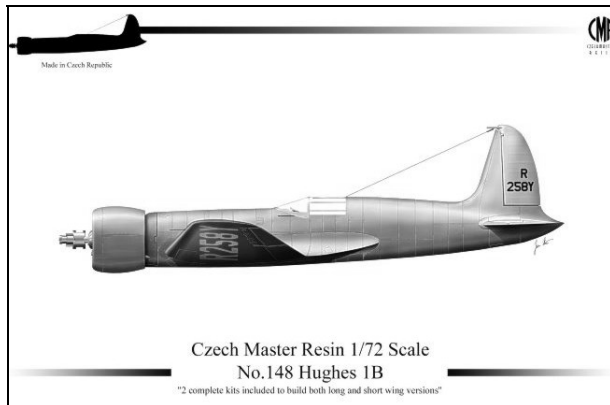


The 1/72 Czech Master Resin Hughes H-1 – Kit review

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Czech Master Resin kit No. 148 "**Hughes 1B**". 1/72 resin kit, containing parts for two complete models. Available from Hannants, price around £ 26.

Those who've seen "The Aviator" will certainly remember Howard Hughes crash landing his beautiful Hughes H-1 record aircraft in a beet root field after running out of fuel trying to go faster than the 352 mph he had just clocked and that made of him the faster man on earth (or in earth's sky...). The date: September, 13th, 1935.

The immensely photogenic Hughes H-1 was designed purely for speed, with a view to conquering the absolute speed record, and for that the designer relied on the brute force of a Pratt & Whitney Twin Wasp Junior delivering 1000 hp. A constant concern for aerodynamic cleanliness came into play in the construction techniques used: The highly polished stressed aluminium monocoque skin was held together by countersunk rivets, the massive engine being encapsulated in a clean if impressive cowling, and the landing gear being of the retractable type, fitting very snugly into wells in the plywood covered wings.

As well known this fantastic aircraft would in two years time rise again to fame in its long wing iteration, when Howard Hughes flew transcontinental from Burbank to Newark in 7 hours, 28 minutes, 10 seconds, averaging 332 mph, thus beating the North American coast to coast record.

I first saw the CMR kit in the December issue of Internet Modeler and since then I've finished the short wing model. Let me share my building notes with you:

Construction

The engine was separated from the rather large pouring block with the help of an X-acto saw. Since I felt that it would be easier to replicate the inlet pipes in copper wire rather than cleaning and cutting the kit provided parts, I made holes in each cylinder block and also in the body of the engine into which the tips of suitably bent pieces of copper wire were introduced. It works perfectly, but, in truth, you might as well skip this task since after finishing the model no one will know there are pipes inside the cowling – they'll be totally out of sight. The instructions

also call for the exhaust pipes to be installed at this time, but this I did not, because a) it is not very clear which pipe fits where and b) I was afraid the cowling wouldn't later fit the front end of the fuselage, slightly overlapping it, as it should, since the gap is very narrow and the added thickness induced by the ring of pipes might conflict with the law of impenetrability. The engine was painted in aluminium and later given a couple of washes of black to make it look more realistic.

The inner sides of the two cowling parts were also painted aluminium and the engine was inserted into the rear part of the cowling and glued onto it. Simple as it might sound, this is a rather important operation since the engine/cowling assembly attaches to the fuselage via the rear of the engine and you'll have to be sure you have just the right amount of crankcase protruding or else the cowling will either overlap the fuselage too much or leave an unrealistic gap.



The radial structure at the front end of the cowling, whose sole function is, I believe but may be wrong, to hold the cowling in place, was cut off from the kit part because it was very fragile and also because it wouldn't fit over the front end of the crankcase without some adjustment. Rather than going to all this trouble I elected to replicate the ring and retaining arms in copper wire after the cowling/engine assembly was finished, and this worked perfectly.

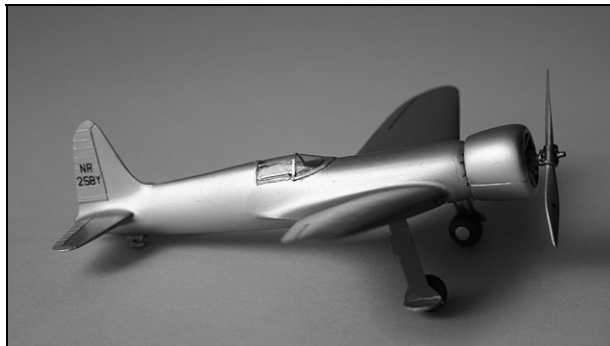
The inside of the cockpit was built straight according to CMR instructions, only addition being lead foil seat belts. The interior was painted as per instructions (incidentally, for the very light anodizing colour called for in the instructions I mixed silver and yellow and it looked ok to my somewhat undemanding eye).

The fuselages halves were glued together with 5-minute epoxy and left to dry, after which the wings were also attached, again with 5-minute epoxy, which has the added bonus of working as a filler once dry.

Be very careful when separating the wings from the pouring blocks. Study each wing before you commit yourself with your new blade. It's easy to get it wrong due to the shape of the wing which is different for top and

bottom. I feel my model has a bit too much wing dihedral and this is probably the consequence of having not separated the wings from the pouring block correctly, so take your time and be careful.

The tailplane came next and to assist in positioning the parts, as usual I reinforced the joints with copper wire pins



After all the gluing, filling and sanding were done I prepared myself for the always daunting task (at least to me) of painting a bare metal finish, but before I hit the trigger of the airbrush I still had one more complicated task to do, and that was dealing with the vacformed canopy. CMR are kind enough to supply two canopies for each version of the model, so I was more at ease knowing I'd get a second try, still this is the type of modelling that makes me real nervous...

I first cut very thin strips of masking tape that once glued over the canopy contour served as guides for the a very new and pointy blade. Carefully, I scored all along the tape edge until the canopy finally came off for the supporting plastic sheet. A couple of passes with a sanding stick to smoothen the edges and I was set to go. Still things were not that simple since even if the rear part of the canopy sits on the sides of the cockpit, and this poses no particular problem, the front end rests on top of the curved fuselage, so some thinning and bevelling had to be done to the lower front edge of the canopy or else it wouldn't sit correctly. The tiny bit of fuselage that will be covered by the front part of the canopy was painted silver since there would be no way of doing it after and the canopy was secured in place with the most judicious possible application of 2-minute epoxy.

Painting

I was now ready to paint and since I was looking for a nice shiny bare metal finish, I remembered I still had a couple of jars of a product that I believe is no longer marketed, SNJ Spray Metal, which I got from the producer as a generous offer - thanks again Scott - quite a few years ago, so I decided I would use it for my Hughes.

I first masked the canopy with tape and gave the fuselage and tailplane a couple of coats of SNJ that went on smoothly and left me with a very nice aluminium fuselage that could be perfectly masked with tape in order to spray Humbrol gloss blue on the wings.

(Note: at the time I built the kit, and judging from colour photos of the original aircraft at the Smithsonian I thought Humbrol "French Blue" was a good match, but I've heard later from Brian Nicklas, the person behind the very useful information packed photos and notes that accompany the kit, that the colour to use should be Blue Angels blue).

After the paint had dried I applied the decals, and these being very fine, as usual with CMR, went on with no trouble at all. However, I would have liked the yellow to have been a bit more opaque. The tail registration is also provided in black when photos of the real thing at the Smithsonian show it in blue.



Since the wings looked too glossy for a 1/72 model, I masked the fuselage again and sprayed some semi-gloss varnish from a can to dull it a bit. Conversely, wanting more shine on the fuselage masked off the wings again and gave the fuselage a rub with SNJ powder. When I lifted the masking tape on the wings tough a part of the varnish coat on the upper right wing came stuck to the tape and what's worse, the N of the registration letters came along too. Luckily this is a double kit, and even better, the long wing version does not need to have the N on the registration to be accurate, since it was not used on the record transcontinental flight, so I could snip the N from the long wing version to repair my short wing registration. But my troubles weren't over, since I still had to deal with the fact that the wing now looked very uneven due to the lack of varnish close to the root. I applied a couple of coats of brushed on future to the upper surface of the wing to try to even the shine out, but it wouldn't work since given the fact that I was starting from a surface with two different degrees of shine, the effect was only exacerbated by the future. So I left it to dry, masked the fuselage again and resprayed with another duller varnish. This killed all shine there was on the wings but on an even way, which was what I was looking for. I left it to dry for a few days and gave it a couple of dustings with airbrushed future what finally solved the problem imparting the needed shine on the wings.

Not having painted a canopy in probably more than 15 years I was afraid to do it so I cut very thin strips of aluminium painted decal and did the canopy frames with it.



All there was left now was the undercarriage and this posed no particular problem in its assembly, so my Hughes H-1 "Short Wing" was given the airworthiness certificate for the delivery flight to the display cabinet.

Conclusion

As this is a double kit, I feel someday I'll do the long wing version drawing on the experience I got with this one. This is not a particularly difficult kit to assemble, main points to be handled with care being the cleaning of the wings, the engine/cowling sub-assembly and the vacform canopy. If you take your time and improve some parts which due to casting limitations lack a bit of finesse (like the wheel covers that are a bit on the thick side) there's all in the kit to make a fine model of this most important aircraft.

Thanks for CMR for the review sample!

(This article first appeared in the March 2006 edition of Internet Modeler – www.internetmodeler.com)