

Seattle Chapter News

Seattle Chapter IPMS/USA July 2022



Show and Tell

If there is one cool thing I remember about my younger school years, it was Show and Tell. I hope all of you got to experience this event. When the teacher would announce Show and Tell, all of my life focused on getting ready for my two minutes of fame in front of the class. I could not tell you one single thing I actually showed during all those school years (the memory forgets details) – but the excitement of it is still in my brain.

Some aspects...about 89.45682%...of me coming to our model meetings is the Show and Tell table. Not only am I excited about what I will be showing and sharing, but to be honest, I can't wait to see **what YOU bring!** Yes, I said **YOU!**

What? You come to the meeting to see all the good people and models, but you did not bring something for Show and Tell. What?...Only kidding...or? This is your time of month to shine! "...But John, I haven't built anything in the last three months!" Well – what a good but non-binding excuse. Trust me, I bet I could come up with more excuses than you can.

Here is what I think. Most of you believe the monthly meeting Show and Tell is only for recently completed 'new' model subjects. **WRONG!** Some of you believe your model is just not good enough compared to Master-Modeler-Extra-Ordinar-Grand-Pubba-King-Of-Plastic-Joe-Schmo with their 67.3 years of experience so therefore I will never show it. **WRONG!** Some of you believe your model subject will be laughed at. **WRONG!** (Unless it is not an orange truck...only kidding!). You believe you can't bring a half-built model that's been on your bench for the last six months. **WRONG!**

All those 'wrongs' are just the ones that come to mind in the last few milliseconds. I assure you there are many more - but, let's get you thinking from a little different perspective.

The club is about people and models. The people part we have down to an exact science. Great people show up from every walk of life imaginable. Every background from the universe and beyond (is any one of you an alien by chance?)...but let's remember, it is a MODEL club. Models - as in miniatures of things real or not. So let the fun begin.

Unless you just arrived from Pluto and are a true beginner, have never before opened a model kit and tried to build one – I'd say 99.4567% of you good folks have built at least one model in your lifetime. Some two or more...others...tons! Are you keeping up with me so far? Good – it's going to get better.

Notice I never mentioned your model has to be as good as the 'best model' shown in our club. No way Jose. There is no such thing! We respect every model ever shown no matter where your experience is in life. 'Experience' is not even a consideration for Show and Tell. Let me tell you a secret before I continue. My very first model ever was not as good as some of the ones I am building 60 some years later. There – now you know. So what I am saying is – every single one of us builders and NO EXCEPTIONS is between their very first model and the latest one you have built. For me, my lifetime experience not only came from building and learning, reading books/magazines about models, watching YouTube about models, going to model shows, but from the very table in front of our meetings. The Show and Tell table.

There is nothing as powerful as actually seeing models from all of you on the tables. I leave each meeting still in a daze at all the subjects you have shown, the creativity, the thoughts of your imagination and so on. What can you contribute to the monthly Show and Tell?

First of all...**bring something**. Let me repeat that. **Bring something**. It can be a just completed model, one from three years ago, or the very first one you ever built. Sorry, my first model was of some birdy I got at a museum when I was 7 or 8 and it has flown

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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 10:30 AM, except as noted, and usually last for two to three hours. Our meetings are very informal, and are open to any interested modeler, regardless of interests. Modelers are encouraged to bring their models to the meetings. Subscriptions to the newsletter are included with the Chapter dues. 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. We are in the process of transitioning to InDesign. Any Word, WordPerfect, or text document for the PC would be suitable for publication. Please do not embed photos or graphics in the text file. Photos and graphics should be submitted as single, separate files. Articles can also be submitted via e-mail, to the editor's address above. Deadline for submission of articles is generally twelve days prior to the next meeting - earlier would be appreciated! Please call me at 425-885-3671 if you have any questions.

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

Upcoming Meeting Dates

The IPMS Seattle 2022 meeting schedule is as follows. All meetings are on Saturdays at North Bellevue Community Center from **10:30 AM** to **1:30 PM**, except as indicated. To avoid conflicts with other groups using our meeting facility, we must **NOT** be in the building before our scheduled start times, and **MUST** be finished and have the room restored to its proper layout by our scheduled finish time. We suggest that you keep this information in a readily accessable place.

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Two Mules: Building Eduard's 1/72nd Scale S-199 Mezek Dual Combo

by Chris Banyai-Riepl

Recently I got the pleasure of checking out Eduard's newest release, the Avia S-199, and it looked like it would be a fairly easy build. Here we are, just a couple of weeks later, and they're done, proving that my initial assessment was absolutely correct. A combination of excellent engineering, great detailing, and simple paint schemes all combined to make these a fun pair of builds.

With two kits in the box, each one featuring a different fuselage, decisions needed to be made right from the beginning. So instead of starting with assembly I spent a while going through all of the decal options to figure out which two I was going to build. The main difference between the two fuselages involve the canopy, with one having the traditional Luftwaffe-style canopy, while the other has a larger blown clear hood. For the traditional option I decided the one with nose art of Diana the archer was the choice there. For the blown hood canopy, there was only one option for me: the civil registered Police Air Patrol S-199. That's been an option I've wanted to do for decades, so having it in the box was perfect.

So, with the options sorted out, the next step is still not building anything, but to go through the instructions and mark out what parts and pieces are needed for each option. This ranged from holes (or not) in the cockpit tub to rudder and cowling underside options. By marking these ahead of time, I hoped to avoid missing things and for the most part I was successful with that. So, with the instructions marked up, I could finally start building things up.

Of course, that means diving into the interior, and out of the box this cockpit will look really nice. There is a lot of detail across the board that is represented in injection parts, but this kit also includes pre-painted photoetch that adds even more useful bits. The cockpit tub has an interesting overall design that had me a bit confused about, as there's a curved forward section that didn't make sense. Once it was all together, though, and the wing on, it made sense. That curved section formed the troughs for the main gear legs, a case of impressive engineering. More on that later.

For the cockpit assembly without photoetch (PE), you get separate sidewall inserts for the right side, a separate trim wheel for the cockpit floor, a separate control column and front cover (where the cannon used to go). The instrument panel mounts up to a separate front bulkhead piece, while the seat is built up from a separate pan and separate back. On the PE side, there's seat belts, rudder pedals, instrument panel, trim wheel, and some other small detail bits. For my build, I used some of the photoetch (like the seat belts and trim wheel), but didn't use all of them. One received the PE instrument panel, but the other I was planning on a closed cockpit so I used the raised plastic detail and decal.

After detail painting, washes, drybrushing, and all the other usual interior detailing work we usually do, assembly is next. Here is another nice feature of the Eduard engineering. This kit is designed to have the fuselage glued together before adding the cockpit tub, which results in no problems at all with alignment. One fuselage got the short tail wheel while the other got the long





one. After the fuselage is together and the seams dealt with, I glued the cockpit tubs in (doing that after sanding all the seams means no extra dust in the cockpit, a great feature).

For the wings, you get a single-piece lower wing and separate upper wing halves, and sandwiched in between are the wheel well sidewalls. That makes for a really detailed wheel well that looks great once painted. Before gluing the wing together, though, make sure

to drill out the holes in the lower wing for those options that have the under-wing cannon gondolas or centerline rack. For Diana, I went with both, while the Police Air Patrol, none of those options were used. There's also an option that has cannons in the wings, so if that's the option you chose, make sure to get that added in. With the wing assembled, the next step is to add it to the fuselage, and here you have to bend the wing apart to fit it around the cockpit tub landing gear leg insert channels. Once done, though, the fit is absolutely perfect. At this point, I haven't used any filler anywhere.

With the wings on, the remaining pre-painting assembly is pretty straightforward. The wings have separate flaps and ailerons, which were glued in place, along with the separate slats. In



hindsight, I should have left those off of the Police Air Patrol option to simplify painting. Likewise, leaving the stabilizers off of the Police Air Patrol option will simplify painting, as those are red while the rest of the fuselage is gray. There are two options for the rudder, but both options use the same rudder so I didn't have to worry about having the wrong one.

Other bits and pieces to go on include the nose bulges and lower cowling, both of which have some options to them. After following my notes on which version gets what options, I got all those in place, including the underwing radiators (which have options to open up the back side). I also got the landing gear set up for painting, which had the gear doors getting the outside painted first, then glued those to the landing gear legs as the insides of the wheel doors were the same color as the struts. With those, and the propellers together, it was time to throw paint around.

For Diana, this option was super easy to paint as it was all one color, including the spinner and propeller blades. For the Police Air Patrol, this option is a bit more complicated, but still an easy one to do as all the scheme's three colors have hard demarcation lines. I used Vallejo Model Air RLM 81 for Diana, while the Police Air Patrol got two shades of Model Air gray for the main scheme, and the red parts were done with a Model Color red match. The most challenging part of that scheme was masking around the nose, with all its bumps and bulges that needed to work around. The wing leading edge should have been easy, but since I glued the slats on ahead of time, I had to mask those separately as they were in the extended position. Unfortunately, I didn't get that line quite straight, but rather than repaint it, I opted to instead paint some decal paper with the upper surface gray and just clean the line up with a strip of decal.

After glossing everything up, the next step is the decals. Eduard's current decals are probably the best and worst decals I've used. I know, that doesn't make any sense, but I'll try to explain. First off, I know some have said that the clear film is really large and potentially a problem. Others have suggested that this is because you can carefully peel the film up afterwards and leave just the printed color on the model. I can say that while yes, you could peel that film up, it is completely unnecessary as these are insanely thin decals that absolutely disappear on the model even without any kind of setting solution. With setting solution the clear film just disappears completely, and everything settles into all the nooks and crannies beautifully, so much so that there's no difference between those areas and others when it comes time to do panel line washes.

So if these sound that good, what's the problem, you ask? Well, these decals are extremely thin, and tend to be very sticky. The first part shows up in how easy it is for the decals to fold over on themselves. So easy, in fact, that just the process of sliding the decals off





the backing paper often resulted in the edges folding over on themselves. This wasn't too big an issue with the larger decals, but for the stencils it was very challenging. For the fuselage codes (IV-8 for Diana, OK-BYW for the Police Air Force), things could have been much easier if those codes had also included the associated stenciling, but they are all separate and require putting decals over other decals, increasing the possibility of the film overlapping itself.

While the folding over was annoying, for the most part it wasn't that big of an issue as the decals are thin enough to handle having a bit of clear film overlap. The stickiness, though, was a big challenge, as the decals tended to stick right where they laid. Repositioning them was challenging at best, and in one case, painfully annoying. The large upper wing registration code stuck in place, and in trying to remove it and slide it into position, the color portion tore and stuck to the model, while the clear film did not. I had no choice but to get the code positioned properly and then come back afterwards and paint over the stuck portions.

For all of these shortcomings, after some healthy application of setting solutions, the decal film disappeared and the end result was truly amazing, a painted-on look. Thus, the decals are absolutely the best I've used, while also being the worst (okay, perhaps not the worst, but definitely more challenging than most) from all the problems that popped up here and there. For future Eduard kits, I will try to apply the decals with more water to keep things from sticking, and hopefully avoid folding over, as the finished result when they go down right is superb.

With all the decals on, a clear coat protected them and I turned to the finishing touches. I kept the weathering to a minimum on both of these, just giving them both a panel line wash and that's about it. There's quite a bit of small details that need to get added, from the landing gear to antennas, aileron mass balances, and wingtip lights. For the Police Air Patrol plane, I decided to do this one with an open canopy so it got extra photo-etch for the windscreen and hood. Diana got a closed canopy, so it was the easier one to finish up.

In addition to the open canopy, I decided to use the Eduard Brassin exhaust stacks and wheels on the Police Air Patrol option. These are absolutely stunning replacements for the kit parts, with truly petite detailing. That said, though, I don't think they're necessarily needed. This is not because they're not detailed, they are. It's more a statement about the quality of the injection-molded parts that Eduard is achieving. Once painted, the plastic exhaust stacks looked nearly identical to the Brassin versions, which speaks highly of the injection molded parts.

For the wheels, the Brassin ones are definitely much more detailed, but as the hubs are painted black, a lot of that detail disappears. A bit of drybrushing can bring it back, but the kit wheels look pretty darn good out of the box, making this decision



a tough one as well. In the end, the Brassin parts do look good on the finished model, but as Eduard gets better and better with their injection molded parts, it's going to be harder and harder to justify these, and that's more a ringing endorsement of Eduard's plastic quality more than anything.

These two Avia S-199s were an absolute joy to build, making for a pleasant couple weeks' modeling with a couple hours here, a couple hours there. They have me very interested in tackling Eduard's upcoming two-seat CS-199 kit, and potentially doing a couple more

straight S-199s (I at least want to do an Israeli one, and probably another Czech example in a different color scheme). If you're looking for a relaxing build, this is a perfect subject as the engineering is superb, resulting in just a fun model to throw together. Visit the Eduard website and order one up before they're gone.

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















The Ghost of Kyiv: ICM 1/72nd Scale MiG-29 72140 In-Box Review

by Morgan Girling

Back in March, a posting from Squadron swam into my in-box: "preorder The Ghost of Kyiv and part of the proceeds go to Ukranian war relief." Wanting to help support Ukraine and Ukrainian model companies, I plunked down my money and waited. Happily, it arrived this week. Who is the Ghost of Kyiv? ICM's copy succinctly says: "There are still debates whether the Ghost of Kyiv really exists. Can it be one person or a whole team. Some believe he died, and many say he was ejected. Or maybe it's just an inspiring story...However, despite all the controversy, we know for sure: The Ghost of Kyiv has become a symbol of indomitable struggle."

The monochrome box art nicely captures the "ghost" theme with a mysterious (some might say Styg-like) pilot giving the thumbs-up overlayed on a missile-firing MiG-29, with Kyiv's Independence Monument in the background. Boxing is contemporary ICM with a pop-off box top decorating a sturdy cardboard inner box. The kit is a rebox of ICM's earlier 1/72nd "MiG-29 "9-13"" (ICM 72141) and "Swifts" aerobatic team (ICM 72142). Inside is a bag holding three sprues in medium grey and an inner bag with one super-clear transparent sprue. All panel lines are recessed, and there is good detail in the wheel wells, and afterburner cans. The cockpit tub is rather basic, and you'll want to replace the rudimentary ejection seat with an aftermarket resin K-36DM seat. There is a nice color decal for the instrument panel, which offsets the otherwise ho-hum panel part.

Having built ICM's MiG-25 previously, I wanted to see if their MiG-29 had some of the same issues. The answer is "yes and no". The landing gear is scale, which was problematic on the heavier MiG-25, so I would expect it to be the weakest physical link here, though not as stressed as with the Foxbat. The twin tails on the MiG-29 follow typical engineering, attaching to the top of the fuselage – they are handed and lean out slightly, so you'll want to pay attention there. (The MiG-25 incorporated the vertical fins and the aft fuselage side into a single unit which cleverly got the angle right but suffered fit problems at the front of the fuselage joint. There's a similar fit risk on the -29 with the forward nacelle assemblies mating with the lower aft fuselage.)

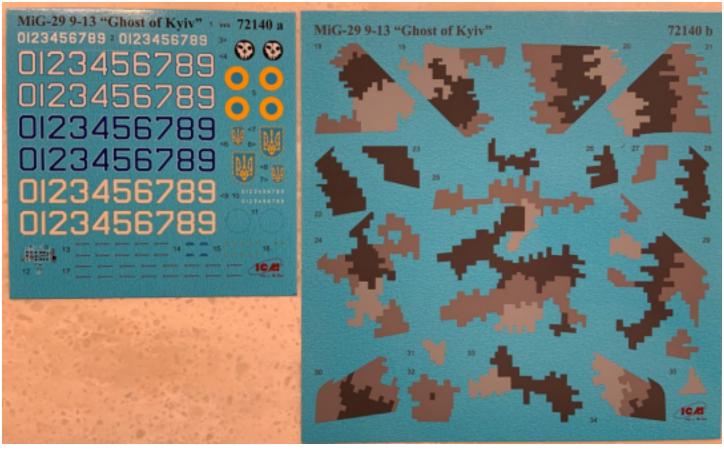
The digital camouflage scheme is provided as decals. To my relief, I wasn't faced with the acres of decal that some of the aerobatic kits now have. One paints it in two shades of grey (upper and lower), applies the reasonably-sized digital decals on that and then follows up with the national markings, fin flash, etc. over them.

One final note: the MiG-29 was designed to fly off unimproved airstrips and closes off the main intakes while feeding air through blowin doors on the fuselage strakes for ground operations. The kit is molded for ground operations, which will satisfy 95+% of modelers, but if you want to make this into an in-flight model, you will have some work to kitbash in-flight intakes.

Slava Ukraini!







Review: Redgrass Games Everlasting Wet Palette 2

by Jon Fincher

A year or more ago, I bought a wet palette to make my figure painting easier. I've built several, but decided I wanted a "professional" one. At the time, I invested in the Everlasting Wet Palette from Redgrass Games (https://www.redgrassgames.com), and even wrote a review of it for this newsletter. Well, Redgrass recently released a new version of their Everlasting Wet Palette, and I had to have it as well!

What is a wet palette?

A wet palette, as its name implies, is a paint palette which is wet. It's very useful for brush painting with water- and alcohol-based paints. It consists of a sponge or similar material to hold water, a water-permeable paper on top to place the paint, and a resealable container to hold them both. Acrylic paint put on the palette paper leaches water from the sponge through the paper. Compared to a dry or well palette, paint on a wet palette is usable for hours at a time, and with a tight-fitting lid can remain moist and workable for days.



Enter Kickstarter

Kickstarter (https://www.kickstarter.com) is a website which is used by individuals and companies to raise money for new products or services. Projects are advertised for a set period of time, during which individuals can view and "back" the projects financially. The level of financial support you provide determines how much or what kinds of new product you will receive. This ranges from "Here's a few bucks because I like you – no need to send me anything" to "Here – take ALL MY MONEY for EVERYTHING YOU MAKE!"

Last summer, Redgrass Games started a Kickstarter campaign to raise funds to develop their next generation wet palette. I backed the project at a modest level, and after several delays caused by general supply chain issues, COVID-19, and a war in eastern Europe, my new Everlasting Wet Palette finally arrived on July 5. My backing level meant I also received some extra goodies, including:

- a painting handle to hold miniatures as I work on them,
- a glass insert for the original Everlasting Palette to turn it into an oil palette,
- a beginner's book on painting miniatures written by Angel Giraldez.

You'll read more about all of these below.

The New Stuff

The Everlasting Wet Palette 2 (https://www.redgrassgames.com/redgrass-wet-palette-2-miniature-painting/) comes well packed, and comprises:

- the plastic palette box which contains everything,
- two hydrating sponges, which are thin flat foam pads designed to hold water,
- thirty reusable palette membranes, which sit on the sponge and hold your paint,
- the Wavy, a traditional well palette and paint brush holder attachment, and
- a paint pot holder attachment.

This generation of the Everlasting is an improvement over the original in several ways:

- The palette box is slightly larger than the original, but still compact for travel.
- It features a new sealing mechanism which is pretty close to 100% water tight.
- The Wavy and paint pot holder attachments now use a sliding lock system. The original Wavy used magnets, which made it less stable and easier to knock loose and spill.
- The hydrating sponge is newly engineered to hold more water.

• The paint membranes are designed to be cleaned and reused up to six times. Submerge it in water, lightly scrub off the paint with a soft brush, rinse and let it dry.

This last part is a big deal – normally, wet paint palette paper is a disposable item. I'm looking forward to seeing how well this works.

The Extra Stuff

As mentioned above, my kit came with some extras as well.

The glass palette is a thin but strong piece of glass which fits in the original Everlasting palette. One corner is cut off to make it easy to insert and remove, and is 100% LRF compatible (LRF: Little Rubber Feet, which come with the palette). The back is painted in a solid 50% gray to allow for accurate value judgments when mixing colors. To be 100% honest, I've been looking forward to having this almost as much as I have the new wet palette.

The painting handle is a short hand-held device with a top which rotates. You place poster tack on the top, then attach your miniature to the tack. You can hold the handle and rotate the top without touching the miniature, allowing you to paint freely. It has a magnet embedded in the base so you can stand it on any metal surface – the handle even comes with a self-adhesive metal disc for this purpose. The top is removable, and while you can buy additional tops, I 3D printed some extras instead.

Lastly, the book by Angel Giraldez is half manual on how to use all the Redgrass stuff, and half how to paint miniatures. Angel is a well-known world-class professional figure painter, regularly contributing content for Vallejo online and in person. The book is aimed at beginning painters, and contains some very good information on things like color theory, proper paint dilution, model assembly, and painting techniques.

Setup

Setting up the new Everlasting is easy – soak the hydration sponge for a few minutes, then wring out the water and place it in the palette box. Next, fill the box with water outlined in the setup guide – in general, you want the sponge to be wet without any water over the top of it. Then, place one of the painting membranes on top and smooth it out. Apply your paints and begin painting.

The glass palette was even easier – after cleaning out my original Everlasting, I simply performed the LRF installation on the glass palette and placed it in the box. The original magnetic Wavy will be used to hold fluids like Gamsol and OSM (odorless mineral spirits), which I use while painting with oils.

Verdict

I'll have more to say about the wet palette as I use it, but for now, I'm happy it's finally here, setup, and ready to use. As I said, I'm almost more excited about the glass palette for oils than for anything else. I think the book will be of limited use, as I'm no longer a beginner, but I'm sure there is something there I can learn. Finally, even though many of my figures are larger scale, the painting handle will still get a workout for the 1/35th and smaller figures.

Stay tuned for more details.

Below: Hydration sponges; Right: Glass palette











Left above: Painting book

Left below: Painting handle

Right: Palette paper

Hauler 1/120 Praga Lt.38 Pz.Kpfw 38(t) ausf.A

by Jacob Russell

This is Hauler's 1/120th scale Panzerkampfwagen 38(t) ausf. The kit consists of 10 finely cast pieces- a one-piece hull, two sets of tracks with integrally molded wheels, turret, jack, Notek light, the main gun, etc. The tiny rivets on the main hull have to be seen to be believed. The wheels and tracks are also highly detailed. ALL of the parts are highly detailed.

You have two color schemes to choose from, the three-tone (earth yellow/green/brown) 1938 Czech version or the Panzer Gray 1939-1943 German tank. A sheet containing the smallest decals I have ever seen includes national insignia and individual tanks numbers in white, yellow, red and black.

I'm a miniaturist at heart and I love the thought of making a model small enough to fit in the palm of my hand. The small part count shouldn't obscure the fact that Hauler's 1/120th scale Pz.Kpfw 38 (t) ausf. A builds into an impressive model. I recommend this kit and I would like to thank Brengun for the review sample.

Wikipedia:

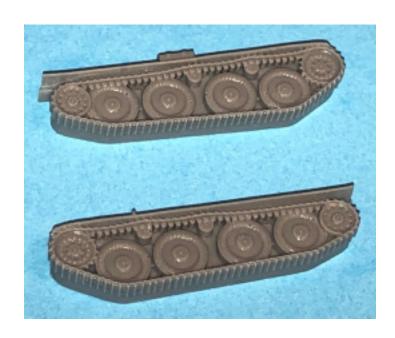
https://en.wikipedia.org/wiki/Panzer_38(t)











Hurricane Bookshelf: The Secret Horsepower Race, by Calum E. Douglas

by Scott H. Kruize

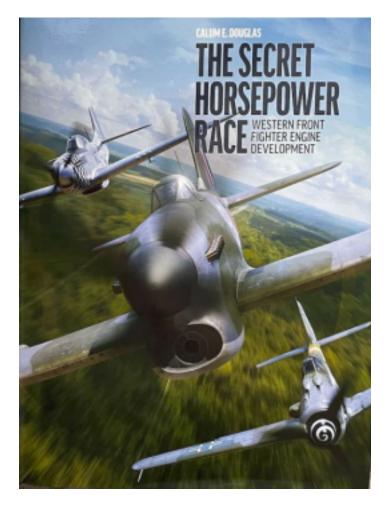
Our interest in modeling historically significant machinery inevitably leads our curiosity about the relevant facts. So this is an important book.

I forget where I first heard of it, but it was recently. I told myself I'd have to read it...but remembering my modest finances, didn't dash onto the Web to buy it. Instead, I put it on hold with the King County Library System. They didn't have a copy either, but it was on order, and when the book came, I was first in line to get it. I've given it a quick page-through, and now returned it. So if you want to tackle it next, have at it!

The gist is that this book is way too detailed and complicated for my understanding of things mechanical. I'm a pretty good bike mechanic, and a reasonably competent radio-control sport-plane builder and flyer. I can readily fire up a glow-engine of less than half a cubic inch capacity, properly mounted and fueled up, and operate it as well as anybody. And that's about the extent of my engine expertise.

Now, being a fan of the Hawker Hurricane, Bell Airacobra, and other World War II fighters – not just Allied but also Axis – I'm aware their engines derived from long, expensive, and sophisticated engineering development. I also know that their power is dependent on the metallurgical quality of their components, the accuracy of production tolerances, choices made about supercharging, and very complex petrochemical engineering and production that made their fuels and lubricants.

It's beyond me to wade through the minute facts about all these, with anything remotely resembling full comprehension. Desperate



competition among the manufacturers of the combatants, for every possible material advantage, was sought...starting in the '30s, and lasting over the whole long course of the Second World War. Not just year-by-year, but practically week by week! Examples include the enormously hard detail work needed to make our 'Art Deco' super-fighter, the Lockheed P-38 Lightning, hold its own against all enemy opposition, while exploiting its unique design elements to advantage. Or the way the Supermarine Spitfire and Focke-Wulf 190 fighters – with not a single element of commonality – nevertheless were prevented from having a performance advantage over the other to last more than briefly.

A very important subset of this story is the development of fuels. I knew that making gasoline more powerful – referred to, in a kind of shorthand, as 'octane rating' – is very difficult – and expensive! At least this development was easier to pursue here in America, with our huge petroleum assets, distant from any interference from enemy action. Nazi Germany operated under much worse constraints, and even their ruthlessness and (supposed!) efficiency under rigid authoritarian rule could not overcome them.

Fuel composition and use are further complicated by the effect they have on engine lubrication...a matter of astonishing complexity, in and of itself. Add to that attempts to supercharge engines with the introduction of other chemicals: pure oxygen, nitrous oxide, water/methanol, etc. Every single addition or change within a complex system, like a high-performance engine, produces a cascade of significant side-effects, nearly all of them bad – and which then need to be compensated for with further additions and changes. Ad infinitum!

Let me name, just in passing, two other matters sometimes overlooked but by no means unimportant. Powerful engines need powerful control of cooling, to prevent overheating. And every increase in engine power – however desirable – must be met by sophisticated airframe stress-engineering and production. You can't just stick a more powerful engine into an existing airframe. If it wasn't overstrength before – which means it was also overweight – putting a more powerful engine into it over-stresses it. I read of an incident where a mid-war Spitfire pilot fired up the Merlin engine on his 'interim' Mark, a more powerful development than the original design accommodated. Sitting on the field, brakes on, he revved the engine up in preparation for flight – and the entire nose assembly – engine, prop, and all – twisted and tore its way off and flung itself to spectacular destruction, down the field. Mission aborted...good thing nobody was in the way!

I'm in awe of author Calum E. Douglas and his ability to write reasonably clear text around all these complexities. Original documentation is quoted frequently, when necessary: internal memos within the participating manufacturers, and their responses to government and military pleas and edicts. Nearly 500 pages of dense text are set in a small font, continually punctuated with photographs, charts, and diagrams.

I say again: this astonishingly detailed and technical 'tour de force' of historical engineering will challenge the knowledge and understanding of readers FAR more sophisticated than I am!

The Secret Horsepower Race - Western Front Fighter Engine Development
Copyright 2121 by Calum Eric Douglas and Tempest Books of Great Britain
11" x 8", 480 pages, hardbound. Heavily annotated, footnoted, and illustrated, with some charts and diagrams in color. List price US\$65,
UK£35

IPMS Seattle 2022 Meeting Schedule Changes

The IPMS Seattle 2022 meeting schedule has been significantly revised. In addition to the upcoming July meeting being held on July 16 instead of the original July 9 date, the September and October dates have also been changed.

September 10 has been moved to September 24 (the center is closed on September 17), and October 8 has been moved to October 22 so that members can attend the Vancouver Show on October 8.

The updated schedule can bee seen on the right - revised dates are in red.

All meetings will be at North Bellevue Community/Senior Center.

July 16
August 13
September 24
October 22
November 12
December 10

Show and Tell

from page 1

off somewhere and I can't show you that one. But that brings me to another point. Bring something you did a long while ago. Why not? Ever go through your boxed up stuff and see a kit you did in the 20th Century that you forgot about? Is that exciting or what? Trust me, I love to hear some you say up front," ...I built this xyz years ago..."! It makes me sit in awe and see your work from way back. I promise you some members will be glad you brought an older model to show they have never seen, or are thinking of getting one. Seeing the real one on the table helps make a decision for many (including me).

Then let's also look at products you may use that we have not tried or heard about. Share with us at Show and Tell. Yes, bring that book/article/drawing and open it on the table for us to see a particular subject we may not know a lot about. 3D stuff is now going bonkers and I want to learn more about it all the time.

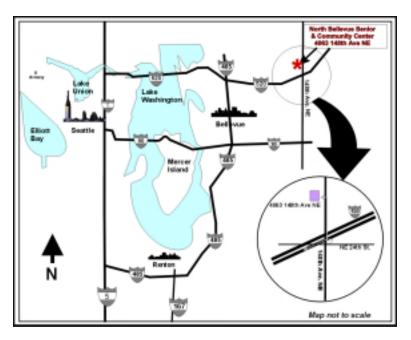
How about what is on your bench right now? I will confess my guilt first. Bring something 'in-work'! I absolutely love to see stuff in-work. I need to bring more of my projects 'in-work'...how else to prove to you I really use plastic 'For Sale' signs for many of my projects! What? – you don't know me yet/Mr. 'For Sale'/Mr. Orange? You will get to know me at the Show and Tell table each month.

Okay – finally, my last thought on this topic. YOU! Yes, YOU! What I mean is with so many members and visitors and new joining people, I many times forget names if you never come up to the Show and Tell table with something. However- as soon as you come up and share what you brought, I connect who YOU are and what YOU brought. See, YOU make the final difference.

I hope you will bring something with you to all meetings. Newly completed kit, old completed kit, 'in-work' projects, or other Show and Tell items. Not just me...but all of us enjoy your sharing once a month at our great meetings. What the heck – show us your 'For Sale' sign plastic!

John DeRosia

Next Meeting: July 16 10:30 AM to 1:30 PM



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

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