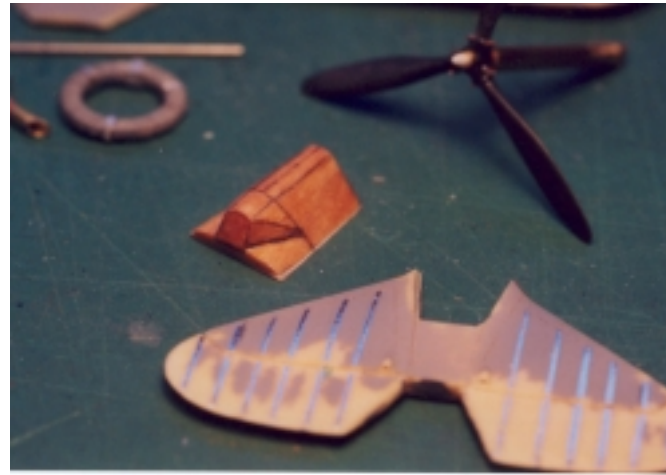
Another common airplane problem that test fitting will often reveal is a fuselage too wide for the root gap between the upper halves of a three-piece wing. See Sketch D. The solution is simple; block sand the fuselage wing roots until the wing fits properly with no anti-dihedral pressure on it.

Canopies on high backed airplanes are sometimes noticeably too wide or too narrow for a flush fit. Uncorrected this problem is quite unsightly. The fix is, again, pretty easy. See Sketch B. If the canopy is too wide, shim the fuselage halves apart at the crown to match the canopy, glue the shims in place and fill as required. If the canopy is too narrow, sand the fuselage halves along the crown faying surfaces fore and aft of the cockpit to make the fuselage width fit the canopy width. These are just examples - model making is all about problem solving.

Good fit, and neatness of joints, make big contributions to the overall look of your finished model and are key elements considered by judges in contests.

Now that you've got all your fit problems solved, let's consider sequence of work. The kit makers' instructions always blithely assume there are no fit or other engineering or detail problems with their product and typically have you start by building up and painting the interior. This is logical and is usually a good way to go. In any case, **do read and understand the instructions before you start assembly.** Personally, I prefer to determine what is the hardest task in each project and do that task first. For example, on my current project, a Dujin 1/72nd scale Caproni Ch.1, the two vacuformed windscreen/canopies provided were cloudy, and showed clearly that the maker of the male-mold did not understand the geometry of the unit - they were unusable. So, after figuring out the geometry for myself, the first work I did on this model was to make the male mold shown in the photo for vacuforming a replacement windscreen/canopy. The next most difficult item was the ring-shaped oil cooler shown in the middle of the other photo. Next hardest after that was the wing ribs and the sag of the fabric between ribs on the wings. I finally got to the interior after all of these "hard" tasks were finished. There's a psychological boost in knowing that this project is a downhill coast now. That's my way. As you gain experience, you'll develop your own preferred sequence of work. Do think and

plan ahead to avoid working yourself into a corner.



B. Specifics

Sanding large flat surfaces is generally best done by attaching a sheet of sandpaper of the appropriate grit to a smooth flat surface with two-side Scotch, or equivalent, tape and then moving the part back and forth on the sandpaper. If the part is small, flat and hard to grip, lay a strip of two-sided tape on it and press your fingers onto the tape. Take care not to localize your finger pressure on the part or you'll wind up with a curved, or wavy, rather than a flat surface when you finish sanding.

"Block Sanding" is mentioned often and I'm amazed at how many modelers don't

understand the term. It simply describes the practice of attaching sandpaper to a block - usually wood - to keep the paper from flexing so that you can actually shape the part that you are sanding rather than just smooth it. Sandpaper stuck to a block of wood with two-side tape makes a "Sanding Block". You can make these any size or shape that you need for the task at hand. For small work, I've attached fine sandpaper to strips of wood as small as 1/32" square to get into tight places. Think. Improvise. Plan ahead.

Scraping is another good way to remove material quickly. I use Xacto chisel blades, or #11s or #10s, most commonly for scraping. A good example of a place for precise scraping is on that molding draft on the root of a tailplane shown in Sketch A. Use a #10 curved blade and scrape a very slight

hollow on the root end of the tailplane to assure a good snug fit. Use a sanding block or a large, rigid, steel file to true up the surface to which the tailplane will fit.

Large, rigid steel files are useful tools on the modeler's workbench. I've one large, coarse, file - over a foot long - that I especially like. It's heavy enough to just lie on the bench of its own weight whilst I work a part back and forth over it. This is a drastic form of "Block Sanding".

C. Trivia & Oddments

- Colored Pencils: These are made by Prismacolor, Aquirell, and others and are great tools for "painting" interior and other

small details, and to use in lieu of dry brushing. You can buy them at any art supply or craft shop. For interiors, first spray the overall interior color, hand paint by brush the larger details, and finish up with the colored pencils for the small details. Keep the pencils very sharp for fine detail work. As they are quite soft, you'll be doing a lot of sharpening. I use a regular pencil sharpener to get close and finish the point on sandpaper. Pencils are much easier to control than paints. For "dry-brushing" simply use the pencil(s) as you would your usual dry-brush by rubbing the side of the color material along the edges or high spots that are to be high lighted by dry-brushing. If you screw it up - wipe it off and do it over.

- **Puddle Painting:** I think I invented this technique for getting a very smooth finish on very small parts or in small, tightly enclosed, areas. Really load up a paint brush of a size appropriate to the task and place a big drop of paint on the subject. Disturbing the drop as little as possible, push it around until the subject is completely covered with the drop with its skin unbroken and then let it dry. The surface tension of the paint will pull it down tightly and uniformly onto the part. Examples of the application of this technique include John Schaaf recently painting the headrest of a fighter, Craig Rosner painting the interiors of the gun tubs on his *Fletcher*, and my painting the fire extinguisher on my Honda F-1.

- **Johnson's Future Floor Wax:** People swear both by and at this stuff. I'm kind of in the middle. The April 2004 issue of *FineScale Modeler* has a pretty fair article on the stuff. For the most information relating to modeling, however, go to this web site: <http://www.swannysmodels.com/index.html>.

I mainly use the stuff for canopies on airplanes and for windshields on cars. I dip the clear parts in Future and then lay them on a paper towel so that only their edges

touch the paper to wick off excess Future. The most important thing is to let it really dry - two or three days. Then repeat the dip and dry process a couple of more times. It really clarifies clear parts. Do the dip/dry before painting frame lines, etc.

Another use I make of Future is to make instrument lenses with small drops of it applied with a toothpick.

Primer as Filler: Lacquer based automotive primer is a great filler for small applications. You can use unthinned, as sold, for larger applications or you can thin it to suit your needs. It is much easier to control as you can apply it with a brush or toothpick.

Throttles: Nowadays the whole world pushes airplane throttles forward to add power. It was not always thus. Until WWII got serious some Japanese manufacturers used "pull" throttles - talk about confusion and accidents waiting to happen! Prior to WWII the French standard was all "pull" throttles. Now if you're modeling a Dewoitine D.520 or Morane-Saulnier M.S.406, be sure your "at rest" (closed) throttle is all the way forward; even the US Curtiss Hawks and Douglas DB-7s used by the French had these "backward" throttles. Some of the US planes ordered by the French and taken over by Britain after the fall of France had the same arrangement - for example, Tomahawk Mk.IIs were fitted with French equipment and controls. On pre, and early, WWII Japanese planes - do your research very carefully. Cheers.

Correction

In the listing of 2004 IPMS Seattle Show winners included in the May issue of *Seattle Chapter News*, the name of the winner of the Best Iraqi Freedom award presented by IPMS Portland was misspelled. The winner was Ricky Wong for his Iraqi Freedom diorama. Our apologies!

UM 1/72nd Scale T-80 Light Tank

by Chris Banyai-Riepl

The T-80 light tank was a last gasp in the light tank arena, developed mainly for reconnaissance duties. Built upon the earlier T-70 design, the T-80 differed in the form of a taller turret, more armor, and an extra crew member. The T-80 carried a 45mm main gun and a 7.62mm machine gun as its main armament, with the elevation of the main gun increased to allow for shooting targets high up in buildings. Although the T-80 was considered the best light tank of the Second World War, they were supplanted in the field by T-34s, which had the same speed as the T-80 but heavier armament and armor. Because of this, few T-80s were built between 1943 and 1945. Interestingly, the T-80 was one of the few tanks to have its designation re-used, with the modern T-80 main battle tank forming the backbone of the Soviet Union's army throughout the 1980s.

This latest kit from UM shares some heritage with their earlier T-70 kit, mainly the running gear and small details. Molded in a rather interesting shade of medium green, the kit is nicely done, with petite detailing and no flash. There are a few sinkholes on some of the parts, but this is mainly restricted to areas that will be covered by the roadwheels, so it is not that big an issue. A small photoetch fret is included, as is a small decal sheet.

Starting with the hull, this is made up of a main lower piece with separate sides and a one-piece upper hull. The side pieces get additional suspension arms, as well as all the wheels. The drive wheel will need some care in cutting free from the tree, as the attachment points run right between the teeth of the wheel. Since the two attachment points are opposite one another, it will be hard to hide both of those with the track. The track is made up of both

individual links and long, straight stretches, with the individual links used to get around the wheels at the ends. Other lower hull details include what appears to be a photoetched light, but could also be a small access hatch.

Moving to the upper hull and the turret, this construction is pretty straightforward. The turret has a separate base and a one-piece upper section, with separate hatches. There is no interior provided, though, so the modeler is left to his own to fill the turret should he choose to leave the hatches open. The main gun fits into a separate mantle, which then fits into the front of the turret. Finally, a ring for the base allows the turret to remain moveable. On the upper hull, there is another open hatch (again, with no interior provided), a few boxes for atop the fenders, and photoetched fender braces. A couple of exhaust pipes, rear fenders, and a nicely done rear grill finish off the assembly.



The instructions call out for the entire tank to be painted in flat white, but I believe this is a typo, and instead should read flat olive green. The instructions use Humbrol numbers, using Humbrol 86 as the main color. The decal sheet is small, with just a pair of red stars and a white number 30 for the turret sides (which really wouldn't work if the tank was painted white, right?). Since these are basically one color decals, there is not much to say about them, especially since there are no challenging surfaces to put them on. They feel thin, so hopefully they will go down just fine.

Continued on page 16

Tires and Props

by Hal Marshman, Sr.

Ah, my friends, I got into a little discussion over on Hyperscale today, and after looking at my answer, felt it might be of some interest to y'all. Many years ago, I did an article for the now defunct *SSIPMS Beacon*, entitled "When Is Black Not Black", touching very basically on tinting out of the bottle black to achieve different effects. If you care to string along with me, you might pick up something of interest. Of course, many of you advanced modelers are most likely doing this already, in either basic, or advanced form.

I notice that many modelers are already painting their tires with a color akin to Panzer Gray, Hotrod Primer, or RLM 66 Black/Gray. This is great, as you recognize that the rubber only appears black, but in reality, is not. How about taking it a little further? Mix your dark gray choice half-and-half with straight black, and use this mix as your basic tire color. Now, tint it with brown, RLM 81 Brown/Violet, Olive

Drab, or a lighter Gray. Dry brush the sides of the tires and the tread with this lighter mixture. Now, doesn't that pick out your "black rubber"? Want to gild the lily? Let it dry overnight. Now run black wash into the tread. Run your black wash into the crevice between tire and wheel. For that, you could also use a .005 Micron marker pen, available from any decent art store. You'd be surprised how that marker can enhance those tailwheels where the wheel and strut are one piece.

Another little hint, on P-47s, B-26 Marauders, Helldivers, Wildcats, and most Mustangs that swung a Curtiss Electric cuffed propeller. Basically, I paint the cuffs black straight from the jar. The rest of the blade is painted with the black/dark Gray mix. Not a great contrast, but enough to denote the fact that these were indeed two parts, and in addition, just a little extra to make the propeller a little more interesting to look at. Is this a lot of extra work? Perhaps, but when it comes to making your models look just that little bit different, and hopefully better, it's worth the extra time spent. Watcha got to lose? Give it a try, and see how you like it.



1949 Schneider Trophy Update

by Tim Nelson

Kudos to all who are planning or building entries in the 1949 Schneider Trophy display and competition. I have been having a blast with my two entries, and one should be complete by the time this newsletter is before you. As we move into the second half of 2004, I offer the following comments to hopefully help and encourage.

Race Numbers - Important!

As noted in the '49 Schneider announcement article in the May newsletter, you must have a race number to participate. We have approximately 30 assigned numbers as of this writing. Please get yours sooner rather than later. NOTE: my email address has changed since the May article was published - contact me at timndebn@comcast.net.

One subject not addressed in the May article was application of the race number

on each entry. Our '49 Schneider flyer currently nearing publication contains the instructions seen at the bottom of this page.

These instructions, courtesy of Jim Schubert and Jon Farrelly, will ensure consistency of race number presentation, just as would be required in a real air race. (Note that 24 inches in 1/72nd scale is 1/3 inch on your model. If you make your race number decals at least 3/8 inch tall, you are in fat city.)

Engineering

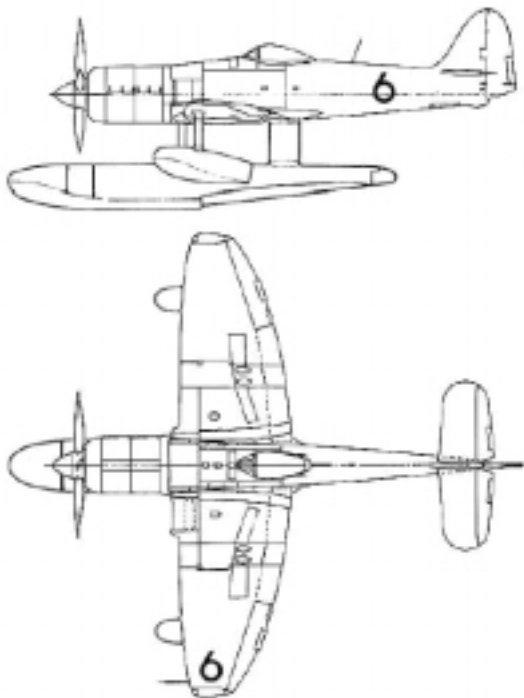
Jim Schubert and Doug Girling provided a treasure trove of technical guidance in the June newsletter. Take this information as far as you like. Let your fun gauge be your guide.

Some of you who wish to appear technically sophisticated without getting bogged down in design issues may wish to consider the following shortcuts having to do with stability:

1) Stability augmentation systems and hydraulically boosted controls were being

introduced by the late 1940s. SAS can potentially improve the handling qualities of your ill-conceived beast considerably. If you are adding significant longitudinal or lateral surface area to the forebody of your racer for flotation, spray deflection, or other reasons, perhaps you can claim the benefits of SAS and avoid additional surgery on the back end. Keep in mind, however, that you can electronically augment stability, but not control; your control surfaces must have enough aerodynamic control power to counter any moments the airframe/powerplant can produce.

2) Racing airplanes are experimental and not certified to the requirements of Part 25 of the Federal Aviation Regulations. Racers may exhibit handling characteristics that would be unacceptable and uncertifiable for a commercial or general aviation airplane. In the experimental world, these potentially adverse characteristics can be partially tamed with a skilled and well trained pilot; a classic example is Jimmy Doolittle and the Gee Bee R-1 in the 1932 Thompson Trophy race. Give your pilot a big bonus and tell him/her to stop



The assigned race number, plain or outlined, shall be displayed in a single color contrasting sharply with the background, in a size not less than [scale] 24" high, on the aircraft as follows: 1. On both sides of the fuselage between the wing and tail or on the fin/rudder or equivalent vertical surface. 2. On the upper surface of the left wing, or equivalent, near the tip, oriented with the bottom of the number toward the wing tip. 3. On the under surface of the right wing, or equivalent, near the tip, oriented with the bottom of the number toward the wing root.

belly-achin' and fly the damn airplane. Of course, it is quite possible that your pilot will be killed...

Personally, my plan is to wing it. I have a B.S. and M.S. in aeronautical engineering, and three patents, but I believe in constitutional separation of engineering and modeling. I'm giving a nod to physics and applying engineering judgment on my two racers, but the only calculation I've made is the minimum race number size of 24/72 inches.

Your Racer's History

As Doug Girling discussed in the June newsletter, a big part of the fun of this project is your license to create a "history" for your subject. Here are some suggestions of things to cover:

- Racer name and number.
- Development of the racer and design considerations.
- History of the racing team, sponsor(s), designer(s), and pilot(s). Exercise caution if relying on actual historical figures who may also be invoked by others; we may have some overlapping and contradictory stories. Don't be presumptuous - please avoid any discussion of '49 Schneider race results.
- Photos/drawings of the design and development of the racer.
- A paragraph on the model itself: kit(s) used, modifications, scratchbuilt items, decals, construction difficulties, etc.

Brevity is a virtue - let's try to keep these histories concise. I think it would be neat to print this material on the bottom half of an 8.5 x 11 inch sheet of paper, then fold the sheet in half to present as a "tent" behind the model. Other ideas?

Model Display

How we actually display the models at the 2005 NWSM show and IPMS contest

remains to be determined. It has been suggested to present each entry in flight, but modeling protocol for in-flight subjects calls for a pilot figure, which I personally am loath to do for this project. My proposal is to display the race entries free form, either in flight, beached, on the water, etc. as each modeler sees fit. More discussion will ensue on this subject.

Entry Ideas and Suggestions

Don't let "winning" the race dictate your choice of subject or nation. Just as the Jamaicans fielded a bobsled team in the 1988 Winter Olympics, many nations would want to simply "show the flag" on such a grand stage as the '49 Schneider. Possibilities include proud entries from a multitude of African and South American countries; a Piper Cub on floats in national colors gets you in the show.

For those of you sitting on the '49 Schneider fence, perhaps pondering an entry but unsure of a subject, here are some specific ideas to consider:

- Saunders-Roe SR/A1 jet flying boat: a near stock entry from Great Britain, although I am not aware of any kit of this nifty aircraft.
- Float Spitfire: a commemorative Supermarine factory effort in 1931 S.6B markings.
- Float Macchi Folgore: another factory commemorative effort, in 1926 M.39 markings, bankrolled by Italian-Americans from New York and Chicago, perhaps with Mafia ties.
- Eastern European entries: the Soviet Union would likely have wanted to promote the benefits of their influence on Eastern Europe and provided financial and technical backing for several entries. (One of my entries fits this category).
- U.S. corporate entries: the vast U.S. industrial base, turning from a war footing to a burgeoning consumer culture, would

be eager to sponsor American entries. A huge number of warbirds sat in the southwest desert, waiting for another chance at glory. (My other entry fits this category).

- Northrop YB-49: a stretch to be sure, an engineering nightmare, and a convoluted history to write, but how cool...

- Other large subjects: PBY Catalina, DC-6, DC-7, Constellation, Stratocruiser, etc. Some of these may not be speed burners or may have major technical issues, but what fun...

Some of you are building your '49 Schneider entries under a cloak of secrecy. That's OK, but please consider bringing some of your in-work or finished racers to NWSM and/or IPMS to inspire and motivate.

Scott Kruize's Finnish "Water Buffalo" is a perfect example of that this activity is about. Keep those imaginative fires burning, and remember about the race number thing.

For questions or comments, please contact me at timndebn@comcast.net or 425-823-5227.

Thinning My Collection

by Terry Clements

Over the Front, Vols. 1-15 complete; *WW I Aero*, nos. 98 -158 complete (2/84-11/97), plus other stray issues. Make an offer - I also have many issues of *Military Modeling Preview*, *IPMS Quarterly*, *IPMS Update* and *IPMS Journal* as a free bonus! All in excellent condition. Contact IPMS/Seattle member Terry Clements for further details at Terrillc@earthlink.net

Special Hobby 1/72nd Scale Bell P-59A/B Airacomet

by Jim Schubert

The list of national firsts in Turbo-jet (properly gas turbine, reaction propulsion engines) flight, it is generally agreed, looks like this:

December 10, 1910: Coanda, at Issy-les Moulineaux, flown by Henri Coanda of Romania. Not strictly a “Turbo-jet” as it used a reciprocating engine to drive the compressor. It is generally listed as the first step toward “jet” propulsion of airplanes.

August 27, 1939: Heinkel He 178, at Marienehe, flown by Erich Warsitz.

August 27, 1940: Caproni-Campini N.1, at Linate, flown by Mario De Bernardi. Again, not strictly a “Turbo-jet” as a reciprocating engine drove a ducted fan ahead of the “burner”. It deserves inclusion here as a stepping stone to further jet flight.

May 15, 1941: Gloster E.28/39 “Pioneer”, at Cranwell, flown by Gerry Sayer.

October 1, 1942: Bell XP-59A Airacomet, at Rogers Dry Lake, flown by Bob Stanley.

August 7, 1945: Nakajima Kikka, at Kisarazu, flown by Susumu Takaoka.

First jet flights of indigenous designs in other nations - France, The Soviet Union, Argentina, etc. followed WWII but these first six were the most important milestones. The initial German, British, and American jet projects were all kept quite secret until the Germans launched the Messerschmitt Me 262 Schwalbe into the formations of Boeing B-17s in October 1944 - then the race was on in earnest.

Bell’s jet project was launched by USAAF Major General Henry H. Arnold in September 1941. Thirteen months later the first

XP-59A, flown by Bell’s Chief Test Pilot Robert Stanley, made its first flight. The engines used in early XP-59A flights were GE model 1-As; essentially license built British Whittle engines of about 1,400 pounds static thrust. Three XP-59As were followed by 13 YP-59A service test airplanes, 20 P-59A, and 30 P-59B production models; the last being delivered in May 1945. All P-59s were retired by the end of 1949.



One YP-59A was traded with the British for a Gloster Meteor in late 1943. The Meteor was the only Allied jet fighter to see combat in WWII. Two YPs went to the US Navy and two to NACA. Later the USN also got three P-59Bs and NACA got one.

Because Bell’s engineers were dealing with hosts of unknowns, their design was very conservative resulting in a heavy, underpowered, airplane with a light wing loading. As a consequence it was not on par with its contemporary reciprocating-engined fighter brethren. It never saw combat. Its great significance is the fact that it was America’s first step into the jet age.

The P-59, particularly P-59B-1-BE, s/n 44-22656, is especially significant to me as it was the jet with which I had my first hands-on experience in 1953 whilst an undergraduate at Purdue University. So I naturally have a soft spot in my head for the type, of which there are only six survivors:

XP-59A, 42-108784, the first P-59, in the NASM at Washington, D.C.

YP-59A, 42-108777, in Ed Maloney’s Planes Of Fame Museum at Chino, California. This is being restored to airworthiness.

P-59A-1-BE, 44-22614, at March Air Force Base, California.

P-59B-1-BE, 44-22656, in the Harold Warp Pioneer Village Museum at Minden, Nebraska; this is my, the ex-Purdue, airplane.

P-59B-1-BE, 44-22633, at Edwards Air Force Base, California; this is the “Reluctant Robot”, one of the two decal markings provided in the kit. This is also the only P-59 to be redesignated F-59 with the USAF’s changeover in 1948.

P-59B-1-BE, 44-22650, in the USAFM at Wright-Patterson Air Force Base, Ohio.

The kit’s lightweight, end-opening box features a very nice painting of P-59A, 44-22610 “Smokey Stover” (an American comic strip character of the 1930’s-’50’s; “Notary Sojacl!”), which was the first operational military jet to serve in Alaska. As a pleasant change, the box was not pre-crushed.

Inside the box we find:

An eight-page instruction folder with a brief history of the type in English and Czech, a parts map, a six-step assembly sequence and two color scheme drawings - one for “Smokey Stover” in bare metal and the other for the drone “Reluctant Robot” in overall orange. Three injection molded sprue trees of 63 parts in medium gray styrene. One injection molded sprue tree in clear styrene containing two one-piece canopies, one for the X and Y models and the other for the P-59A/B, and a nose landing light lens. The instructions, interestingly, overlook the landing light, which must be used. There are no other parts for the X and Y models included so

we may look forward to a future release of the kit with the rounded wing tips, tall fin/rudder and sans the long ventral strake. One PE fret containing the anti-torque scissors for the landing gear. One small decal sheet for the two color schemes offered.

This is not one of Special Hobby's best kits. Although the parts are cleanly molded with no flash or sink marks, it is not up to the standard of their recent 1/48th scale WWI offerings. There is scant detail provided for the cockpit. There is no indication of ribs, rib-tapes, or fabric catenary-droop on the ailerons, flaps, elevators or rudder as there should be. There are no boundary layer splitters in the intakes. There is no tail running-light.

The engineering of the area around where the jet nozzles and the engine nacelles relate to the wing and fuselage is very poor and correcting this will require a lot of careful work with filler, files, and knives to sculpt it into the proper shape. The Ginter book, referenced below, is an invaluable reference for this work. Otherwise, the engineering of the kit is conventional.

If you are an AMS afflicted masochist you may wish to convert this kit to represent the X/Y configuration. I've long had it in mind that an He 178, a Caproni-Campini, an E.28/39, the first XP-59A, and a Kikka would make a great 1/72nd collection for display; release of this kit makes building that collection a lot easier.

In your consideration of this kit don't forget the USN's Airacomet; they only had five airplanes but they had at least six different color schemes. These schemes are all set out in the Ginter book.

I paid \$24 for the kit at Emil Minerich's Skyway Model Shop in Seattle.

This a great choice of subject by Special Hobby and kudos to them for that. The less than acceptable engineering of the jet exhaust/wing/nacelle/fuselage area, however, earns them a simultaneous brickbat.

References:

P-59 Airacomet - Air Force Legends No. 208: Steve Pace, Steve Ginter Publications, California, 2000, ISBN 0942612-93-0. The best single reference.

Flame Powered: David C. Carpenter, Jet Pioneers Of America, 1992, ISBN 0-9633387-0-6. A fair 50th anniversary book. *Air International*, March 1980. A very comprehensive article with a fine cutaway drawing.

P-59 Airacomet - A Peregrine Photo Essay; USAF 2: Steve Muth, Peregrine Publications, New York, 2000, ISBN 1-930432-03-8. Not worth the price.

Many unlogged magazine cuttings.

Diorama Construction, Part Eight

by George Haase

As far as the design of the facility is concerned, remember the function of this building - temporary Less Than Carload cargo storage. You need a door to get things in and out, of course, but the window openings are up for discussion. Allowing in enough light to allow workers to do their job in the daytime without supplemental lighting would be nice and ventilation would be real nice (no need for a sweat pit here) but you don't need so many windows that access to the windows would limit the wall space against which to stack merchandise or cargo. I think a window set around the main door or at least a transom will be helpful and justified, also an interesting modeling challenge. I think that a set of one-foot high by four-foot wide casement windows near the ceiling line would be warranted, except for the fact that they weren't used back when the building was built (say, 1912). I think a window of about three feet wide by five feet tall located in the center of each end wall would fit the bill nicely. Gable end ventilator grills in the attic space would also be appropriate. Of course, these will

be located just off the edge of the modeled scene and thus inclusion of these amazingly intricate, and fully operable, windows and grills (complete, of course, with a battery powered 1/35th scale fully reversible ventilating fan) is no problem because I don't actually have to build them. Getting the rope, weights and pulleys inside the 1/35th scale double hung window's scale built frame was tough, wasn't it? It was almost as bad as glazing the windows. Do you realize the actual size of glazing points in 1/35th scale? The period I'm about to type would cover a half a dozen of them. Am I good or what?

The doors will swing outward. My limited research indicates that the sliding doors so popular with this type of facility in the USA were not so in Europe during the pre-war (WWI) or inter-war period. See Wood Structures for more on the doors.

The ½ by 1-inch (real) blocks in the drawing above correspond to an 18 by 36 inch concrete block in 1/35th scale. More appropriate would probably be 1 X 2 foot or 1 X 3 foot cut stone blocks so don't take the drawings too literally. It was just easier to draw them with the Visio at this size. The detail at the corners and around the door and window openings would also be of this thicker stone. The use of heavy cut stone at these locations (the structural items) was common at the time when stone was used as a structural material. The heavier stone would also be used at the base of the walls and up to a height of about four feet where a drip rail would be installed. The field wall above this would be filled with brick. Now that would be interesting (See sample plane view and cross section below).

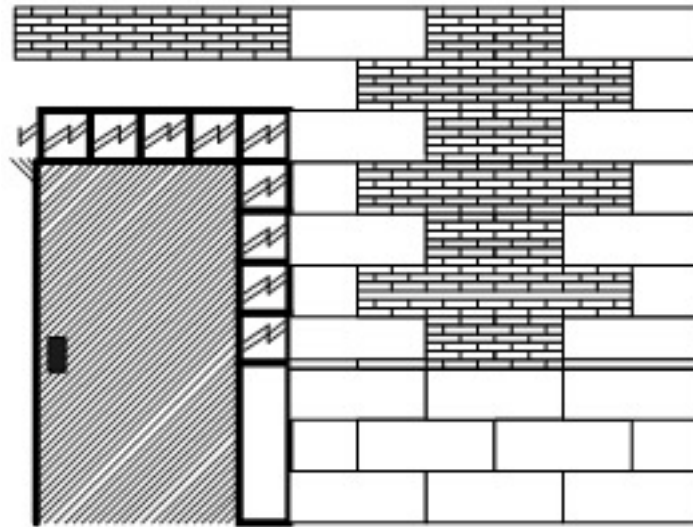
Remember, in the time we are talking about a brick wall would have at least two "walls" of brick with a certain number of the layers of brick connecting the two adjacent "walls" together. A single column of bricks would fall over in a stiff breeze. If the wall were intended to be free standing, as if to border a field or garden, there would be little or no space between the (at least) two columns of bricks in the wall. It

would be very much like a simple organized pile of bricks with mortar in between. For stability and strength, the connecting rows of bricks would be no further apart than every fifth row of bricks. They may be as frequent and every other row, but that would be for a wall you want to keep around for a couple of centuries. The connecting bricks would be the same brick as the others in the wall but placed edge on. For a 2X4X8 inch more-or-less-standard fired clay brick this would mean that a regular wall brick (called a running brick) would present a face (or side to view) that is two inches high by eight inches wide. A connecting brick would be the same 2X4X8 brick but would present two inches high by four inches wide side with the eight inch length of the brick being included as part of the other "wall". A visit to the library will result in more than you probably cared to know about bricklaying. Suffice it to say that how these connecting bricks did their connecting thing was often a very individual thing for the mason. Individuals could work patterns into the wall as a sort of signature.

If the wall were for a building, there would likely be a dead air space purposefully built between the two walls as a form of thermal insulation. The connecting bricks in this case would be purpose built. They would be of the same material (pattern, color, etc.) but they might be ten or twelve inches long. When used to connect the "walls" of the wall they would leave a two or four inch dead air space between the "walls". See the section diagram on the right below. These days, a "brick" house is usually a wood frame house to which a brick veneer is applied. There is only one column, or "wall", of bricks involved. The carpenters build a regular wood frame wall to which metal tabs are nailed. The foundation is a bit different in that a lip to bear the weight of the bricks is cast into the foundation when it is constructed/formed. As the masons build or apply the brick veneer wall they bend the tabs out so they extend into the space between the bricks where they are locked in between

the bricks by the mortar. The wood frame wall actually supplies the real support for the veneer wall.

So the wall would look like this:



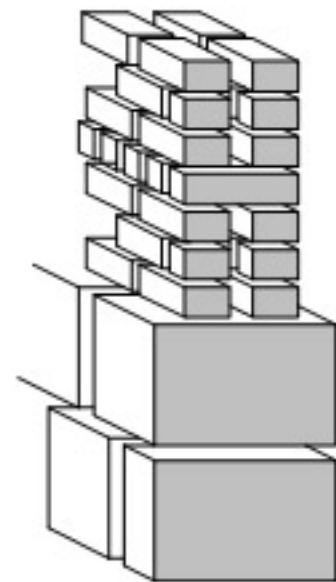
Note the heavy cut stone pieces on the corners and around the door opening. Remember, that the large piece of cut stone over the window (none present in our example) or doorway would be on solid section spanning the entire opening. Look close and you can see it in the drawing on the left immediately below and on the building plans two drawings down. Note there that the heavy stone also protrudes to provide a base support for the cantilevered roof supports. This will come up again later.

Common brick field wall sections would be very interesting - maybe too interesting. I am concerned that the polystyrene foam will not be able to replicate detail as fine as that required for the common bricks. Fearing that I could not engrave so many fine lines so close together without tearing the surface of the material and thus destroying the piece (I have not had much experience with this material and while I know it will take a nice cut I just don't want to risk it with the common bricks), I engraved the common brick pattern on/in a piece of .020 sheet plastic. I then inlayed

this in the appropriate locations in the foam wall and I can have the best of both worlds. The different texture will also reflect the different "manufactured" bricks versus the cut natural stone. Remember, we have an interior wall to handle, too! This means that the common brick pattern needs to be replicated on the interior wall. The common brick part of the wall is build on top of the cut stone part of the wall. It is inset on the exterior wall and set

flush with the cut stone on the interior. The separation between the bricks and cut stone will be a natural location for electrical conduits and the like, but that's something to discuss later.

Section through the wall where the common bricks are located



The biggest and most noticeable item about the building (after all, it is only one story) is likely to be the roof. It is one of the things we usually tend to forget just a bit. It is just the top of the building, don't you know. But given that our eyes are generally much higher than the diorama, the tops of things (the tank, truck, figure, hat, helmet, bridge, whatever) are the first things we see. Sometimes, it is the only thing we see until we bend over and get our eyes down to eye-height where the set design and the action is located. Modern industrial roofs are often "flat" (Not really, of course, but that one inch of pitch in three feet of roof is hard to see even in 12 inch to the foot scale). These roofs are also filled with things like air handling and ventilation equipment - lots of vents, fans, ducts, compressors, etc. Our roof, however, will have none of that. Just a vast expanse of...of...of...roof.

My limited research on the topic suggests that while the roofing material might possibly be shake, it is more likely to be slate tile. Clay tile would be preferred if the location was a bit more Mediterranean (Italy, Spain, Portugal, southern France, northern Africa, that neck of the woods) and thatch would be more suitable elsewhere (England, Ireland, and maybe northern France, and parts of southeast Asia). The problem with thatch is the work required to simulate it is extreme and you'd need five pounds of Woodland Scenics Long Grasses. On the other hand, you could carve a piece of Styrofoam to thatched roof shape and cover it with a couple of layers of long grass - an interesting idea, but for another project.

The Japanese Gate figure base had a roof made from shake. That looks fine, although there are a few things I'd like to fix in the sub-roof department should I do that again. The thing here is that the sub-roof in this case is very like that used for a shake roof. In both cases, rows of the shakes (or slate tiles) are attached to slats in the sub-roof. Subsequent rows are attached to subsequent slats in such a manner as to overlap and cover the slits

between shakes or tiles in the lower rows. While one can just nail through the shake and into the slat, the slate tiles actually need to have holes drilled in them. This is done at the tile factory where the infamous big "Oh-oh" results in the opportunity to make and sell half tiles rather than French Drain material or sub-gravel for the driveway or walking path. Trying to punch a nail through a solid piece of slate would just split the tile and one would get nowhere. So, one will have to carefully build the sub-roof with the appropriate number and spacing of slats to accommodate this method of attachment. Furthermore, once you've got the viewer to bend over and get their eyes down there to see what is under all this roof, the underside of the roof and the sub-roof structure will be visible. It needs to be done correctly, or at least close enough to correct to fool the viewer's eye.

I have always wanted to do something with clay tile. I've thought that sections of plastic tube that have been sliced in half would be the way to go. You establish a row of over-under-over-under-etc., followed by another row of under-over-under-over-etc. It wouldn't cost more than a buck or so per square inch. The thing that has prevented me is that plastic tube is about the same thickness, regardless of the diameter of the tube. In the smaller scales, the thickness would be way out of proportion to the correct scale thickness. Even in 1/35th scale, I think that the thickness of the tube is a bit much. An alternative that occurred to me when assisting the kid with a school project involves corrugated cardboard. You remove the top layer of cardboard and expose the corrugations below. It looks like columns of clay tile all nice and uniformly arranged. He was building in about 1/72nd scale so it really didn't look bad at all. The only thing missing was the step where the upper row of tile overlaps the lower row of tile. I thought it better to reduce the step to nothing than to present it and leave the impression that the tile were three inches thick, as would be the case with using 1/16th inch diameter plastic tube.

So, how do we do this slate tile business? I think that a piece of .010 plastic sheet, which would be a bit thicker than a quarter inch in 1/35th scale, cut to about 9 by 24 inches or about 1/4th by 2/3rds of a real inch, will make a good tile. There is a place in Tacoma where Lemar and I once bought 4x8 foot sheets of white plastic sheet. I got a piece of .010 and .020. So did he - we sure needed his van for that road trip. We also got a bunch of .005 and some .001. I got to tell you, that .001 is thinner than paper. I don't know how you actually glue this material, as Testors liquid cement will about melt a hole in the stuff. For this, however, a sheet of .010 will do. Remember, score and snap, score and snap. Meaning, use a straight edge to run the back of the knifepoint along the desired line. How deep to make the groove, thus how many scoring trips are needed with the knife is a matter of experience. I find that two scorings is enough, and then I actually use the blade to cut through the plastic on the ends. After the scoring, you bend the plastic away from the scored line until it breaks. A little sanding along the scored line takes care of the scruffies. It sure beats actually cutting all that plastic. Purchasing 1/4th inch wide by .010 plastic from Evergreen Plastic Products would be an expensive proposition, but if a whole lot of score-n-snap isn't your thing, it is an option. I have an 18-inch ruler so I can cut an 18-inch long by 1/4th inch wide piece of the plastic. I then cut 5/8ths inch (although 11/16ths would be better) pieces from that 1/4th inch wide strip. Actually, I happen to have a ruler with a lot of scales marked on it. I select the edge with three feet per inch and cut a two-foot piece. While I try to make the to-length cut square, a little error is advantageous as it adds a little character to the pieces of slate.

Having said all this, one thing to recall (Remember, the criticism when I talked about plastic as a material to simulate brick?) is that the plastic sheet is very smooth. While scuffing it up a bit might help, it may still not have enough texture to simulate the tile, which is really a thin sheet of rock. An alternative is construc-

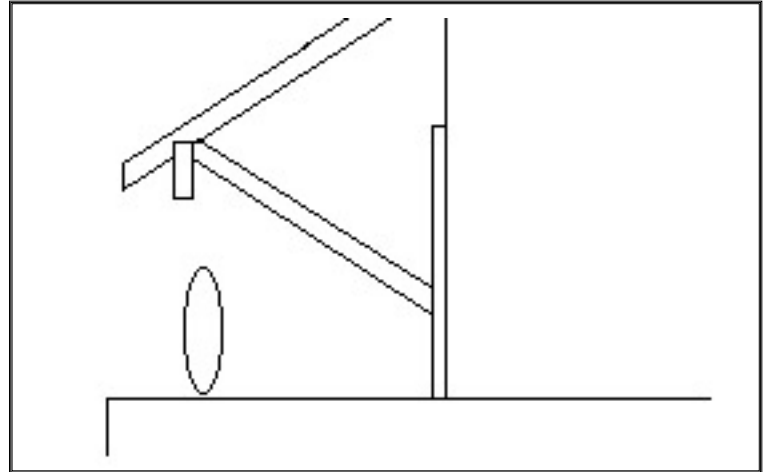
tion paper. I'd recommend black or dark gray just because they start somewhere near the final color you will want. While this gives you a tile with texture galore, it is paper. While you need to use different glue (white is fine), the real challenge will come in the painting. Acrylic paints will want to curl the paper, so a lot of care is needed here.

Regardless of the material used, gather a nice pile of tiles, and you will need a lot of them. What do we do with them? The first thing needed is the construction of a very strong sub-roof. Remember, this roofing material is slate - that's rock. It's very heavy. The slate has at least two holes drilled about two inches from the top of the tile before it leaves the tile factory. This is where the nails go through and attach the tile. So you need a cross member, or a furring strip, as part of the sub-roof to attach each row of tile. For a 12-inch exposure, you need a cross-member every foot. For 8-inch exposure, you need a cross member every 8 inches. Funny how that works out, isn't it? (Also, see the discussion of double or triple coverage below). I'll use 1/16th by 1/8th inch balsa (approximately a 2X4) unless I can find some 1/32nd by 1/8th balsa (approximately a 1X4). I would not like to cut this from balsa sheet, because its visibility will scream at me if I can't do a nice job of cutting the wood. A good supply of wood coffee stirrers would do the trick. The rafters that hold all this in the air and keep all this slate out of the living room would be on approximately two-foot centers, or the metric equivalent. Given that this is a commercial building that is supposed to last forever and a week, we will assume 18-inch centers. The rafters would be expected to be at least 2X8 or 2X10 depending on the pitch and thus the required length of the rafter. If long enough, there will be internal supports required, sort of like a truss system and its internal bracing. I'll use 1/8th by 1/4th inch balsa. There should be a ridge beam of a pair of at least rafter-sized boards to which all the rafters are attached. The rafters should also have bird mouths to aid attachment to the

headers. Holding all of this up in the air are the really heavy headers and other support beams and probably some masonry to transfer the load to the foundation and thus the ground. The stone and brick structure (the building under the roof) gets to contribute to the support of the roof structure and the part over the loading dock would have its perimeter supports cantilevered off the main walls.

One could support the perimeter with a series of pipes or one-foot square columns and headers (3/8th-inch square) masonry column. But let's think about that for a minute. One of the considerations here is that the purpose of these overhanging roofs at railroad facilities is to keep the loading dock or passenger platform, or whatever, out of the weather. There comes a conflict in that one needs to adequately support the roof, without allowing the roof supporting structures getting in the way of cargo loading activities. This is why you see these elaborate cantilever structures that transfer the load from the roof that would normally be borne by a perimeter wall back inboard to the building's wall. Our design features a nice overhang that could benefit from one of these cantilevered support structures. This will allow the engineer to "stop" a car in front of the warehouse without having to worry about too much about precision spotting. The cantilever arrangement results in no posts along the drip line to worry about getting in the way of loading operations regardless of where the railcar's loading door is located. This drawing shows a man-sized object on a loading dock with the cantilever support placed diagonally between the

wall and the beam holding up the roof header. We'll have to see if I can figure out how to do it.



The cantilevered supports start at six feet up the wall and angle out at 45 degrees. The supports rest on the top of one of the cut stone blocks that comprise the major supports for the wall. This particular block sticks out from the wall an extra four inches. This is something to remember when drawing up the wall and figuring its thickness. These cut stones will stick out farther than their brothers so you have to cut the wall thick enough to accommodate them (see above). I think that our overhang will be large enough that we will need to support a rudimentary truss that itself will support the perimeter roof beam and the rafters. These are made with 4x4s for the main vertical, horizontal and cantilever beams. Again, estimate the required amount of lumber and pre-paint or stain the lot with the green acrylic paint or your choice of stain. Don't forget some 2X4 for the truss cross bracing. You need to do a little engineering and draw the layout for the trusses. Cut the beams and the truss components and glue-up the supports. Once everything is dry, re-paint or stain the cut ends and set these guys aside until

Continued on page 16

Upcoming Model Shows and Aviation Events

Wednesday - Sunday, July 7-11

Northwest EAA Fly-In and Sport Aviation Convention. Arlington Airport. Daily admission \$12 EAA member, \$15 non-members. Web site: <http://www.nweaa.org/>

Wednesday-Saturday, August 4-7

IPMS/USA National Convention. Phoenix, Arizona. Special Theme Awards: Grand Canyon State Award - Best Arizona Related Subject - Some examples include a plane flown by Barry Goldwater, a Kingfisher from the USS Arizona, Mark Martin's 1993 winner at the Checker 500 race at the Phoenix International Raceway, an A-10 from Davis-Monthan AFB, or a figure of a Western cowboy. The link to Arizona should be explained if it is not obvious; Dry Heat Award - Best Weathered, Rusted or Oxidized Finish - We are looking for subject like a sun-baked aircraft that's been out on the tarmac for way too long, or a rusted out Chevy that's seen too many winters (obviously not many in Arizona), or a heavily weathered tank; Checkered Flag Award - Best Real Race Vehicle - This special award is intended for a real race vehicle, not just a NASCAR or Indy-type car in bogus markings. It should represent a model of a real prototype from a specific date or era. And it does not have to be a car, as a speedboat or racing aircraft are also eligible. A photo of the prototype displayed with the model is strongly recommended; Pat Fowler Award - Best Cold War Era Subject (1945 - 1989) - any subject, military or civilian, related to the Cold War (military vehicle, aircraft, political figure, or even something from the Space Race) from the years 1945 through 1989. Web site: <http://ipms-phx.org/2004/>

Thursday-Sunday, August 5-8

Blue Angels at Museum of Flight. The U.S. Navy Flight Demonstration Squadron - the world-famous Blue Angels - are once again including Seattle on their tour schedule, and the Museum of Flight is once again proud to host this elite group in cooperation with The Boeing Company. The Blues are the stars of the KeyBank Air Show at SEAFAIR presented by Boeing, which is best viewed from Seattle's Genesee Park on Lake Washington. But to get an eyeful of the Blue Angels as they perform their precise pre-flight walkdowns, to feel the thrilling formation takeoffs and landings of the seven blue-and-gold jets, and to meet the Navy's finest pilots as they return from their practice sessions and show performances, the only place to be is The Museum of Flight! For more information, visit www.museumofflight.org, or call 206-764-5720, ext. 303.

Saturday, September 18

Evergreen Museum Model Show & Contest, presented by Portland Oregon IPMS and the Evergreen Aviation Museum. Show theme: Remembering Those Who Serve... 9 am - 4 pm. Museum admission: Adults \$11; Seniors \$10; Children \$7. Contest Entry: Adults, \$5 for 1-4 models, \$1 for each additional model; Juniors 11-17, \$1 per model; Juniors 10 and under, free. Evergreen Aviation Museum, 500 Michael King Smith Way, McMinnville, Oregon. For more info, Brian Yee, 503-309-6137, web site, www.geocities.com/oregonshow

Friday - Saturday, October 1 - 2

Sci-Fan. The Northwest's premier science fiction and fantasy modeling show. Entry fee: \$5 for up to five models; \$1 for each additional model. Galaxy Hobby, 196th and Highway 99, Lynnwood, WA. Phone 425-670-0454; e-mail info@galaxyhobby.com; web site, www.galaxyhobby.com

Saturday, October 2

Show Off the Good Stuff Model Show 2004, presented by Palouse Area Modelers, and Hodgins Drug & Hobby. Registration 8 am - 11 am; show opens at 10 am. Entry fees: Adults, \$5 for unlimited models; Juniors, free; spectators, \$1. Moscow Moose Lodge, 210 N. Main, Moscow, Idaho. For more info: Wally Bigelow, 605 NW Fisk #27, Pullman, WA, 99163. Phone: 509-334-4344.

Saturday, October 9

IPMS Vancouver 34th Annual Fall Model Show & Shop Meet. 9 am - 4:30 pm. Admission: Adults, \$2CDN; 16 and under, free. Model registration: Adults, \$5 CDN; 16 and under \$2 CDN. Bonsor Recreation Complex, 6550 Bonsor, Burnaby, BC, Canada. For more info, contact Warwick Wright, 604-274-5513; e-mail jawright@telus.net; web site, www.members.tripod.com/~ipms

Saturday-Sunday, October 16-17 or 23-24

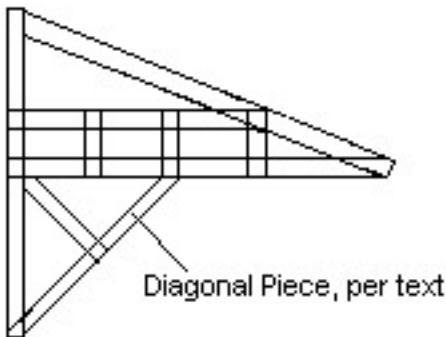
7th Annual Model Show and Contest, presented by Aleutian Tigers/ IPMS Fairbanks, Alaska. Date TBA. Entry fees: \$1 per model up to five models, additional models free. Pioneer Aviation Museum, Pioneer Park, Fairbanks, Alaska. Web site, www.alaska.net/~gidg/index.html

Diorama Construction

from page 14

they are needed. By the way, this truss is probably legal. It comes from an 1890 US designed railroad station so it is probably "legal" for us to use it on our 1912 building.

One other thing, the usual treatment of the diagonal piece is to make it curved to some degree and then add fluting on the edges. It just adds a little architectural detail to this structural component - real cute! I wish I could figure out how to do that in this scale.



T-80 Light Tank

from page 7

This looks like a very simple yet nice model to occupy a weekend or two. The quality of molding is high, and aside from one or two tricky areas of removal, there should be no surprises here. My thanks to Squadron for the review sample.

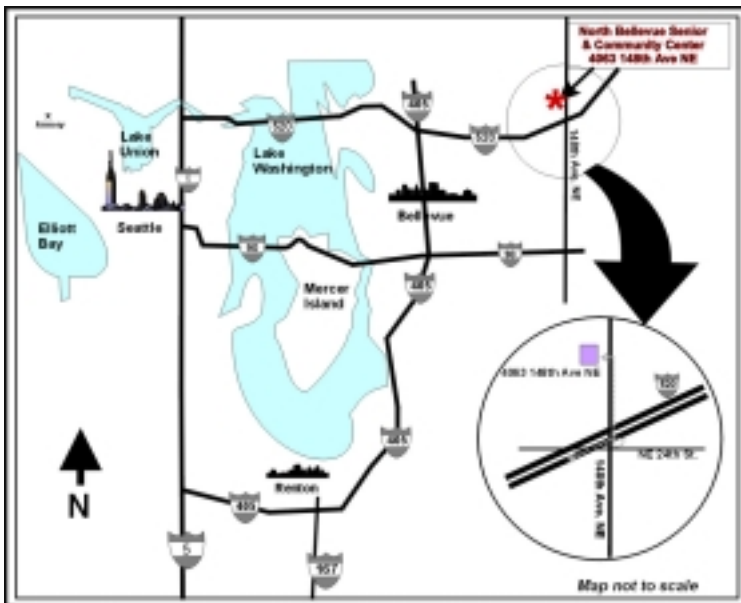
[Thanks again to Chris and www.internetmodeler.com for permission to use his reviews, and also Jim Schubert's Special Hobby P-59 review - ED]



Meeting Reminder

July 10

10 AM - 1 PM



**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.