

FULL REVIEW

Airfix

BAe Harrier GR.Mk.7 (Combo with new-tool FA2 version)

1:72 scale

Reviewed by Geoff Coughlin

(42 images, 3,136 words, 24 pages A4)

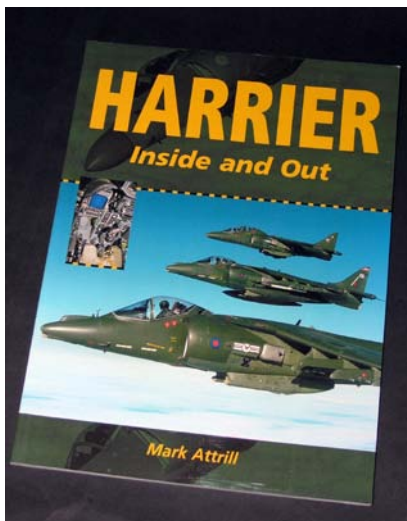


Our thanks to Airfix for supplying the review sample www.airfix.com



References:

- ➔ Just click 'Images' in your Google search facility and you'll have lots of images to help you build a representative BAe Harrier GR.Mk.7



Another very good reference is Mark Attrill's excellent book: Harrier – Inside Out

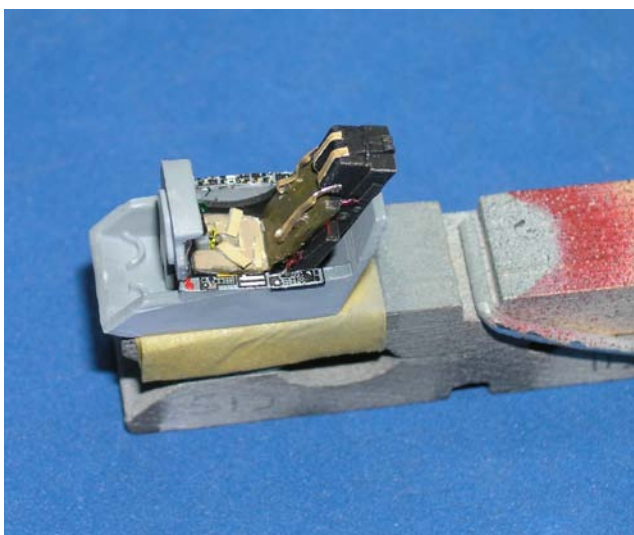
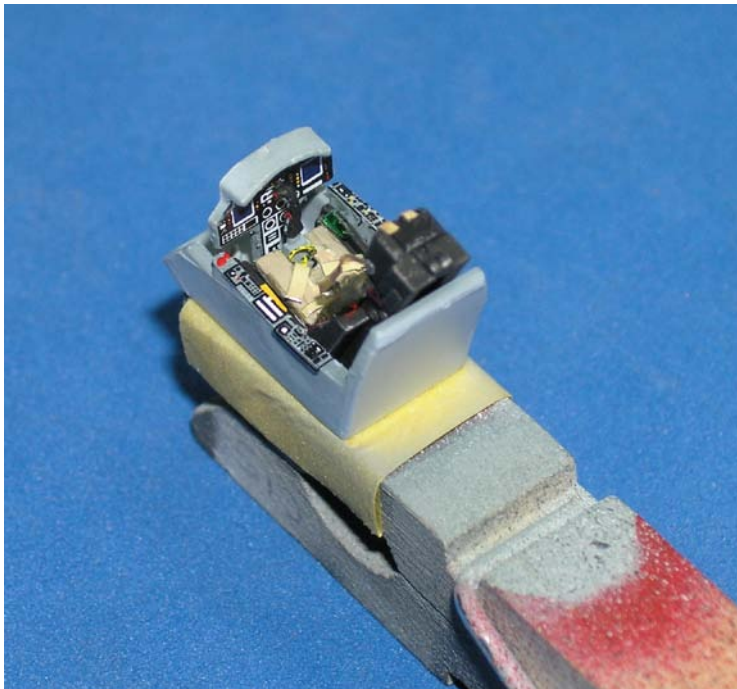
Check out this great You Tube video for reference data and inspiration!

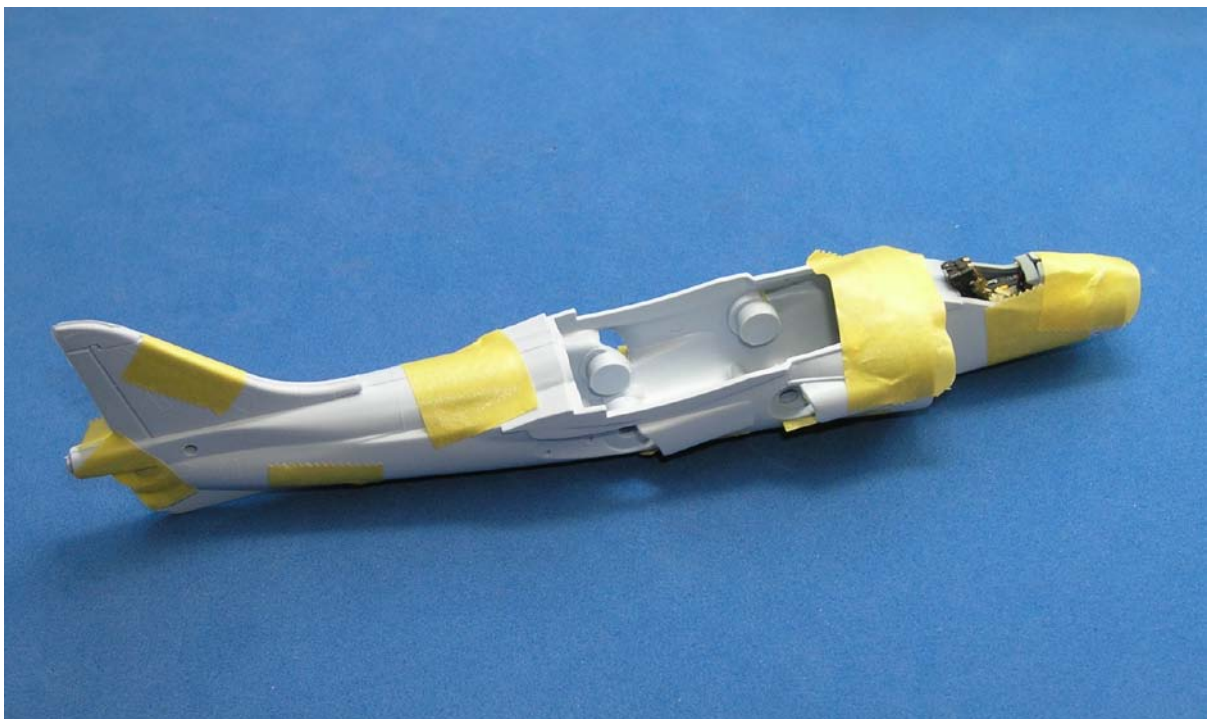
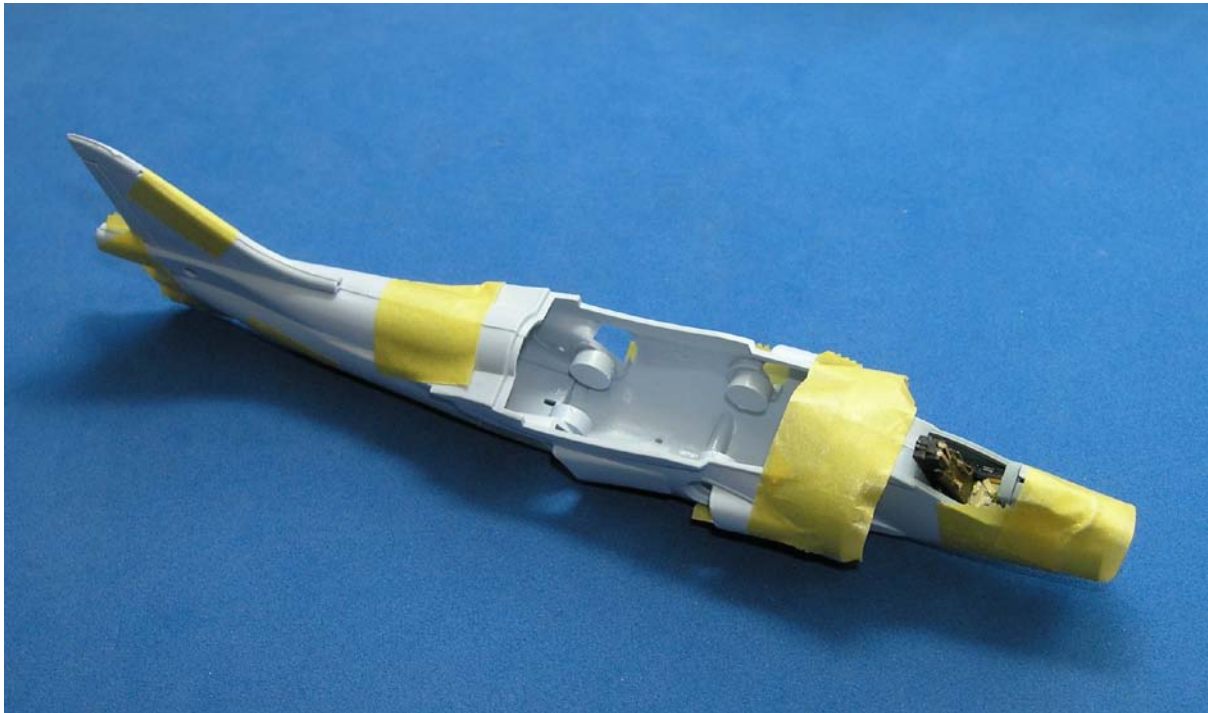
Ok we're off.....

This BAe Harrier GR.Mk.7 kit comes in the combo as stated above. There are a lot of sprues in the tightly packed box and so you'll need to tread carefully to make sure that you use the correct parts for your 1:72nd scale GR-7. I'll give you a steer here though, to help you as some exchange of parts is possible, indeed desirable for some areas of the build.

Into the office...

As you'd imagine in a kit in this scale – construction is pretty basic and straightforward, although I was a little confused when the parts all got a bit mixed up. I think this was because I (incorrectly) I thought that the new-tool parts were for the GR-7 – wrong! They are for the FA2 and very nice that is too. We'll be building that one as well fairly soon, so keep an eye out in your **Build Now** area of SMN for that.





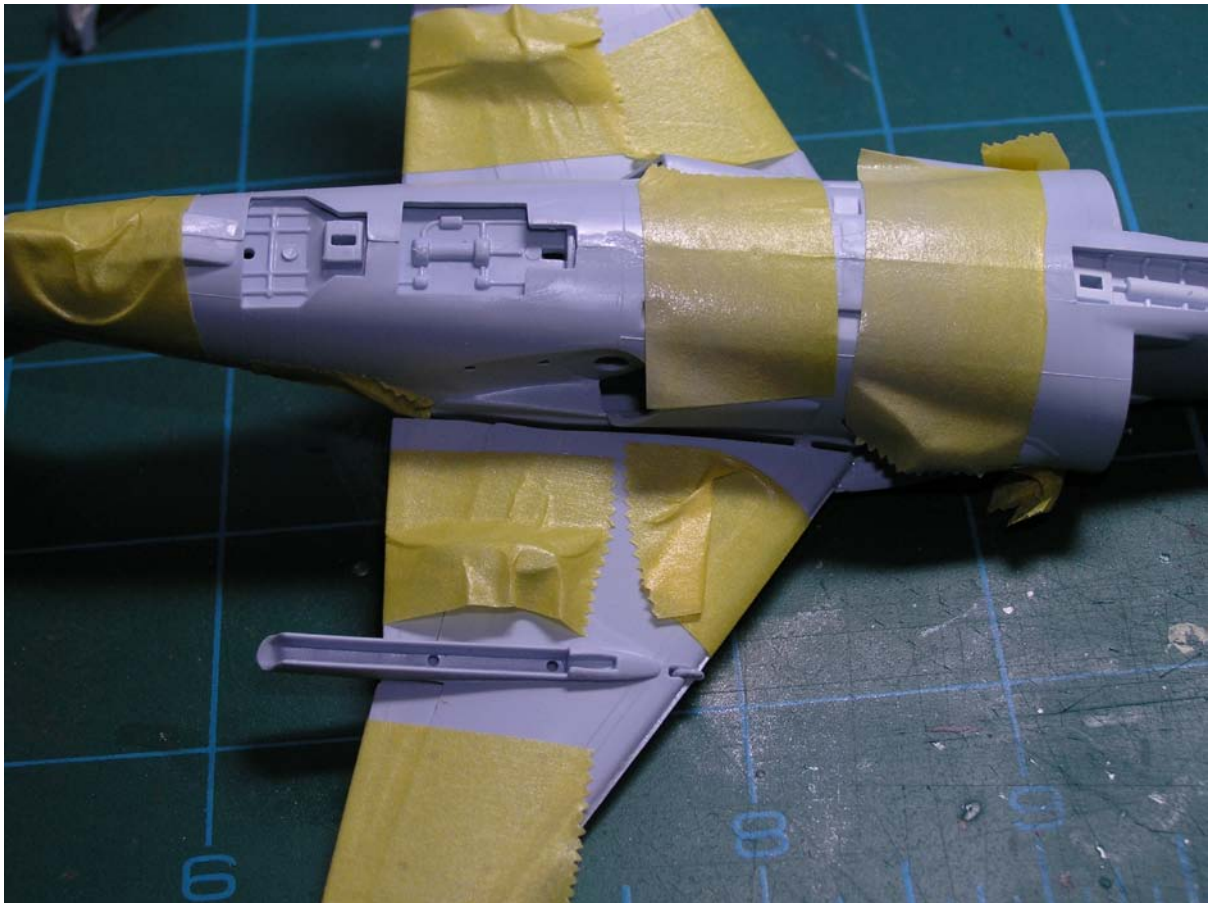
The instructions would have you use the earlier moulded seat and, to be honest, it isn't anywhere near as well tooled as the Martin Baker Mk.12 seat designed for the FA2? So I changed the seats over and the FA2 seat does just squeeze into the tub designed for the GR.7. I thought about using the other tub, but it doesn't look like it will work with the different main instrument shroud, so just the seat was used. Oddly, the GR.7 cockpit tub supplied doesn't have any side consoles and is incorrectly shaped so to fix this I simply cut the side walls down to make them flatter and this made a flat ledge. Onto that you can stick the decals supplied for use with the FA2 kit, but, of course using the main GR.7 instrument

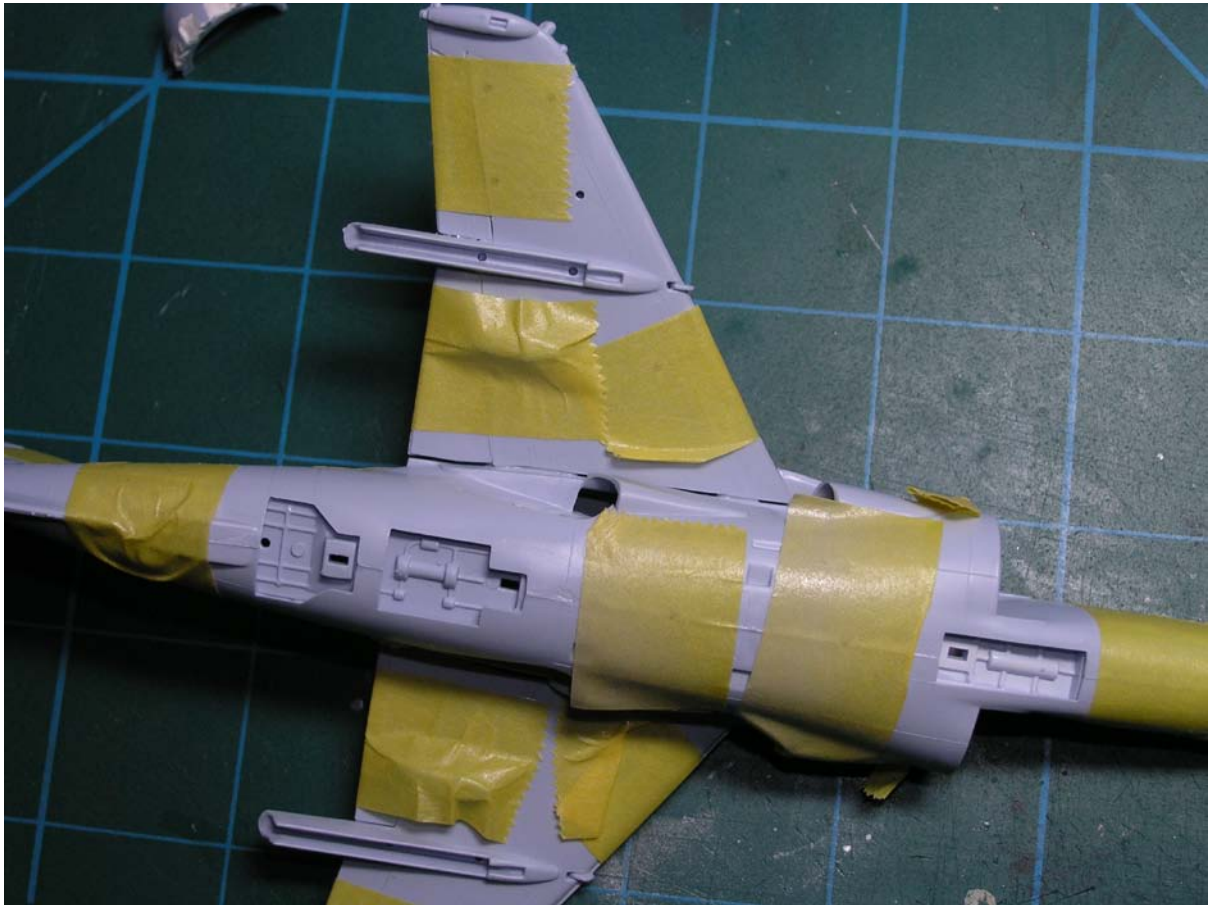
panel in front of the pilot. This has the correct two square CRT screens either side of the main instruments.

The seat needs some belts and a harness to make it look realistic. There are two simple shoulder straps moulded into the seat but these were cut off and new straps simply cut from an old wine bottle top and painted bronze-brown to reflect the colour of the real belts? I just used a steel rule to cut some thin strips of lead foil and added them using cyano (Super) glue. Mark's excellent Harrier book (above) gives lots of very useful images for reference.

The instrument decals worked well enough and I secured them using a mix of Johnson's Klear and Micro Set decal setting solution. They stuck like glue and the excess carrier film trimmed away when all was dry.

The little tub goes into the front fuselage.

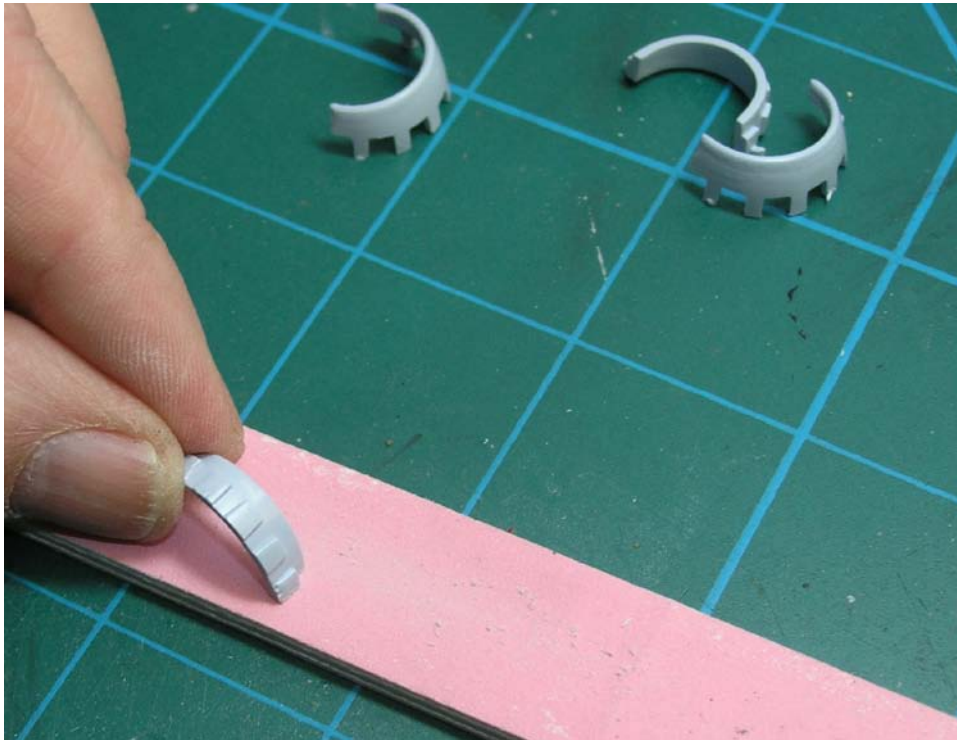




Main airframe construction...

The fuselage fits well together, but before you join the halves you can choose to pose the jet nozzles in whatever position you like. The idea of making them moveable complicates the construction/painting process, so I won't be bothering with this feature. It is easier to assemble the two-part nozzles separately, paint them and add them later towards the end of construction once all the main painting is finished? This will save you having some fiddly masking to do later on.

You can see that I've joined the main fuselage halves here and securely taped the parts using Tamiya tape – simply the best masking tape on the market in my opinion. It's majorly re-usable for one thing and that will save you plenty in the long run? When everything is dry, I'll sand the joins smooth. Speaking of which... I love the plastic Airfix has chosen to mould this kit in – it's really easy to work with and cuts and sands beautifully, being easily sanded to shape.

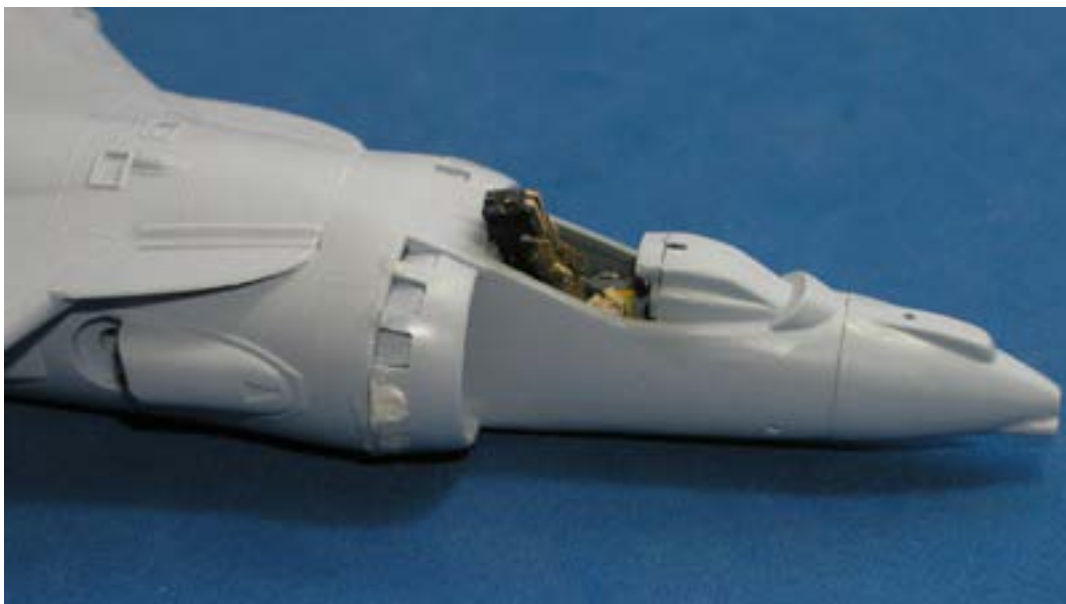


Pegasus engine intakes...

The separate intakes come in two parts – the inner doors and the main exterior intake ring. The idea is a good one, because if you examine Harriers when parked, they almost always seem to have the upper 3 or 4 vent doors open while the lower doors are closed? Check it out... the option included by Airfix is an attempt to help out with modelling this feature. In fact the insert with the square vent doors needs to be sanded where it attaches to the side

of the forward fuselage to get a good neat fit. In addition, the lower doors were filled using Vallejo filler and the upper doors that I wanted to configure open were sanded at an angle to look as they are hinged down from, joining the intake ring at the front edge? This seems to be working well and in the next instalment you can see how I get on....

Whilst this may seem like a lot of work, filling the lower doors and rescribing the outline is worth the effort on you finished model. This is all part of trying to really capture the essence of the type that I'm modelling and with the Harrier, the intake doors are certainly a key distinguishing feature. Another is the sit of the whole aircraft on the ground – more of that shortly!





The intakes are handed so make sure you fit them as per the instructions. It immediately becomes apparent that some filler and work is going to be needed here, but, hey isn't this what modelling is all about? I think so. In fact I really enjoyed this task. This is the first time I've used this Vallejo white filler and it performed quite well, although you do need to apply it thinly and come back and apply other layers as needed. This is because, (like Squadron White and Green Stuff) it does sink when fully dry. I decided to add cyano to get a hard top layer that can be lightly re-scribed with a scalpel. You can use Dymo sticky plastic tape cut into small strips to act as a guide when scribing (see your **Techniques Bank**) or, if you're careful, freehand by eye, but this isn't recommended.

As you can see, the intakes are ready and all is progressing well now.





It's time to take a long look at the overall shape and look of the work so far. I decided that the upper rear decking fuselage shape has too much of a 'hump' in it and this is easily improved by sanding with one of MDC's excellent sanding blocks (see **Techniques Bank**). The fine surface is restored by buffing and polishing using one of the nail buffers I bought from the supermarket (again, see the **Techniques Bank**).

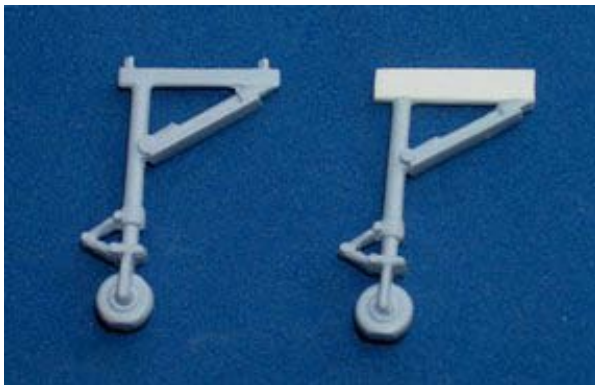
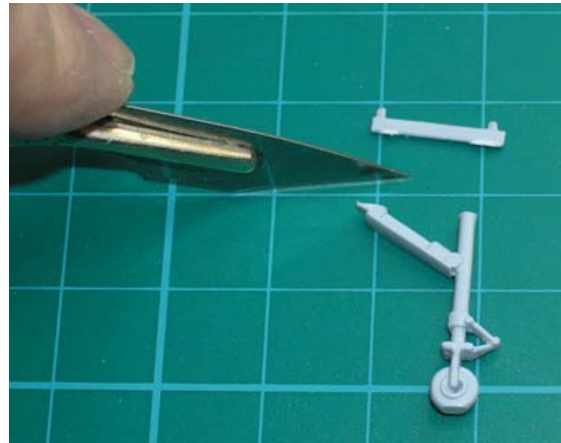
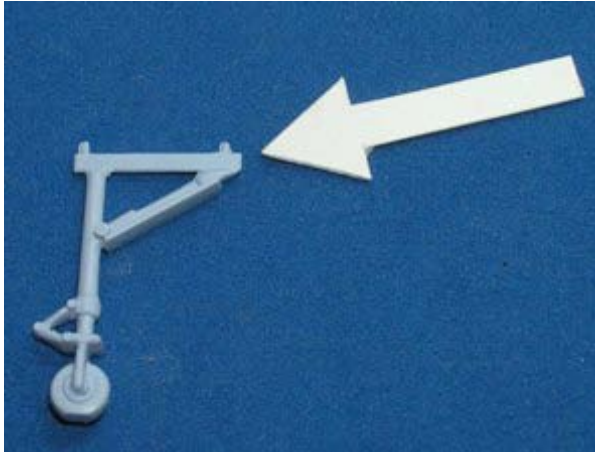
The leading edge of the fin is also much too thick as are the trailing edges of the rudder and main wings. If you haven't already done so, it's worth giving these a seeing to with your buffers and sanders to reduce them to a realistic, more pleasing thinner section. Easy to achieve, but do watch that raised detail? In fact this process caused me to review my initial thought to keep most of the raised detail. In fact, most has been removed, just leaving a little near the leading edges of the wings and some on the under surfaces, but the choice, as ever is yours.



Undercarriage units

Just about every Harrier I've ever built (and that isn't many to be honest) has had the same problem of all the wheels not being in contact with the ground at the same time – how bizarre is that? This kit is no different, with the left or right wing (plus the main gear units of

course) contacting the ground, but not all together. There being about 2mm that needs to be dealt with. In fact, it isn't too difficult to correct. I test (dry) fitted the wheels in their locating holes. The fix that's needed is to sand a decent flat onto the main central gear unit tyres and nose wheel. That takes care of nearly 1mm and when you look at pics of the Harrier the tyres do sink under the weight of the bulky airframe.



The second stage is to re-work the outrigger units. They can be lengthened about 1-1.5mm without looking odd and this is just enough to fix the problem. What you need to do is remove the rectangular locating tab at the top that attaches each unit to the wing bay. I then cut a slightly 'taller' rectangular replacement from scrap plasticard, securing with cyano. Using white PVA glue I temporarily re-attached all the gear units and great! They all make contact. Ok, off with them and a little water on a tissue removes the PVA. All are set aside for later painting and attachment to the completed airframe.



Exhaust outlets...

Moulded in two parts with raised ribbed detail is never a good combination, but using plenty of liquid poly the four ducts having been assembled earlier and now thoroughly dry can be improved. Again, reference pics are very useful here and even a cursory look reveals that the two metal vanes in each rear duct are very noticeable. They are also very thin and the kit parts will be improved dramatically with a little work. The internal shape of all 4 units is improved by using a sharp scalpel and taking great care not to impale yourself! Then the

rear ducts have replacement vanes cut from old metal wine bottle tops – attaching with Gator Glue. This great stuff (I got mine from Paul at Little Cars) looks and acts a little like thin PVA but behaves like cyano and is great for strong joins but will take a little longer to dry.



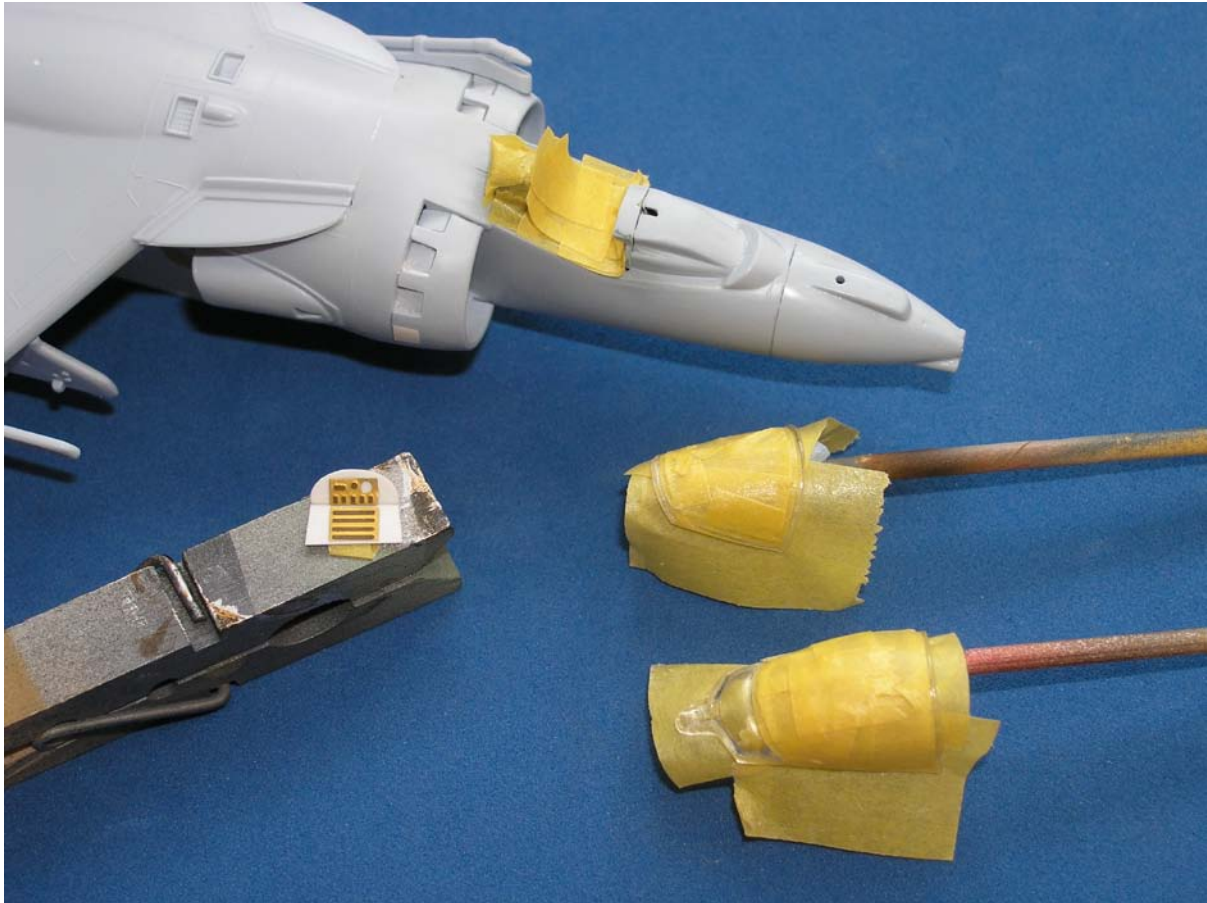
Canopy improvements...

The kit canopy is pretty good as is, but it lacks any form of rear decking and from the pics in Mark's good book, you can clearly see that there is an angled decking and flat section that moves with the canopy as it is slid back. I scratched this from small sections of plasticard and some old raised etch detail from a Reheat etched set. Not accurate detail as I didn't have a good enough image to work from, but much better than no decking at all!



Onto the stores...

If nothing else the Harrier GR-7 is a workhorse. No less than four pylons under each wing. The new-tool kit parts are pretty good and when you've cleaned up the mould seam lines, they should fit very well to the underside of the wings.



Masking up...

The canopy, rear decking for the sliding portion of the canopy and instrument shroud all need to be painted in a scale black colour. Black is almost always too stark and doesn't give a realistic dark colour. A good option is to go for something like Revell's Anthracite Grey No.9. This matt shade is superb and I will paint the cockpit sills in this shade too.

Main camouflage...

Mark Attrill's excellent book: Harrier Inside and Out has some great walk-around images of the Harrier GR.Mk.7. The overall Dark Sea Grey (BS 638) camouflage looks very striking, especially when matched with the great 'Shark-mouthed' aircraft featured on the decal sheet – very creative Airfix, well done! In fact, the scheme is a two-tone grey, the other tone being a marginally lighter shade Dark Camouflage Grey (BS 629). To be honest, in my view, when you look at the images in Mark's book, there seems almost no discernible difference in the greys. For this reason I sprayed the whole thing gloss Xtracolor Dark Sea

Grey. In order to provide contrast and a little weathered look, I added a drop of white to the paint mix after the initial DSG base coat and sprayed this over the central parts of the wings and panels on the upper surfaces. The gloss paint provides the much needed gloss surface onto which the decals will be applied soon.



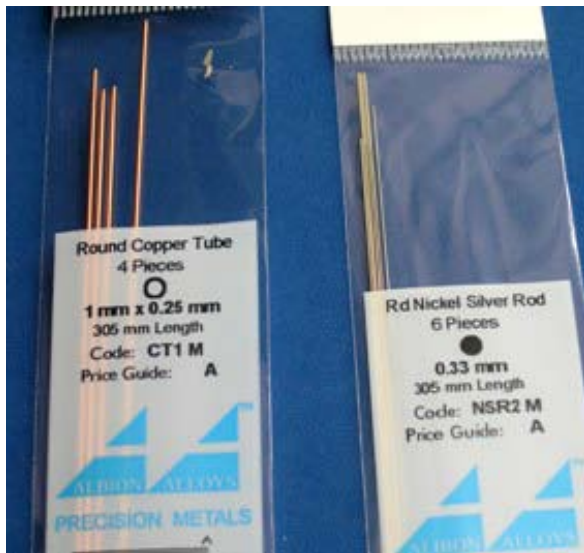
While this was all drying, I turned my attention to the main undercarriage units again. Even in 1:72nd scale, you do need to add some detail to the nose gear leg. It is the most prominent feature on the aircraft and benefits from a couple of black hydraulic / brake lines up the right side. Little cars (www.little-cars.com) supply some superb scale model products

and amongst these are a large range of fine coloured wires.



I guess mostly for use by auto modellers to detail engines, but they are of course good for many other areas of the hobby. Aero engines, undercarriage units and cockpits to mention a few.





New ram for ventral airbrake...

The kit part looks a bit over-scale and clumsy. I created a new one by simply using two sections of metal – one tube, one rod that fits inside it from the excellent range of metal products offered by Albion Alloys (check out your **Here Now** area under Tools and Materials).

Decals...

Now this is where I usually get a bit twitchy when it comes to Airfix's decals – they are almost always printed very well, in register and accurate and feature all the stencilling that's needed – so far so good. In the past I have found them to be quite thick and matt in appearance and these factors almost always has resulted in annoying silvering (see **Techniques Bank** – 'Getting rid of decal silvering'). However, I have to report that I found these much better; thinner and slightly shiny, all much better. The gloss surface that the Xtracolor enamel gives provides a good surface for these decals and so I found very little 'silvering' (caused by tiny amounts of air being trapped between the decal and the surface of the model). All coming together very well now and I just love that No.20(R) Squadron shark mouth decal under the nose.

Weathering and finishing

Now onto the home leg and some subtle weathering to finish off this project. Looking at the reference images I have and taking a good look at a couple of Harriers at previous air shows and on operations, it is clear that most GR.7s had a pretty flat/satin finish. I like Gunze Sangyo varnishes because they spray very well and have a nice flat finish that will take the pastel chalk dust to come very well. The varnish went on and all the undercarriage units added – I just stayed away from spraying the legs and bays as they are glossier in appearance on real aircraft. Pleased to see that all the wheels still touched the ground at the same time – don't you just hate it when you do all that prep before, test the sit and fit

and all is well, only to find when you later add the glue and come to attach the parts that oh no, they don't sit right now!! What's that all about? So, no such probs this time around.

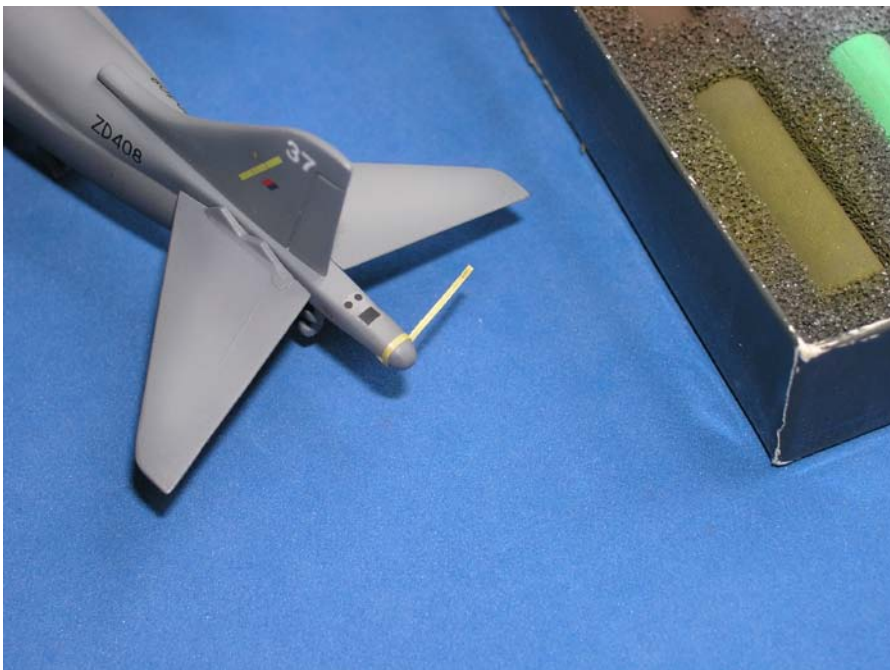


Looking again at the good close-ups in Mark's book there is some significant staining aft of the rear pair of exhaust nozzles. The rear set of nozzles are also highly weathered and heat stained. For the former I sprayed thinned Gunze 'Smoke' (or use Tamiya Smoke X-19 – it's the same) backward, gradually building up subtle (ish) yet noticeable exhaust-stained rear fuselage sides. The rear pair of cans are also weathered to show heat staining. The base colour for the rear set of cans is Mr Metal Color Dark Iron (214) and the front set, Iron (212). This awesome paint is easy to brush or spray on – here I brushed it on, working quickly before the paint touch-dries (which is very soon). The cans are buffed with a stubby old paint brush with a little ordinary pencil graphite added. The rear set are finished off by spraying a very thin amount of Tamiya Desert Yellow (XF-59) in the direction of the airflow. This nicely highlights the thin faces and edges of the new vanes we added earlier.

On the upper surfaces of the centre part of the main wing you may be able to just notice some scuffing that I've added – caused by the boots of ground crew as the work on the aircraft. Some dark grey paint thinned and applied with a very small pointed brush created the effect I was after.



Finally some finishing touches like the twin buff-coloured housings for the Zeus ECM system. The kit parts looked too clumsy and so I fabricated mine using Micro Kristal clear. The nose lens representing the dual-mode TV/laser target seeker/tracker has a blue internal area and Tamiya Clear Blue added to the back of the kit clear part does the trick here. No clear light is provided for the centre of the upper fuselage and so I added one from my mini-spares box. I wanted to add a Sidewinder acquisition round to the starboard wing and fashioned this from one of the kit-supplied AIM-9L Sidewinders. Another feature of many parked Harriers is the various RBF (Remove Before Flight) tags, intake FOD (Foreign Object Damage) guards and Sidewinder covers. I fabricated the latter from an old piece of sprue tree. The FOD guards are easy to create. I first fashioned a piece of Blu-Tac putty into the rough shape of the intake and fitted it in place in each intake. Then I roughly cut some plasticard blanks and kept test-fitting them to get the correct shape that will fit onto the Blu-Tac. The Harrier guards seem to have fabric tags running vertically that are pulled to remove the blanks before flight so I made these from scrap metal foil in the spares box (old metal wine bottle tope work well). The guards are painted Tamiya Flat Red.





A few fine mods to the rear end and weathering with pastels completes this project. What do you think?

Conclusion...

I'm pretty pleased with my 1:72nd scale Harrier GR.7. It's a long time since I worked in this small scale and I have to say it's been fun and I think I've managed to get a reasonable result from the kit without using any expensive add-ons, just a bit of scratch building of some of the small parts and all of these are within the grasp of any scale modeller. Good work Airfix – in this combo package you can see the different tooling you get with the Harrier FRS.1 which is slicker and neater and the older, more basic representation that formed the basis of this project.

Watch this space for my attempt at the new-tool Airfix FRS.1

Recommended

Geoff C.





