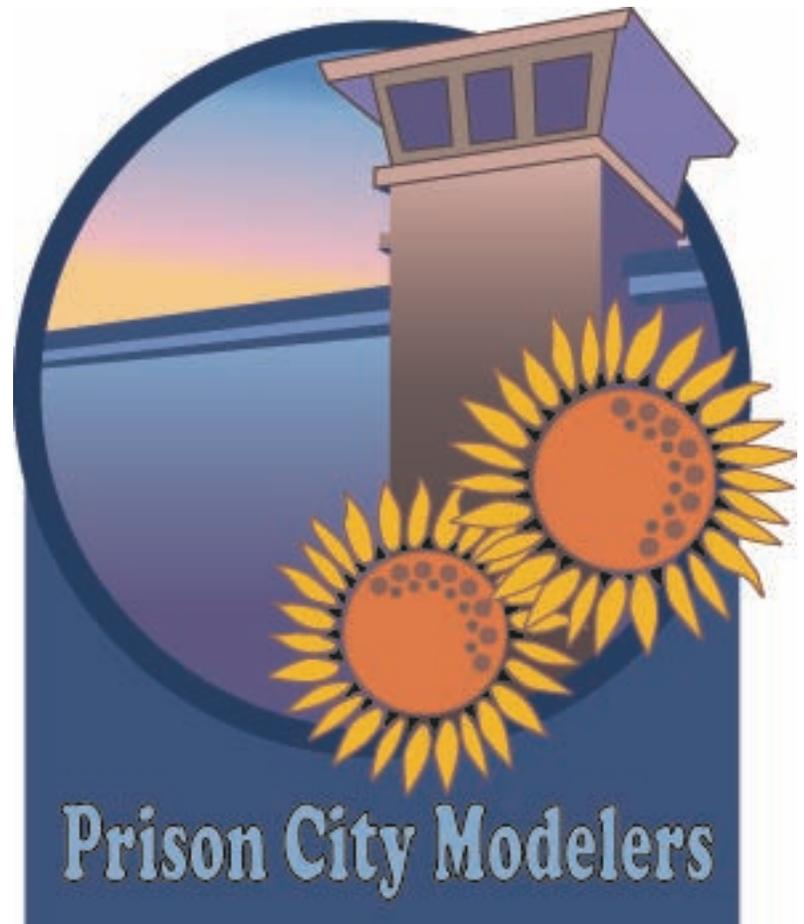


Thanks to Rick Brownlee for some great graphics work



Time for the Contest 27 March 2010, in Leavenworth

By Ed Burgess

The big deal this month is of course the model contest. As I write this, much of the work is already done. A large number of modelers have put in a lot of hours and a lot of craftsmanship. Tanks, cars, ships, spaceships, figures, and for all I know three-headed iguanas have been lovingly constructed and painted.

That's the hard part. Club members have cheerfully (usually) donated their time and

organization ability. A venue has been rented. Insurance has been arranged. Judges are named. Flyers have been distributed. Horses have been saddled and warnings shouted out across the land.

So here's hoping everyone has fun showing off good work.

March 27 at the Heritage Center in Leavenworth. I look forward to seeing you there.

Now we need a large number of hobbyists to show their work. Unlike last year, the Leavenworth members will be eligible for awards so be on your toes.

And, by the way, we have heard from some vendors but there is room for more. If you are interested in a vendor table (\$10) please contact Tim Fincham at tbfinch@yahoo.com

This is an unusually long newsletter, mainly because I received some great content from club members. Brooks Lyles contributed a short piece on a British vendor and a resource site. Rick Brownlee contributed a long essay on his build of a weatherbeaten Russian fighter. Enjoy.

Two Useful Sites Model Tree Shop and Modelwerks

The Model Tree Shop has excellent trees. I ordered the plants in the picture. I got my order in less than a week and am very impressed with the products and the service.

<http://www.themodeltreeshop.co.uk/>

Found a website called Hobbywerks. <http://www.hobbywerks.com/> It appears to be a fairly new site built to allow you to show your work and share techniques with other modelers. It is also free and they have tons of server space so their are no size restrictions. Under Groups there is one called [Next Best Thing to Being There](#) which is their place for Museum reference pics. I've loaded albums from Aberdeen, The Patton Museum, The National Air Force Museum and Fantasy of Flight and will likely post more today. They also have groups for Gamers, Railroaders, etc... Check it out, I think you will like it.

regards,
Brooks



Calendar

Upcoming club meetings:

- 1
- 17 March -- Club Meeting at Leavenworth Library 7pm
- 21 April -- Club Meeting at Leavenworth Library 7pm
- 19 May -- Club Meeting at Leavenworth Library 7pm
- 16 June -- Club Meeting at Leavenworth Library 7pm

Interesting 2009 - 2010 Events in our area:

- 26-28 Mar 2010 -- "Recruits" war gaming convention, Lee's Summit, MO
- 20 Mar 2010 – Omacon, Council Bluffs, IA
- 27 Mar 2010 – Our Prison City Modelers Club Model Contest at the Heritage Center in Leavenworth, KS
- 3 Apr 2010 – KAMS 15th Annual Model Car Contest, Salina, KS
- 17 Apr 2010 – Model Fest 2010, IPMS West Central Missouri, Liberty, MO
- 22-24 Apr 2010 – Armor Modeling and Preservation Society (AMPS) 2010 International Show, Auburn, IN
- 12 – 13 JUN 2010 – KC Slammers 19th Heartland Model Car Nationals, Overland Park Convention Center, KS
- 8 -11 Jul 2010 – “Historicon” war gaming convention, new location Baltimore Convention Center, MD
- 24 Jul 2010 – KC Slammers 5th Annual Elden Titus National Model Kemp Spectacular, Salina, KS



Wehrmacht machine gunner by Rick Brownlee

HobbyCraft 1:48th Scale Polikarpov I-16 Rata

By Rick Brownlee

PAY IT FORWARD

I want to say at the start of this article for our Newsletter that the views expressed below are strictly my own; and do not in any way reflect the views of our Newsletter editor or any of our club's members. My start in this wonderful hobby was in the 1960s, at age 28. I was a boy during WWII and there was no plastic; or plastic model kits. And my views, ideas and philosophy may not be consistent with your views, as you see the hobby. But, if that is the case, I hope we can agree to disagree. That said, I will continue.

WHAT IS AND 'AIN'T' IN THE HOBBYCRAFT KIT BOX?

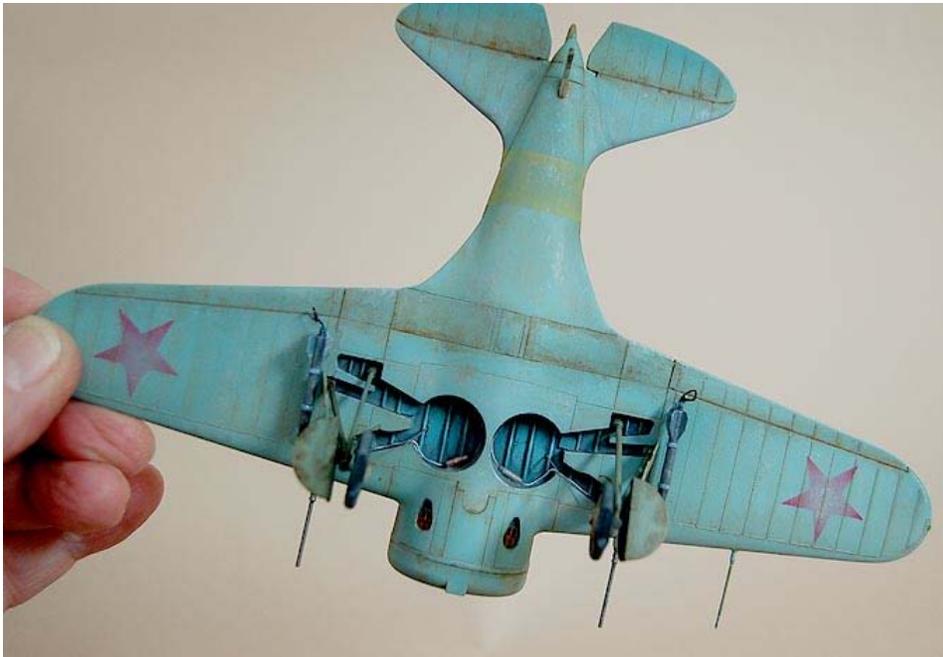
The kit is really just a "basic" kit and that is what I expected in the price range. No photoetched frets, no resin accessories, just the fuselage halves, wings, wheels, only one clear canopy in one piece, and decals. The instructions are explosion drawings without text. The kit comes with a fairly decent radial engine, an OK styrene instrument panel, a pilot's seat, a rear cockpit bulkhead and a cockpit floor. The I-16 reference I used are listed as follows:

1. Profile Publication number 122, The Polikarpov I -16
2. Illustrated Encyclopedia of Aircraft Vol. 14, Issue #165.
3. Squadron/Signal #162 Polikarpov Fighters in action, Part II. (w/ some bitchin' color schemes)

CONSTRUCTION

From the outside of the fuselage halves I drilled out the exhaust openings (they're solid plastic) and added the plastic tubing cut at the correct angle behind, so that the exhausts would look more realistic from the outside. I usually always try to find a way to drill out places that should look like an opening, i.e. gun barrels. Next, from dry fitting a lot, I realized that the instrument panel, according to references, should be very far forward. I decided to move it aft about one fourth of an inch so it would be more visible.

Whenever I add anything scratchbuilt or aftermarket to an interior, I dry fit it a lot and study it a lot with the two fuselage halves just taped together so I will know for sure what you can see and what you can't see after you've glued the fuselage together. The same way of doing things applies for the techniques when painting interiors. In other word it's not what the interior parts looks like that matters. It is what they look like when you look down into the cockpit of the completed model. Think about that for a second. . . You want to make sure all your hard work in the cockpit area is visible from looking down into the cockpit.





I sprayed the instrument panel black Model Master enamel and dry brushed with white enamel to pick out the instruments. A couple of days later I dabbed Woodland Scenics Realistic Water, which is a clear acrylic liquid, on each instrument with a Windsor Newton series 7 pure red sable double zero (00) brush.

A SERIOUS MODELER NEEDS QUALITY BRUSHES

A serious and disciplined modeler needs the very best quality brushes and needs to be aware of the care required for them. And the brushes I prefer for very small detailed work where I need to paint a straight line, or the highlight dot in a 54mm figure's eye is the Windsor Newton Series 7 Kolinsky Pure Red Sable brushes. I've used this British company's brushes since 1957. I learned about them in college. They are costly. But, as I see it, they are necessary. Each day I wash the bristles of the brushes with mild hand soap in warm water. Then I form a point with the bristles and store them in a container with the handle down.

ANY TWO BY FOURS HANDY? STACK 'EM!!

Also, I have three or four lengths of wooden 2 by 4s. They are about 12 inches in length. I stack them on top of each other, high enough to be able to support my hand so that I am not working with either the model piece or my hand in an "unsupported" or shaky position. Of course, the 2 by 4s are glued together so they don't slip around; especially for when I paint canopies with a double zero (00) brush. No, I don't mask off canopies and use an airbrush to paint them. I paint the bracing by hand. It is a lot faster.

In the wheel wells, I used Evergreen strip styrene item # 102 K-3 for the framing supports running from fore to aft. I also added some tiny rectangles and squares of sheet styrene along with solder wire. I like to weather my aircraft models quite a bit and that is another reason why I picked the WWII Russian theatre and the "Rata" in particular. So I painted the wheel wells with tube acrylics and a brush. I use a cheap hair dryer to speed up the drying time. When dry, I made a wash on my auto safety glass palette, with water and tube acrylics: raw umber and tube acrylic black.

The kit cockpit floor left open areas below the floor level so I made a new floor from .20 thousandth sheet styrene. We're talking dry fit city, here. Did you hear that? Dry fit, dry fit, dry fit. I decided to make a template that fit just right, out of card stock paper, first. It was easier to cut the card stock with scissors, to the exact shape of contour to fit the floor snugly against the two cockpit side walls. Trial and error, most assuredly, here. When the paper pattern fit just exactly, then it was used as a pattern to make the correct shape from sheet styrene.

PAPER PATTERN FOR BULKHEADS, ALSO

Same approach for the bulkhead aft of the pilot's seat that I made from sheet styrene. I made the seat belts from that foil around the top of wine bottles with corks in them. The wine bottle foil is very pliable and easy to cut just the right width, with a sharpened blade, on a piece of auto glass, since the glass is so hard. And before that, I sand off the printed colors and lettering on the wine bottle foil.

I decided to open the port side cockpit door somewhat late. I'd glued in the interior side panels and controls already. And I glued the fuselage halves together. I should have thought about the cockpit door much earlier, naturally. But I took my time and didn't worry about keeping the portion of the port side door I was cutting away. I fashioned a new door, first from card stock paper that fit just right in the closed position and then used that as a pattern for a new door cut from a cottage cheese plastic carton because it had the correct curve. Of course, the new door was painted and "installed" along with the brass tubing cannon barrels, stretched sprue pitot tube, kit landing gear, etc. after the model was almost completely finished. I try not to glue on any part that sticks out, i.e. pitot tube, gun barrels, control horns, antenna masts, until the model is almost completely finished. I ignore the instructions on this point. Those parts are easily broken off. Been there, done that, . . . you get the idea.

ENGINE COWLING, FUSELAGE, WINGS AND TAIL ASSEMBLY

Looking at reference photos in the Squadron Signal book I purchased, I realized I needed to add .05 thousandth sheet styrene behind the openings in the engine cowl kit part to simulate the

louvers or baffles on the inside of the engine cowling. This step improved the realistic look of the Rata viewed from the front.

All in all, the fuselage halves went together very nicely with just a little sanding and filling of gaps. Correct alignment of parts like the wings and horizontal stabs is very important of course, and in the case of this kit's horizontal stabs, it requires careful attention. For these chores I used tube glue or Testors Liquid Plastic Cement #3502. It is very 'hot' and really softens any styrene plastic. It has the slow drying capability and there are times when you need more 'wiggle room' and it fills the bill, and gives you more time to get the positioning exactly right. I checked the alignment a lot in the first 10 minutes. The laws of gravity apply here of course, and the weight of the plastic parts allows them to droop. I kept checking and repositioning them. I don't like masking tape to hold them in place. With the tape on the model it is harder for me to tell if the alignment is correct in the first place. I came back and checked again and again for more than 30 minutes. Obviously I don't glue the fuselage together and the wings together or horizontal stabs on the same day. I want the bond to get good and hard; well cured.

I used Aves Apoxie Sculpt and super glue for filler. I re-scribed the sanded panel lines with an Xacto-knife and a 6 inch flexible steel ruler with cork backing in areas where the curve isn't too acute. This is a very slow and careful process. The Rata wing root required filler and sanding, then I sprayed a coat of white paint in those areas to check how well I did or didn't do. Then more filler and more sanding till there was no trace of plastic parts coming together. We all know this procedure isn't fun but we also know that it is the correct way to build QUALITY models. But on the other hand, as I previously mentioned, I think a modeler should enjoy building models. It should be fun. If all that sanding and filling isn't fun for you then don't do it. In this article, I'm not talking about IPMS emphasis on BASIC CONSTRUCTION competition here. That is another story. And if you're wanting to compete in contest modeling, basic construction is all important. A beautiful paint job won't save you if your seam work is faulty.

I cleaned up all the mold marks and raised seams from the landing gear parts and substituted .05 thousandth sheet styrene for two sets of the smaller portions of the gear doors. Each gear door assembly is in 3 pieces. That does not include the landing gear struts. I painted and weathered the landing gear assemblies and flattened the tires; and set them aside.

SCRATCHBUILT RS-82 ROCKETS ADDED UNDERWING

From looking at the color renderings on the back cover of the Squadron Signal book on the Rata, I saw the RS-82 rockets and rocket launcher rails. Whoa Nellie, cool man! So I decided to scratch build them since I had the Accurate Miniatures 1/48th IL-2 Stormovik kit I looked at the RS-82 rocket parts from that kit. Scale wise they

were too long for the I-16 wing chord but they helped me with proportions. I used .05 thousandth sheet styrene for the rocket's aft fins. I used Evergreen brand tube styrene for the body of the rockets and put Aves Apoxie Sculpt putty on the front end so I could sand it down to a rounded shape. I drilled holes in smaller diameter solid plastic rod and glued that very short piece into the aft end of the rocket body. The two bands around the rocket body were made from the wine bottle material I had made the seat belts from and these were glued in place with Super Glue.

PAINTING AND MARKINGS

Actually, the I-16 has a lot of really eye catching schemes and they're crying for a "this baby's been thru Hell" weathering approach. Remember however, that most of the wing's material was made from wood. So in those areas composed of wood, there would be no paint chipping with a metallic surface underneath.

First I sprayed the undersides and used the low tack blue masking tape to mask off the undersides from the curve that goes into the leading edge of the upper wing. I cut the tape to a very narrow width, on a piece of auto safety glass I got from an auto glass installation business. I use similar pieces of auto safety glass for painting palettes.

Next, I cut small pieces of masking tape and stuck them together to cover the cockpit opening. I masked and sprayed the lighter color of the two camouflage colors on all the upper surfaces. Then I looked at my reference and sprayed the outline of where the darker green would go. Again, I had premixed my own "faded" brown and faded green colors in empty hobby paint bottles that were marked. Perhaps I should mention here that I use a CO2 cylinder and usually spray at 22 psi. It is silent and makes no noise. There are no impurities in CO2 so I do not need a filter trap.

Then I masked off the area where the faded yellow band on the aft portion of the fuselage would go. I shot the light yellow to simulate faded paint on the model and took off the tape. Oops. Too bright. So I repainted the faded colors of the two tone camouflage over the yellow band, once again. Then I masked off the yellow band area and tried it again with the light yellow only with a lot less spraying. This time I got the results I was after. You have to look close in the photo to see the faded yellow fuselage band.

GOOD BYE TO THE KIT DECALS!!!

Then I started the process of making my own markings instead of using decals. I will say here that since I'm painting a model to look weathered with faded paint, doh? . . . well, then the markings on the aircraft would have to look the same. So I felt that the kit decals couldn't be used. They're a "straight out of the factory bright" kind of

finish. So then that means I have to spray on my own markings and just give them a light spray. And that is what I did for the numeral "4" on the tail and the national insignias of the Red stars on the wings and the Red Stars with yellow surround for the fuselage. It is understood by some, that the Russians did not put the National Insignia Red Star on the upper surfaces of their aircraft. However, I have many photos from that period that show Red Stars on the upper surfaces of wings. Some aircraft did not have upper wing stars and some did have them.

I drybrushed Model Master flat aluminum sparingly using the Windsor Newton series 7 double zero (00) brush to simulate chipping and wear in areas that weren't wood, and on the propeller, and other areas of exposed to prop wash, and wear. Some model builders use PrismaColor Brand Colored pencils for the same purpose. The oil based pencils, not the pastel pencils.

FINAL ASSEMBLY OF LANDING GEAR, PROPELLER AND 20MM CANNON

After the painting was completed, I weathered and installed the prop. I had previously drilled a center hole in the engine to take a metal tube glued into that center hole of the engine. Then I glued a small diameter brass rod of about an inch and a half in length (that would fit inside the metal tube previously glued into the engine) into a drilled hole into the center of the back of the prop hub. After all construction was completed I slid the prop's brass rod down into the metal tubing in the front of the engine face. And then the prop would really spin easily. Yet, I could remove it at any time, for travel purposes.

Next I installed the landing gear. It was a major nightmare. Hello! Are you listening? A major nightmare! A real test of patience. But if you look at the photos of the real aircraft you see that the landing gear is very complex. If you build this kit take your time and make sure you understand just what goes where with the landing gear, AND at what angle. I took very thin strips of masking tape and taped all the landing gear parts together at the correct angles into the wheel wells — learned from trial and error! And no, the instruction do not help much here. Don't rush this part of construction.

CONCLUSION

For the most part the construction of the kit and fit of parts is quite good. And I would recommend this kit to any experienced modeler who will have patience with the installation of the landing gear; build it straight from the box and the landing gear is the only tricky part. However, as my photos of the landing gear hopefully show, there should be a piece of sprue or steel wire (I used sprue) coming out of the inside of each wheel hub that goes up into the wheel wells. The

Squadron Signal books shows this and the correct angle quite clearly in the line drawings.

DOES THIS STUBBY STALWART NEED A BASE?

I noticed several reference photos that showed the Rata with the tail being held up at the tail end, on either a wooden or metal frame during maintenance. Should I say "candid"? Oh yeah. The kind of different stance I was looking for! Haven't seen many models displayed that way. And I think that when you find a unique and different way of displaying a model, it attracts attention. My wooden stand was made from popsicle sticks sawed in halves or quarters lengthwise and painted with oil paints. Hey, those "craft sticks" are very strong but easy to saw or drills holes in. I put two steel pins — made from piano wire — up into two of the legs of the "pop stand". Then I countersunk two short pieces of metal tubing down into the circular base (represented by red arrows in the photographs) so that I could push the maintenance "stand" pins down into the holes in the base to hold it still. When in transit, however, I put the little stand in a small box for safe keeping. Because of the length of this article, I will not relate the "how to" or explain the significance of the Cracked tarmac/Hammer & Sickle that I fabricated.

Last of the images, are two photos of the kind of boxes I fabricate from cardboard, with the styrofoam shaped into a platform. This keeps the model from touching the bottom of the box! The styrofoam is covered with cloth, so the bothersome specks of styrofoam don't stick to the model. Now, I realize there are better foam products available than Styrofoam; that don't shed particles. I made a platform for the model to rest in, using popsicle sticks and rubber bands to hold the wing tips in place.

I go to many contests and am amazed that a modeler will spend months on an intricate aircraft model and then set it on it's landing gear in the trunk of the car while they're driving 100 miles at a high rate of speed, to a contest event. You see them trying to frantically repair the damage. And I just don't understand that. Why not take a couple of hours to construct a box that will keep "the evidence of your hard work and dedication" safe during transit? As I see it, discipline is required in this hobby.