

Anigrand Craftwork Hiller VZ-1, Kit Number AA-2010, 1/72 scale

Let's start this review with a couple of definitions obtained from the Concise Oxford Dictionary.

Disappoint: failure to fulfill desire or expectation of

Ire: anger

Well, in the case of this kit, both of these words are very appropriate when I got a look at the contents contents.

The Kit:

The model comes in a very sturdy corrugated cardboard that opens from the ends. Pasted to the outside is a nice colour profile of the VZ-1. In reality the box is but a Trojan Horse with a nasty surprise awaiting within.

Inside there are nineteen tan coloured polyurethane resin parts, heat sealed into a miniscule plastic bag. There is a decal sheet about 1 inch square, and an 8.5 inch by 11 inch, two side instruction sheet, showing an exploded assembly diagram and history on one side, and a three way view of the VZ-1 with markings info on the other side.

Inspection of the contents reveals that the statement "High Quality Resin Model Kits" as advertised on the Anigrand web site, does not apply to this kit. Whomever let this kit out the door must have been blind. Out of the 19 pieces, nine were so poorly molded that they had to be scratchbuilt or extensively repaired.

Here is a breakdown of the offending parts and what state they were in when the kit arrived.

1. decal sheet was noticeably out of register
2. the two pieces comprising the operator's cage (parts E and F) were severely warped, and incompletely cast
3. the struts attached to the fuel tank (part D) were incompletely cast
4. one of the two engines (parts I) was missing one cylinder, approximately one half the crankcase and part of the chain cover
5. the wheels (parts B) were of varying size with two being noticeable larger than the other two, and the struts were not very round or consistent in diameter
6. The props (parts K) were rife with pin holes

On the plus side the duct body (part A), the deflector vanes (parts J) and the cross member (part C) that runs across the inside of the duct are usable.

Construction:

Oh, where to start? Obviously I had to rebuild all the flawed parts.

First was the engine. I replaced the missing portion of the crankcase with plastic and built it up using repeated applications of superglue, coats of paint to find seams, and sanding to shape. A small piece of plastic rod provided the missing cylinder, which was attached to the crankcase with superglue.

Next was the fuel tank. The struts molded onto the rear of the tank were sanded off, and then replaced with plastic rod. I cut the plastic rod too long, so that it could be trimmed to fit when it came time to attach it to the cage. Strangely, the instructions show these struts as part of the operator's cage (part E) separate from the fuel tank.

Then it was on to the biggest task - the operator's cage. The resin cage parts were scrapped. They were beyond any attempt at repair. Severely warped, poorly cast and rife with flash, I decided to rebuild with plastic rod and tubing, and save myself the effort of trying to salvage the originals.

Plastic tubing was used for the ring at the top of the cage. I had a styrene tube that was close to the correct outside diameter, and I cut off a thin section. The inside diameter was increased by using a piece of sandpaper wrapped around a dowel. As the hole increased in size I had to rewrap the paper onto a larger diameter dowel. Once I was happy with the inside diameter, I sanded the section of tubing to reduce its thickness.

The vertical struts of the cage were replaced with plastic rod and glued to the ring. While the glue set, I aligned the legs of the cage to the cross member and superglued the struts to the cross member. Once this was completely set, the angled braces between the ring and the struts were added. Note that there are only two angle braces on the rear of the cage, while there are four on the front. The instructions show this, but make no mention of having to cut these from one of the resin parts. I have no idea why they were cast as part of cage in the first place. The circular operator's platform that mounts inside the cage needs to be sanded down to allow it to fit.

Next came the landing gear. As mentioned above, the gear struts are not very round and I replaced them with plastic rod. I cut the two best wheels off the resin struts and glued them to two of the plastic struts. The other struts had the wheels replaced with circular pads, which I cut from some plastic sheet with a hole punch, and then glued to the end of the other two struts. Each strut has a small bracket at its end where the strut attaches to the duct, so this was recreated with rectangular plastic rod and sanded to shape.

Last but not least, the props were finished. They were very thick and required a fair bit of sanding. Unfortunately, even with all the sanding, there are still quite a few pinholes. So I filled these with numerous applications of thick paint followed by sanding between coats.

I found two small pinholes in the duct, which were filled with super glue and sanded.

The duct, cross member and air deflectors all need to be sanded to get a smooth finish.

Due to the primitive nature of the kit, all parts were test fit numerous times until I was sure they would fit when it came time to put everything together. Things that need some sanding before they would fit were:

1. The engines - they were much too long to be mounted between the cross member legs and the curved braces that join two of the legs, which resulted in the almost complete removal of the chain covers.
2. The cross member - it is a bit too long, and thus sits too high inside the duct unless it is sanded down in length.

After all the preliminary construction was complete, the kit was painted.

Paint and decals:

Since the desired scheme with the yellow US Army markings was not an option due to the decals being out of register, I just settled for a generic olive drab scheme. The engines were painted silver and given a black wash to tone down the shine. The props were painted black, as were the two wheels. The cross member, top of the landing gear struts and operator cage were painted light grey, and the stand and bottom portion of the cage's legs were painted yellow.

The only decals applied were two of the US stars and bars. When they came off the paper it was obvious that they were printed on something akin to plastic wrap, and were not going to sit down well. So I applied a spot of Future Floor Polish to the area on the kit where the decals were to rest and placed the decals over top of the Future, and then left everything to dry.

Final Construction:

Following the painting, all the sub-assemblies were put together. First the engines were mounted to the cross member. Then the cross member placed inside the duct. Next were the landing struts and the deflectors. Using a clamp to hold the propeller spindle, I sprayed the whole kit with Aeromaster flat. Afterwards, the

props were add to the spindle. The part of the spindle that protruded past the props was removed, sanded smooth with a piece of sandpaper glued to a toothpick, and then touched up with paint.

Conclusion:

What can I say, other than I think this kit is a piece of garbage. What you get is about one half of a kit for a full kit price. Only a masochist would enjoy building this kit. I was thinking of buying their upcoming Piaseki Airjeep kit, but not now.

Instruction Sheet:

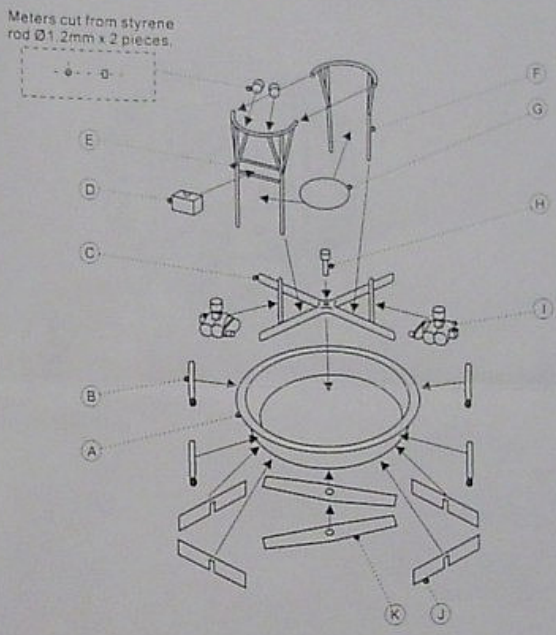
(the side with the parts breakdown)

Hiller VZ-1 Pawnee experimental VTOL flying platform
1/72 scale resin model kit
#AA-2010

In early 1950s, the NACA engineer proposed a concept that placing the rotors on a bottom of the aircraft, a pilot could steer it by shifting his weight, called "Kinesthetic" control. In 1953, the Office of Naval Research (ONR) awarded Hiller Helicopter a contract for the development of a VTOL research-flying platform as a tactical reconnaissance and transport aircraft. Hiller used two engines, each driving one of the rotors inside the 5' diameter duct and the aluminum tube platform fixed atop the duct. The 1st prototype was given the Navy designation YHO-1E. After a year of flight tests, Army was interested in its performance, and ordered a modified vehicle for service testing and operational evaluation. This 2nd prototype was re-designated VZ-1 in 1956. For improvement to produce enough thrust to climb out of ground-effect, it was designed with a larger 8' diameter duct. However, the added weight affected the pilot's ability to use kinesthetic control. The unsolved control problems caused it retired in 1959.

Specifications:
 Duct diameter- 2.4m
 Height- 1.9m
 Power- 40hp Nelson H-59 engine x 2
 Crew- 1
 Max speed- 16 mph

VZ-1 was required to design for the pilot who could be aimed and fired a rifle with both hands while hovered in free flight.

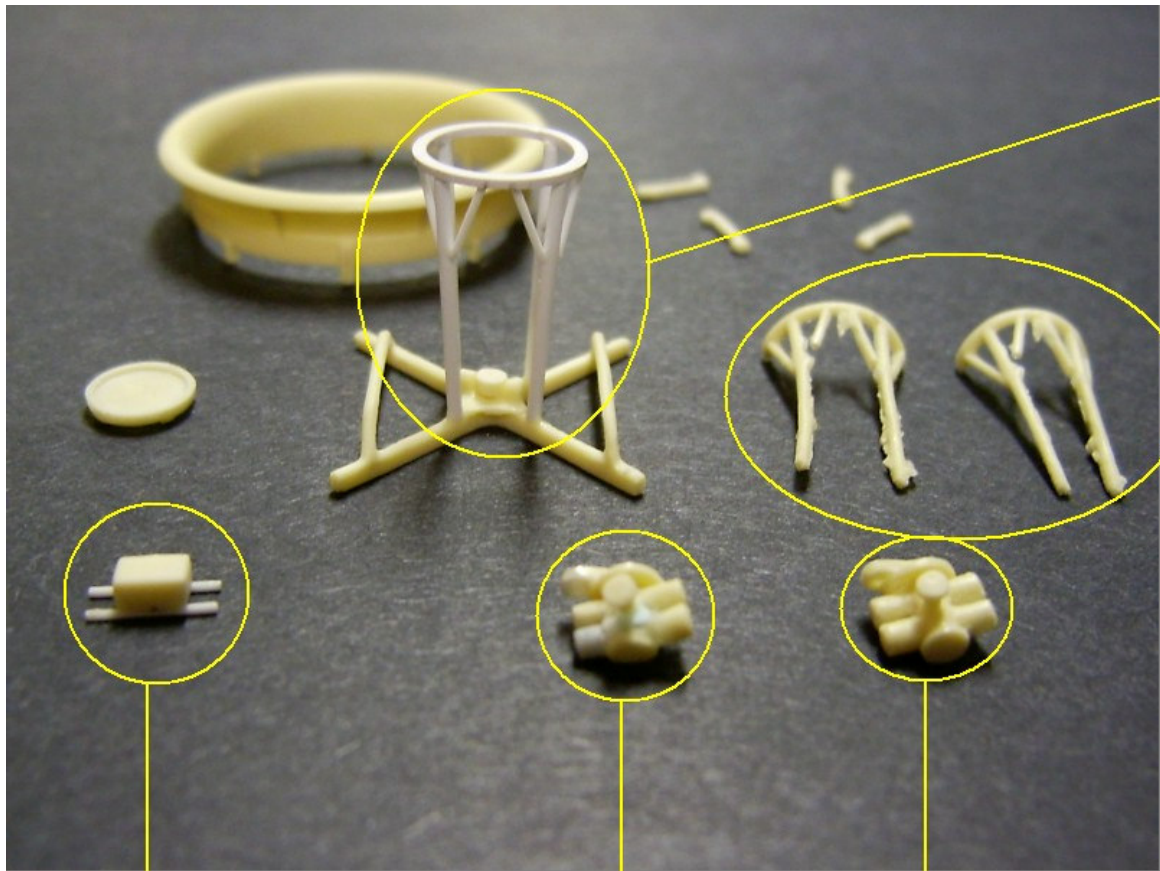


Meters cut from styrene rod Ø1.2mm x 2 pieces.

- A Duct x 1
- B Landing gears x 4
- C Crossmember x 1
- D Fuel tank x 1
- E Front fence x 1
- F Rear fence x 1
- G Stand plate x 1
- H Spindle x 1
- I Engines x 2
- J Stabilizer vanes x 4
- K Propeller x 2

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 CRAFTSMAN

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New operators cage
- white pieces are the
replacements for the
original parts

Original
operator's
cage parts
-warped and
incompletely
cast

White parts are the
replacements from
plastic rod

Rebuilt engine - white parts
are the remanufactured pieces
- one engine cylinder, part of
crankcase and part of chain
cover

Original engine