



RESOURCES FOR MODELERS

MODEL REVIEW Halberstadt CL.IV (Rol.) Mirage Hobby, 1:48

Reviewed by Joe LoMusio

Background

After the success of the Halberstadt CL.II as a durable ground attack plane and effective escort for bombers and German recon planes, the decision was made to design an improved version. That improved design resulted in the Halberstadt CL.IV which started arriving at the front in the summer of 1918. The plane was produced by the parent company, as well as two production batches under license to LFG Roland. These Roland produced CL.IV's had their fuselage extended by 0.4 m to stabilize the aircraft's level flight. The craft quickly gained the reputation as one of the best ground attack aircraft in all of the Great War. The CL.IV performed exceptionally well in low-level, ground-strafting flying while demonstrating good maneuverability in avoiding ground fire. When not assigned to close support and ground attack missions, the CL.IV also proved lethal as a standard two-seat fighter, especially when used to intercept Allied bombers as they returned from their missions.



The Kit

Mirage Hobby's Halberstadt CL.IV (Rol) is nicely packaged (great box art!) with six sprues of grey plastic (totaling some 158 parts), one Photo-etched fret of 23 parts, one clear sheet with ten dials and two windscreens, and two decal sheets. The instructions included are twelve pages of large, easy-to-read, step-by-step instructions in English and Polish. One page carries the rigging diagram, another has the layout of the sprues and parts. The outer pages are in color

and include an introduction and history of the CL.IV, and a section with the color profiles for four different planes to build. The four planes are 8013/18 (currently displayed at the National Air and Space Museum), and 8171/18. Both of these aircraft are from the first production batch produced by LFG Roland. The other two planes are from the second production batch, 9407/18 and 9455/18, number 2, which is the plane depicted on the box art.

The four profiles all call for the lozenge camouflage on the wing surfaces, but curiously, Mirage Hobby does not include lozenge decals in the kit. This was similar to their CL.II, which also did not provide the decals. If you are going to build one of these four planes, you will need to secure some after-market lozenge decals in 1:48 scale. The paint call-outs are all indexed to Vallejo paints, but there is no accompanying Vallejo chart to show what colors the numbers refer to.

There are some errors in the instructions that need to be pointed out. Looking at the profiles, it will be obvious that the starboard profile of 8103/18 is misidentified as 8171/18. Also there is a mis-numbering of the decals, as two #27 are listed in the first profile, with the correct #27 being the cross on the rudder. The small decal at the end of the fuselage is actually #2 and not #27. Furthermore, both fuselage crosses are identified as decal#23, when one is #22.

In step 15 it shows the placement of the Spandau machine guns as coming from sub-assembly 18, when it should be marked as 17. Step 18 is the assembly of a meter gauge (parts G30, P54 and CL07). The insertion of that sub-assembly is then listed correctly as 18 in step 25.

Some further typos and mis-assigned numbers in the instructions is the top wing compass holder (PE22) which is mis-marked as PE5 in step 34. Step 5 does not identify part F15. Brackets for the Parabellum MG ring mount are misidentified as G10 when they are P40 and P41).

There are three times in which a step calls for selecting one part over another depending on which profile you are building, but then it doesn't make it clear which part goes with which profile. For instance, Step 15 calls for two versions of the exhaust manifold, p13 or P14, but then which one goes with which profile? Similarly, Step 25 calls for a choice between two different dial faces, CL02 or CL06, but for which profile? And Step 40 has two different generator fan blades, P56 or P57, but again, which one for which profile?

Another slight problem I encountered is that in some of the steps, the arrow directing you to where you should place the part is not always precise enough to know the exact location. An example of this would be the placement of the hand pump (G10) just forward of the cockpit on the starboard side of the front deck fuselage. Similarly, right next to it, the exact placement of the altimeter gauge is likewise unclear. Historical reference photos may help you here.

Let me make it clear that the typos and problems in the instructions are not that critical and certainly do not take away from the building of the model. Take your time, especially as you preview the instructions, and you will be able to figure out some of these issues early on and avoid confusion later on in the build.

Inspection of the parts show some moderate flashing, especially on the smaller parts. The radiator pipes (F16, F17) are particularly in need of delicate clean-up.

The Mercedes D.III 160hp engine is moderately detailed and includes six individual cylinder heads, with connectors that will need to be manipulated to get them to meet. The kit provides five exhaust manifolds and three props, with the profiles all using (E8)

The best representations are the wings, with nicely molded and accurately warped wings with thin trailing edges. The top wing is in two sections with a center radiator section. The modeler will be better served to replace the small plastic nubs with rod so that when you attach the top wing halves to the center section you will be rewarded with a much more solid joint. This would be true of the bottom wing halves as well. Replace the plastic connector nubs with metal rod and then insert into the bottom of the fuselage on each side.

Construction

After the cleanup of the parts, I simply followed the step-by-step instructions, which calls for the construction of the Mercedes engine first (steps 1 – 6). Next was the assembly of the cockpit. This sub-assembly consists of some 30 parts alone, and, as I mention above, you have to give

attention to the location of some of the parts (most notably, P49, G20 and P58). Be sure to give attention to which profile you are building when you come to step 12 and the placement of the Spandau ammo containers. The second batch of CL.IV's utilize only one Spandau MG.

Painting inside the fuselage in the exposed cockpit area was accomplished with Vallejo Beige Red (804), Woodgrain (828) and then a thin coat of Transparent Orange (935) for the cockpit framed area and Grey-Green (866) with light Grey (940) and Dark Green highlights (979) for the fuselage walls. Metal surfaces were highlighted with Natural Steel (864). Control panel dial bezels were highlighted with Silver Metallic Sharpie marker. Be sure to drop a bead of white paint into these dial cavities, so that later, when you add the clear sheet dials, they will stand out better. Over that, a drop of Future will create a nice looking glass face to the dial.



Seatbelts are photo-etched brass, and are nicely done. A slight problem is once again encountered in that there is no charting of where you are to locate the seat belts. I painted my seatbelts with MSP Linen White (09061) and picked out the silver buckles with a Sharpie silver metallic pen. The placement in the observer/gunner's compartment of his seat (P58) and radio and control boxes (G12 and G21) do not provide exact location nor any painting suggestions.

Another important step to consider here is that before you glue the top divider wall between pilot and observer (P67) in the cockpit frame, be sure to measure the distances for the parabellum MG rings as they connect to this structure as well as to the top deck of the fuselage just aft of the observer opening. You will want to make sure all of this is in alignment before you close up the fuselage halves.

Before joining the fuselage halves together, give attention to the motor support mounts in the forward section of the fuselage (P21, P22 and P44). The engine board mounts are a little tricky, as you have two board mounts (P21 and P22) that are to be fixed over the U-shaped engine mount which spans the inside of the fuselage and is obviously glued to both sides. To make this a little easier, I glued the U-shaped bracket (P44) to only one side of the fuselage and then affixed one of the board mounts over it in the slot provided. Once you close up the two fuselage halves, you can then glue the other side of P44 to the opposing fuselage half as well as now positioning the other board mount over it into its slot. Once this is all secure, there will be enough of an opening for you to drop in the engine and secure it with some CA.

The kit provides nicely detailed Spandau machine guns in plastic, but also photo-etched cooling jackets for the Spandaus as well as for the Parabellum MG. If you choose to use the PE parts, you will need to cut away the plastic barrels and replace them with the PE parts. The most glaring parts problem with the armament is that the ammo drums for the Parabellum are out of round and really totally unusable. You can hide some of the oblong shape to the ammo drum when you are placing the ammo spares on the observer's shelf inside the cockpit (see step 12), but the one you need to attach to the Parabellum on the ring mount will be in full view and it's oblong shape will be very noticeable. Unfortunately, the PE fret does not provide for PE ammo

drums. As an alternative, I had a set of Tom's Modelworks PE for German Guns in 1:48 scale and so I used the ammo drum halves provided in that set, along with the ammo belt to create an acceptable looking ammunition drum for the Parabellum.

As to the Parabellum gun mount ring, the instructions paint call out has it as being Grey/Green (Vallejo 920), but in all of the four color profiles, it is obviously natural wood. I chose to paint mine in a light natural wood, using a base coat of tan, then some streaking with mahogany and topped off with clear orange.

Once the fuselage was joined and the engine dropped in and the Spandau machine guns installed, this whole open area was masked off and the fuselage was ready for painting. The CL.IV's, as all four color profiles show, employed a four color pattern camouflage scheme of large slightly angled swaths of color – Blue, Green, Beige and Purple. Uniquely, this scheme did not extend



unbroken around the entire fuselage, but rather it was divided between starboard and port sides, so that you actually have a mismatch of colors joining at the top of the fuselage as well as at the underside. The four colors I used were all Tamiya paints trying to match the suggested Vallejo color suggestions. For the Beige (brown) I sprayed Tamiya Desert Yellow (XF-59) with a little Yellow Green (XF-4) mixed in. For the Green, I used Olive Green (XF-58). For the Blue, I sprayed Field Blue (XF-50) with a little Blue (XF-8) mixed in. And, for

the Royal Purple, I used Purple (X-16) with a little Black (XF-1) to darken it somewhat. This four pattern camouflage was not a hard edged camo, so it was sprayed with a soft edge between the colors. This can get a little delicate on the top of the fuselage as there is not a lot of room for error and overlapping here. You must try to get the separation of the colors coming up from each side of the fuselage to join right at the center of the top of the fuselage running from the observers open area to the tail plane.

After joining the top wings to the center radiator section, this center section was also painted with the Olive Green (XF-58). A very light coat of Desert Yellow (XF-59) was then sprayed over the whole area to mute and blend the four colors. After this, I sprayed Future over the fuselage as well as the all the wing surfaces to prepare them for decals. The fuselage decals are quite simple and attention needs to be given to some of the mis-numbering (as mentioned earlier). I wanted to position the rudder slightly deflected, which is easy to do, since the rudder and the vertical stabilizer are two separate parts. You will need to paint them white and then position them together to receive the black cross decal. Once dry, you can cut the decal and separate the rudder from the stabilizer and glue it in place later in your construction. Similarly, if you choose to pose your elevator in a downward position, it is also a separate piece from the horizontal stabilizer and is easily done. These parts will receive lozenge decals and rib tapes, and so you can decal them separately.

As mentioned earlier, Mirage Hobby does not provide lozenge camouflage decals with this kit. You will have to obtain your own set. The lozenge was applied in straight chord and not diagonally as with some applications. I cut thin strips of the same lozenge to create my rib tapes and then applied those as well. Once the wings were covered with the lozenge camouflage decals

top and bottom, you can also add the national markings on the top wings and the underside of the bottom wing. Another coat of future will seal everything in. There are tiny decals for both the wing struts and the landing gear struts and these are quite delicate and small, so care must be given here. Overall I found the kit decals to be very workable, strong and reliable.



Affixing the bottom wings came next. As suggested, metal rods need to be substituted for the plastic nubs. This will ensure that a more stable fit is achieved and a more true alignment as well. The cabane struts have adequate pins for the assembly into the fuselage. The wing struts, however, are a little more delicate. The plastic pins are thin and a little oversized in terms of length and will need to be trimmed. The matching holes in the wings are actually much wider than they need to be and you will need to drill a hole in the center of these larger holes that will provide a better fit for the strut connecting pins. At this point, I glued the four struts in the bottom wing, checking my angle and measurements against the top wing, and set it aside to dry and set thoroughly.

Biplane construction takes on a certain degree of complexity at this stage, not only getting ready to set the top wing, but in planning for and applying the all-important rigging of the both the flying and landing wires. The kit diagram of the rigging of the CL.IV is done well and you will be helped in following it. Tail plane control cables are no problem, but be sure you have drilled out the two small fuselage fairings at the end of the fuselage. Both the elevator and the rudder control cables will emerge from these fuselage fairings.

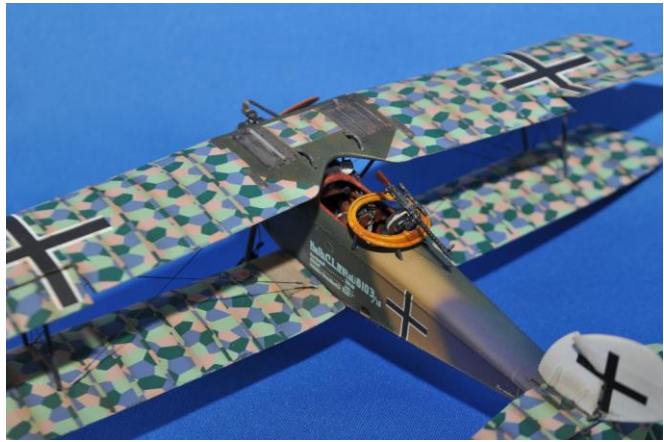
While I had designs on keeping this an Out-of-box build, I am of the opinion that accurate looking turnbuckles is essential to WWI aircraft modeling. Over the years I have tried to replicate authentic looking turnbuckles in many ways, but lately, I have come to appreciate the turnbuckles created by Gas Patch Models in both 1:48 and 1:32 scale. The 48 scale turnbuckles are not easy to work with, in that the eyelet needs to be reamed out somewhat to receive the EZ-line, which is what I use for my rigging material. However, once you thread the turnbuckle and glue it in place at your rigging points on the bottom wing, you will be rewarded with a great looking biplane with authentic looking turnbuckles and rigging lines. I created small eyelets with fine wire and glued them in place in the top wing. After setting the top wing and adding the cabane struts and checking that everything was in alignment, it was a simple (although tedious) matter of pulling the EZ-line rigging up to the top wing eyelets, wrapping them a couple of times and then gluing the line with CA and cutting off the excess line. I prefer EZ-line because it stretches and produces zero tension on the wings. It also responds immediately to super glue and holds together strongly and securely.

Assembly of the undercarriage and landing gear was no problem, and before installing the wheels, I rigged the assembly with thin guitar string. EZ-line is not used here as the guitar string is stronger and stiff and provides extra strength to the undercarriage. I did use some EZ-line to wrap around the axel to replicate bungee cords, and then I glued on the wheels, checking to make sure that they were in proper alignment.

Installation of the Parabellum machine gun ring and brackets, along with the Parrabellum machine gun came next. Once again, a PE ammo drum and adjoining brackets from Tom's Modelworks were used to replace the kit ammo drum. Tom's PE also includes the ammo belt to wrap inside your ammo drum, and then feed into the Parabellum MG, so all-in-all, you will have

a much more authentic looking Observer gun station then if you use the plastic ammo drum that come with the kit.

This is not any easy kit to build, but it is good one and with patience and some modeling skill, you will be able to come up with a great looking representation of an important World War One fighter during the last months of the Great War.



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