

Seattle Chapter News



Seattle Chapter IPMS/USA
April 2019

PREZNOTES



The Main Event: Let's Make Our Spring Show The Best Ever!

When I stood at the front of the room at the NBCC many moons ago, asking for your vote to be President of IPMS Seattle, one member asked "what do you plan to do to reach out to the community to promote our hobby?". Over the years I have proposed a number of ideas, but the one event that I have given the most of my energy to is our very own Spring Show. This is by far the largest event IPMS Seattle undertakes each year, involving the most members, taking up the most organizational time, and reaching the biggest numbers of modelers and non-modelers alike. And this year is most likely my last opportunity to attend this august event, at least for a good few years.

As such, I would like to encourage you all to help make it a memorable event. We are still short of volunteers to help with the various tasks that need to be done on Show Day, April 13. So please, listen at the meeting this Saturday and volunteer to fill in some of the staffing gaps.

Equally important, I encourage each and every one of you to bring models to enter in the contest categories, or if it suits you, the display only categories. People are traveling from as far north as Vancouver BC, and from as far south as San Francisco, from Boise ID, and Whidbey Island WA and all places in between. The one thing more than anything else they want to see upon their arrival at the RCC: MODELS.

So, let's not disappoint them. "Bring them ALL" is my plea. If you have built something since the last Spring Show you

entered, BRING IT. If you have entered it before, but it didn't place previously, yet you are proud of it: BRING IT.

Let's make this year's Spring Show one for the ages!

See you all at the Saturday chapter meeting.

Cheers,

Andrew

Just a reminder that we have two events this month - our meeting will be on Saturday, April 6 at VFW Post #2995, 4330 148th Ave NE, Redmond, and our Spring Show will be on Saturday, April 13 at Renton Community Center.

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IPMS Seattle Web Site (Web Co-Ordinator, John Kaylor): <http://www.ipms-seattle.org>

Public Disclaimers, Information, and Appeals for Help

This is the official publication of the Seattle Chapter, IPMS-USA. As such, it serves as the voice for our Chapter, and depends largely upon the generous contributions of our members for articles, comments, club news, and anything else involving plastic scale modeling and associated subjects. Our meetings are generally held on the second Saturday of each month, (see below for actual meeting dates), at the **North Bellevue Community/Senior Center, 4063-148th Ave NE**, in Bellevue. See the back page for a map. Our meetings begin at 10:00 AM, except as noted, and usually last for two to three hours. Our meetings are very informal, and are open to any interested modeler, regardless of interests. Modelers are encouraged to bring their models to the meetings. Subscriptions to the newsletter are included with the Chapter dues. Dues are \$15 per annum, and may be paid to Twyla Birkbeck, our Treasurer. (See address above). We also highly recommend our members join and support IPMS-USA, the national organization. See below for form. Any of the members listed above will gladly assist you with further information about the Chapter or Society.

The views and opinions expressed in this newsletter are those of the individual writers, and do not constitute the official position of the Chapter or IPMS-USA. You are encouraged to submit any material for this newsletter to the editor. He will gladly work with you and see that your material is put into print and included in the newsletter, no matter your level of writing experience or computer expertise. The newsletter is currently being edited using a PC, and PageMaker 6.5. Any Word, WordPerfect, or text document for the PC would be suitable for publication. 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 2019 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.

April 6 (VFW Post)
May 11

April 13 (Spring Show, Renton)
June 8

IPMS/USA MEMBERSHIP FORM

IPMS No. _____ Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____
 Phone: _____ E-mail: _____
 Signature (required): _____

Type of Membership: Adult, 1 Year: \$30 Adult, 2 Years: \$58 Adult, 3 Years: \$86
 Junior (under 17) \$17 Family, 1 Year: \$25 (adult - \$5, child 6-16) How Many Cards? _____
 Canada & Mexico: \$35 Other / Foreign: \$38 (surface) Checks must be drawn on a US bank or international money order
 Payment Method: Check Money Order

Chapter Affiliation, if any: _____
 If recommended by an IPMS Member, Please List His / Her Name and Member Number:
 Name: _____ IPMS No.: _____

IPMS/USA Join or Renew Online at: www.ipmssusa.org
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IPMS SEATTLE PRESENTS

Spring Show Scale Model Contest and Exhibition 2019

**SATURDAY,
APRIL 13TH**

DOORS OPEN AT 9 AM

**Contest Entries Close
at 12 Noon**

Awards at 3:30PM

- Model Contest with 75 Different Award Categories!
- EXPANDED PARKING
- Huge raffle!
- Vendor tables!
- Every junior entry wins an award!



Adult Entries: \$10 (unlimited) • Junior Entries: \$5 (unlimited) • Spectators: \$5



**MAKE N TAKE
FOR THE KIDS**

**HUGE RAFFLE
DRAWING ALL DAY!**

Categories, model registration forms available online at:
<http://www.ipms-seattle.org/Springshow>

**Renton Community Center
1715 Maple Valley Hwy, Renton, WA 98057
15,000 SQ. FT. OF MODELS!**

From I-405, take exit #4, Renton-Enumclaw exit. At Maple Valley Hwy, drive east to the second light and turn right into RCC.



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2019 IPMS Seattle Spring Show at a Glance

Saturday, April 13

Registration - 9 AM until 12 noon*

Public Viewing - 9 AM until 3 PM

Judging – 12 noon until 3 PM

Awards Ceremony - 3:30 PM

Show Close – 4 PM

* Entries must be registered by noon for judging.

Renton Community Center, 1715 Maple Valley Highway, Renton

Directions:

From the North: Take I-405 southbound to Exit #4 (Renton-Enumclaw). Go through the first stop light, turn left on Maple Valley Highway (South 169). This will take you under I-405. Continue about 500 feet and turn right at the first stop light. Follow the entrance driveway around the athletic fields to the large parking lot area. The Renton Community Center and Carco Theatre are adjacent to one another and the parking lot.

From the South: Take I-405 northbound to Exit #4 (Maple Valley-Enumclaw). This exit will divide, take the first exit to Maple Valley-Enumclaw (South 169). At the stop sign, at the end of the off ramp, turn right. Go approximately 200 feet to the stop light and turn right. Follow the entrance driveway around the athletic fields to the large parking lot area. The Renton Community Center and Carco Theatre are adjacent to one another and the parking lot.

Entry Fees:

\$10 for Adults (unlimited entries)

\$5 for Juniors

\$5 for Spectators

Registration:

To make the spring show registration as smooth and easy as possible for everyone involved, we have put the form on line for people to fill out ahead of time. Please feel free to download the form as a PDF from the address below and fill it out ahead of time.

<http://www.ipms-seattle.org/springshow/SpringShow-Registration2019.pdf>

DO NOT FILL IN THE NUMBER! This will be assigned to you when you pay your entry fee at the door. Any model without a registered number will not be eligible for judging or awards.

PLEASE NOTE: There will be no names on the registration forms. The registration number assigned to your model when you check in for the contest will also identify you.

We will have “Display Only” tables for those models whose builders wish to remain outside of the contest. These models will not be judged.

Raffle:

As in years past, we will have a raffle this year with lots of great models and model related prizes. You will be able to buy tickets at the raffle table during show hours.

Ticket Prices: 1 ticket - \$1; 6 tickets - \$5; 15 tickets - \$10

General web site address for Spring Show information: <http://www.ipms-seattle.org/springshow>

Special Awards

Best Canadian Subject sponsored by IPMS Vancouver

Best British/Commonwealth Subject in Memory of George Allen sponsored by Robert Allen & Andrew Birkbeck

Best Fire/Life Safety Subject sponsored by Seaside Fire Service

Best Sci-Fi Subject sponsored by Galaxy Hobby

Best Military Vehicle in Honor of Dale Moes sponsored by George Stray, Roy Schlicht & Shawn Gehling

Best French Subject sponsored by Djordje Nikolic & Jacob Russell

Best Small Air Forces Subject sponsored by Mike Millette & Andrew Bertschi

Best Italian Subject in Memory of Stephen Tontoni sponsored by Will Perry & Ralph Braun

Best Japanese Subject sponsored by Tim Nelson & Woody Yeung

Best WWII Eastern Front Military Vehicle in Memory of Rich Sullivan, R&J Enterprises sponsored by Mark Ford

Major Edward C. Allworth Award for Best WWI Subject sponsored by Oregon Mid-Valley Modelers

Best 1/72nd Scale Bomber Aircraft sponsored by Fred May

Best Display sponsored by Morgan Girling



HKM 1/32nd Scale Avro Lancaster B.Mk.1 – Part 1 of 3

by Eric Christianson

(Editor's note – this abridged version has been edited for use in our newsletter – mostly by removing the specific build notes. You can see the full article posted in the 'Reviews' section of the IPMS USA website or on our own IPMS Seattle website.)

[This review is the first installment of a three-part series on building and finishing this impressive kit.]

Since 2012, newcomer Hong Kong Models (HKM) has been rolling out some of the most exciting big-scale aircraft kits to hit the market. Ever since the prolific company first released the B-25J Mitchell, modelers have been anxiously waiting for the next big-kit announcement, perhaps none with more anticipation than the 1/32nd scale Lancaster B.Mk.I.

As the RAF's premier heavy bomber, the Lancaster was to eventually form the backbone of Bomber Command in World War II. Loaded with an increasing variety of bombs and special ordinance, the 'Lanc' lorded over the night-time Allied bombing campaigns in Europe, disrupting or completely paralyzing German manufacturing and industrial infrastructure.

I have been a Lancaster fan since I built my first 'Dambuster' Revell kit in 1/72nd scale as a boy. The heavy, brutish look of the nose, combined with the sturdy layout of wings and box-tail, all bristling with guns and engines still fills my imagination. After watching a fellow modeler complete the similar-sized B-17G by HKM, I couldn't wait to get my hands on this big boy.

This first installment (of three) will cover the assembly and painting of the interior, the gun positions and the interior of the fuselage body. Once the masks arrive (!), a second installment will cover the engines, wings, wheel wells, and clear parts. The third installment will cover final assembly and finish.

Normally with a model of this size, the shipping container is separated into sections by cardboard dividers of some sort to protect the parts from damage during transit. In this case, however, all of the individually-packaged sprues, instructions, etc. were placed loose in the cavernous, yet sturdy box; small mixed in with the large. By the time it reached me in Seattle, everything had settled into a disorganized heap of bags, instructions and decals, all slammed into one end of the box. Examining the contents, however, produced two conclusions; 1) The somewhat brittle plastic HKM chose to bag everything in allowed them to easily slide around the inside of the box without snagging; and 2) the softness of the plastic used was key to saving the day. Even the largest sprues were able to bend and spring back against what must have been an enormous amount of jostling.

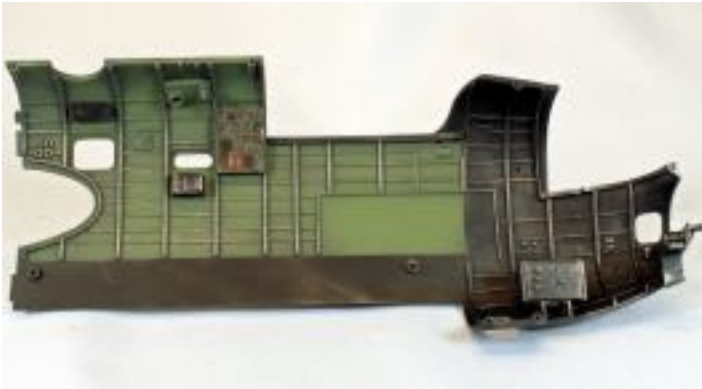
The clear parts come on two sprues, each packaged separately. HKM has gone the extra mile and inserted a clear sheet of protective film between the larger clear pieces and the plastic packaging, thereby providing the best chance possible for these important parts to get to you in the best possible shape. The sprue attachment points and knock-out pins are thick, but HKM has tried their very best to place them all on the edge of the framing where possible. On the positive side, I was able to use one of the pins on each piece to hold the part while I dipped it in Future, making this task a simple affair. All in all, the clear plastic included in the kit was managed as well as possible for a big kit like this. Good Job HKM.

Looking over the sprues I noticed that many of the parts have circular ejection pin marks which are not always hidden or covered with other parts. Some modelers will want to fill these in before assembly. It is questionable however, even in this scale, whether the marks inside the cockpit will be visible through the canopy and other clear parts.

While most of the 800+ parts will need (some) form of minor cleanup with a sanding stick and such, the kit overall is flash-free and free of defects.

The largest of the 41 sprues is a little more than 20 inches across, the smallest one, perhaps four. While there are some surface areas that show raised features, most of the panel lines and rivet detail is recessed, although a little light at this scale, in my opinion.

The fuselage comes together in four parts; left and right forward fuselage halves, and left and right main fuselage halves, with the vertical split along panel lines, just aft of the leading edge of the wings. Taping the four pieces together results in a main fuselage that, to be honest, is a little frightening. It's HUGE. While the cavernous bomb bay along 3/5ths of the bottom of the fuselage decreases the amount of seam cleanup, the top of the fuselage shows a major 24-inch long seam that will have to be 'disappeared'. Every 1/2-inch there is a row of rivets that go up and over the top, so cleaning that seam won't be child's play.

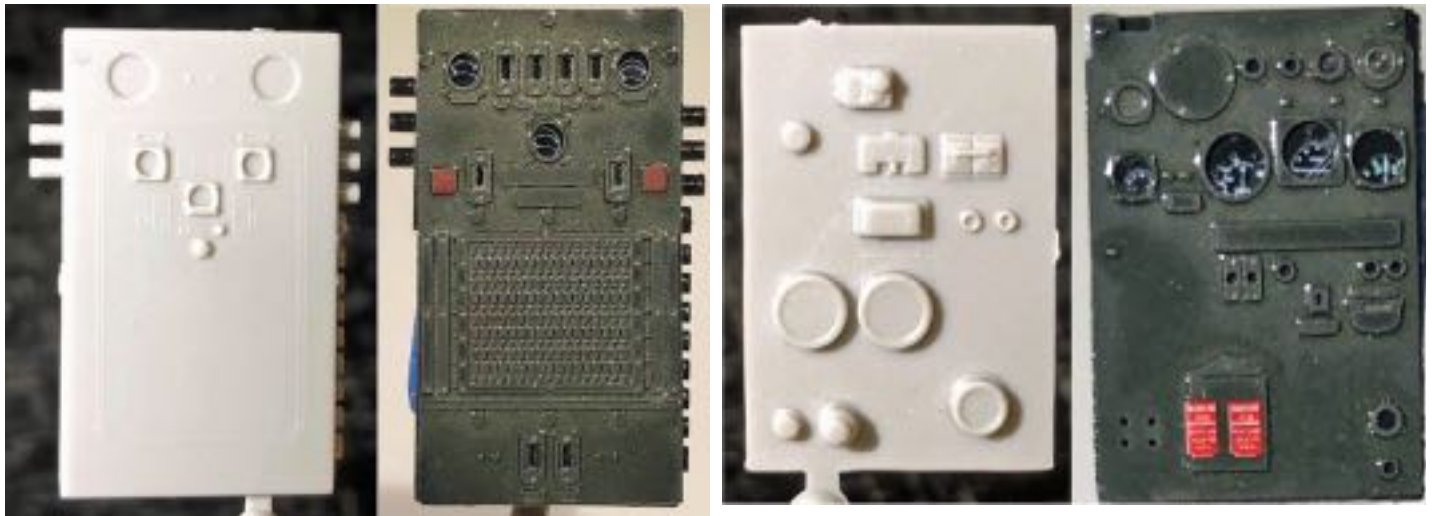


The interior walls of the fuselage are completely detailed with ribs and stringers, and the kit comes with an excellent start on a full interior.

The initial release of the kit (including mine) was shipped with a second, complete clear fuselage (all four parts) for showing off this myriad of internal detail included. Unfortunately, the clear parts were stamped from the same molds, it appears, as the normal opaque parts which means that all that beautiful rib-and-stringer-detail obstructs what could be a clear view of the interior. I felt that if the clear parts were detail-free, the effect HKM was looking for would have been perfect. That said, separate molds for clear parts like that might have pushed the cost of the kit even higher than it is.

The wings are a marvel of (slide-mold?) engineering – each is molded in a single, wrap-around form, opening aft where the flaps and ailerons are attached. In other words – there is no seamline along the leading edges – significant since the wings of the hulking ‘Lanc’ are very thick. The outboard tips of each wing are separate and are also designed as single, hollow pieces that attach along natural panel lines. Underneath there are large cutouts for the engine/wheel assemblies inboard and engine nacelles outboard. By designing the wings this way, the unique Lancaster dihedral is built in. One more absolutely brilliant decision to mention about the wings; they are detachable by sliding them forward and out – making transportation and storage of this behemoth relatively simple. In fact, with a little work, the kit box itself can be reinforced and used to carry the completed aircraft to shows and such. Smart.

Two types of propeller blades are provided, (a slightly pointed set and a set of more angular ‘paddles’), the former being correct for this kit. The main wheels are delivered in two halves each, and are ‘pre-flattened’. Bomb Bay stores include 18x500lb bombs and 1x4,000lb HC Bomb.



I was disappointed in the lack of detail offered with the cockpit control console and the three additional control panels in the kit, portions of which were simple, flat surfaces, surprising for a kit in this scale. To compound matters, HKM chose not to include any decals or stencils for these panels, leaving a somewhat daunting task of detailing these items up to the modeler. Fortunately, Airscale stepped up with a beautiful after-market set made of clear plastic parts, photo-etch and decals. You can find the set here: <https://airscale.co.uk/store.php#!/1-32-Scale-Avro-Lancaster-B-Mk-1/p/121136238/category=16104112>

The kit comes with the following three decal schemes represented – the color schemes are identical:

1. B Mk.I, W4783/AR-G, No. 460 Squadron (RAAF), Binbrook, UK, May 1944
2. B Mk.I, R5868/OL-Q, No. 83 Squadron (RAF), Wyton, UK, June 1943
3. B Mk.I, R5868/PO-S, No. 467 Squadron (RAAF), Waddington, UK, May 1944

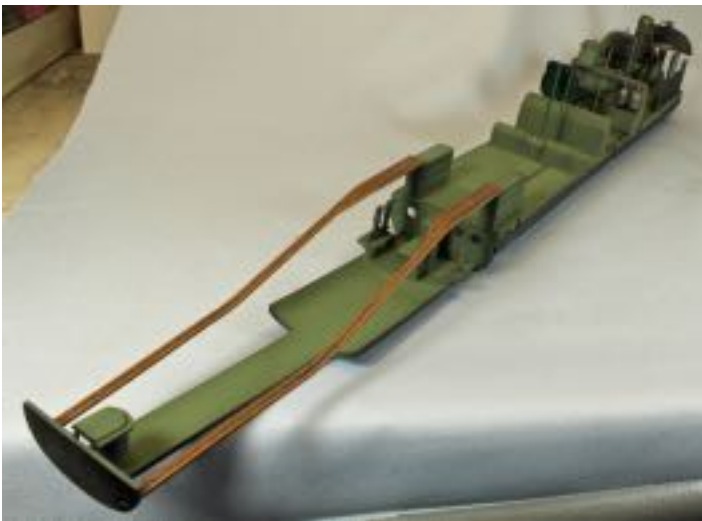
Paint call-outs are made by reference to the following paint brands: AK Interactive (acrylics), Tamiya (acrylic-lacquers), and Gunze/Mr.Hobby (lacquers).

Finally, HKM chose to go with a single, small fret of photo-etch, and I know I wouldn't be the first in line to congratulate them on this decision. A subject of this size, with a huge amount of PE, would have been a completely different modeling experience, and not nearly as enjoyable - at least not for me.

The instructions are printed in a large format, side-bound, black and white booklet which I found a little ungainly with everything else on my workbench. As a consequence, the first thing I did was to cut this beautiful booklet up into separate pages (!), and organize these into three sections: 1) what I've done, 2) what I still need to do, and 3) finish options/paint chips/parts map. Cutting down the booklet allowed me to use single pages on my workbench, as well as separate parts map and painting keys for easier access. This is a big model, and a big instruction booklet – by doing this I could make room for both on my bench.

One thing HKM does that I really appreciate is to use up sprues in rough order of assembly. That kind of thing really helps on projects of this size – some of the sprues are two feet wide!

The two-page Parts Map is complete, but many of the part numbers on most of the images of the sprue trees are unreadable, even with an Optivisor. A combination of small size and heavy ink is the cause here.



HKM has designed the interior of the Lanc as three distinct sections that connect together in tandem before being pressed into the port fuselage half. The front two sections hold the cockpit and crew area, taking up the space above the cavernous bomb bay. The aft section's singular distinction is that it holds the long runs of ammunition for the rear turret.

Assembly begins with the forward cockpit section. HKM provides rudimentary PE seat belts for the pilot's seat, as well as the other crew stations. The various boxes, panels, pedals, etc. contain enough detail without overwhelming the build with tiny parts. That said, some of the detail is a little sparse, such as the control consoles mentioned earlier. The Airscale replacement set fits well in the kit, and even though the expense is a little dear when considering the cost of the HKM kit itself, it is well worth the investment, in my opinion.

The plastic windows that push in from the inside along the fuselage are thick, crystal clear and of good quality. HKM thoughtfully included a generous gluing surface that surrounds each piece, easing assembly and helping to avoid 'pop-offs' once the fuselage is closed up. You can wait until after painting the interior to insert the windows – there is access to all of them around the interior detail while the fuselage halves are apart.

Everything is big on a 1/32nd scale Lancaster, and the tail section is certainly no exception. Luckily, once assembled, the elevators, rudders and stabilizers literally snap together, with a discernable and satisfying 'chunk'. And while the fit here is perfect, there is a flaw in the molding. HKM somehow got their drawings mixed up – two stabilizer "tops" make up one horizontal tail plane, while the remaining two 'bottoms' make up the other – you get to pick. Since the only way to tell one apart from the other is by the rivet detail and panel lines, I chose to use them as is – I felt that with paint the error will hardly be noticeable. On the other hand, for many modelers, this will be something they will want to correct. Luckily, a good treatise on how to do that can be found online here: <https://www.youtube.com/watch?v=XRXSpN5OyXk&t=531s>

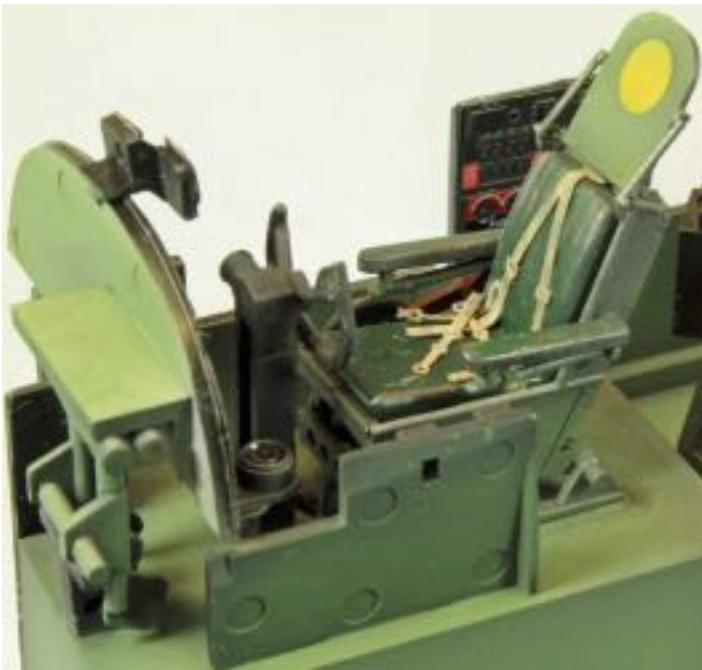
When I started this project, I was a little intimidated. I had not built a large aircraft kit in some time; and precious few aircraft kits in the last few years for that matter, focusing mainly on armor. Those that I did build, however, were complex projects and I enjoyed them, so I knew I would be able to build this kit. Now that I've finished the cockpit and interior, I find myself really excited about the remainder of the build coming up. This, to me, is a clear personal indicator that HKM has a real winner in its big-scale Lancaster. The fit of the parts, with few exceptions, is nearly perfect (which always helps), but other decisions by HKM will also make it a lot of fun to build, such as the design of the clear plastic parts, the one piece wings, and a very-light reliance on PE.

I recommend this kit to all modelers who are up to the small challenges that a kit with so many parts will offer. I suggest that you make your big decisions up front, spend the time to carefully clean the parts thoroughly once separated from the sprues, and dry-fit everything. HKM has put a lot of effort into making sure the parts fit, and if they don't, there is a good chance that you've got something wrong. Slow down, use your references, and enjoy the journey!

Next segment: Wings, Canopies, Wheels and Engines.

Last Segment: Final Assembly and Finish

I would like to thank Hong Kong Models for providing this kit for review, and to IPMS USA for giving me the opportunity to review it.





What Was on the Tables at the 2019 April Show?

by John DeRosia

I can see into the future...you missed seeing the models at the 2019 Spring Show.

Models?...what models?...

Here's a few more thoughts on show day volunteers.

Of course I am talking about the heads of the show committees (Judging, Registration, Raffle, Hosting, Make-n-Take etc...) that may just miss seeing all the awesome models on the day of the show.

If not enough volunteers help – the heads of the committees have very little time, IF ANY, to really see the models or walk around the vendors. I mean that is what the show is all about. Fun, seeing models, spending money on kits from the vendors, seeing models, seeing friends, seeing models, spending more money, seeing models etc...etc...etc.

IF WE DO NOT GET ENOUGH VOLUNTEERS – the heads of the committees are tasked to work all day from opening until closing. Then all the fun of the actually seeing models is bye bye until next year.

No one is asking you to put in five hours of volunteer time the day of the show. Typically one to two hours at the most. That is not much to give up to help every single member out who heads a committee and **DESERVES A DAY OF FUN SEEING ALL THE MODELS** and vendors along with all of you.

Those club members that have not volunteered to help out in a while, -or ever, - rest assured it is the human members of our club that make the show a huge success. It's all centered **ON YOU!!!** If you have not already volunteered – you will have a fun time helping the show and others to see the models. We welcome others outside the IPMS Seattle club, family members or friends who like to volunteer but are not into models necessarily.

Let's all have a fun time
SEEING ALL MODELS
and signing up to help.

C U at the show!



Air Ambulance Painted, Displayed

by Scott Kruize

Regular readers know the story of how Morgan Girling decided that the “So Others May Live: Search and Rescue, and Mercy Flights” quarterly display at the Museum of Flight needed an additional build. Some Learjets – nearly as fast as commercial airliners but able to get into modest -sized airfields near small cities – have been converted to air ambulances. And there is a 1/72nd scale kit available: from AModels@!

And how I was gifted with the build when none of the other members of the NorthWest Scale Modelers wanted it, and how the build itself, being based on a recent AModel, much better than those that have established Bill Osborn as a Skillful and Determined Modeler Who Doggedly Perseveres Against All Odds. The last issue of this newsletter showed the completed assembly in basic white.

That basic paint would actually have been adequate for the decal scheme provided in the kit, which was for the German-based 'AA Service'. But I wanted something flashier, and picked the scheme from the Internet showing one of the fleet of 'Luxembourg Air Ambulance'. It's in our favorite color scheme: red-white-&-blue. How could I resist?

The model went into the display at the March 7 meeting, and will be there through the end of May. That means it will not be an entry at the upcoming IPMS Contest-&-Show...which is just as well. As I've said, I'm not an aspiring Bill Osborn clone. The model will win no awards, but prompted me to learn about modern air ambulance service, and should enlighten as well as entertain the Museum of Flight visitors





***Solaris*: Even For Sci-Fi, A Strange Hollywood Movie**

Movie Review by Scott Kruize

All of us like to watch movies, and not only war 'shoot-'em-ups' and aviation epics – if *Jet Pilot*, *Murphy's War*, and *The High And The Mighty* can be so characterized – but also science fiction.

My wife Sandra picked up this DVD from the library, because it looked interesting and neither one of us had seen it before. I vaguely recall hearing about *Solaris* back when it was released in 2002, getting the impression that it was a Russian movie. Not quite: there was a Soviet made-for-TV movie in 1968, and then a Soviet-made theatrical film in 1972. Both were based on the novel by Stanislaw Lem. The new movie is a complete remake.

Once upon a time, I used to read science fiction books and magazines regularly, but have hardly done so for years, and never read, or even heard of, the 1961 book. It's obviously good enough, in its way, to have inspired three visual productions.

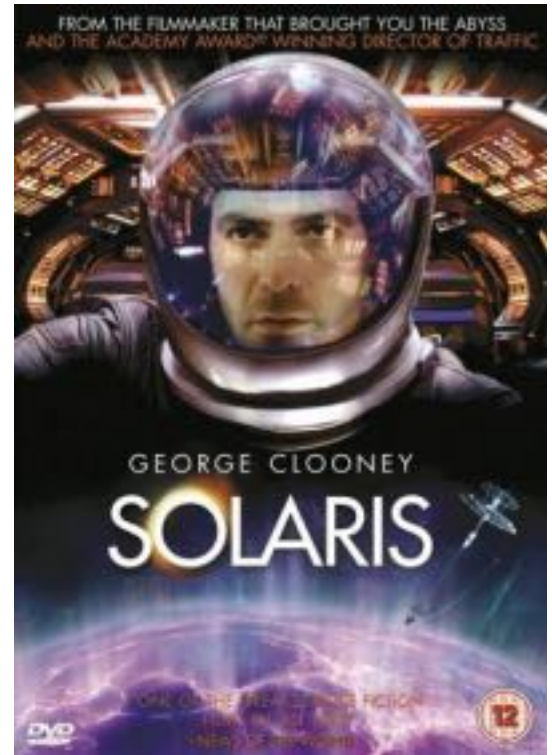
Except that it's weird. I know: all science fiction is supposed to be at least somewhat weird, taking us to new places inhabited by weird beings and creatures, under the influence of weird technology. "Controlled weirdness", if you will... but that means lots of it tends to be garden-variety 'space opera': swords and sorcery, spaceships and spacemen, princesses and ray guns, aliens and monsters...sound familiar? But higher levels of sci-fi promote thinking of the possibilities of new worlds, new ways of living, and the consequences of technology currently beyond our grasp, but not beyond our imaginations. I have to classify *Solaris* in this higher level. But beyond that, it has roughly equal parts of mystery, psychodrama, and romance.

The basic plot involves a professional psychologist, played by George Clooney, the world-renowned 'hunk'-heartthrob of so many Hollywood moviegoers. This psychologist gets a Skype-like message from an acquaintance with the small crew of the experimental space station orbiting the newly-discovered remote planet Solaris. He asks for help, emphasizing how much it's needed, but stumbles trying to convey how little they understand, even among themselves, what's going on there, or why they need help.

The psychologist goes there and finds all the machinery intact, in good working order, shiny clean and bright – except for a pattern of bloodstains. Exploring cautiously, he enters a refrigerated room – apparently an improvised morgue – containing two bodies, one his acquaintance. A noise interrupts: a small child is watching but vanishes down a corridor. Finally, our psychologist finds a crew member, who seems OK except for being so 'weirded out' that he is next to incoherent, not even minimally able to explain what's going on aboard. He steers the psychologist to the remaining live and active crew member, a woman with all the scientific and technical expertise the station requires in its studies of the alien planet, but who is hyper-agitated and in a fury about some danger aboard. She is no more coherent about what's happening than the other guy.

The mystery at the space station is then interspersed with a number of scenes back on Earth, when the psychologist got into an intense – and intensely odd – love affair with a very strange lady. Hints are dropped, becoming more detailed and clearer in flashbacks, that the affair somehow, sometime, went horribly wrong. And then inexplicably resumes aboard the space station!

The production has quite a bit of 'eye candy'. The space station, and the space taxi that takes our protagonist there, are beautifully and plausibly done (in a Hollywood sci-fi way), and every member of our group will want to model them. They bear resemblance – as do elements of many other scenes – to things we've seen in *2001: A Space Odyssey*.



The mysterious planet Solaris – never identified by location or in any other meaningful way – is drop-dead gorgeous. It's a glowing iridescent blue gem, with energy whorls and arcs constantly in flux. As the story progresses, however, in its obscure way, viewers read menace into its beauty.

The film does come to a conclusion. I'm reluctant to characterize it as satisfying, or even comprehensible. I don't want to go into details further, which would unavoidably be 'spoilers'.

I recommend the movie if you're open to watching something provocatively different. That means not everyone makes for a suitable viewer, and the financial data bear this out. The movie was in theatrical release only from November 20, 2002, to February 20, 2003. Its budget is conjectured at about \$47 million. It has been explained to me that every movie incurs distribution and presentation costs likely to be at least half again, and perhaps equal to, its production budget. This movie may have cost its producers nearly 100 million dollars. It made \$15 million domestically, doubled when worldwide returns are added in. DVD sales and streaming service charges can't push that \$30 million into anything resembling a profit... but that's not to say that individual viewers won't profit by watching it. My wife Sandra, who can hardly be considered a sci-fi buff, and isn't even much of a George Clooney fan, liked it. "It's like a fairy tale... a moral lesson about life-and-death...and love."

Tiertime Cetus MK3 Extended 3D Printer

by Blaine Singleton

If you have ever been interested in 3D printing, then this printer will get you started. 3D printers take a plastic filament material and melt it into an extruding nozzle, then ejected on to a moving build plate forms an object, so as the material cools it hardens. 3D printers can use several materials to melt plastic and create objects of different plastic type materials.

I have no experience with 3D printing but have always been intrigued about the idea.

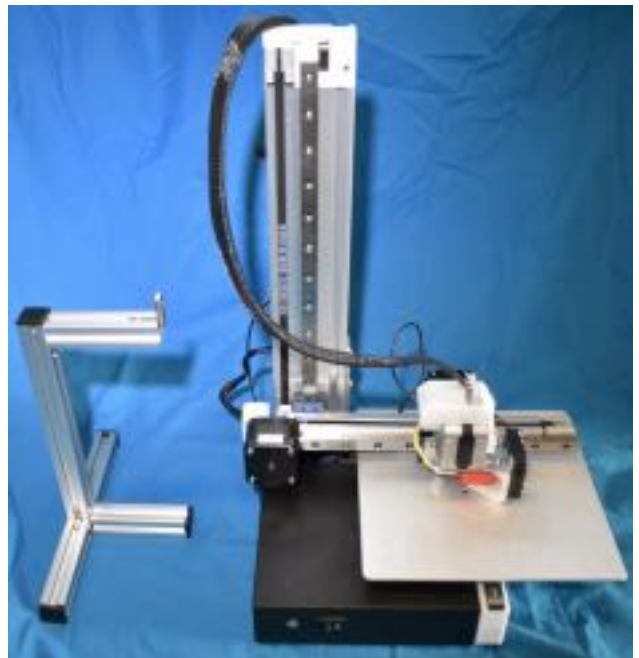
I have experienced times when a special tool or part would be good to have, but there is nothing available, but now if I think about the part I can design it and at the same time learn a new skill of 3D printing. I will be honest and say the kicker for designing a part was the last time I knocked over my Tamiya cement bottle and said to myself, I wish there was something I could put the bottle in to keep me from tipping it over. Guess what my first design and project was with the 3D printer.

I have taken note of 3D printers and always looked to see what the latest was in printing. I have found there are a lot of web sites, Thingiverse for one, that offer peoples 3D creations that you can download direct to a printer and create that object which is nice, but I wanted to design and print my own items.

Part of my resistance to get a 3D printer was thinking it was too hard to learn to design objects for printing and I wasn't interested in printing someone else's stuff.

After viewing videos reviewing 3D printers, I was attracted to the Cetus MK3 extended printer. Andy's Hobby Headquarters did a YouTube video of the printer and it was very informative. I liked the Cetus because of its simplicity, quality of materials used for construction of the printer, small footprint and the positive reviews the printer was getting.

<https://www.youtube.com/watch?v=IEfPrPXcbEY>



When I had the opportunity to do a review of Cetus MK3 extended printer I jumped at the chance and it has been fun learning the printer and learning how to design 3D objects.

One of the things you will notice about the printer right away is the simplicity of the design. It has a very small footprint (compared to other printers that look like a gantry crane system and take up a lot of bench space). Construction of the printer is of stainless-steel linear rails for the print head and build plate to move on and have no plastic brackets holding the frame together.

The print area of the Mk3 extended printer is 180mm(W) x 180mm(D) x 280mm(H) or 7 W x 7D x 11H inches. This is a big area of print for such a small physical size 3D printer.

Cetus will be coming out with accessories such as a heated bed, good for printing ABS plastics as an example.

The reason this printer is called the extended version is that it can print a taller object than its predecessor.

When I opened the box, I was impressed with how well the printer was packaged with what I thought was a lot of care. There were no loose parts rolling around in the box to potentially damage the printer. All the printer axis motors were preassembled to their movement arms. The extruder was the only item I had to attach to a movement arm.

In different videos I watched about the Cetus printer, people would remark about how fast it was to set up and get ready to print. This is where the care in packaging came in, I was able to assemble the printer in 21 minutes. Tiertime when packaging the printer had subassemblies in different layers of the box which helped to speed the assembly. A quick start guide showed the different steps to assemble the printer with included photos of assembly steps, and instructions on how to download the printer operation program.

With the printer assembly parts there are also included items to make a spool holder for your included plastic PLA filament.

All tools to assemble the printer were included in the box. Once the printer was assembled, the quality in manufacture and craftsmanship were apparent; there were no cheap plastic parts with the potential to break. It is a sturdy quality machine. All the X, Y and Z liner arms are made with stainless steel for accuracy and vibration elimination when making a 3D print.

Printer software: Once the printer is assembled you need to go to the Cetus site listed in the Quick Start Guide and download the software to operate the printer. Cetus asks you to establish an account so you can be notified of software upgrades. The software also allows the printer to be remotely operated via WIFI.

Object Design program: The software that is downloaded from the Cetus site to use with the printer to design basic shapes is simple. I decided after several recommendations to use a program called TinkerCAD to learn how to model 3D objects and design my own items. To learn the program, it takes a couple hours of watching a few how to videos on YouTube but it will get you started printing objects fast. TinkerCAD is a web-based program and when your items are designed, the program allows you to download your item file to the Cetus printer. When designing an object, I found it easier to use millimeters for measurement instead of inches. Digital calipers set to measure millimeters makes object design so much simpler.

Once the printer is initialized the print head must be aligned to the build platform. A section of the software allows you to do so and may be a little intimidating, but the Quick Start Guide will show you how easy and fast it is to do. There also YouTube videos showing how to do it.

The printer comes with three different nozzle sizes - 0.2mm, 0.4mm, and 0.6mm. The 0.4mm nozzle is preinstalled on the printer. Nozzle size dictates how much material (PLA) is extruded to print.

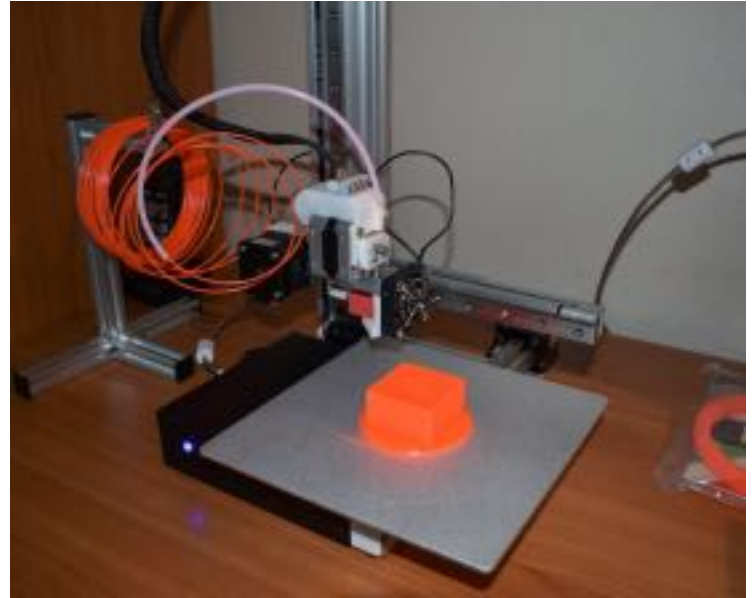
Changing the nozzle is very simple, the printer is shipped with a socket type wrench for changing the nozzles. Just make sure when you go to change a nozzle you let it cool off first. Ask me how I figured that one out.

PLA is the material (plastic) you will use to create your 3D print. PLA is short for Polylactic Acid which essentially is a biodegradable plastic that is melted and extruded through a heated nozzle to create the 3D printed object. Guide motors move the print head on an X, Y, and Z axis.

PLA is the basic form of plastic material used in 3D printers, the Cetus MK3 can use different materials for object creation some are Nylon, PVA, PETG, Wood Fiber and ABS plastic to name a few. There are a total of 15 different materials that can be used in the printer to make objects.

PLA is most common used material for the beginner like me. The material comes on spools and you can order several different colors. The average price I have seen for PLA is around \$20. It is all dependent on your object size and density to determine how many objects your spool of PLA will make.

If you find that your object required more PLA to create than what you have on a spool, you can add to the material by inserting more material from another spool following the last of the original material entering the extruder nozzle head. Easier done than said.



I was not sure how my first 3D printed object would turn out, but I was impressed with the print quality given my lack of 3D experience. The whole printing event went smoother than I had expected, which was a very pleasant surprise.

The printer operation software is downloaded from the Cetus web page and within the program you can set parameters to change the density or the print detail of an object. If for example you choose fine detail and a dense fill of the object, it will take more time to print and use more PLA. Obviously the more you use the printer and change density of the infill of PLA for an object, you can design objects with PLA reduction requirements in mind.

As I said at the beginning of the review my first object to print was a Glue Caddy that I designed to keep my Tamiya glue bottle from getting knocked over.

My second object to print was a Modelling Tool Tray. I designed the tray to hold my most used tools for modelling. Now with the tool tray if I want to work on my models somewhere other than my work bench I grab the tray and can move with no hassle rounding the tools I use most.

Reviewing this printer has been a very positive and fun event. I am now thinking of different objects that when my designing skills get better I can print. As 3D printers get better and more people use them, I think there may be a change in the modelling

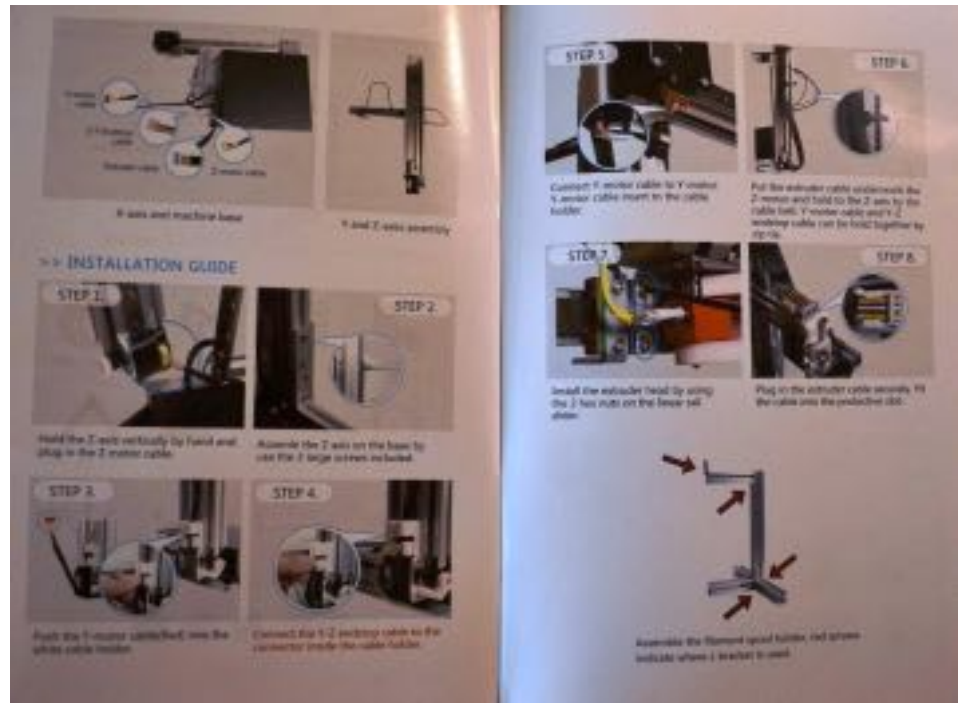


world as far as the ability to scratch build needed parts.

If you have ever thought about designing and printing 3D objects, then the Cetus Mk3 extended printer is a good start. My whole experience of getting the printer, assembling it and creating printed objects was way easier than I thought it was going to be. The printer can handle the requirements of the beginner or the advanced modeling engineer and has enough capability to handle printing as you get better with your designing skills.

I highly recommend this product.

Thank you to Tiertime (Cetus) and IPMS/USA for the opportunity to review the Cetus MK3 Extended 3D Printer.



Meeting Reminder

April 6



This month's IPMS Seattle meeting will be at VFW Post #2995, 4330 148th Ave NE, Redmond, WA, 98052, at 10 AM.