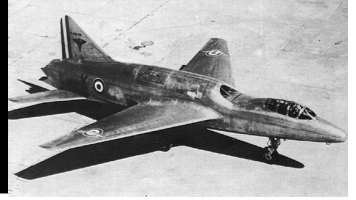


Seattle Chapter News



Seattle Chapter IPMS/USA
January 2004

PREZNOTES



Here it is - after midnight on the third day of the New Year and I still haven't written this column. Heaven forbid that our esteemed editor should have to run a "best of Preznotes" this issue. Ewww.

Sound Familiar? I wrote word for word the exact same thing a year ago, almost to the second. At least the weather is better this time around - no lightning, thunder, or hail. Just the threat of snow.

I finally got a few minutes to check my e-mail a short while ago and there was the proverbial warning shot across the bow that I had not, as yet, written the January column. I've actually been quite busy at the chair 8' to my right, working on models. Currently on the active bench is the PBX you've seen before, a Monogram B-25, as well as two Polar Lights star ships, and a model I started a few days ago, a Hobbycraft P-26. After I finish this I am moving over and am going to spray some primer on the PBX, put the finish colors on the P-26, and possibly get the first color coat on the star ship models. **On a roll!**

The P-26 has only about ten or so hours of work on it. About 2.5 of that is dealing with the rigging. At least the rigging holes were pre-drilled, otherwise I'd still be working on the rigging! It was one of those models that I dragged off the shelf because I wanted something different to work on whilst waiting for putty to dry on the PBX and the star ships. It went together very fast with only a minimal amount of putty. I chose not to correct the minor error of the dihedral of the wings beginning outboard of the wheel spats as opposed to the way the kit is molded - with the dihedral beginning inboard of the spats. I'll correct this with the **next** P-26 I'll build. It's not that noticeable, and besides, it's an out of the box effort anyway.

By the way, one of the only resolutions I ever made for a New Year was to start nothing new until I finished what was on my bench. I did it for 2003 (it lasted until mid-September) and consequently I finished only seven or so models. Not this year. My plan is to get as many models finished as I can and keep my average at the 11.48 models per year that I have been keeping for over the last three plus decades! Yep. I actually sat down to figure how many models I've built since joining IPMS Seattle. Way too much time on my hands!

Now, if you will excuse me, I'm going to close this effort down and go work on models.

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.

January 10
March 13

February 14
April 17 (Spring Show at Renton)

IPMS/USA NEW MEMBER APPLICATION

IPMS No.: _____ Name: _____ M. _____ LAST _____
(leave blank)

Address: _____

City: _____ State: _____ Zip: _____

Signature (required by PO): _____

Adult: \$21 Junior (17 years old or younger): \$9
 Trade Member: \$21 Canada & Mexico: \$25 Other Foreign: \$28
 Family (Adult dues + \$5, one set magazines, # of membership cards required: _____)
 If recommended by an IPMS member, list his/her name and member number _____ (name) _____ (IPMS#)

IPMS/USA P.O. Box: 2475
North Canton, OH 44720

Check out our web page: www.ipmsusa.org

Hurricane Bookshelf

by Scott Kruize

There's two books off the shelf this time, but first, a trivia question:

What started the modern age of plastic surgery?

It's not such a trivial question for the people involved, of course. The answer is "The Battle of Britain".

The fall of 1940 saw many Royal Air Force pilots in a terrible plight. Their Hurricanes and Spitfires had unprotected 'header' tanks just forward of their cockpits. When these took hits – very common as the interceptors confronted German bomber gunners – the cockpits instantly flamed into infernos. Pilots who somehow managed to escape did so only with horribly burned hands and faces.

Archibald Hector McIndoe, a plastic surgeon from New Zealand, determined to return these disfigured men to something like normalcy. He and his team, working at Queen Victoria Hospital in East Grinstead, advanced enormously the state of the art of skin grafting and reconstructive plastic surgery. They had all too many patients to 'experiment' on because of the war, and these, realizing they were de facto research subjects in a new field, christened themselves "Guinea Pigs".

One was Geoffrey Page. 'Invincible' until badly burned in a Hurricane during combat with a Dornier bomber, he would recover and return to operational flying. *Tale of a Guinea Pig* is his personal account.

Altogether, it took fifteen major operations to restore his face and exceptionally injured hands. Page stayed alive thirsting for revenge, forcing his way back into active duty where he was determined to shoot down one German aircraft for each operation he'd undergone. His book tells in detail how he succeeded in scoring



eighteen further victories and rose to the rank of Wing Commander before finally crashing after a ground-strafting mission during the invasion of Holland. By then he was "drained of energy...like an old, old man...purposeless... I had left hospital with a seething desire to destroy; this ambition now...seemed shallow and puerile...there had been no room in my heart for love. Hate had filled it to capacity. Now hate was spent, leaving a void."

The book ends on a cheerier note, though. Having survived early combat, then being a "Guinea Pig", then flying on operations for a large part of the rest of the war, he was sent on a goodwill tour to America. He went to exotic places like New York, Minneapolis, Spokane, and even Hollywood, where he found...

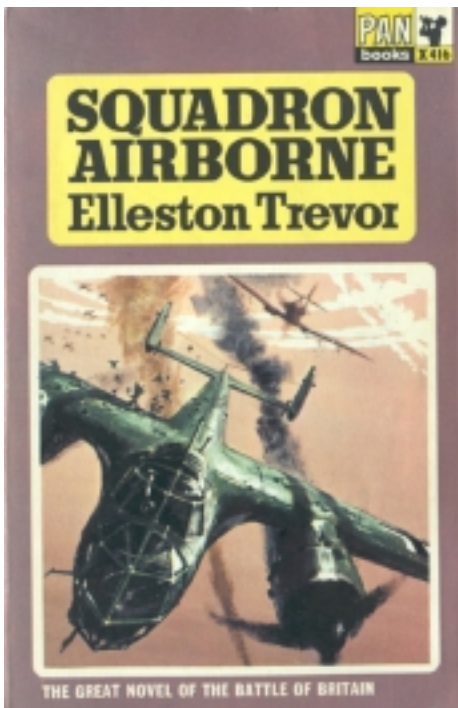
I'm going to stop here, and make you read the ending for yourself. The book can be found as *Tale of a Guinea Pig* or its alternate title *Shot Down in Flames*. Geoffrey Page recounts how it's possible to go through hell, yet re-emerge afterwards into the Good Life. His book is devoted to 'Archie', the doctor who helped him get there. We readers can feel admiration for both of them.

After such uncompromised reality, how about a little escapist fantasy? Perhaps a light, shoot-'em-up war novel? Of course you knowledgeable and sophisticated IPMS members are quite discriminating, and will pay attention only to authors who "get it straight".

Squadron Airborne should fill the bill. Elleston Trevor was in the RAF during the

war, so this is a Battle of Britain story told by someone who was there!

It starts quietly as an aerodrome slowly approaches daybreak. Mechanics are busy getting the 'kites' ready when the New Kid arrives, all too aware of his own ignorance and inexperience, but anxious to 'make good' at this experienced Spitfire squadron.



“Spitfires”?! What’s this sacrilege? Haven’t I been harping on what inadequate recognition Hurricanes have gotten all these years? Haven’t I opposed the lingering impression that Spitfires won the Battle all by themselves, even though Hurricanes made up three-fifths of Fighter Command and shot down more attacking planes than all other defenses combined?

Well, yes, but I’m resigned to the fact that the more glamorous Spitfires must be given their due sometimes. Besides, the author put me at ease in the first few pages:

We follow “the Nipper” out on an orientation flight with the squadron leader. As they return to base, he spots an incoming

German force and nervously asks, “Can we go and sort them out, sir?” The squadron leader replies “Give me two reasons why we shouldn’t.” Looking frantically around for answers, he finds one on his instrument panel: “Our fuel wouldn’t last out in a dogfight, sir...” and, encouraged by his leader’s “One mark,” looks again at the incoming Germans, and sees something else. “They’re being taken care of, sir, by the Hurricanes.” “Correct.”

The novel has excellent descriptions, with - so far as I can tell - realistic and believable dialogue. The period covered is short; a few weeks as the Battle progresses and ‘the Nipper’ turns into a veteran fighter pilot. The focus frequently shifts from aerial action to the ground crews’ efforts, and there’s a mixture of common, recognizable human qualities: stupidity, earnestness, pride, fear, and laziness, and a modest measure of heroism. The carnage didn’t go on uninterrupted, in the real Battle, nor does it here, in this book. There’s even time for just a bit of sex, but very English, mind you, and nothing obscene or in bad taste.

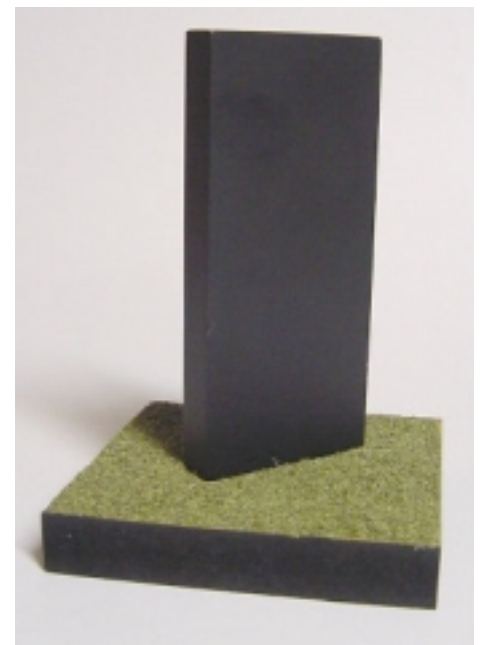
The Battle of Britain was a tremendous struggle, involving tens of thousands of people and changing the course of modern history. It’s easy to forget that it was fought by individual people, each with a unique and somewhat narrow viewpoint and experience of the whole. This novel reminds us of that, and like other good ones, brings empathy and understanding of our fellow human beings. A *War and Peace* epic it’s not, but in its own small way, it’s an excellent story, well told. “Scramble!” and “Tally-ho!”

Building a Monolith From Scratch

by Trevor McTavish, Rocky Mountain Model Club

“My God - It’s full of stars...”

Science fiction hasn’t been the same since Stanley Kubrick brought Arthur C. Clarke’s famous novel to the silver screen in 1968. Without making this article into a movie review for *2001 - A Space Odyssey*, the entire movie and its sequel; *2010 - The Year We Make Contact* center around the discovery of a Monolith buried on the far side of the Moon.



The original basis for this project came while sitting around the table, beer in hand (a common thought process for this modeler). For the 2001 contest, RMMC member Tom Calbury suggested a theme of “A Modeling Odyssey” in honor of the famous movie. Everyone thought this to be a great idea, and we proceeded with the planning for the contest. I however, immediately began thinking about a modeling project to honor this event. Since time was important, I thought about kits of

certain subjects. Somebody made a kit of the *Discovery* spacecraft, but I couldn't find one. Collectaire makes a 1/48th scale "Pod" but the high price in American dollars was a turn off. What was left? Figures of the actors or - a Monolith.

Since the sequel, *2010*, gave rough dimensions; I was quickly off looking for something to base my Monolith on. In the movie the ratio of 1 by 4 by 9 (the squares of 1, 2, and 3) are used to describe the sizes of both the Tyco Monolith and the Monolith orbiting Jupiter. With these dimensions, I managed to find a piece of wood that measured ½ inch by 2 inches, and cut it to a 4-½ inch length.

All that would be required was to fill and smooth the surface of my wooden block so that no wood grain would show through. This was accomplished by applying several thick coats of household paint, and sanding with sandpaper. When a smooth surface was created, I airbrushed a coat of Polly Scale RLM Night Black acrylic over the entire block. When this was dry, I applied a coat of Polly Scale flat clear to remove the shine.

It was now time for a decision. In the *2001* and *2010* movies, there are five distinct times that Monoliths play key parts in the plot. I now had to decide on which one I wanted modeled. For simplicity's sake, I placed my Monolith on a dusty, desert sand base - just like the "Dawn of Man" sequence from *2001* (minus any monkey-men).

What could have possibly been an easier scratch-building project? A black block of wood on a base, and I instantly have a recognizable science-fiction icon. Overall I spent about two hours working on this model; that doesn't include waiting for the paint to dry, but I never count that time anyway.

So visit your scrap woodpile, you never know what projects might present themselves.

1/48th Scale Fonderie Miniature SE 2415 Grognard II

by "Bondo" Phil Brandt, IPMS
Austin Scale Modelers Society

Lord knows, there have been some ugly airplanes since Orville and Wilbur first "...slipped the surly bonds...", but over the years the French seem to have cornered the market in, shall we say, less-than-aesthetic designs. The Sud Ouest (SE) Grognard ("Grumbler" in French, the sobriquet applied to Napoleon's Old Guard troops in the Russian campaign) is a case in point. Designed in 1945 and first flown in 1950, the airframe was distinguished by under-and-over engines ala the later BAC Lightning. Unlike the Lightning, however, the Grognard's intake trunk was located above and just aft of the canopy, much like that of the sleek North American



F-107. Bondo can't help but notice how the Grognard's profile resembles that of our own Texas turkey vultures, slim, featherless head and neck merging into the hump of the wings.

In addition, the Grognard's design featured long (70% of wing-span) flaps and slats, as well as spoilers. Other than the over-and-under engines, the most distinctive design feature was lack of a control column. Instead, movable seat armrests were connected via levers to flight control surfaces, speedbrakes, trim, and radio. Flight testing continued through 1953 (using Rolls Royce Nene engines) with a

maximum achieved speed of Mach 0.79. At that point the French government gave a volume production nod instead to the Grognard's competitor, the Vautour. Both Grognard prototypes were subsequently scrapped.

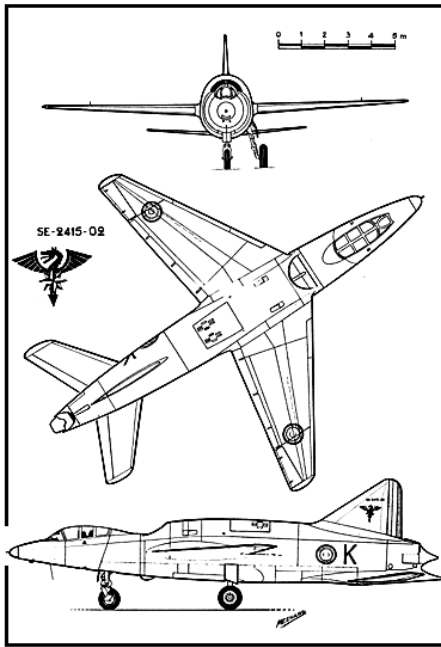
Plastic molding, while not in the Tamiyagawa class, is quite decent for a limited production effort, with very acceptable engraving, minimal flash, and just a few small spigots. The injection-molded part count is minimal and simple. Airframe surfaces have that familiar glass-beaded texture - I believe someone said this is a characteristic of the "spark erosion" method of mold creation. Thus, NMF finishes will require wet sanding up through at least 1000 grit (Bondo Industries goes all the way up through 12,000!) Per the instructions the inside of wing trailing edges need some thinning, but do not come anywhere near that needed by many Mach II kits. There are no locator bosses cast into kit parts, but detailed measurements are listed in the instructions.

Sharply cast resin parts add a welcome touch to the rather plain airframe: a nicely done, "busy" cockpit tub, instrument panel, seat (no harnesses provided), wheel wells (main and nose), wheels, and exhaust tubes.

As is F. M.'s (and other French firms), custom a fair amount of cast metal parts are included: gear struts, gear doors, wing fences, and many small parts. Details are well-defined, with little flash.

Two vacuformed canopies, with lots of framing, a la the F-84G, have the same graininess as the injected parts and, unfortunately, this slight roughness, while not a "showstopper" cannot be made smooth...unless the builder wants to mold a resin master from the existing canopy, carefully sand it, and then vacuform a new one.

A color guide? What color guide? None is given, but the builder could be reasonably safe in using overall black for the cockpit and that sandy yellowish beige for gear wells. The NMF is self-explanatory. Markings are included for the definitive prototype, the Grognard II. The decals are thin, and registration is excellent. Separate blue circles are added, to be applied to the middle of the traditional French yellow-edged red roundels.



Four pages of easily understood bilingual text and drawings plus a parts blowup and three-view are included in the instructions. Especially appreciated is a short historical review of the Grognard. This retired tech writer would suggest, however, that F. M get a competent proofreader, at least for the English text portion!

Fonderie Miniature has produced a decent representation of this little-known, but interesting design; I like it! The Grognard has a reserved spot in the Bondo Industries Weird Kits production line.

Guest Editorial: A Modest Proposal (With Apologies to Jonathan Swift*)

by Jacob Russell

IPMS/Seattle is a bunch of old farts.

There, got your attention. Just kidding! I missed the December meeting for the first time since 1996. Normally I look forward to the last meeting of the year because I get to stuff my face with Holiday treats in addition to seeing my fellow modelers' latest work. As the day of the meeting drew closer I found myself filled with ambivalence about attending. Ultimately, I decided to stay home. Somewhere I detect a chorus of "So what?" and that's fine. What is **not** fine, in my humble opinion, is the current state of the hobby of modeling in general and IPMS/Seattle in particular. I hope that you have read the thought provoking articles that Andrew Birkbeck and Stephen Tontoni contributed to the November issue. If you haven't read these articles I encourage you to do so. Both articles have given me much to think about.

I came to IPMS/Seattle because I had been modeling alone for about a year and I recognized that I needed to associate with modelers of greater ability and different areas of interest than myself. I came to my first meeting in April of '96 and have been an enthusiastic member ever since. I was immediately made to feel welcome and a valued member (and not only for reasons of diversity, this being the Northwest, but I digress) and I quickly got involved with the club. I have enjoyed writing articles on a variety of subjects for our newsletter. I have made the acquaintance of modelers who have become good friends and whose opinion and advice I respect, even when it's unsolicited. The friends that I have made within IPMS are friends for life. I have improved tremendously as a modeler since I joined IPMS/Seattle and I couldn't have done this without all of the members

who have been so generous with their time and knowledge. I love you guys!

Am I biting the hand that fed me, and has fed me **well**, to state that I have become disenchanted, bored even, with the meetings? Am I the only one who feels this way? I don't think so. I have discussed this topic with another modeler who has voiced his own displeasure with the current state of affairs by simply not renewing his membership when it expired. I have a criticism of IPMS/Seattle and it is that because so few of its members are building models the meetings are increasingly dominated by issues other than modeling.

I disagree fundamentally with Stephen Tontoni about the definition of a modeler. I believe that a modeler is a hobbyist **who builds models**. Shooting the breeze at the hobby shop, listening to industry gossip, and examining kit sprues are at best aspects of the hobby of modeling. They are no substitute for building. I think that people who buy models but don't build them are collectors, not modelers. To call such individuals modelers is akin to calling oneself a writer because one subscribes to *The New Yorker* and attends book fairs and author signings. As they say down South, that dog won't hunt. There is certainly room in IPMS for people who collect models as well as those who build them. Both are definitely welcome. But to call collectors modelers is to exist in a state of denial. Modeling is an active pursuit, not a passive one, and no amount of fondling of sprues has ever built anything. I agree with Andrew that models should be built rather than contemplated ad infinitum.

Why do so few people who belong to IPMS build models? I disagree with Andrew's comments about the time needed to build a model - specifically that we're running out of time to do so. Yes, it does take **time** to build a model, but I think that one needs to consciously set aside time to build them. I watch very little television, limit my Internet use, and adhere to the "Birkbeck One-Hour-Per-

Day” modeling formula. It’s a good way to quickly build models. Andrew’s approach is not for everyone. Many modelers build in spurts or go through months of inactivity. Yet I think that most members are capable of building models.

So let’s speak plainly. You either build models or you don’t. You either bring your models to the meetings or you don’t. You either participate or you don’t. Andrew had a valid point about how concerned we are with the opinions of others. Yet I think that we’d all be better served by developing both thicker skins and a sense of humor. We are by and large adults in this hobby, and if we can’t accept a critique of our work now, then we probably never can. When you stand in front of our group and discuss your work you are among your peers and friends. We as a group could certainly benefit from a greater sense of decorum but we’re genuinely interested in your work and learning more about it. I think you’d be hard-pressed to find a more congenial place to polish your public speaking skills.

If you don’t build models, what do you get out of coming to meetings? What are your expectations of IPMS/Seattle? Most of us have specific expectations. In return for our membership dues we expect to receive a monthly newsletter with articles written mostly by the local membership. We expect a clean and congenial location where we congregate monthly to see each other and display our latest work. We expect to have some fun in the process. Stephen’s point about IPMS being primarily a **social** organization is right on the money.

What does IPMS expect of its members, above and beyond paying their dues? Well, not much that I can see. Is it valid for the club to expect anything, such as participation, from its members? Yes, I think so. In any typical social club approximately 4 percent of its members do 90 percent of the work, and IPMS/Seattle is no different. There is a core group of approximately 30 modelers (of the 100 dues-paying members cited by Andrew)

who, over the course of the year, build most of the models brought to meetings. These modelers also write most of the newsletter articles. The rest show up to chat, and to look at and discuss the models built by the others.

A good friend once told me that I’m both an idealist and collectivist. He asked me why it mattered that other IPMS members don’t build models, since modeling doesn’t “matter” in the grand scheme of things. He felt that this is probably **my** issue rather than the club’s and that it had more to do with my own expectations than anything else. I thought about his comments while writing this article. It matters to me because I feel that everyone who can contribute something to our club should contribute. There is more than one way to contribute. You can bring your built models. You can write newsletter articles. You can give a slide show presentation or a seminar on your modeling techniques. I think that we all have something to offer. And with that in mind, here are the points of my Modest Proposal:

I think that these proposals are realistic and reasonable. They are proposals and nothing more! I think that their implementation can make the meetings more dynamic and exciting. I welcome input, feedback, and thoughts that other members have about the current focus and direction of the club. I wrote this because I care about the direction of a club that has given me so much. I wrote this to annoy and provoke - and also to make you want to give something back. I hope that I have succeeded. The club needs you and your contribution, not just your membership fee. You have something to offer the club and I want to know what that is. So please bring your latest project to the next meeting. We’d all like to see what you’ve been up to!

(*Author’s note: Jonathan’s Swift’s *A Modest Proposal* was written in 1729, and used satire to mock what he regarded as the false values of contemporary British society and its treatment of the “Irish Problem”.)

Every IPMS/Seattle member should BUILD AT LEAST ONE MODEL PER YEAR.

The monthly meetings should be reduced from three hours to two because we no longer have participating vendors.

The meetings should be re-oriented with MODELS as the primary focus. It is unacceptable to rush through the model presentations because “there are so many models on the tables” or because too much time has been devoted to other topics.

If members are unwilling/unable to commit to building one model per year they should be willing to write an article, or contribute to the club in their own chosen way.

IPMS/Seattle should examine ways to involve, excite and energize its membership, such as quarterly in-chapter contests with a specific theme (Pearl Harbor, NASCAR, etc.).

IPMS/Seattle should consider an outreach program to increase awareness of the club and expand its membership to younger people - the lifeblood of the hobby.

The Six Most Important WWI Fighters?

by Jim Schubert

Back in mid-November, Andrew Birkbeck asked me to circulate the question, "Which were the six most important British, French, and German fighters of WWI?" His reason for asking was that he wanted some WWI fighters in his collection and knew very little about WWI aviation. I put the question out to 36 modelers and kicked off the discussion with my own candidates:

BRITISH: Camel
S.E.5a
FRENCH: Nieuport 17
Spad XIII
GERMAN: Albatros D.Va
Fokker D.VII

...and then the fun started!

Chris Banyai-Riepl:

"What, no Fokker Eindecker here? That plane dramatically changed the way war was fought in the air."

Stephen Tontoni:

"The device that revolutionized air combat was the interrupter gear and that was introduced on the Fokker Eindecker. Without that device, none of the other aircraft we've discussed so far would have been nearly as effective as they eventually were. The Fokker Eindecker was more important than the Albatros."

Andrew Bertschi:

"How about the Bristol F.2B Fighter?"

Stephen Tontoni:

"Bristol Fighter? Why would that be more important than the Camel or the S.E.5?"

John Alcorn:

"I certainly concur with Jim's list - with one small exception, to wit: perhaps the Albatros should be the D.III. While the D.Va was perhaps produced in greater

numbers (I haven't checked), the D.III was the subtype that probably had a greater impact on the aerial war. During its heyday, most of 1917, it was probably the finest fighter on either side. Among other claims to fame (infamy?) it was largely responsible for the Allied losses of "Bloody April" 1917. By the time the D.V and D.Va reached the front in numbers (Autumn) their supremacy was being seriously challenged by the Camel, S.E.5a, and the Spads. I recall reading that more had been expected of the "refined" D.III than the D.V could deliver. For one thing, the Germans never fully solved the problem of the single spar lower wing; this sesquiplane configuration having been plagiarized from the Nieuport 11 and 17. However, the Austrians solved it by putting two spars in the lower wing, thereby eliminating the tendency to fail in torsion about the single spar.

"Incidentally, I suppose that implicit in this exercise is the restriction that the candidates be single-seaters. Otherwise the Bristol F.2B might be a contender - at least if the list were expanded to seven."

Will Perry:

"This is indeed a delightful exercise and I have no quibbles with Jim's picks for the French and British. The German fighters make for tougher decisions. First off, those troublesome Albatrossen. It could be argued that the D.I/II were the most important - they were the first fighters light and strong enough to carry two guns and they devastated the DH.2s and Bebes they opposed. But the D.III solidified that success by racking up large production numbers (1,350) and becoming the mount of most of the Jastas and of many aces. The D.III also inspired an Austro-Hungarian version that saw widespread production and long post-war service in many air forces. Yet, in some ways, the D.V was the most important - it saw the greatest German production numbers and equipped most of the Jastas from mid-1917 until mid-'18 when Fokker D.VIIIs started appearing. Indeed, many units operated D.Vs until the end. But it was a bit of a cursed design.

Richthofen damned it as useless. The D.V had roughly the same performance as the D.III it replaced - a design that was past its prime despite its longevity and large production. If I had to pick an Albatros number it would be the D.III

"The importance of the Fokker D.VII is pretty unquestionable. But that makes two choices for the Germans already and how can we pass over the Eindecker? This design is certainly one of the most important in the entire history of fighter aircraft, and it turned the British and French designs into "Fokker Fodder". Can't there be three German picks?

"When Revell, back in the mid-1960s, issued their first WWI kits, they picked:

BRITISH: Camel
S.E.5a
FRENCH: Nieuport 17
Spad XIII
GERMANY: Albatross D.III
Fokker D.VII.

So, other than the Albatros version, history (or at least Revell) votes for Jim's list."

Stephen Tontoni:

"Under German subjects, I think the Fokker Eindecker deserves at least a footnote, if not a full entry, due to its interrupter gear, which made tractor aircraft deadly."

Jim:

"I'm teetering on the brink of switching my vote from the Albatros D.Va to the D.III based on Alcorn's and Will's inputs. I do think the Fokker D.VII must stay but also agree the Eindecker was a watershed aeroplane. Mr. Birkbeck, you may have to build seven models! I also think the "Biff" is a non-starter; it was a fine aeroplane but it was very late and was not innovative in any respect. Of course neither was the S.E.5a; they were both amalgams of the best of the state of the art."

Chris:

“So, Jim, what were the reasons for your initial picks?”

“For some reason on the British side I’m leaning towards something like the DH.2, as it could be argued that design put aerial combat ahead of observation. So much changed during the First World War in aviation that it is hard to define “Most Important”.

“Want a real challenge? Open the discussion up to all aircraft, not just fighters. Then you get to wonder if the Gotha bomber was more important than the Fokker D.VII.”

Mike Millette:

“I’m sorry I missed out on this very entertaining exchange and lively debate. If I could add my vote at his late date, it would be:

NB - Mike agreed with four of my original choices but opted for the Nieuport 11 instead of the 17 and for the Eindecker instead of the Albatros.

“The Eindecker was chosen for all the reasons that Chris and Stephen mentioned. Not including the Albatrossen was tough. The genius of Rheinhold Platz’s contributions to Tony Fokker’s aircraft provides the endpoints for the “Best German Fighters” but the Albatrosses were certainly significant contributors throughout much of the war, and arguably better looking than the Eindecker (yeah, I know that’s not relevant).

“I picked the Nieuport 11 simply because it was the father of the Nieuport family of single-seaters and I see it as “representative of the Nieuport line of fighters.”

Robert Allen:

“Well, actually, I’ve been following this discussion with great interest, and if I haven’t chimed in, it’s mainly because I’m undecided. I’m writing this off the top of my head at 2:30 in the morning having just returned from a Death Cab for Cutie

concert, so if my mind wanders, stay with me...

“The really hard thing is deciding exactly what “important” means. Does it mean “best on paper”, does it mean “most widely used in combat”, does it mean “most representative”, does it mean “an aircraft that contributed a significant advance in aviation history”? Or does it mean all of these things?”

“To go off on a tangent here, It’s like discussing baseball players (and hold on, **I do** have a point). Do you look at a player’s entire career? Or do you look at how good a player was at his best? Sandy Koufax and Warren Spahn are generally considered the two best left-handed pitchers in the history of the National League. Yet their careers were completely different. Sandy only pitched until he was 30 and then retired due to an injured elbow. But for his last five seasons he was brilliant like no other pitcher in baseball history. Warren never reached the heights of Koufax at his peak, yet he was a great pitcher whose career was twice as long. Who was better? There is no “right” answer.

“In the same way, there is no right answer here.

“I would go with the Camel and S.E.5a for Britain, because they were so widely used, were very successful, and most of the British aces flew them. Yet the Airco DH.2 was a tremendously important fighter, one that equipped the first dedicated single-seat fighter squadron in any air force (No. 24 Squadron, RFC) and played a major role in defeating the “Fokker Scourge”. The Bristol F.2B was the cream of the two-seat fighters flown by any air force, and if you wanted to include a two-seater, that’s the obvious choice. And if there’s a WWI fighter equivalent of Sandy Koufax, what about the Sopwith Triplane, which had an extraordinarily successful career that lasted all of eight months - yet so impressed the Germans that they rushed to copy it?”

“On the French side, I don’t think you can go wrong with the Nieuport 17 and the Spad XIII, which not only served so well with the French fighter units, but also were the mounts of foreign aces such as Eddie Rickenbacker, Albert Ball, and Francesco Baracca.

“On the German side we have five choices - the Albatros D.III and D.V and the Fokker E.III, Dr.I and D.VII. My favorite German fighter, just because of its looks, is the Pfalz D.III, but I recognize that historically it doesn’t make the cut.

“The Dr.I is most well-known for being flown by the Red Baron, but its combat record doesn’t really live up to its fame. Yet, is there a more recognizable WWI fighter than the Fokker Triplane? Ask the hypothetical “man on the street” what a WWI fighter looked like, and I’d bet a lot of them would give it three wings.

“The Fokker E.III was the most important fighter of the early war, which through its innovative use of the interrupter gear (and yes, I know that Fokker didn’t invent it) caused great havoc throughout the Allied air forces. Perhaps not a great plane as such, but its importance is beyond question.

“The D.VII is a given, regarded by virtually everyone as the best German fighter of the war to see widespread use.

“The Albatros, as they are often called in period literature, were really the backbone of the German Jastas and merit consideration for their wide use alone. The D.III was a much better fighter for its time than the D.V and I’d pick it over the D.V on that basis.

“So, I’d eliminate the Fokker Dr.I and Albatros D.V, take the Fokker D.VII and waffle greatly between the E.III and the Albatros D.III. In the end, I’d probably give a very hesitant nod to the Fokker monoplane, just because its historical importance is too great to overlook. But it hurts to completely ignore the Albatros.

“So ignoring my natural bias to name the Camel, S.E.5a, DH.2, Bristol F.2B, Sopwith Triplane, and Sopwith Snipe as the six most important fighters of the war (*Robert is British*), I’m left with the Camel, S.E.5a, Nieuport 17, Spad XIII, Fokker E.III, and D.VII if limited to six.

“That’s my opinion and I’m going to bed.”

Chris:

“If Andrew or anyone else is really interested in building WWI models and want assistance I highly recommend joining the WWI Modeling Mailing List. There are lots of great modelers on that list who are very quick to offer advice and tips on building WWI aircraft. Additionally, it’s highly likely that any model you choose to build, someone on that list has built it before and will be able to tell you what pitfalls to avoid. Ask about references and you’ll get a nice laundry list of what’s available and what to avoid.

“Go to this site to sign up: <http://www.wwi-models.org/mailman/listinfo/wwi>

“You can set it up so that you get bundles of messages one or more times a day or so that you get the messages as they trickle in throughout the day. That list has definitely kept my interest in WWI modeling up, and as soon as I invent that machine that gives me extra hours in a day, I’ll get back to work on my Pfalz pair.”

John Alcorn:

“Yeah, this exercise, *“The Six Most Important Fighters of WWI”* has been enjoyable.

“I don’t recall who suggested that the Fokker E.III should perhaps be included in the six, but it’s a valid consideration. Possibly it should replace the Fokker D.VII. Sure the D.VII was arguably the finest fighter (scout) of WWI to see widespread operational service. However, by the time it appeared in numbers - Summer 1918 - Germany’s final bid to defeat the Allies had run its course. So, while the D.VII reigned as the fighter supreme for several months, its presence

could do little to alter the course of events. Au contraire, the appearance of the Fokker Eindeckers in 1915 revolutionized aerial warfare, what with its synchronized forward-firing machine gun(s), good performance and aggressive use by such luminaries as Max Immelmann and Oswald Boelke.

“Meanwhile, perhaps this “Airplanes of the Great War” fever is contagious. As many of you know, for the time being at least, I have abandoned my two 1/32nd scale A-20B and Boston IIIA scratchbuilt projects for the Halberstadt CL.II in 1/24th scale - another of my all time favorite airplanes. Just now (as discomfort permits) I’m preparing a set of multi-view line drawings of it, based upon the considerable configuration material at my disposal, thanks to: *Windsock DataFile 27* (including Ian Stair’s drawings); a packet of extensively dimensioned detail sketches from some unknown Dutch source, sent me by Doug Carrick several years ago; an unfinished 1/24th scale side view (pencil and ink on mylar) also sent by Doug accompanied by the statement that he was abandoning the project; and a wonderful series of detail photos, mostly of the fuselage interior, kindly taken for me by the good folks at the Krakow Museum three years ago during their restoration of the remains of the only surviving CL.II - saved at WWII’s end from the ruins of the Berlin museum. While battered, it was mostly there, except for the wings and many interior fittings - instruments and such. Fortunately, the top wing center section remained in place atop its cabane struts - but lacking its radiator (the good news and the bad). At this point my greatest frustration is lack of accurate dimensional information on the Mercedes D.III engine. I have a facsimile of the 1919 *Jane’s* that includes just about everything you could possibly want to know - except for any key dimensions! Would it have been too much trouble, for example, to have included the cylinder spacing? Well, OK, they break down and give the length of the connecting rod distance between bearing journal centers. As the connecting rod appears in a section view of the overall engine, I

scaled the cylinder spacing as 17.5cm. This is OK, except that careful scaling from photos indicates about 18cm; and a 1948 William A. Wylam drawing that I have gives the dimension as 18.4cm. If Wylam had the information he’d use it, if not he’d make up a dimension. I wouldn’t trust his drawing as far as I could throw a Mercedes D.III engine. Unless I find something better, I’ll use 17.5cm. As for Ian Stair’s drawing - in general it’s pretty good, although not good enough for a multi-year modeling project.”

Chris:

“First off, for John and the rest of you guys who are interested in Mercedes engines, I recommend visiting this site: <http://mwmiller.net/alb/engine.htm>

“The gentleman there, Mark Miller (mark_m@sbcglobal.net) has done quite a bit of rendered 3D work of World War One subjects, and he is currently redoing his Mercedes D.IIa engine. In addition to his 3D computer-generated engine, he has lots of detail photos of the real engine as well as other Mercedes engines. How did I come across this? Yup, that WWI Modeling Mailing List...

“On the issue of the Fokker D.VII, I would say that while its impact on WWI was minor, it definitely should be included on the list of six for its **long-term** impact. As the only item identified by name in the Treaty of Versailles, the Fokker D.VII put aviation at the forefront of military and industrial thought. As an example, after the war, Hungary tried hard to keep its aviation industry active, as its sole form of technical industry. This failed dramatically, and as a result all the aviation industries present in Hungary during WWI had disappeared by 1924 (although the factories were effectively dismantled by the Romanians in 1919). When the treaty restrictions were lifted in 1927, Hungary chose aviation as the industry which with to modernize their society. But without the technical knowledge base (think of the aviation industries in the 1920s like our tech industries in the 1990s) Hungary lagged far behind and never caught up

with the rest of the world. This led to a dependency on foreign manufacturers, which led to an association with Germany and Italy, which resulted in Hungary's occupation by the Soviets after WWII and a complete denial of any technical industry. Currently, Hungary's main industry is service-oriented, which keeps the country economically weak while it attempts to join the EU. Similar examples can be made for other East European countries as well. All due to the Fokker D.VII - at least indirectly. Because of all that, I think the D.VII must definitely remain on the list of six."

Bob Pearson:

"Interesting discussion. I don't really have anything to add, but I guess it depends upon the criteria used. The most "useful" aircraft weren't the fighters, but the observation and artillery co-operation aircraft. The fighters were just used to try and stop the opposing side making use of their two-seaters.

"Whittling a list of scout aircraft down to just six makes it necessary to decide just why each should be there:

Fokker Eindecker : First aircraft with a fixed forward firing gun.

Albatros D.I/II: First powerful aircraft with two guns.

Albatros D.III: Previously mentioned as the backbone of the Jastas.

Albatros D.V/Va: Really just a lightened D.III and no real improvement. In fact the Austrian D.III OEF series was superior with their two-spar lower wings. One wonders what would have happened if the D.III had been further developed.

Fokker DR.1: Everyone's introduction to WWI.

Fokker D.VII: Best German fighter of the war - made a good pilot better and a better pilot great.

Pfalz D.III: Beautiful (my favorite) but an also ran.

Sopwith Pup: Beautiful and the pilots' choice.

Sopwith Triplane: Inspired many others. The "Triphound" was the best aircraft at the time of its introduction but was soon superseded by the Camel, which had the

advantage of only needing to rig two wings. And the Camel carried two guns from the start while only six of the Triplanes did so. This is my favorite British aircraft and at one time I was researching each aircraft for a possible book.

Sopwith Camel: Maneuverable and claimed more victories than any other WWI aircraft. However, its critics said this was because there more of them around than any other aircraft and that it was too slow to get away and it had to stay and fight. It also killed more of its own pilots than did German and Austrian airmen.

Sopwith Dolphin: First multi-gun fighter. Designed with two each Vickers and Lewis machine guns.

Sopwith Snipe: Supposedly the best Allied fighter at the end but the Martinsyde would have proven itself even better.

S.E.5a: Fast, maneuverable and carried two guns. While not as agile as the Camel, it was a more stable gun platform and was used by many of the top Commonwealth aces.

Nieuport 11: Its sesquiplane design inspired many copies - the most famous of which are the Albatross D.II through D.Va. In the end this was a flawed design.

Nieuport 17: More powerful than the 11 and, in French service, was armed with a Vickers.

Spad VII: Fast, rugged. The Spad VII served from the Summer of 1916 to the end of the war.

Spad XIII: An enlarged VII with two guns.

"What to choose - heck - build 'em all. I'd also recommend that Mr. Birkbeck join the WWI Mailing List at: <http://www.wwi-models.org>.

"One small correction to what was said before by one of the contributors to this discussion, and one that continually arises due to the writings of A. R. Weyl - Rheinhold Platz was **just** a welder at the Fokker plant and he was not a designer. Weyl had a particular hate for Fokker and used everything in his power to denigrate Fokker and this is just one more untruth that has managed to survive.

"Okay - if it has to be only six:

Camel
S.E.5a

Ni 11
Spad XIII

Fokker E.I
Albatros D.III."

Charlie Schaaf :

"A collection of six models representative of WWI, which can be considered the most important fighter aircraft of the UK, France and Germany.

"Well, I always like to be the iconoclast, the troublemaker, in these things, which renders my answer very suspect.

"Well, you want this to be representative of WWI, which means, to me, that you want to try to have at least one monoplane and one triplane, along with many bi-planes, and at least one water-based plane, or - even better - at least one floatplane and one flying boat. We should also have at least one two-seater; you can't really be representative of WWI if you ignore the two-seat fighters.

What about balloons and helicopters?

"If we want a flying boat fighter, I think we go with the Macchi M-5 single-seater, or maybe the Lohner/Macchi L1, produced and flown by both Italy and Austria-Hungary.

"If we want a float fighter, we could use the Albatros W4, which would also give us our wooden fuselage Albatros D.I/D.Va family, or the Hansa-Brandenburg W.29, a marvelous airplane used long after the war by a number of airforces - it would also give us our monoplane and two-seat fighter.

"I thought of the Vickers FB.5, one of the first airplanes with its design optimized for shooting down other airplanes but I think the DH.2 is a more important representative of the pusher airplanes. It was

designed as a single-seat fighter with a moveable gun, but its combat experience showed that single-seaters needed to have the gun fixed to fire forward, most of the time, for most pilots.

“The need to represent all types flown in WWI gives us our excuse to include the Fokker Dr.I in the list - and aren't you all secretly glad? How can you really imagine building a “set” of WWI fighters with no Fokker Triplane?”

“The Bristol two-seat fighter gets in on its own merits as one of the best, most effective fighters of the war once proper tactics for its use were invented. One of the reasons it is “Most Important” is because it was one of the best teachers of the lesson that no fighter plane can be finally judged unless great attention has been paid to developing proper tactics for its use. In the middle of 1917, the Martinsyde Buzzard was recognized as just about the best prospect for an effective single-seat fighter but it was not ordered for quantity production because it used the Rolls Royce Falcon engine and all of these engines had to be reserved for the Bristol Fighter, which was more important.

“So we have the:

- DH.2
- Biff
- S.E.5a
- Camel

- Ni 11
- Spad VII

- Fok. E.III
- Fok. Dr.1
- Fok. D.VII
- OEF D.III
- H-B W.29

“No WWI collection would be complete without representatives of these types, and the collector should really remember that there were other countries in WWI besides the big three.

By my count 14 nations operated aeroplanes in combat in WWI; four Entente powers and ten Allied powers. - Jim

“Hmm? Where are my Russian and U.S. markings?”

Norm Filer:

“I have stayed out of this learned discussion because I am not learned about World War Once birds. My suggestion leans heavily toward Snoopy's Doghouse. I think he may have educated more people about the Sopwith Camel and the Red Baron than anything else.”

SUMMARY

Opinions were solicited from 36 modelers in the Puget Sound region and from Bob Pearson up in Prince Rupert; ten responded - with great enthusiasm.

I suspect there's a consensus lurking in all of this but as the responses were not disciplined into a statistically evaluable format, a statement of that “consensus” would only be my opinion.

As I read the data, the candidates for Andrew Birkbeck's six are:

- | | |
|----------------|---------------------|
| <i>BRITISH</i> | <i>Camel</i> |
| | <i>S.E.5a</i> |
| | <i>DH.2</i> |
| | <i>Sop. Tripe</i> |
| | <i>Biff</i> |
| <i>FRENCH</i> | <i>Nie 11</i> |
| | <i>Nie 17</i> |
| | <i>Spad VII</i> |
| | <i>Spad XIII</i> |
| <i>GERMAN</i> | <i>Fok. E.I/III</i> |
| | <i>Fok. Dr.I</i> |
| | <i>Fok. D.VII</i> |
| | <i>Alb. D.I/II</i> |
| | <i>Alb. D.III</i> |
| | <i>Alb. D.V/Va</i> |

Also “Mentioned In Dispatches” were:

- Sop. Pup*
- Sop. Dolphin*

- Sop. Snipe*
- OEF D.III*
- Pfalz D.III*
- Halb. CL.II*
- H-B W.29*
- Snoopy's Doghouse*

That gives us 15 clearly viable candidates for Most Important WWI Fighters and eight questionable candidates. Andrew - take your pick!

With Roden, Eduard, MAC, Revell, Flashback, Eastern Express, Battleaxe, Jager, Aeroclub, Hi-Tech, Choroszy-Modelbud, Blue Max/Pegasus, HR Models, Czech Omega, Olimp, A-Model, Special Hobby, Gavia, Maquette, Copper State, etc. virtually flooding the market with new WWI kit releases along with publications such as WWI Aero, Windsock, DataFiles, etc. expanding their distribution, this is becoming a “Golden Age” for WWI enthusiasts.

I must add a personal note here. When Chris suggested the WWI Mailing List, I clicked on his link and took a long look at it. Anybody even slightly interested in WWI ought to take a look too. I signed up and it's proven to be both a blessing and a curse. It's a blessing because it is so darned interesting. It's a curse because it sucked me right in and now I spend way too much, altogether enjoyable, time with it. Do try it but be forewarned - it is addictive.

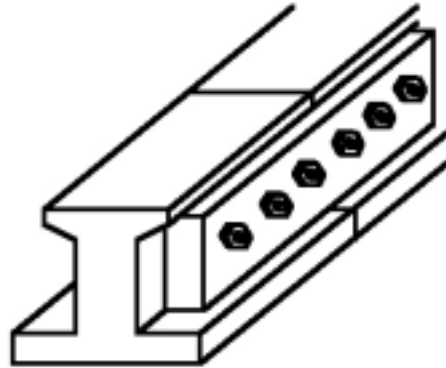
Now, what's our next topic?

Diorama Construction, Part Five

by George Haase

The real fun was the tie plates and fasteners. I used a section of .020 sheet plastic to represent the tie plate base. Additional sections were used to fabricate that portion of the plate that grips the rail. The real fun part was applying three (according to the pictures) Grant Line bolts (again, the model railroad shop), two on the inside and one on the outside. That's six per tie and 28 ties over the 14 inches of the master. Don't bother with the math...it's a bunch. I made the master at a slight angle so there is only one tie plate on the outermost tie at each end. If I'd have had any brains, I'd have made one and actually cast the 57 I needed but I didn't think of that at the time. In fact, I thought of it as I was typing the last sentence. Since the master was done back in my pipe smoking days, I had four-five hours a day to model. All those bolt heads...no problem. Actually, the best thing to have done would be to have made a master of the tie with a tie plate at each end and cast a bunch of those. I could then make the rail section any length I wanted, even curved. Just apply the castings to the groundwork and, like the DML-modeled parts, just slide the rail into the tie plates. Next time - and it would have avoided the "locking" problem discussed below.

Adding to the fun, I made a pair of rail connector plates (used to join two sections of rail end to end.) I am not sure if they used welded rail in Europe during WWII. I do not think so. In this regard, I consider myself a pretty much Average Joe. Since I would expect to see rail connector plates, I decided to include a pair on the master. I used a razor saw to cut a slit in the top of the rail to simulate the presence of the two separate section of rail to be joined. (No, this is all simulated. The rail joiner is not actually functional.) In reality, each end of a section of rail has two

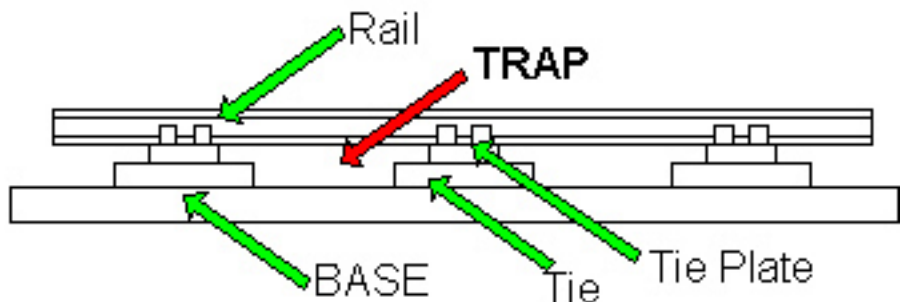


or three holes drilled into the web before it leaves the factory. Whether it is two or three depends on the weight of the rail (expressed, in the US, in pounds per yard). The heavier the expected traffic, the heavier the rail you use. Light rail, for expected light traffic (Duh!) has two holes in each rail section end. Light rail is used for branch service and sidings. Heavy rail has three holes per end. The rail joiner is a pair of metal plates that fit in the rail web, one on each side. A light rail joiner would have four holes in it, two for each of the two holes on each end of the rail sections being joined. The holes in the joiner are aligned with the holes in the rail sections (usually by adjusting the position of the "new" rail) and a section of threaded rod is passed through the joiner plates and the rail between them. Nuts (the bolt head being simulated) are turned down on the threaded rod from each end, so there is a nut on each side. This captures the rail section between the rail joiners. When all four threaded rods are so attached the rail sections are joined end to end. The same process occurs for heavy rail except that there are six rather than four holes to align

and fill. To simulate this, I added a piece of plastic to the web that extended equidistant to each side of the slit. I added three bolt heads to the plastic joiner on each side (inside and outside of the rail) and on each side of the slit for a total of 12 bolt heads. (See drawing at left.)

So now we have a master of about 14 inches of fairly accurate European WWII type railroad track. I mounted the master, complete with its base, on a large section of Plexiglas. Around this, about a half inch away on all sides, I constructed a dam of modeling clay, making sure it was well adhered to the surface of the Plexiglas so the RTV couldn't leak out under it. The modeling clay dam was nearly one inch high to make sure that the RTV could cover the entire master, plus about a quarter of an inch. This, plus the side structure, are all that provide strength to the mold. The RTV was slowly poured into the cavity formed by the clay; slowly so as to avoid trapping an air bubble under the rail that passes between each tie and over the "base". In case your ability to visually construct the shape of this structure is as good as your modeling ability, you're right! The rail is going to be trapped in the mold. The base forms the floor and the rail, as it extends between the ties forms the ceiling with the ties and tie plates form the walls. (See drawing below).

When the RTV cures, remove the clay walls and lift the mold with the master locked in it from the Plexiglas sheet. Now what? The master is locked in there, right? We can cut it out. Carefully start peeling the mold from the master form one end.



Using a sharp knife, cut the mold between the ties and through to the bottom of the rail (the trap) to free the master. Continue this down the mold, freeing the master like undoing a zipper. Eventually the mold will be free of the master but will it be usable? The short answer is yes!

To cast, first coat the mold with mold release. As I said earlier, I am using a product called mold soap. I work the soap into all the crevasses and creases. Special attention needs to be paid to the rail section as that is hidden from sight. The two slits in the length of the mold facilitate access to the rail section of the mold for the spreading of the release agent. For this casting a slow setting resin would be best because you need a lot of time to get things established. I do not have the real slow setting resin. If I did, I might be able to set the mold on a slight incline and pour in one end and keep on pouring until it slowly oozes out the other end. The ultra-thin type resin might also be helpful. I guess the best would be an ultra-thin, slow setting resin. Do they make one of these? Since I do not have that kind of resin, I mix enough of the "whatever the stuff is that I have" resin, per the manufacturer's instructions, to work with for about five minutes. I do this out in the garage since you need good ventilation - you do not need to resin cast your lungs. This will become a multi-pour casting. Welcome to that club! First, starting at one end, pour a bit of the resin into the tie plate region of each tie. The problem being addressed is the possibility of trapping an air bubble in a bolt head casting. After pouring a bit of resin in the tie plate area, use a toothpick or other probe and gently prod around in the bolt heads portion of the casting to push out any air trapped there. Continue this on down the mold. Work this left tie plate, right tie plate, next tie, left tie plate, right tie plate, next tie, etc. After about five ties you will have to make sure to address the "tube" that goes between each tie plate - the rail. I gently pry open to mold where the knife slit is and pour a bit of resin in the opening at a tie plate location. The resin flows down the "tube" between tie plates forming the rail. When you allow

the mold to return to shape, the force will compress the resin and help drive air bubbles out. You do need to work quickly and a bit carefully. You do not want the resin to harden in the pocket of a tie plate before you have poured the rail that goes through that area. The result will be an air bubble trapped in the tube that will be formed into the rail, that will have to be fixed later. I have done at least five of these and I have yet to do a casting without an air bubble or two in the rail. They are fairly easy to fix with some putty, filing, and sanding. The earliest casting, before I settled on this pour sequence, suffered from incomplete casting around the bolt heads or the rail itself due to trapped air bubbles. The "fix" was to pile some ballast up around the tie plate and thus cover the missing or incomplete bolt heads. It is better to have them, however, so...

After the five minutes the resin will begin to harden in the cup and will not pour. I scrape as much of the remaining resin into a part of this mold that isn't yet filled. Remember, the ties and the base section are at least 1/8th inch thick. This lets you use the resin (no waste) without needing it to flow very well, which it will not do any more. Mix additional resin and continue with the pouring. You may have to change out the cup after a second or third batch. I have found that the setting time becomes reduced as I re-use the mixing cup. The resin will stick to anything (I have a pair of light brown dress slacks that I happened to be wearing while doing some resin casting while on lunch break. The resin escaped the other end of the mold and got on my leg. Seven years later I still have a resin colored, almost indistinguishable from the color of the pants, thank goodness, patch of pant leg.) So you'll have to toss the mixing bucket. Paper cups are imminently disposable. They are, however porous so they want to absorb the resin material and will throw off you equal parts of Material A and Material B type resins. Little plastic medicine cups, if you can find them are probably best.

After the all the tie plates and the rail have been poured, start pouring a lot of resin

into the mold. All the ties need to be cast, and the base section will also take a lot of resin material. When finally done, set it aside to dry. Give it a couple of days.

When the casting is ready, slowly and carefully remove the cast part from the mold. It will come out just like the master, but you won't need the knife. I am sure that the slit in the mold will eventually limit mold life or eventually result in some leakage of resin and thus some flash that will need to be cleaned up. I've done a half dozen of these castings and that hasn't happened yet.

You will probably have an air bubble or two in the rail that needs fixing with your favorite putty. Have at this. I find these fairly easy to fix and generally undetectable after things get painted.

Speaking of which, I generally paint the ties my favorite tie color. This is Humbrol Wood Brown, followed when dry with a serious wash of black. After this, the ballast material needs to be added. This may be rock or dirt depending on the use intended for the track. Check the model railroading magazines for pictures of what, how, and what materials are used for ballasting track. After the ballast is in, I airbrush the rail with Humbrol Track color, or Floquil Roof Brown. This airbrushing represents the accumulated dirt, rust, grease and oils that accumulate near and on the rails and includes the entire rail, tie plates, the ties and everything either side of the rail for at least 1/4 inch. Since the grease layer is actually rather heavy, very little dry brushing of bolt heads is appropriate. Also, since it is based on the use of the track, everything else (ties, ballast, etc.) needs to be there first. A very dark steel color needs to be painted only on the bearing surface of the rail (top and inside edge). A little dry brushing of the inside edge of each rail with a bright silver or brighter steel color would also be appropriate. Finally, a few drops of a very dark material (black wash of acrylic or enamel paint might be good, but use what works for you) get dropped down near the middle of the track section to represent heavy oil,

fuel and other oils that might get dripped off of the equipment. Remember, this equipment does not use a centerline coupler, per se, like US equipment. The cars are held together against bumpers at each end by a chain hook up. The break system and other things that might leak something are on either side of the central support beam for the car so these items would also be off the centerline. So the drops of something black representing leaks of "stuff" from these sources need to fall where such "stuff" might land. In this case, the landing zones would be a bit to either side of the centerline between the tracks.

All that remains for our track thing is to install it. In this case I decided that I wanted a little more height off the sur-

rounding terrain. I cut a piece of cardboard slightly smaller than the base of the casting and glued it to the base. Once well attached and dry, I glued the resin casting to the cardboard. I used white glue with weights to hold everything down until the glue set. One of the problems here has to do with the materials and the glue - they are all a bit water-soluble. The way I do my scenery these days (everything is held down by a mix of Woodland Scenics Scenery Cement, water and a drop or two of dish soap) uses a lot of water and this could be a problem. The Verathane covered base is waterproof, and the resin casting is waterproof. The cardboard and the white glue between are susceptible to attack and need to be protected. You just do not want any water to get between these two water proof structures - it will

stay wet for years. My answer in this case was use a little paintable calk, and calk the seam between the Verathane base and the resin casting. Watch out for silicone calk. It may work but paint will have a problem sticking to it. The paint will bead up on the calk. At each end of the track where it passes across the edge of the base, the raised section of track sticks out. I paint these kinds of things, places where my giant knife of the edge of the diorama world has sliced through a raised portion of the earth, black. So we need to be able to have paint stick here. Yes, I could have used something else to raise the resin casting but I couldn't find anything that was the right height. It will work out in the end.

To be continued

Upcoming Model Shows and Aviation Events

Saturday, January 10

Mars Fest '04. 10 AM to 5 PM in the MOF theater. News of the *Spirit* Robotic explorer, which landed on Mars on January 3. Panel discussion at 3 PM in the theater. Museum of Flight, 9404 East Marginal Way, Seattle. Information line: 206-764-5720. Web site: www.museumofflight.org

Saturday, January 17

Inaugural Bucey Lecture: Test Pilots' Forum. 2 PM in the theater. Well known test pilots Dick Rutan, Corky Meyer, and Len Fox share stories. Museum of Flight.

Saturday, January 31

NASA Remembrance Panel Discussion. 10:30 AM and 2 PM in the MOF theater. Apollo Astronaut Walter Cunningham, and Mission Control Specialists Jerry Bostwick and Sy Liebergot will speak. Museum of Flight.

Saturday/Sunday, January 31 and February 1

Badge of Honor. 12 noon. The Museum pays tribute to the crews of Apollo 1, Challenger, and Columbia. Museum of Flight.

Saturday, February 7

Northwest Scale Modelers' Show. 10 AM to 4:30 PM. Museum of Flight. See last month's Chapter News for more details

Saturday, February 7

The Aviation Art of John Amendola. 2 PM in the MOF theater.

Saturday, February 14

Tuskegee Airman Lee Archer. 2 PM in the MOF theater. Forty years after Lee Archer was given credit for four and one-half victories, cadets at the Air Force Academy researched and added a half credit, making Archer an Ace. Museum of Flight.

Sunday, February 15

Flying the Hump. 2 PM in the MOF theater. Harry Giles flew the Hump and will present his personal experiences. Museum of Flight.

IPMS Seattle 2004 Membership Renewal

2004 is here, and it is dues time again.

Everyone on the current (2003) mailing list will receive the January newsletter, but those who have not renewed will have a "Last Issue" note on the mailing envelope. If you do not renew prior to the mailing of the February newsletter, you will not receive that or subsequent issues.

Dues are **\$24.00**, make checks payable to: **IPMS Seattle** and either bring it to the January meeting, or mail it to

IPMS Seattle
16510 NE 99th St.
Redmond, WA 98052

IPMS SEATTLE MEMBERSHIP 2004 RENEWAL FORM

Full Name _____

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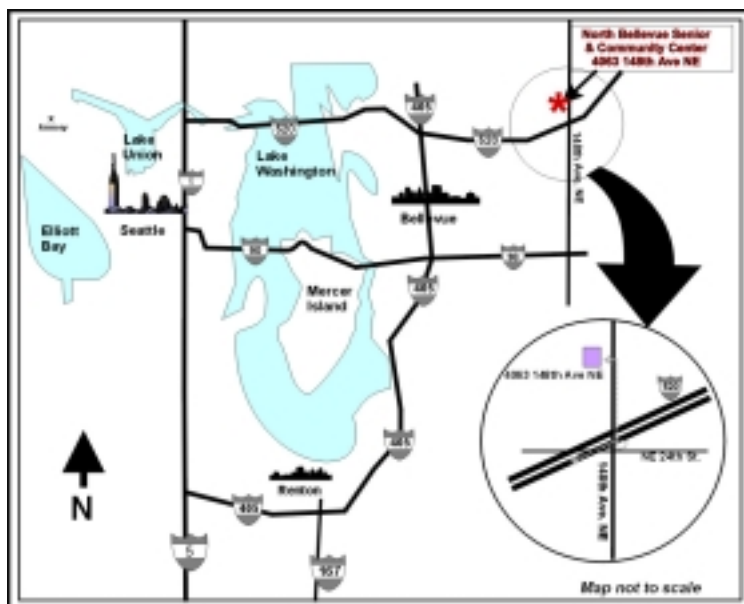
City _____ State _____ Zip Code _____

Telephone No. Area Code (_____) _____

E-mail address (optional) _____

Meeting Reminder

January 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.