## UMa 1/48 AV-8B Harrier II Plus - Karl Smith's Build Observations

Making sure the parts have been cleaned and test fitted, will bring rewards. The fit on this model is first class. I have chosen to have the flaps down, I know it is incorrect on a parked aircraft but is done purely to show you the detail. (I'll pay the pilot's fine!)

Stage 1 - Incorrect seat, that supplied is for a RAF jet. Other SJU-4 Stencel S-III-S seat options than Rockit are Quick Boost QB48522 at £6.60; Aires AIRE4904 at £9.40 - which is the seat I used.

Stages 2+3 - Cockpit detail, clever if using 3D decals, using B12, B16, C12 and C13 which are smooth so no detail to remove. The two-part control column is very nicely detailed.

Stages 4-7 - Nose wheel bay, primed and painted when built, looks busy. I then jumped to page 16 to finish the cockpit off. There's no need to fill the ejector pin marks in the inside of the cockpit, as they are hidden by Stage 2.

Back to stage 8 - No issues except B3 has incorrect detail on the floor.

Stage 9 - Different forward LID parts - D3 for the GAU-12 gun pod system, D2 for the AN/AAG-28 Litening pod. I opted for the pod and opened the holes as instructed.

Stage 10 - Do not glue part R3, the tailplane pivot.

Stage 11 - No issues whatsoever, a beautiful join, left to cure overnight.

Stage 12 – Leave the airbrake retraction jack off for now so it does not get broken off.

Stage 13 - Antennae left off until later for the same reasons.

Stage 14 - It's a nice touch to have the chaff pod dispensers full or empty.

Stage 15 - The tailplanes are assembled but left off until later, probably until after painting.

Stage 16 - The movable rudder is a nice touch and fit. The temperature sensor part N2 is left off until later.

Stage 17 - The exhaust shield supports are another good touch.

Stage 18+19 - I only put G22, G20 and G17 on at this stage, all are the wrong shape and depth, as are the nozzles and exhaust plates; the rear nozzle fairings are undersized as the rear nozzles are undersized!

Stage 20 - G13 was left off to avoid damage.

Stage 21 - The wing halves are another beautiful fit. Tip - start with the LERX lined up then lower the top half down, perfect fit.

Stage 22 - Wing RCVs added and wings joined to fuselage, no problems.





Stage 23 - Choose open or closed. Paint the inside white. When dry put the masks in. I THEN JUMPED TO STAGE 29. The reason for this, is the tight fit of the front section, to the intakes.

Back to Stage 24 - The fix of the fuselage pieces and main wings is second to none, no filling, cutting or sanding required, unlike the Hasegawa/Revell kit. Of note, there is nice definition, on the frog eyes and vents. Again, all antennae and lights left off.

Stage 25 - I went for the refuelling probe open and only attached F11 at this stage, I will put the rest on later.

Stages 26+27 - Omitted for my chosen loadout.

Stage 28 - I only put G11 and G10 on here.

Stage 30 - No issues fitting the cockpit deck.

Stage 32 - Mirrors and bulkhead fitted and inside painted. I left Stage 33 for later.





Stages 34+35 - The PE HUD frame, fold as specified, but the film for the HUD glasses is not wide enough to fit the frame so I had to make replacement.

Stages 36+37 - Fit B15 and HUD. This was my first major problem. The windscreen had started to splinter, at the start of the seam. I tried polishing it out but that did not work. Will have to try another fix. Not sure why this happened. In the end I had to use a vacformed replacement windscreen.

Stage 38 - Leave G1 and G2 off for the moment.

Stage 39 - Outrigger fairings fitted. I then jumped to Stage 43.

Stages 43+44 - As mentioned, I'm fixing the flaps deployed; another great fit.

Stages 40-42 - All pylons built, watching for the metal parts in stage 42, cleaned and primed but not fitted yet.

Stage 42 watch for the metal parts.

Stages 45-47 - No issues with the well detailed outriggers assembly and painting; these will be fitted later. I jumped to Stage 51.

Stage 51 - On both sides of tanks, the horizontal panel line, needs filling and sanding smooth

Stage 52 - The AN/AAQ-28 Litening pod has exquisite detail, it's tricky painting the inner detail of the clear head. (When on the ground, it is rotated, so as not to damage the lenses.)

Stage 53 - BEWARE! When joining wheel hub to the tyre, make sure the parts are cleaned, the hubs and tyres have lips, and will go together only in one direction, clever. The same applies to the main landing gear... Leave the nose wheel yoke loose until final assembly.

Stages 54/55 - Leave the door struts off until the front U/C and small door are fitted after painting.

Stage 56 - I was not happy with connecting pins of wheels and cut them off. I drilled a 1mm hole in each wheel and used Albion Alloys' 1mm brass tube, to connect them for a more solid fit.

Stage 57 - OMIT. D17 is support strut which is presumably a safety feature for museum aircraft.

Stage 58 - Leave D8, the small main gear door off until final assembly of all the components after painting.

Stage59 - Fit G16 before painting.

Before I put the undercarriage on, all masking was done. Tamiya dark grey XF24 was sprayed on top, the boundary lines were masked up and Ghost grey then sprayed - Tamiya XF2 80% + white 20% is very close to Ghost grey.

Stage 60 - Wheel bay doors, parts B30, B29 need the rear strut thinning down to an L-shape for an accurate fit and parts B18, B19 need the bottom of the ram cut off for a level fit.

Stage 61 - I used a razor saw, to open the slots, to accept the PE wing fence parts

At this stage I elected to use the 3D cockpit as the detail is second to none. I put them in place with, deluxe glue and glaze.

The fin was painted gloss black and, when dry, it was masked up, exposing the rudder and the top of the fin which were sprayed matt white. I used XA1056. Typhoon Ruby red as the closest match I could find to the red. After a coat of sprayed Tamiya clear it was left to cure for 24hrs. During that time all sub-assemblies were painted and decaled ready to go on.

I fitted the outriggers (stages 45-47) and the nose wheel, this item after the small door (D4) (stages 54-55). On attaching the main landing gear I was surprised to find everything fitted perfectly with no tweaking needed to get all the wheels level!

I then weathered it with Humbrol black wash, thinned down with white spirit and Tamiya pastels.

**Decals** – I chose the Tomcats option and the Cartograph decals are of excellent quality, they only need soaking for a few seconds, and I settled them down with Humbrol decal fix and Microsol setting solution. Once the decals wee on all the antennae and other small parts were attached before I gave it a final coat of Tamiya semi-gloss X35 to seal it all in.

Load out – I selected: 2 x Aim9M - stage48; 2 x AGM65 - stage49; 2 x fuel tanks - stage 51; 1 x Litening pod - stage 52. The only fault I can find, is with the fuel tanks, the nose is too pointed and, as mentioned before, the horizontal line needs filling.



**Seat** – I used the Aires resin seat and its PE straps. Painting:

Cushions - Tamiya XF57 buff

Seat - Tamiya semi-gloss black

Upper harness - Tamiya XF53 neutral grey

Lap straps - Tamiya XF62 Olive drab.

When dry the straps were glued in place and the seat fitted. Lastly the canopy with the moulded MDC was fitted in place and I double-checked I'd missed nothing.

In conclusion... A thoroughly enjoyable build. If it not for the accuracy errors Nick has highlighted this would be up there with Tamiya and Hasegawa, for ease of building as there are some excellent mouldings and nice touches to aid assembly. I will be buying one, just to do the corrections on it. My only gripe is the damaged windscreen, whereas the canopy frame, is in a box, the screen isn't, the clear parts were in a bag with other sprues. At the end of the day, it does look like a Harrier, and I'm pleased with it. I'd like to thank Nick, the SIG and UMa, for the chance of building one of their Harriers. In the lower photo it is seen next to a Hasegawa AV-8B Plus.









The UMa Av-8B Plus next to a Hasegawa/Revell AV-8B Plus on the right

 ${\tt CAVEAT\ EMPTOR!}\ \textit{UMa have got it in them to make a great\ Harrier\ II\ kit,\ their\ first\ variant\ is\ not\ quite\ 'it'\ however.$