Geoff Coughlin's
scale modelling now
magazine

Full Review

Italeri

BAe Tornado GR.4 DC Build

1:32 scale

with

Dave Coward

(May 2023)

Kit ref: 2513

Background

Being designed for low-level operations, the Tornado required modification to perform in medium level operations that the RAF adopted in the 1990s. The RAF's GR1 fleet was extensively re-manufactured as Tornado GR4s. Upgrades on Tornado GR4s included a Forward looking infrared, a wide-angle HUD (Head-up display), improved cockpit displays, NVG (Night vision devices) capabilities, new avionics, and a Global Positioning System receiver. The upgrade eased the integration of new weapons and sensors which were purchased in parallel, including the Storm Shadow cruise missile, the Brimstone anti-tank missile, Paveway III laser-guided bombs and the RAPTOR reconnaissance pod. The first flight of a Tornado GR4 was on 4 April 1997. The RAF accepted its first delivery on 31 October 1997 and deliveries were completed in 2003. In 2005, the RSAF opted to have their Tornado IDSs undergo a series of upgrades to become equivalent to the RAF's GR4 configuration. On 21 December 2007 BAE signed a £210m contract for CUSP, the Capability Upgrade Strategy (Pilot). This project would see RAF GR4/4A improved in two phases, starting with the integration of the Paveway IV bomb and a communications upgrade, followed by a new tactical datalink in Phase B.

References used:

Basically, I used the internet a lot to find pictures of the subject I wanted to model. I'm also very fortunate that I work at a place that has a Tornado as a Gate Guard that I go past most days so I could stop and check anything and take photographs as required.

There's also a extensive inside and out walkaround for the Tornado GR.4 in your SMN Photo Reference Library.

The Tornado Sig webpage is also a good source of Info:

https://www.tornadosig.com

Aftermarket Extras:

- **e**duard ED32981 Interior PE
- eduard ED32275 Seat Belts
- eduard 3DL32001 3D Decals
- eduard 632171 Resin Wheels
- eduard EDJX270 IT Face Interior / Exterior Mask
- Master MR32-033 Brass Pitot Tube & AOA Probes
- Aires (Quickboost) Ejection Seats 2131 MB Mk10 Resin Ejection Seats
- eduard ED632126 Litening Pod.

The Decal Options

The first thing I needed to do was to work out which subject I was going to do as the kit has four options of which the last one had some subtly different configurations to it. The first three are earlier GR4's with the earlier antenna configuration and the last one is a late GR.4 with the TCAS (Terrain and Collision Avoidance System) fitted along with the TARDIS (Tornado Advanced Radar Display & Information System).

Chris Evans has done a really nice earlier non TARDIS / TCAS version that I recommend having a look at for another perspective on this kit.

Version A

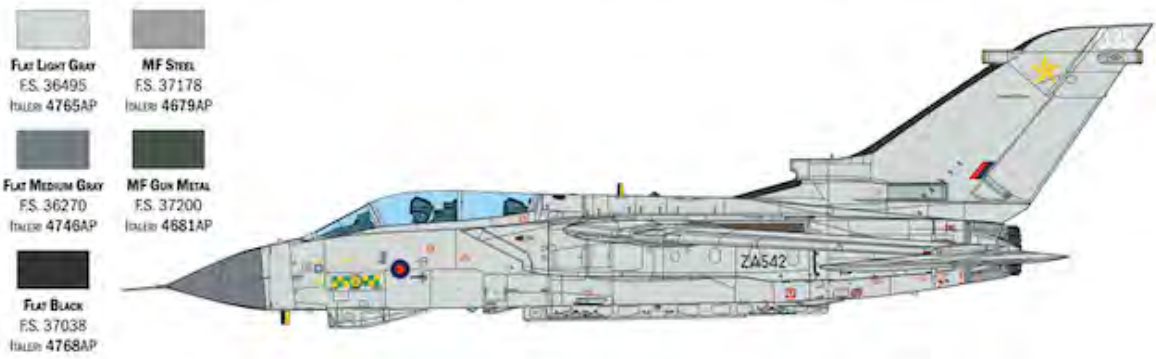
Panavia Tornado GR.4, Royal Air Force "Danger Mouse" – ZA 542, Operation "Telic" Iraq, 2003

Version B

Panavia Tornado GR.4, Royal Air Force, 617th Squadron "Dambusters", ZA367, Operation "Herrick", Afghanistan, 2010

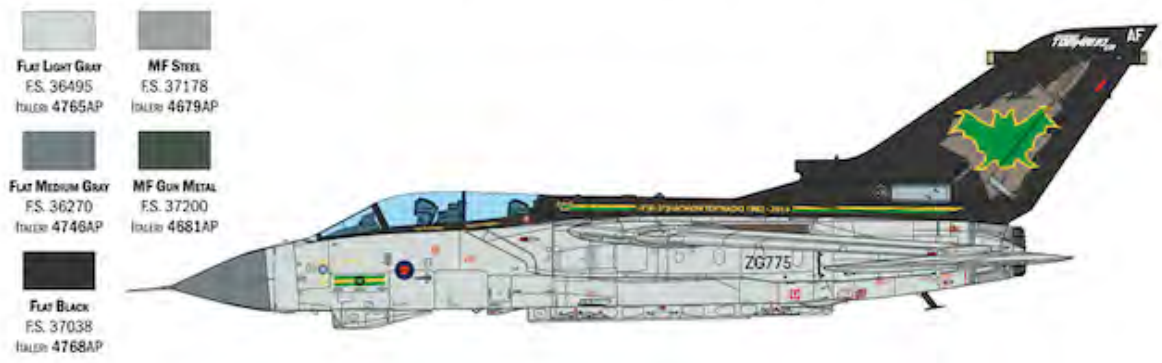
Version C

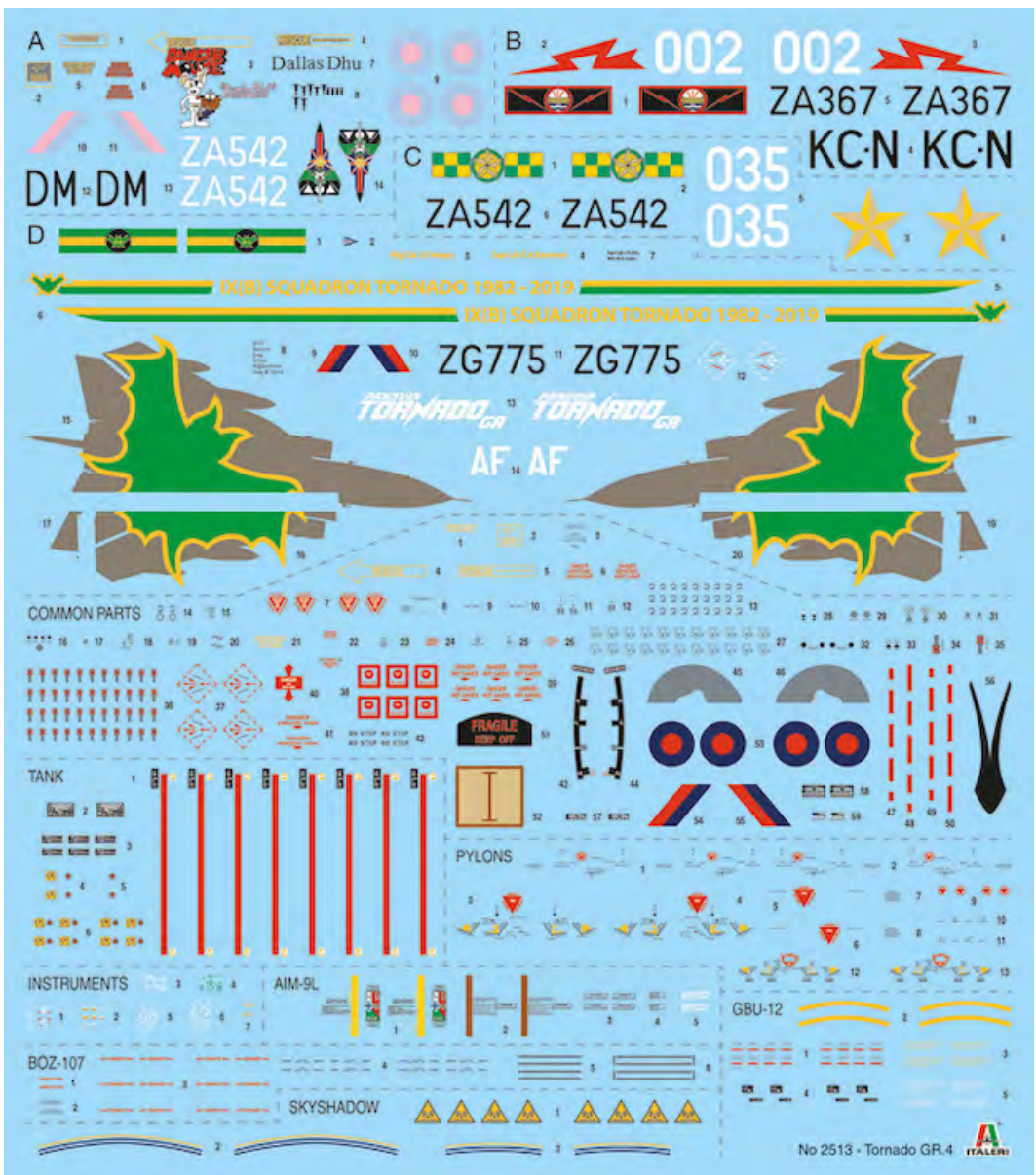
Panavia Tornado GR.4, Royal Air Force, 31st Sq. "Gold Stars" ZA 542, Operation "Ellamy", Gioia del Colle AB, Italy, 2011



VERSION D

PANAVIA TORNADO GR.4, ROYAL AIR FORCE, ZG 775, IXTH (B) SQUADRON, "TORNADO FAREWELL" SPECIAL LIVERY, 2019





I did really like the idea of the Late IX (B) Sqn aircraft with the commemorative tail and it would go nicely with my 9 Sqn 1:32 Lancaster as a display of new and

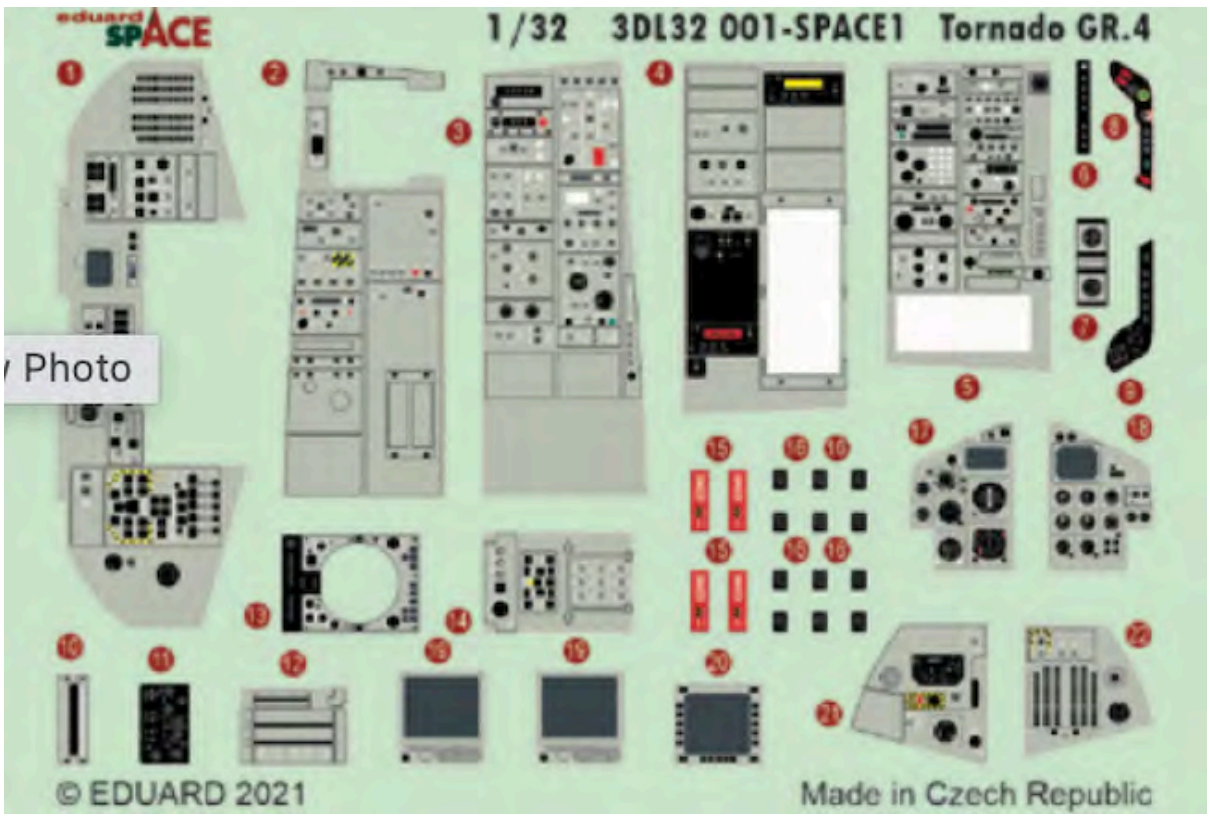
old. The decals themselves are printed by Cartograf and their colour density, registration and detail is excellent. Additionally, there were some really good reference pictures of this aircraft at this website.

https://www.dynamicvectors.co.uk/photography/farewell-to-a-legend

Construction

So, with my choice of subject decided it was on with the build and the starting point as with most aircraft models is the cockpit. From the box this is very nice and the kit has decals for some of the instruments but you will have to paint some of the details especially on the side consoles. Given the size of the subject and the fact that I was going to pose the cockpit open I decided to go down the aftermarket route for some extra detail and finesse.

The first thing was a set of eduard 3D Space decals for instrument panels and consoles. These are nice and in this scale I think they work quite well. The eduard set is good but I do think that the Qunita 3D decals are a little more refined; additionally, the eduard set only covers the earlier non-TARDIS Nav configuration but fortunately this omission was only for the central main MFD which is included in the base kit.

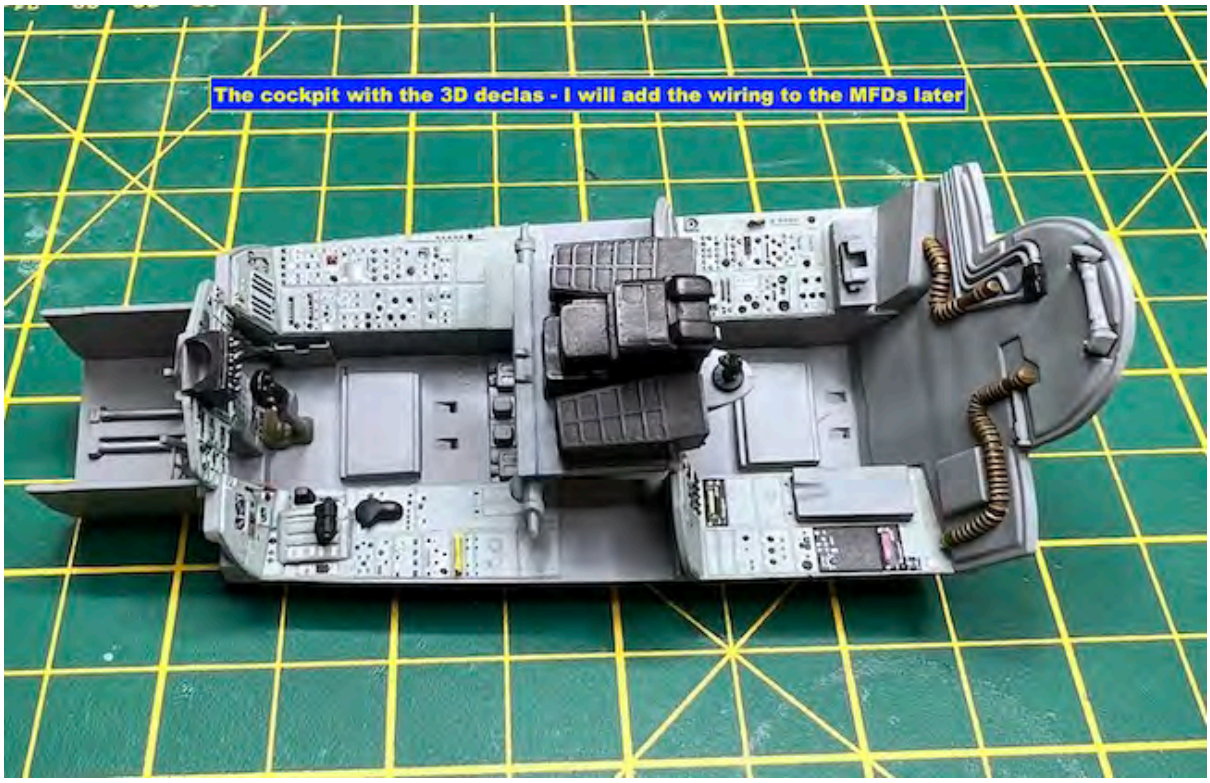


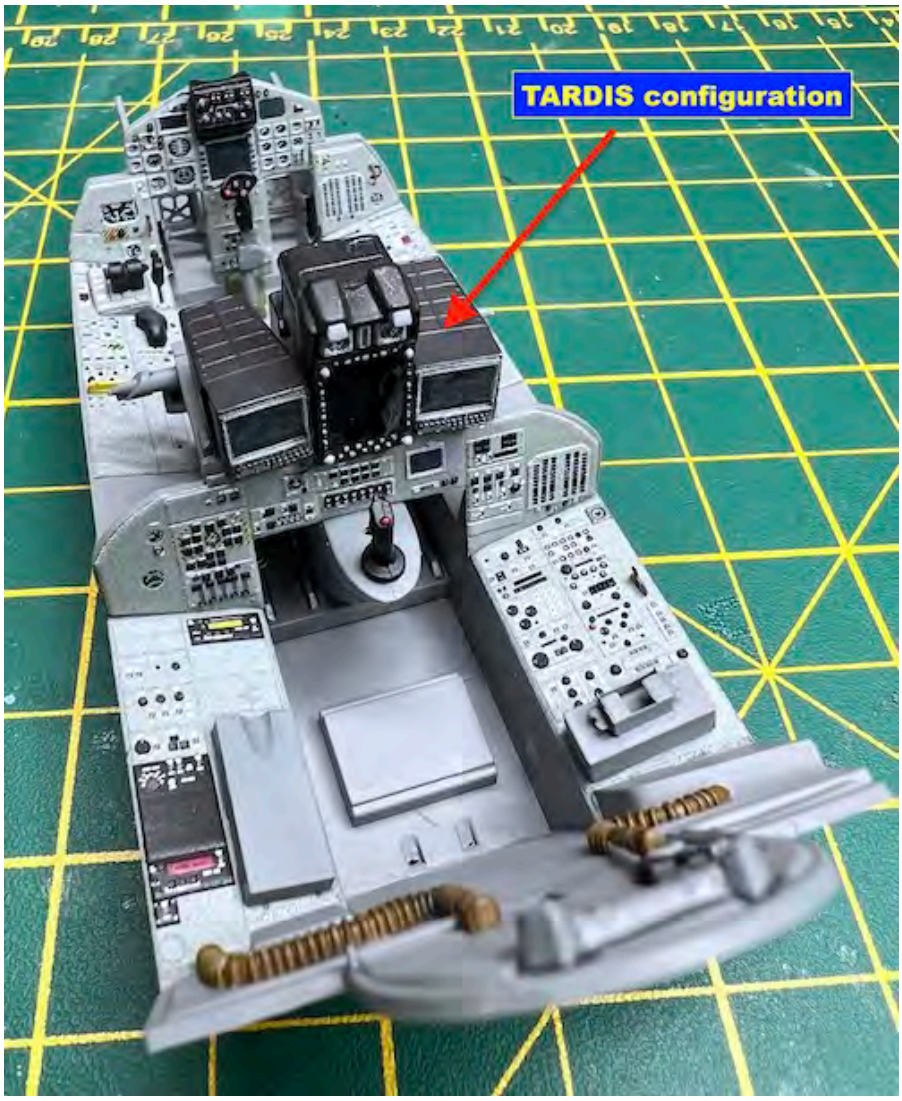
The first stage of using these 3D decals is to remove the kit surface detail and then spray the cockpit tub in a colour that matches the decal grey – you will need to experiment here until you get a grey that matches (or nearly matches!). The decals can then be attached using white glue (Gorilla White glue or Ammo Canopy glue in my case). It was then just a case of adding some weathering to bring out

the surface detail and some paint for the detailed parts.

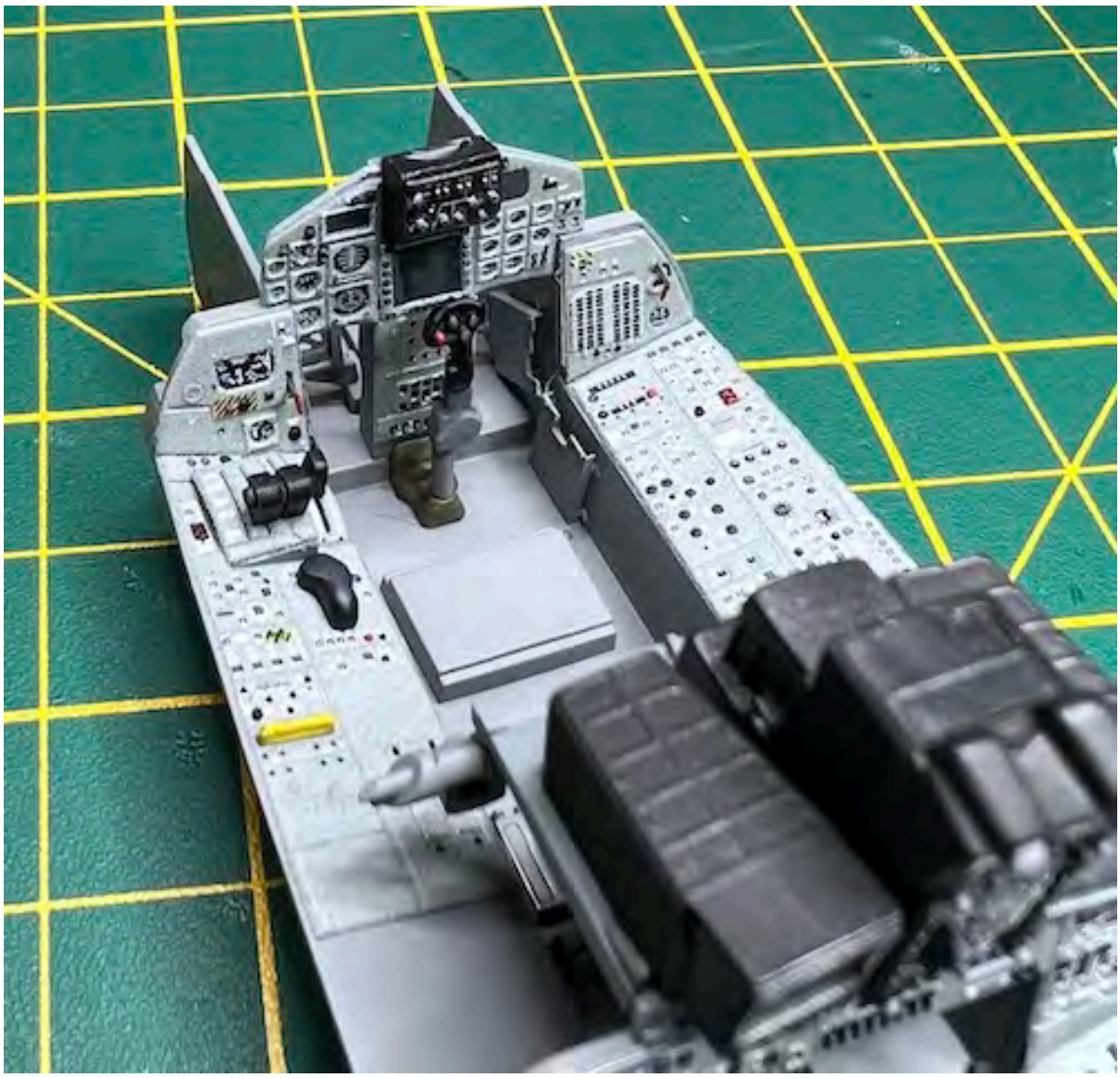

Late Gr.4 TARDIS Nav configuration


The Nav MFD layout - note the wires out of the sides and backs

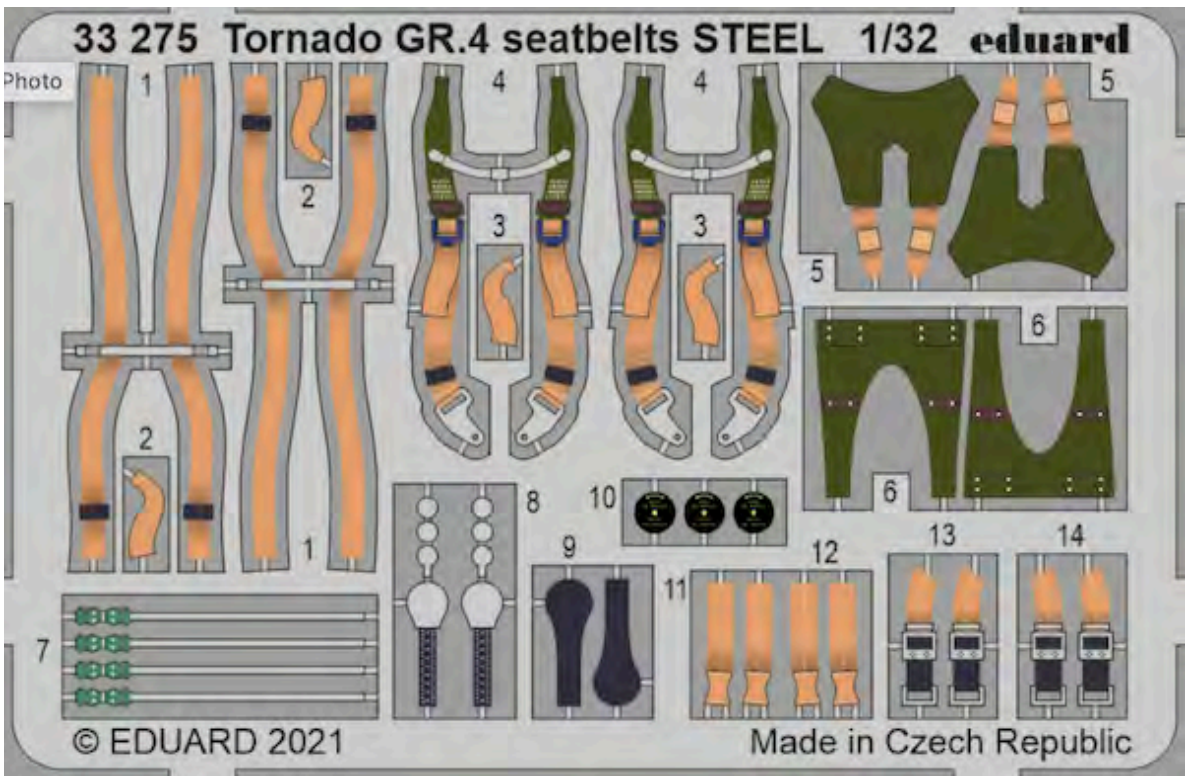

The cockpit with the 3D declas - I will add the wiring to the MFDs later

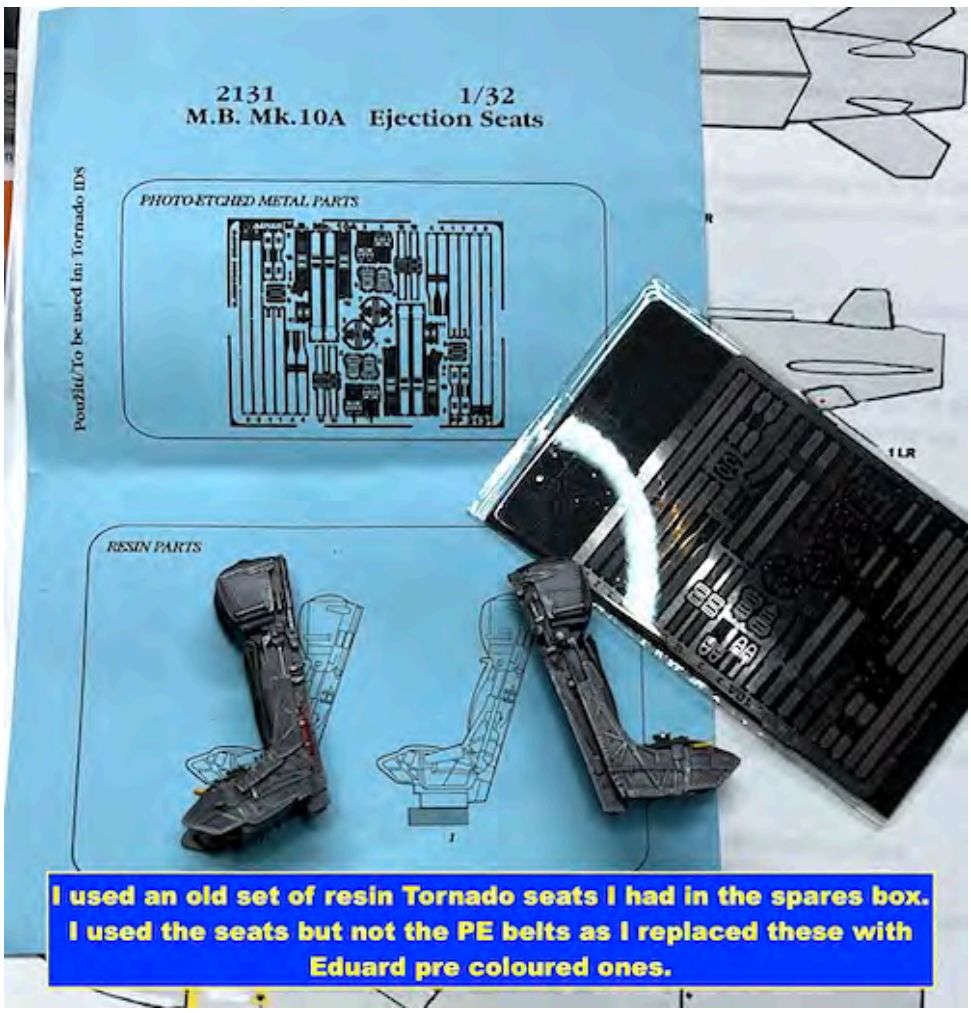

TARDIS configuration

The kit seats are again quite nice and to see how they turn out from the box have a look at Chris's build. I did originally plan on using these but I found a set of resin seats in the spares box that I had bought for the Revell kit so I decided to use these but rather than use the PE seatbelts I opted to use eduard's new coloured Steel PE belts. I'm reasonably happy with the end result here.

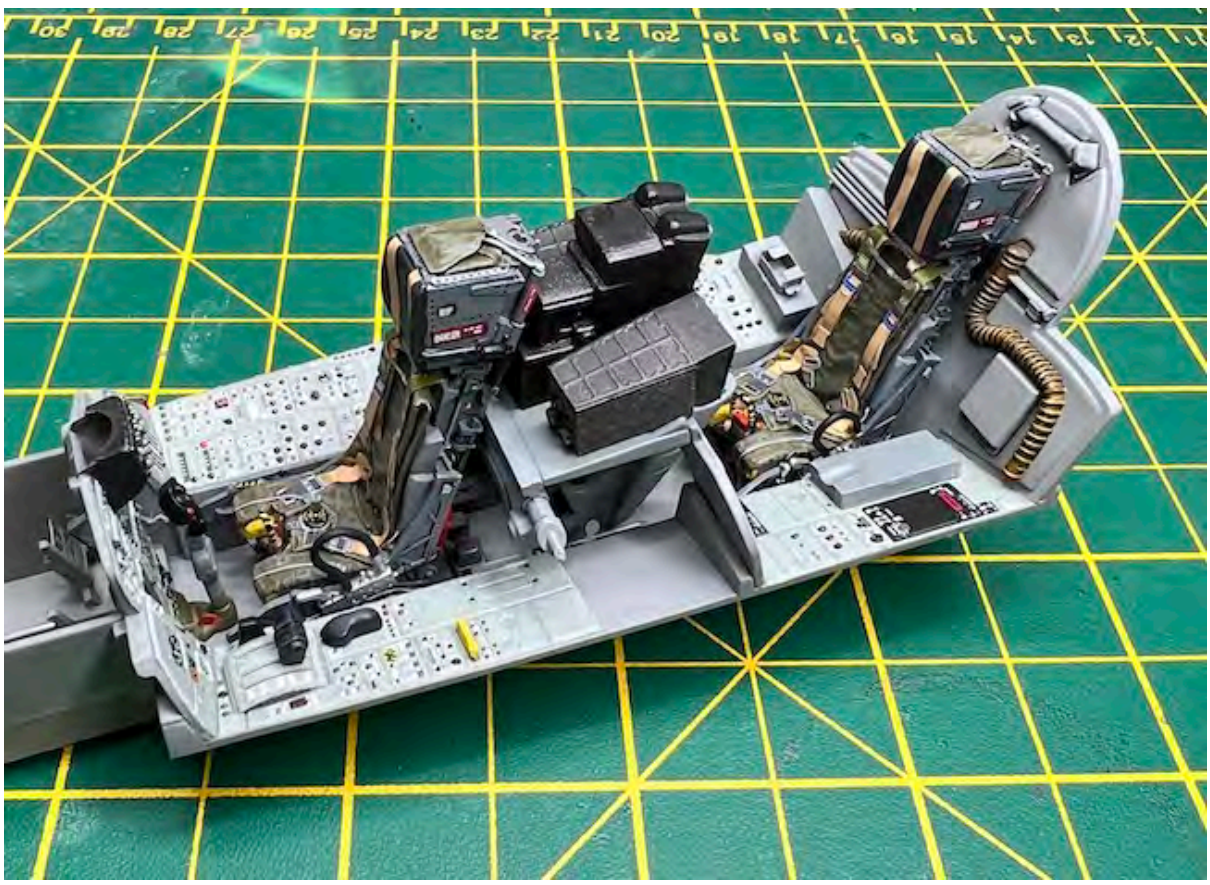



DANGER

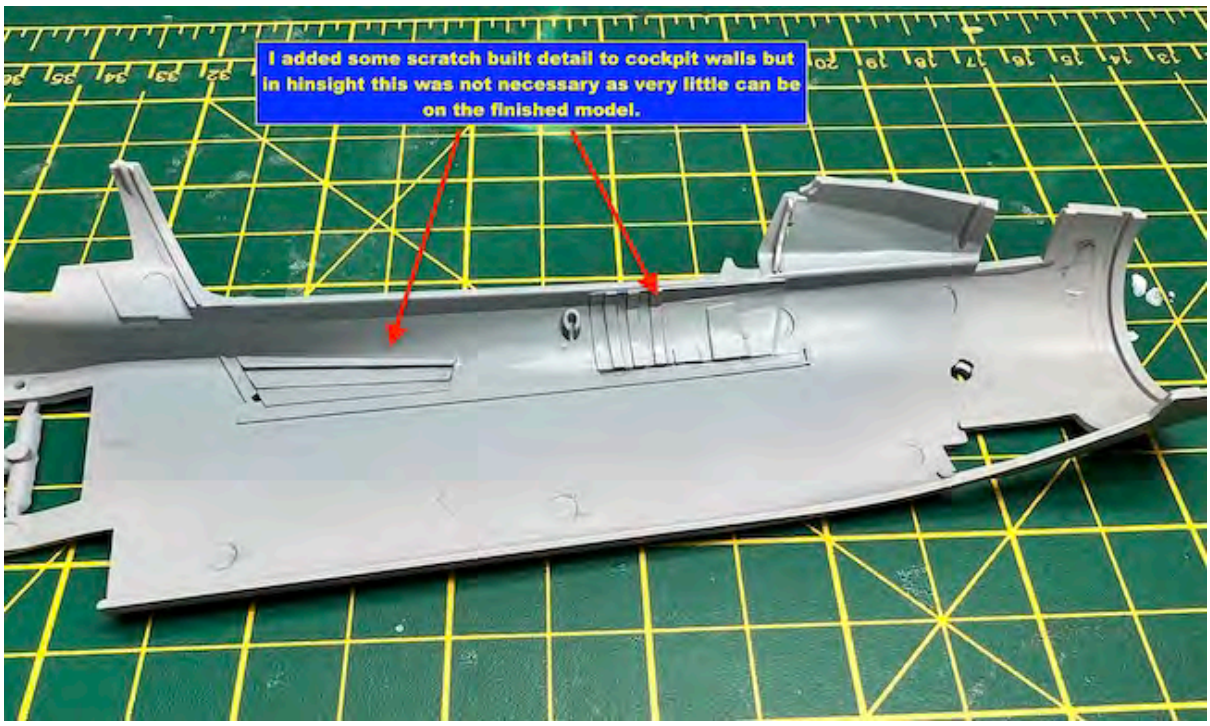

33 275 Tornado GR.4 seatbelts STEEL 1/32 eduard
Photo
© EDUARD 2021
Made in Czech Republic

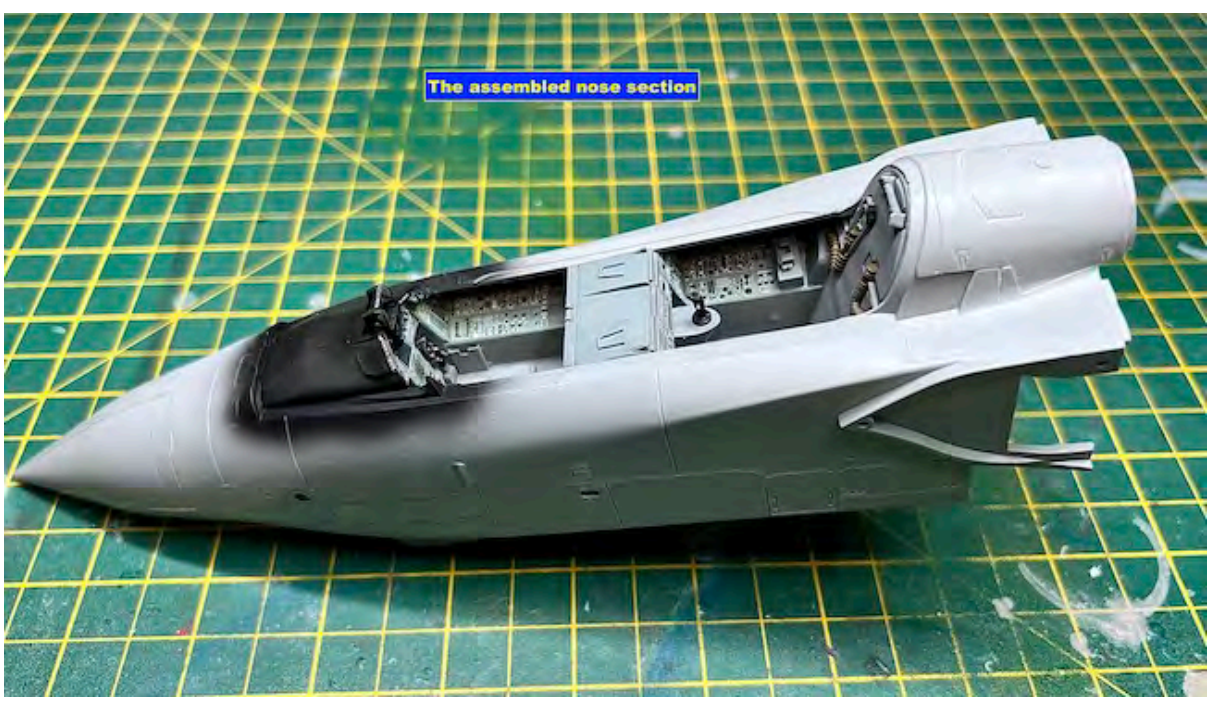

2131
M.B. Mk.10A
1/32
Ejection Seats
PHOTO-ETCHED METAL PARTS
RESIN PARTS
Použití/To be used in: Tornado IDS
I used an old set of resin Tornado seats I had in the spares box. I used the seats but not the PE belts as I replaced these with Eduard pre coloured ones.


The resin belts with coloured belts from Eduard

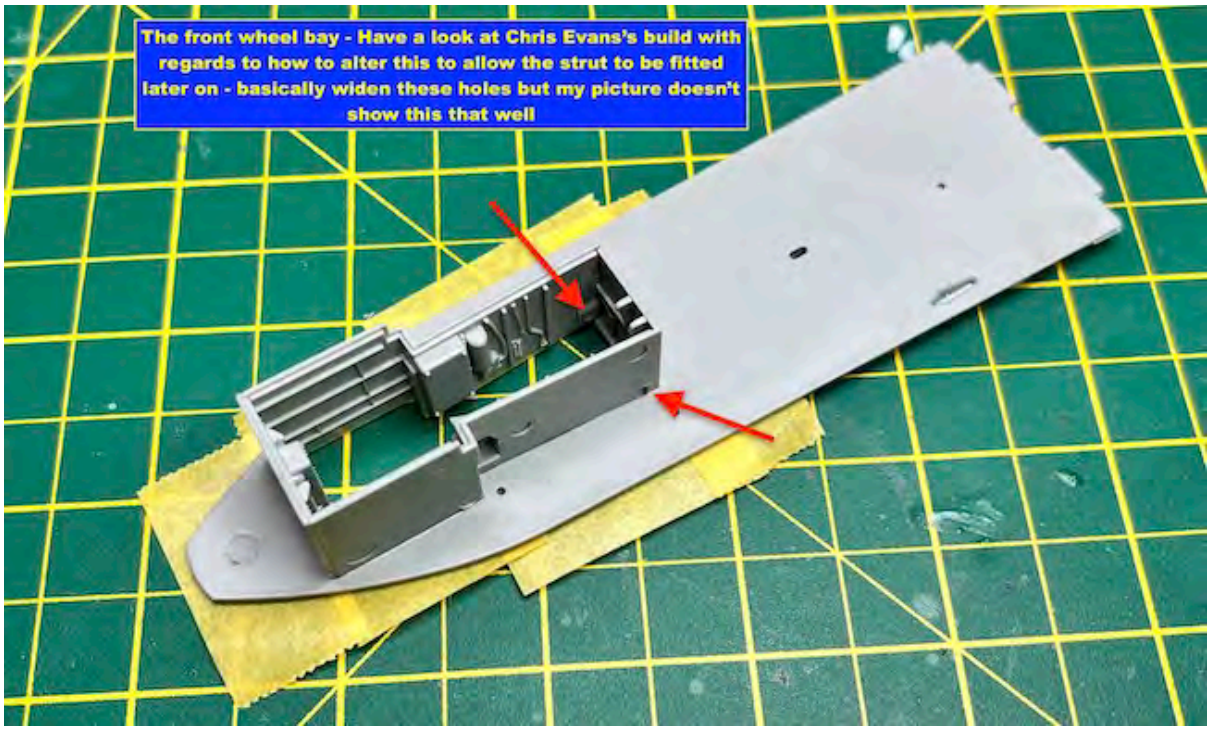


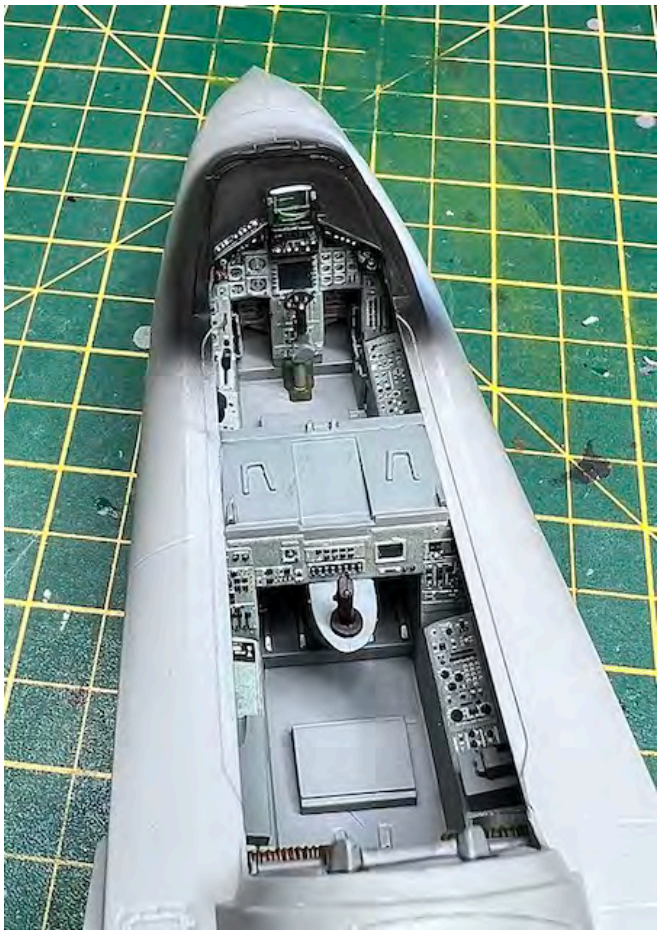
The interior walls of the cockpit are plain so I decided to add some evergreen plastic to give some detail to these areas with the cockpit being open. In hindsight this wasn't needed as you can barely see any of this detail on the finished model.



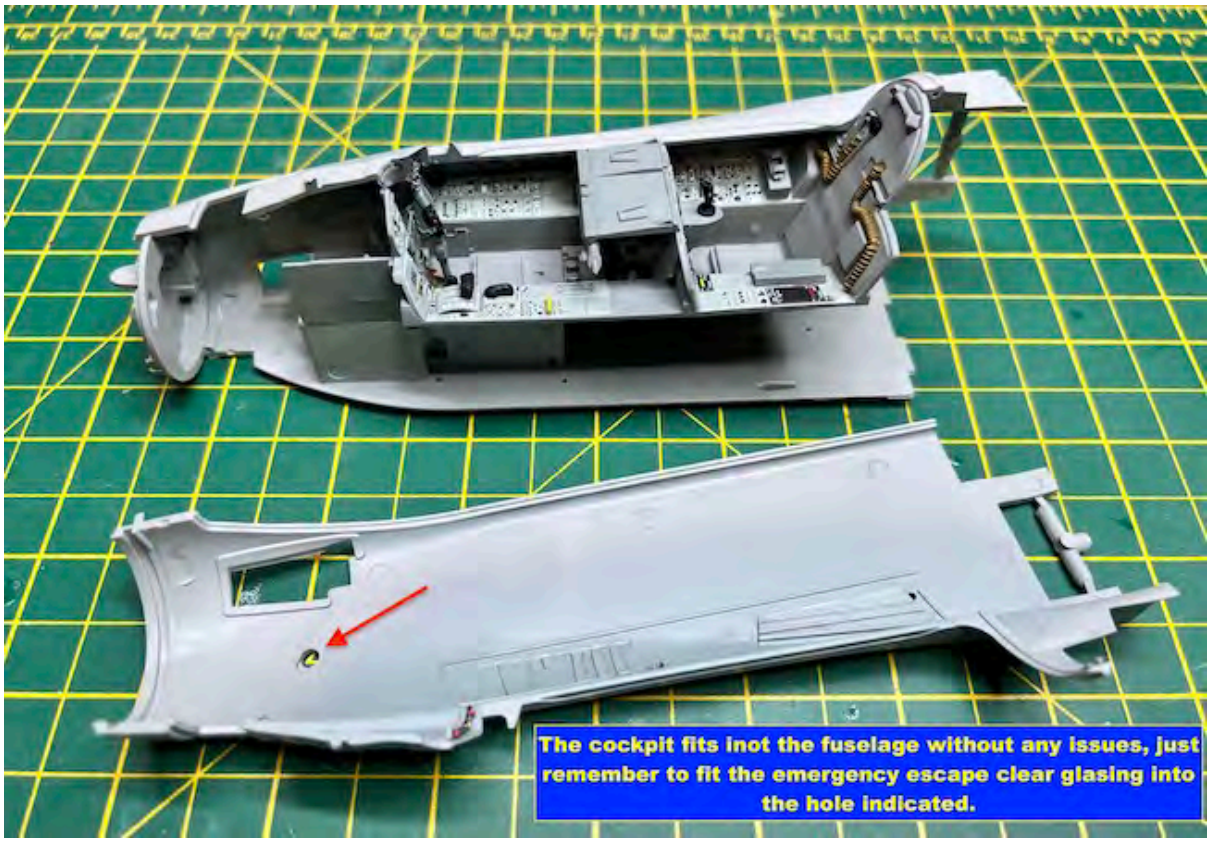


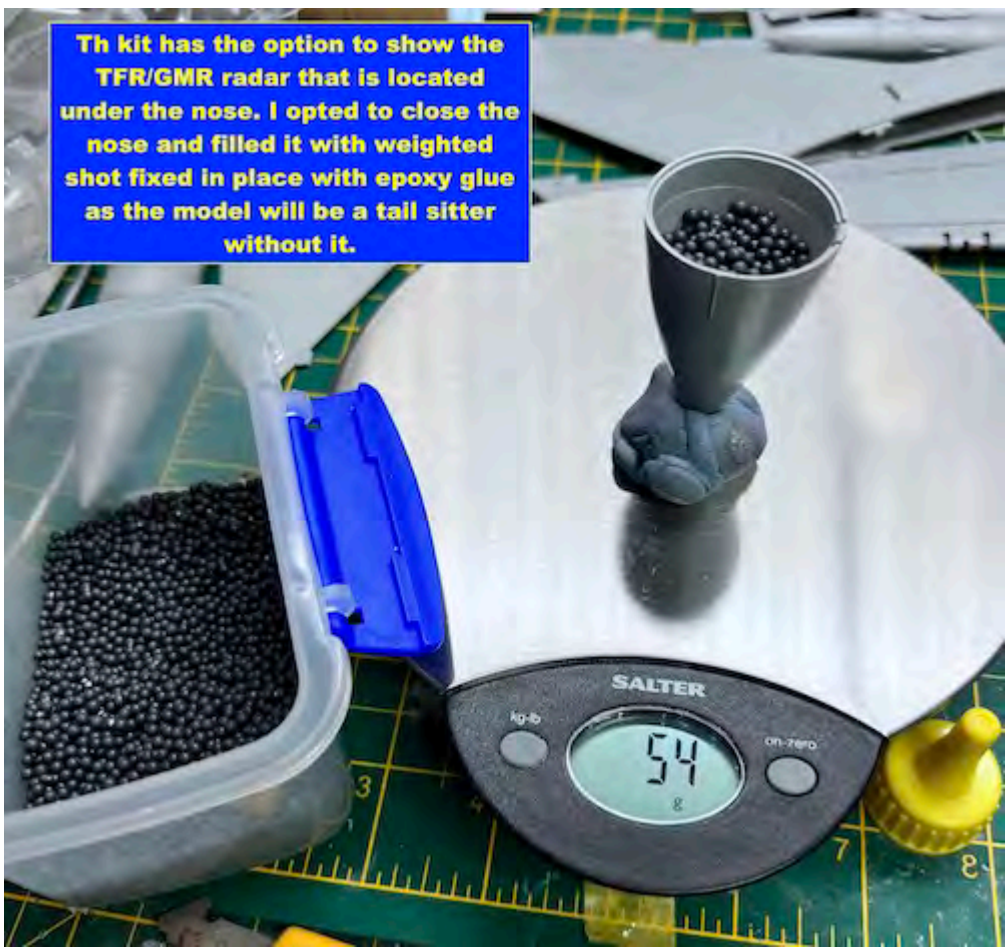
The nose wheel bay can then be assembled. The instructions tell you to fit the nose wheel strut at this point but if you do it is liable to get damaged so if you enlarge the holes for the struts to fit into you fit them later (See Chris Evans's build for a better description / picture of this process). The cockpit can then be fitted in the front fuselage.





If you plan to have to model with its undercarriage down (the only way shown in the instructions) you will have to add weight to the nose to stop it being a tail sitter. The kit has the option to display the nose radar with the nose cone open. If you take this option you will have to put the weight around the cockpit or if you



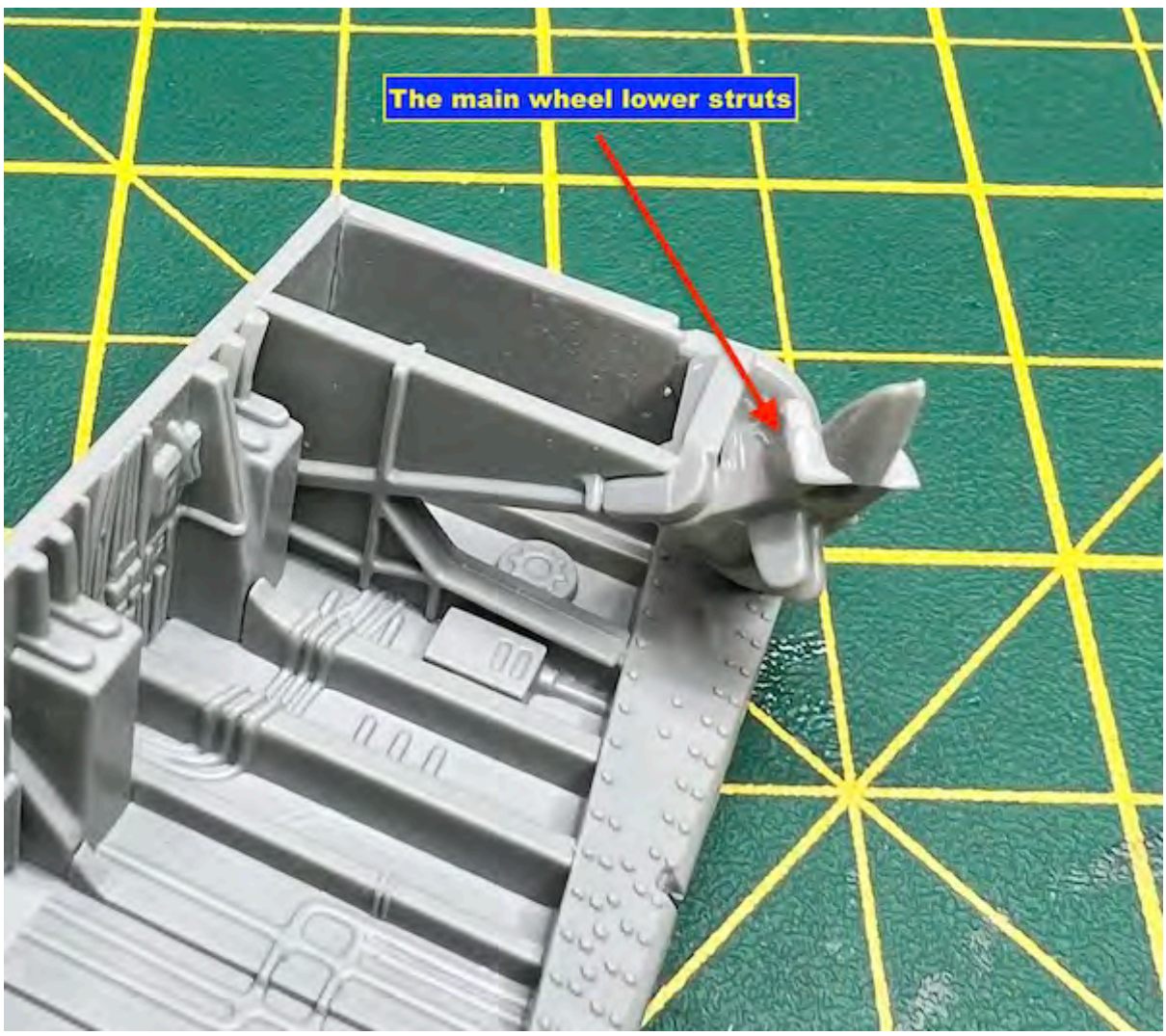


have the nose closed like me you can just seal the weight in the nose cone itself. I also fitted the two under nose sensors (IR and Laser) at this stage – just be careful

how close these fit to the front undercarriage doors as there needs to be a small gap for the doors to fit correctly.

The next stage of the build was to construct the rear fuselage and wing assembly. This started with the main wheel bays. The bays themselves are quite straightforward but the instructions aren't very clear about how to locate the main strut bases. It took me a little time to figure this out but hopefully the pictures will show how they position in the bay. I didn't add the lower section of the struts at this stage as they would be prone to being damaged as I handled the model during the build process. The bays were painted up using a very light grey as research showed these aren't actually white, even though they look white. The details were picked out using Vallejo acrylic paints and a Tamiya light grey panel wash was used to bring out the details.


The main wheel bays


The main wheel lower struts

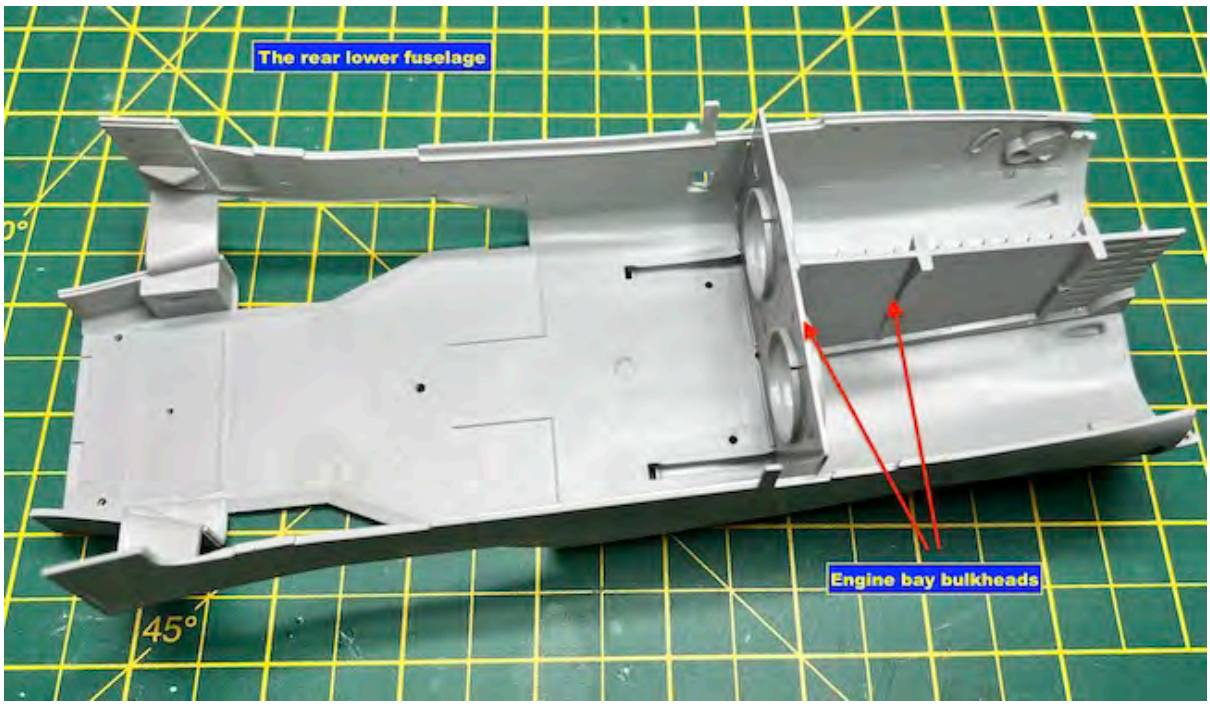

The main wheel lower struts

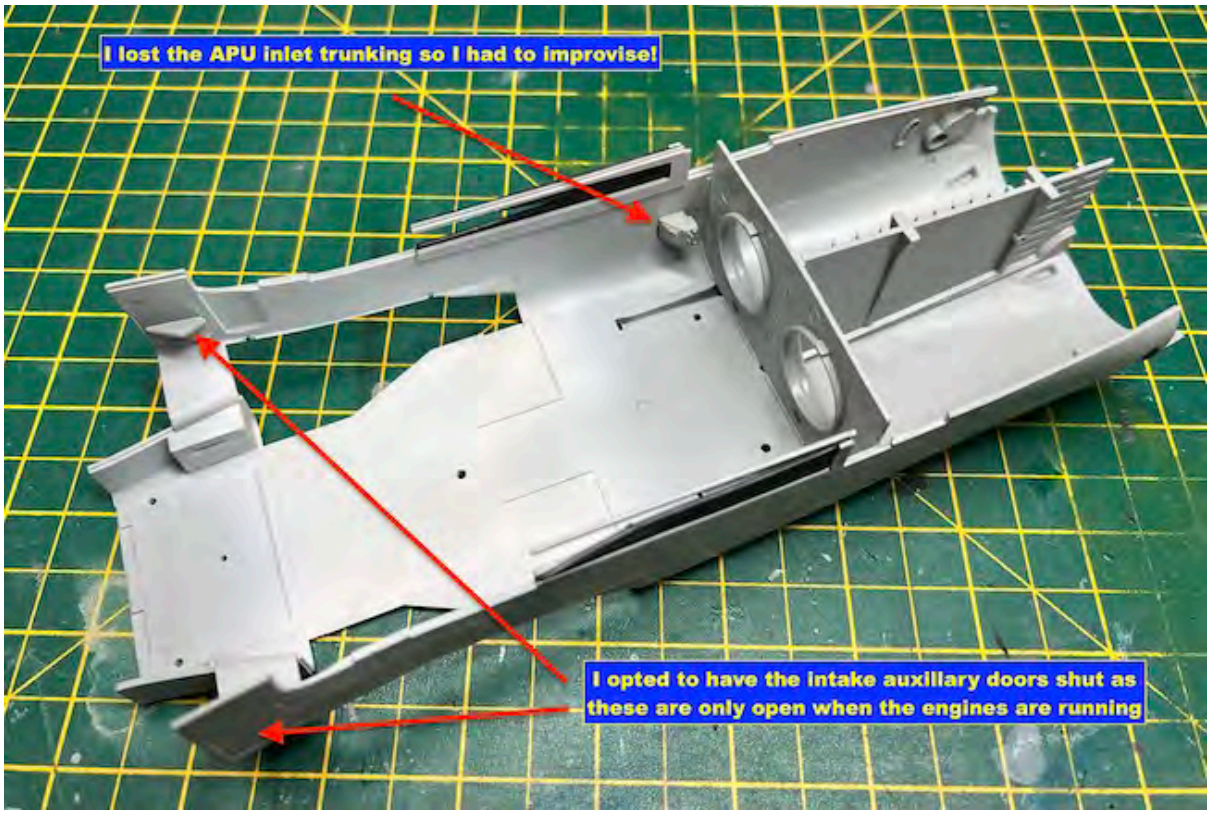

The main wheel lower struts

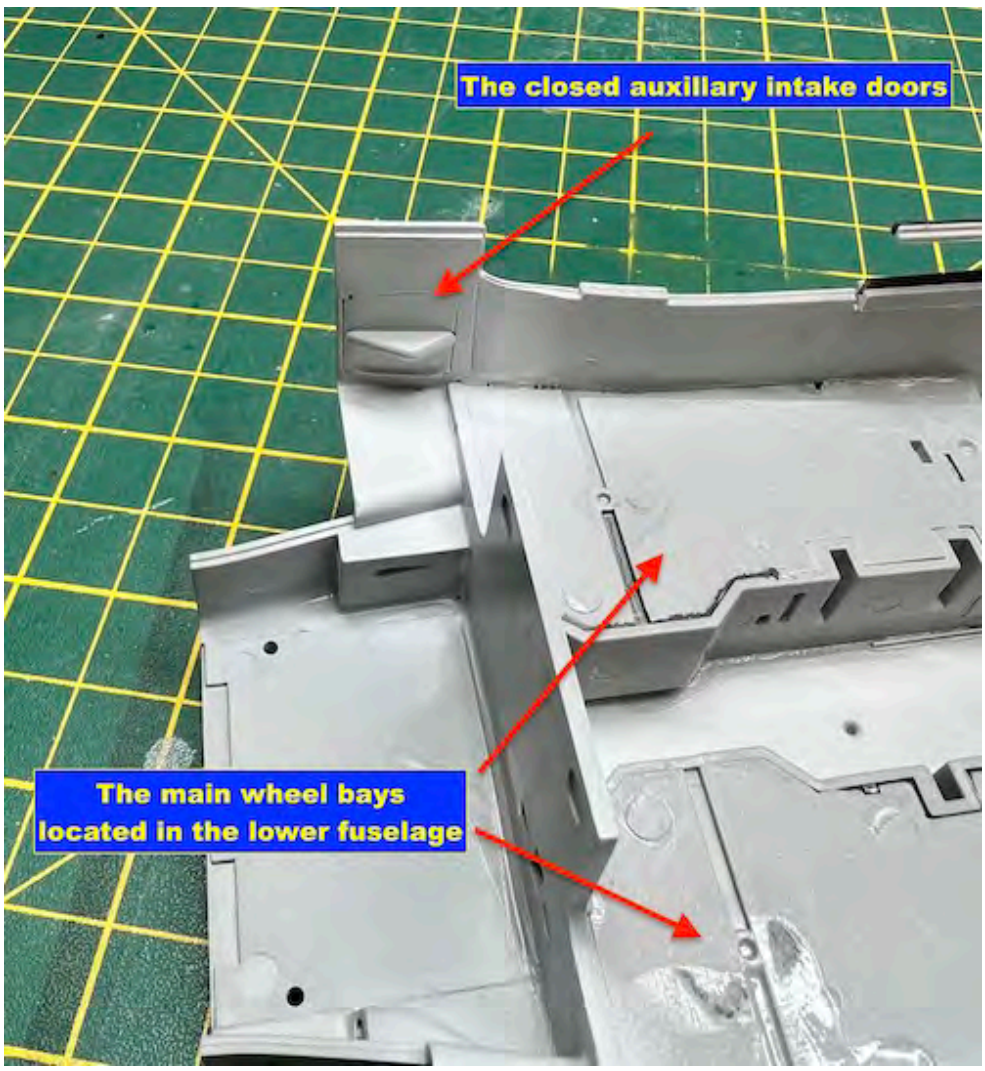
The rear engine bay bulkheads were now added. Take care to get these in the correct location as this is critical when attaching the upper rear fuselage section. The wing seals that allow the wings to enter the fuselage when sweeping are make from a rubber material. I was quite sceptical of this at first due to my worry that glue wouldn't react with it. I need not have worried as Tamiya glue works well between this rubber material and the kit plastic. Additionally, the seals are held in place by a plastic back plate which holds them firmly in position.

The next part I looked at were the two auxiliary engine intake doors located on each side of the fuselage. This kit has the option to have these doors either open of closed. Research (and talking to some of my colleagues who have flown Tornados) informed me that these were only open when the engines were running and when in flight only in the lower speed envelopes. As my model would be shown in a powered down pose I opted to close them up. The wheel bays were then positioned into the lower fuselage – take care here as the inner intake trunking sits on these and the wing sweep pivots are attached to the intakes – if you position any of these assemblies incorrectly the wings won't fit correctly. Talking of the intakes, I found these to be the most frustrating part of the build. They are narrow and long so eliminating the interior seam proved to be very difficult. I got rid of the majority of the seams but some were just too difficult to get to. Fortunately, I

can now say in hindsight that on the finished model you can barely see up the intakes so I needn't have spent so much time on these.



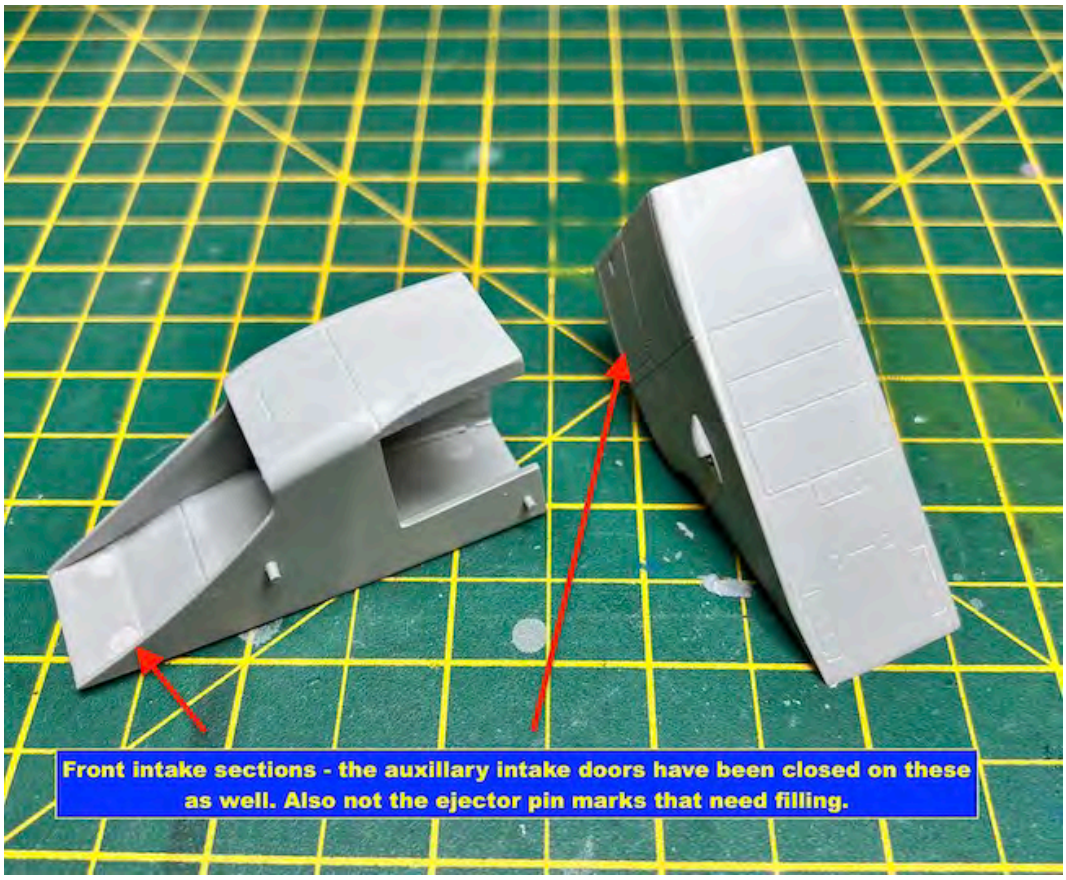

I lost the APU inlet trunking so I had to improvise!
I opted to have the intake auxillary doors shut as these are only open when the engines are running

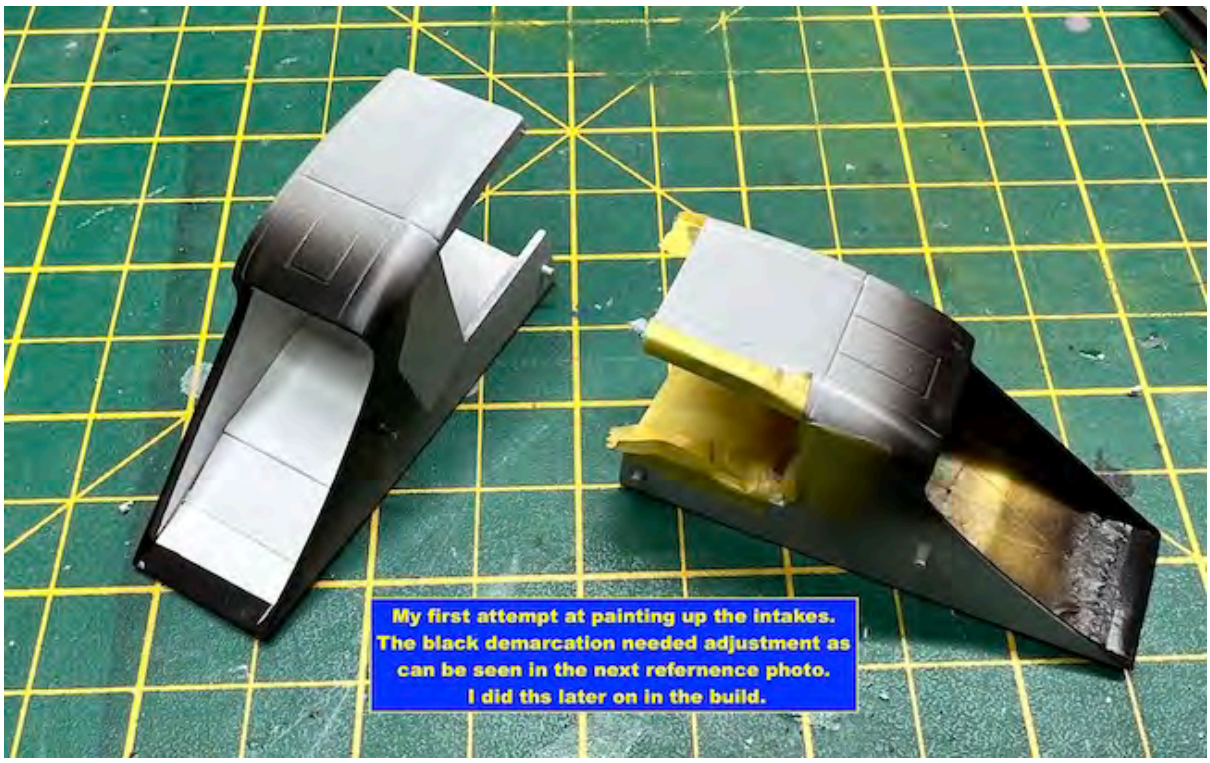

The closed auxillary intake doors
The main wheel bays located in the lower fuselage


The intake trunking

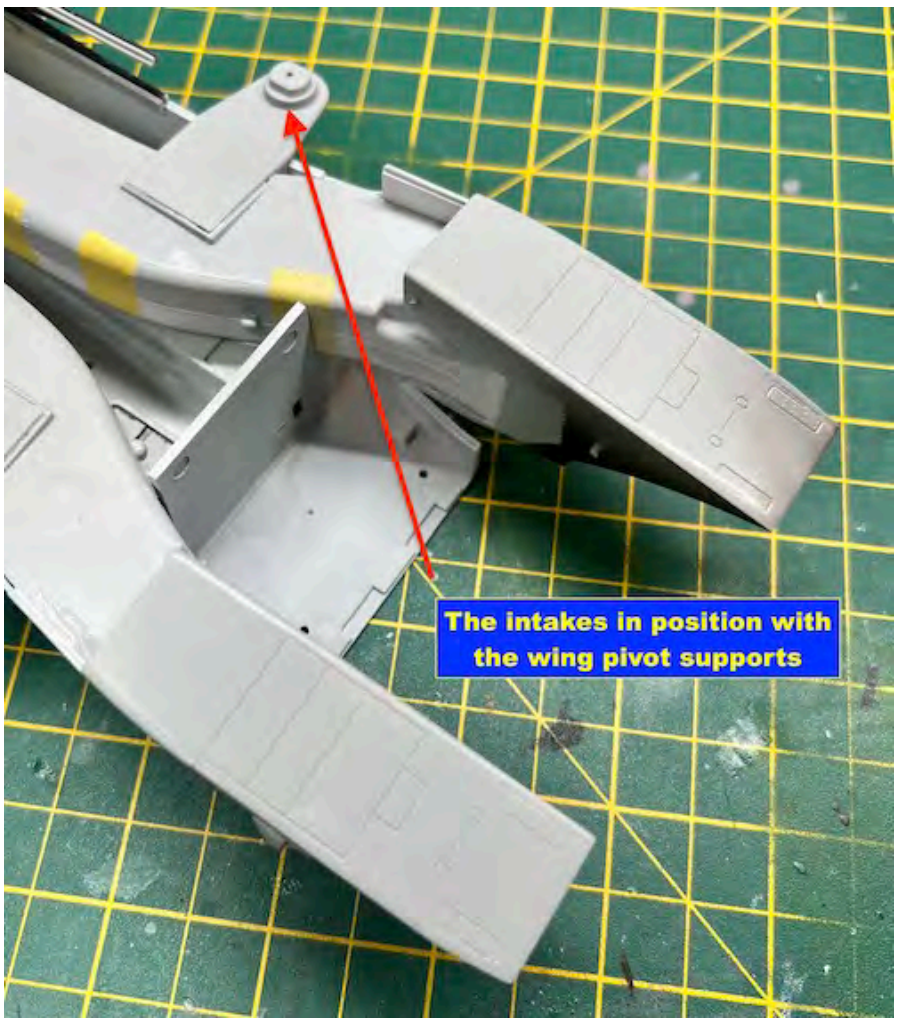

Eliminating the seams along the join of the two halves was very time consuming but in hindsight very little can be seen up the intakes on the finished model so I wouldn't spend to much time on this on any future build.

The front section of the intakes again need care in their assembly and painting. I initially got the colour demarcation wrong as shown in the initial photos below. It should be as shown on the reference photos which I corrected later.

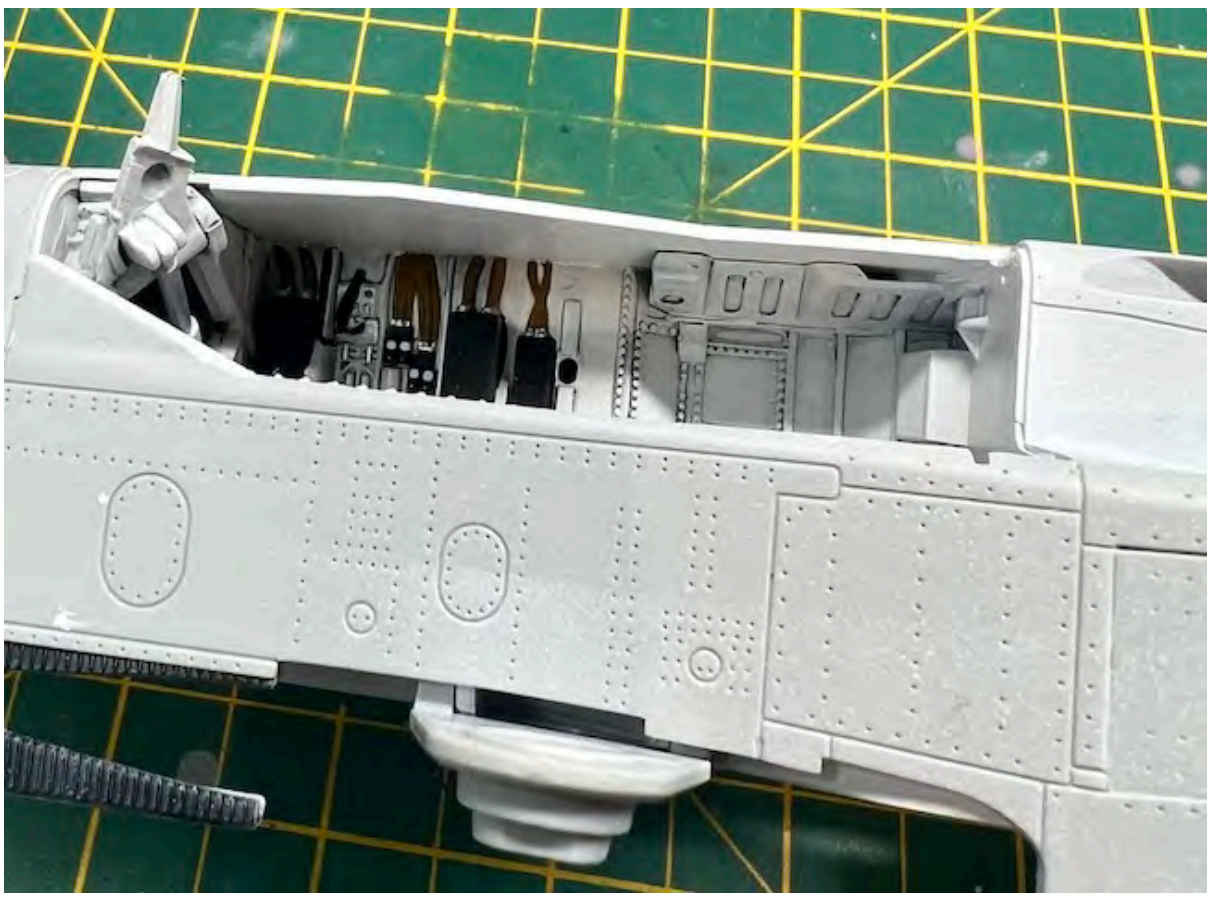





The correct intake markings
DANGER
AIR INTAKE
KEEP CLEAR


The intakes in position with
the wing pivot supports

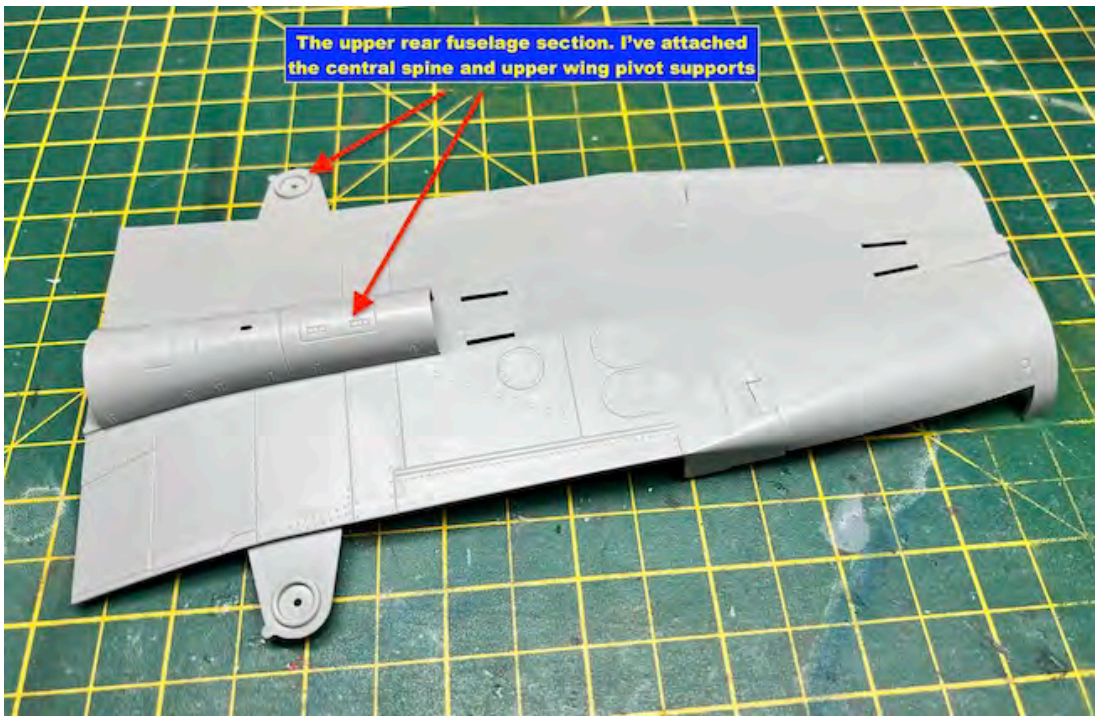

Main wheel bay



The kit has the option for either open or closed airbrakes…

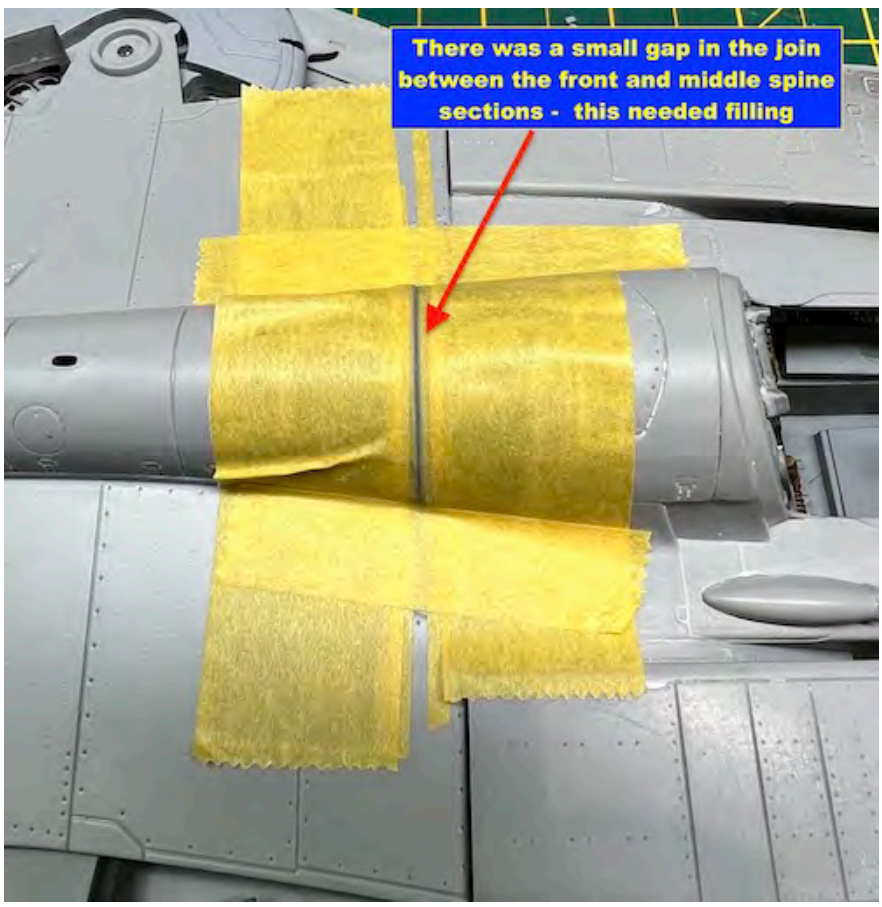
I was again quite sceptical about how well they would fit in the closed position as this was my preferred choice but the fit wasn't bad with just some minor sanding required to get it to and acceptable standard. I then opted to fit the central spine section as it was easier to clamp in

position to the upper fuselage section before this was attached to the lower section.



The wing had to be assembled next before the rear fuselage sections are joined together. Internally the wings have a mechanism that allows the pylons to swing as the wing sweeps back and forth to ensure that they are always correctly orientated. I needed to cut away some of the mechanism in order to get the wing halves to join correctly – see the pictures for this. I also painted up the inner part of the wing's Dark Sea Grey – I'll explain why further on in the build.

The front fuselage was attached to the rear section and this was remarkably painless with just some superglue used as a filler between the two front spine sections.

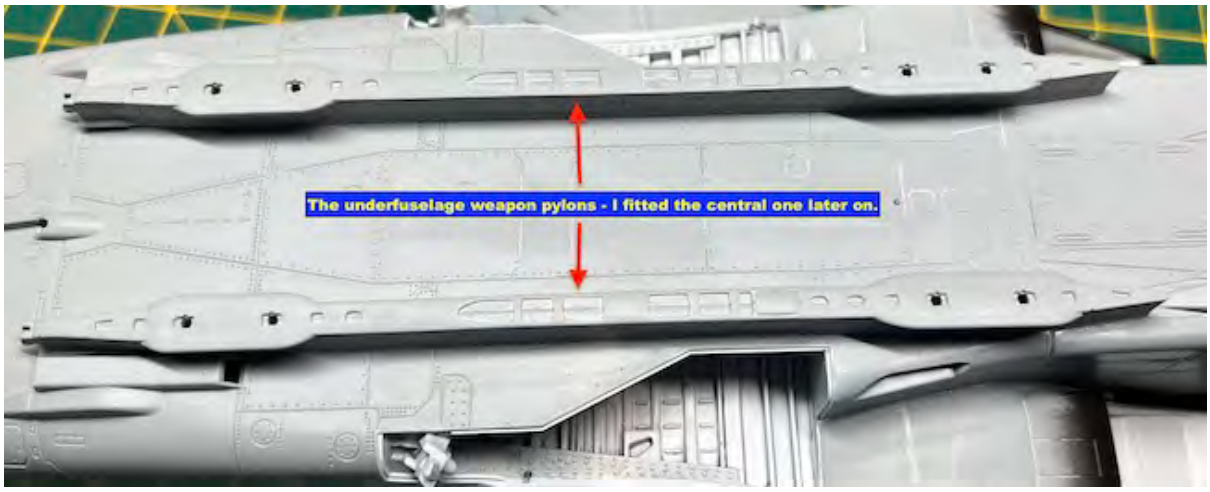


The next part is the critical part of the build and for some reason I have lost the pictures I took of it – I don't know what happened here but I will do my best to describe the process I used to attach the wings.

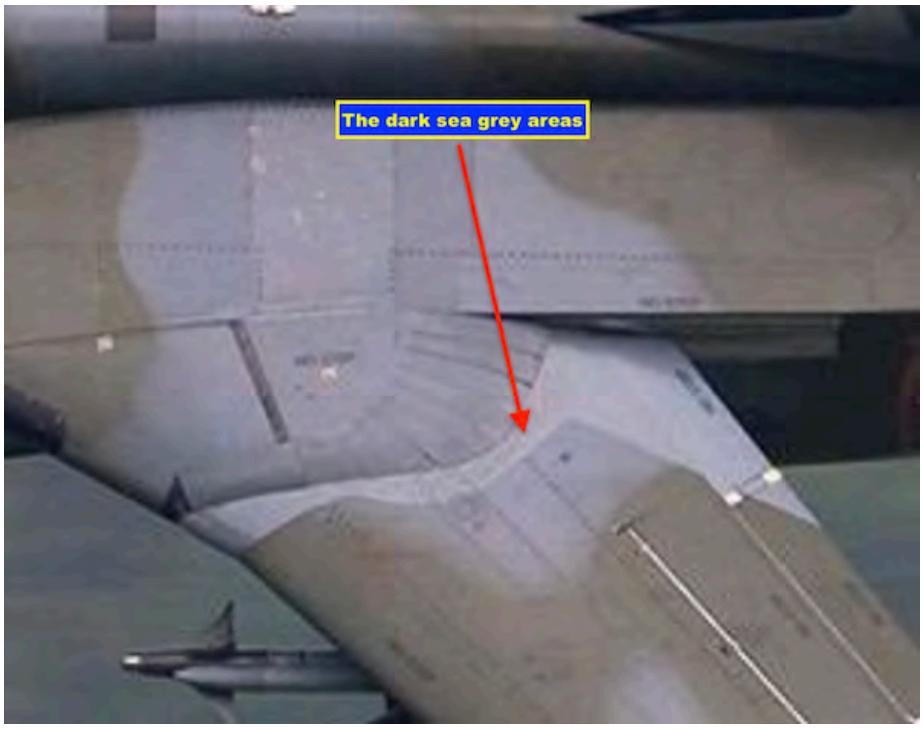
Firstly, I wanted to have the flaps and slats deployed so this effectively meant I needed to leave the wings in the fully swept forward position. There was no requirement then to allow them to sweep so I decided to glue then in position. This would also ensure that they 'drooped' at the correct angle and also the 'droop' on each wing was identical. To do this I position the wings in place and liberally applied Tamiya White Label glue into the teeth that interconnect allowing the wings to sweep together. The advantage of using this glue is that it's thick and slow drying so I could then attach the upper rear fuselage section and screw down the wings using the provided screws through pivot points. The upper and lower fuselage were glued together by letting Tamiya thin glue capillary along the join. The model was then placed on a flat surface and the wings were adjusted until their droop angle was identical and they were then held in this position by the use of paint pots, etc to ensure they didn't move whilst the glue set. I could do this as the glue on the teeth had not set due to its slow drying properties. More glue was

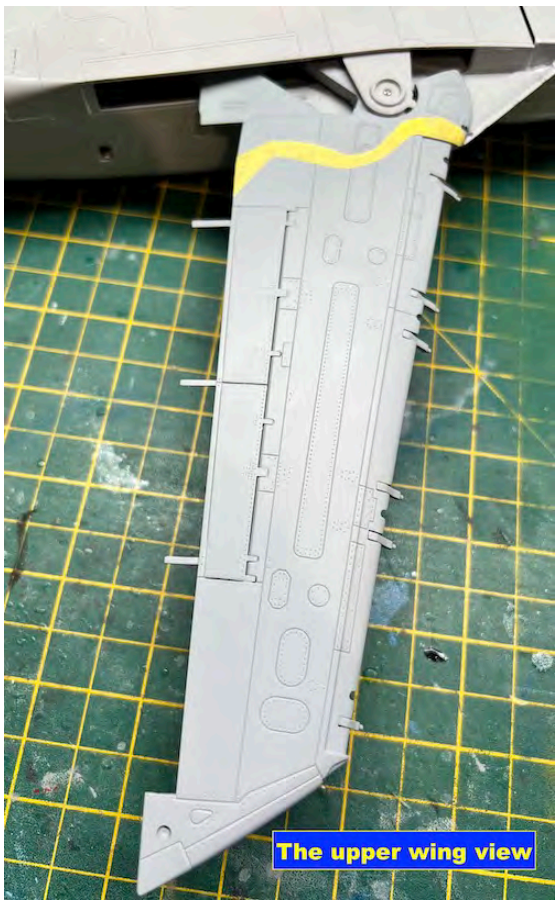
then liberally added to the pivot points and then everything was left for 24 hours to fully dry.

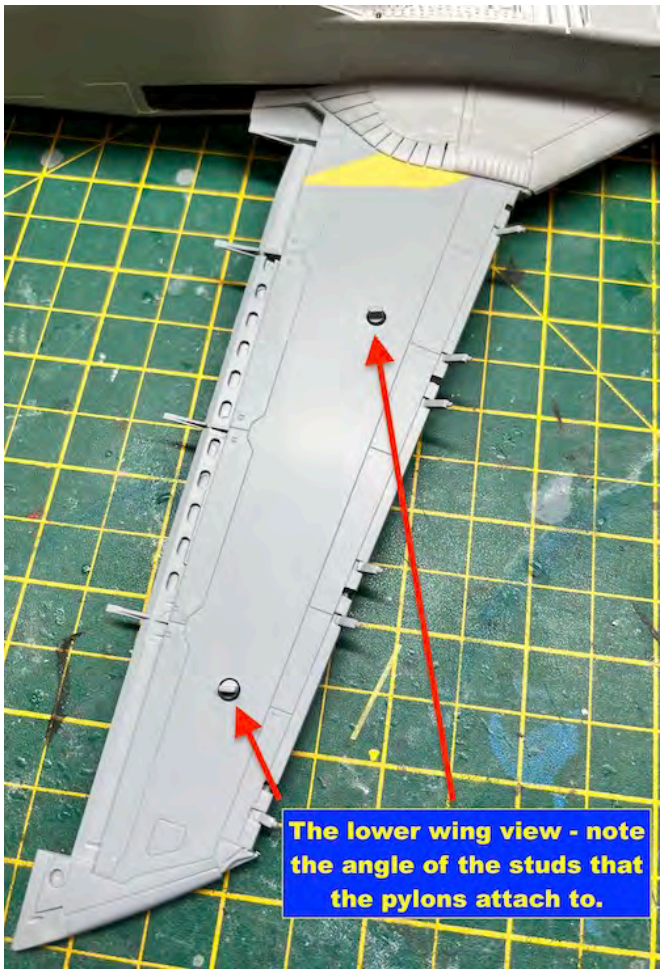
A good tip here is to attach the lower fuselage pylons as they let the model sit flat whilst the wing glue is allowed to dry.



Before adding the gloves that cover wing pivots I need to mask off the Dark Sea Grey area seen on the reference photos. I had previously sprayed the inner section of the wings before I attached them to the fuselage so I could now put masking tape on this area and use the wing gloves as temples to cut this masking tape – the pictures show this better than I can explain it!!



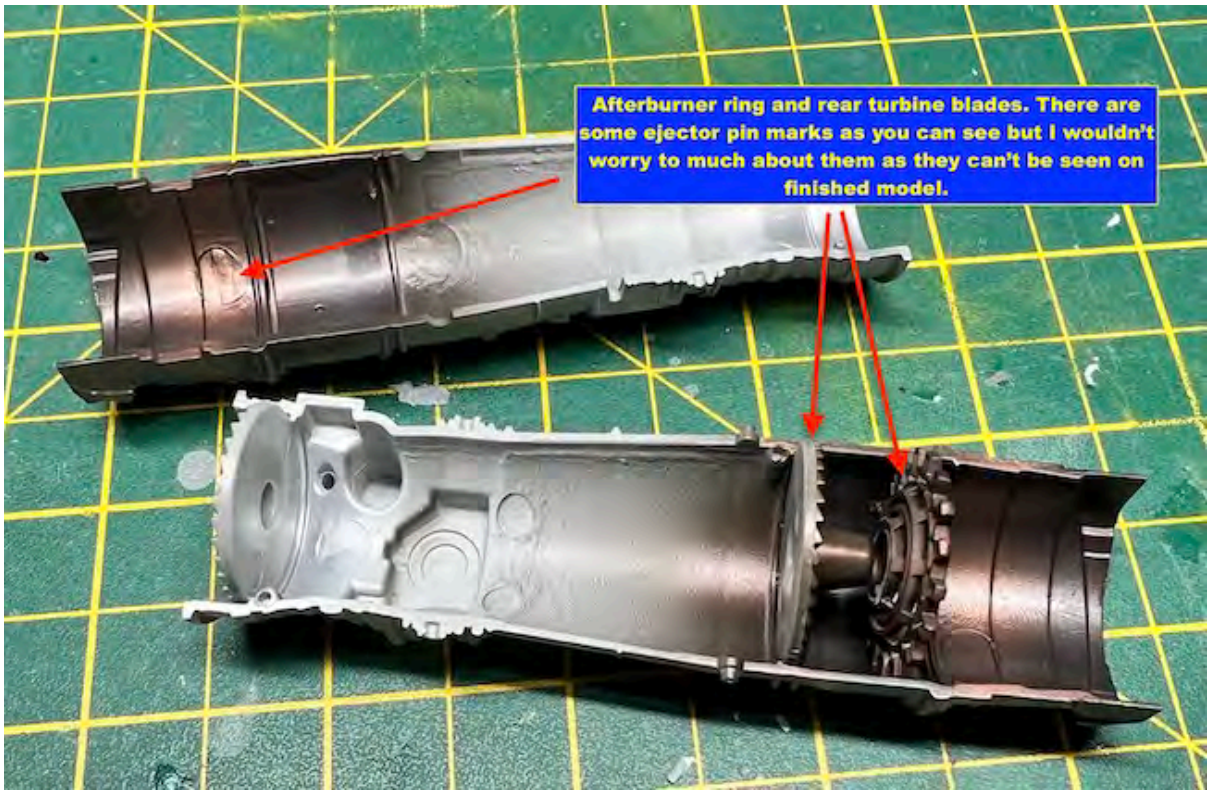



The lower wing view - note the angle of the studs that the pylons attach to.


The trailing edge of wing fits into the rubber seal

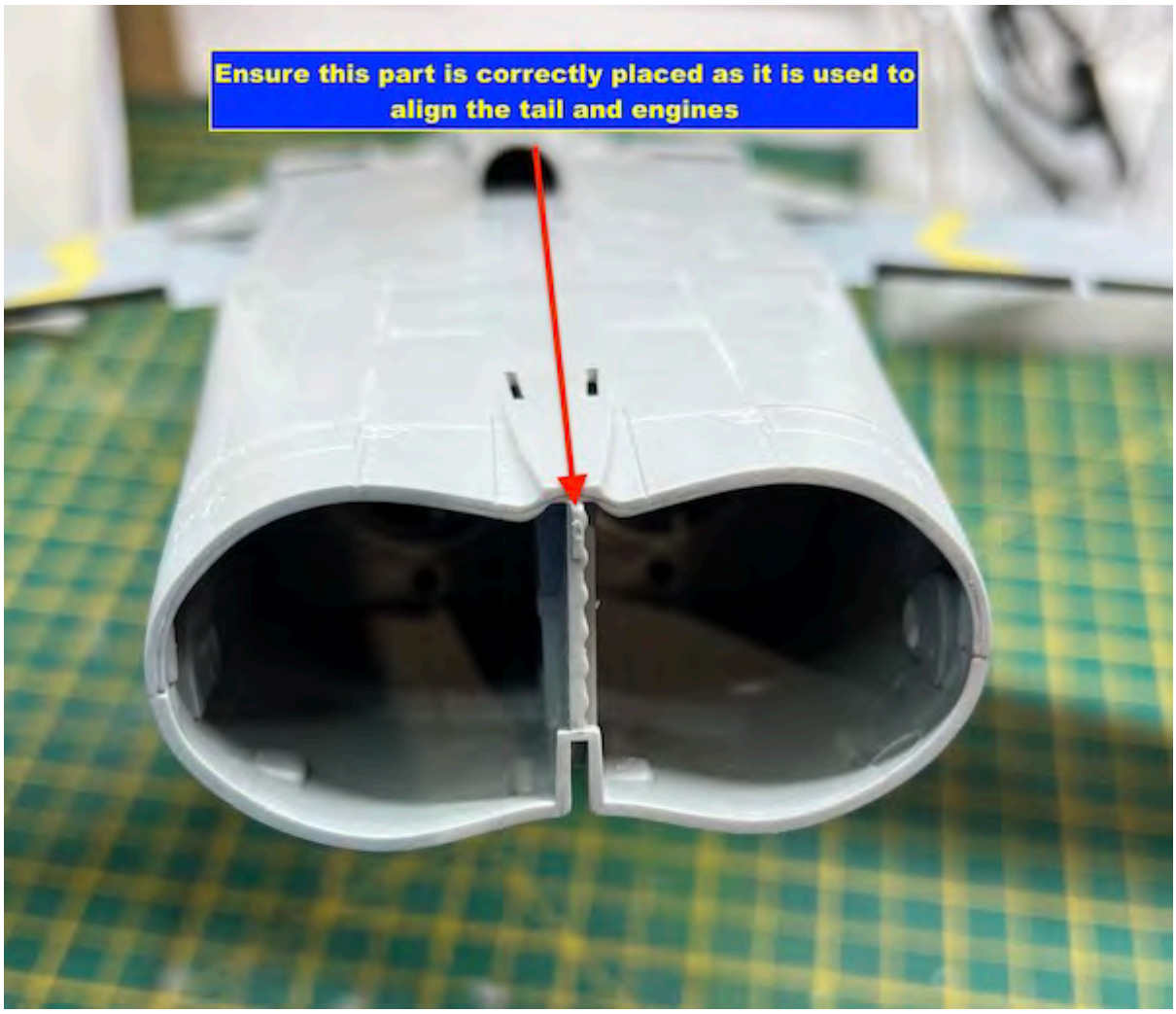
I next looked at the engines…

In theory they have been designed to be removable so they can be moved between the model and the stands that are provided in the kit. I'm not sure about this especially when the thrust reverses buckets are in the closed position but happy to be proved wrong! Anyway, my plan was to permanently place them in the fuselage and fitting them did prove to be very fiddly so I took drastic measures to make my life easier. I chopped up the completed engines so that I could remove the unseen centre section. This allowed me to fit the front compressor stage onto the intake trunking and the rear section could be slotted in later on in the build. Only having to position the rear section of the engine against the rear positioning ring proved to be a lot easier than having to position the whole engine into the bay.


Afterburner ring and rear turbine blades. There are some ejector pin marks as you can see but I wouldn't worry to much about them as they can't be seen on finished model.


Thrust reverser mechanisms

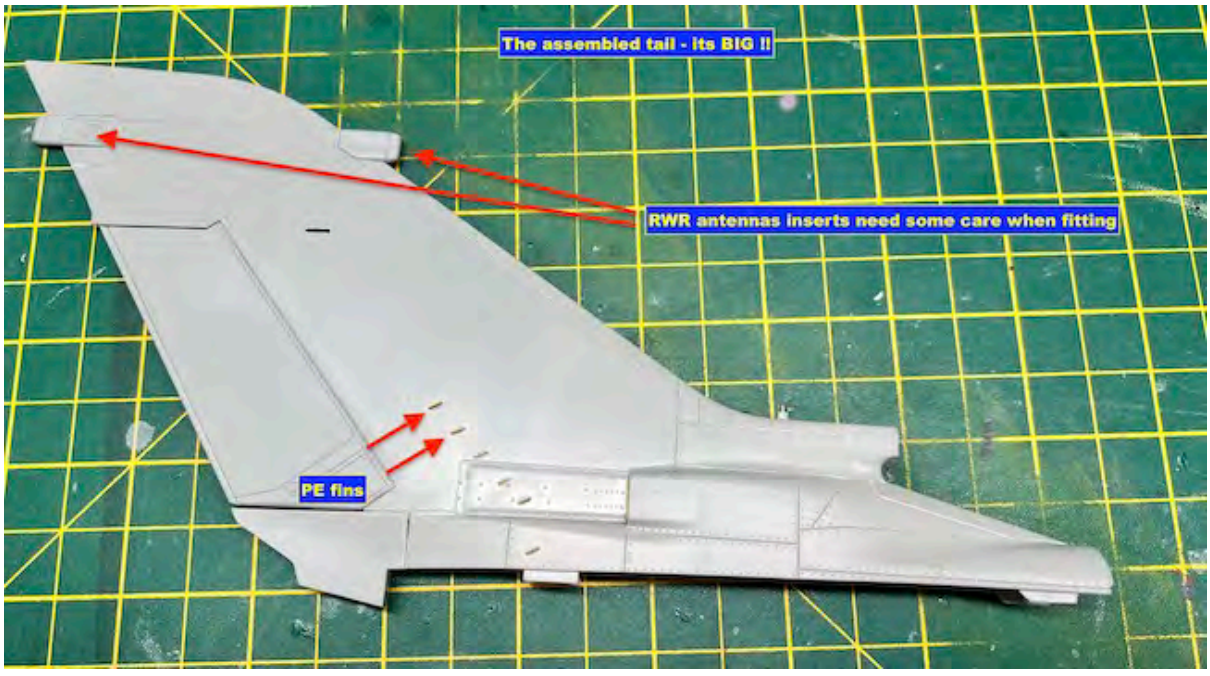

Chopping up the engines !!!
Unsed part
Used parts


Ensure this part is correctly placed as it is used to align the tail and engines


Engine locating ring ?

The tail was assembled next…

It has been designed as a modular assembly so that the antennae for different variants can be fitted as required. The only issue I had with this is the RWR antennae I used, mine left some quite big gaps that needed filling. There are some very nice PE fins that really look good on it. The fit of the tail onto the rear fuselage is ok but I recommend gluing the front section to the central spine first and then letting this joint dry. Then push down the rear section of the tail onto the rear fuselage and capillary glue along the joint – this will ensure a gap-free joint.



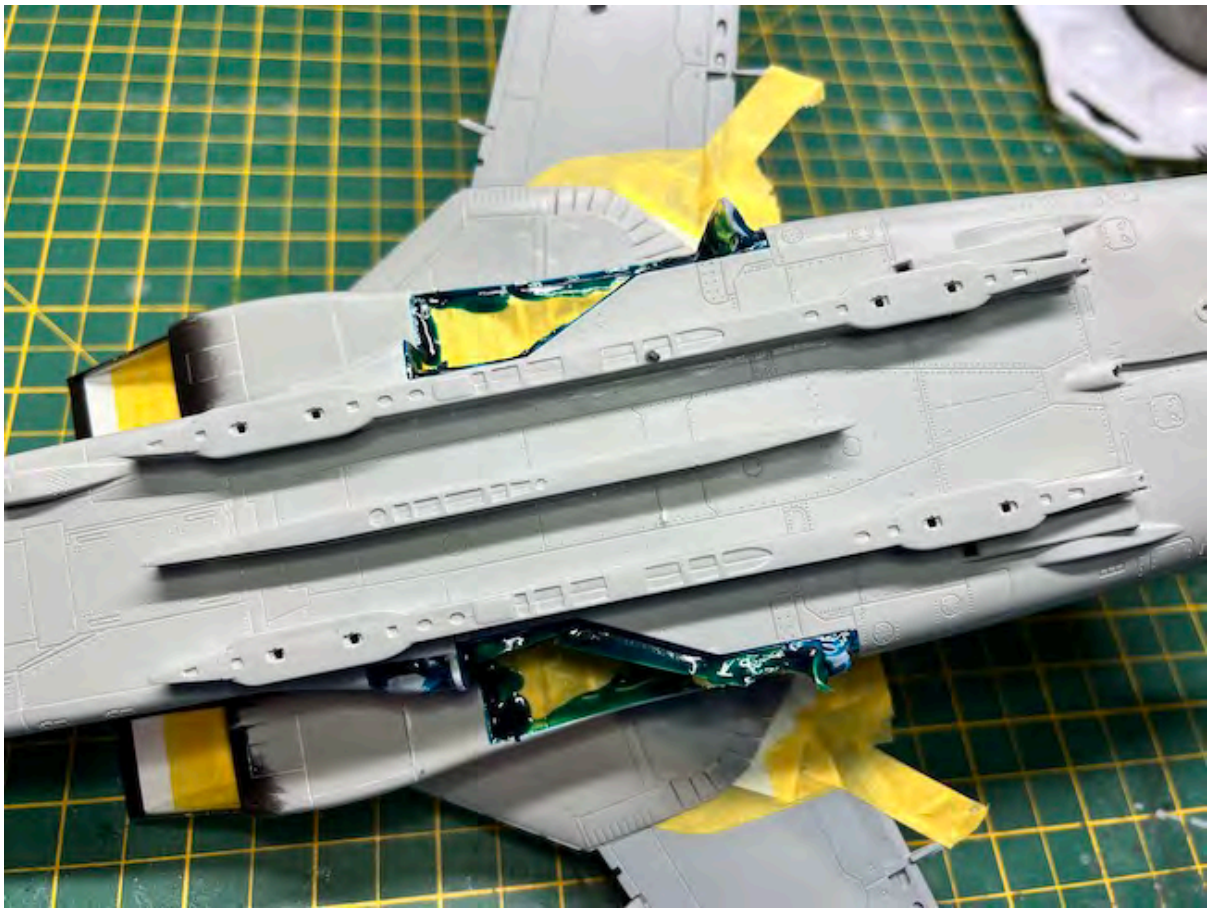
The kit has the option for the AAR probe to be either deployed or retracted. I wanted my finished model to look like it was sitting on the flight line and the probes are generally retracted in this case so retracted it was. The fit of the parts is good.

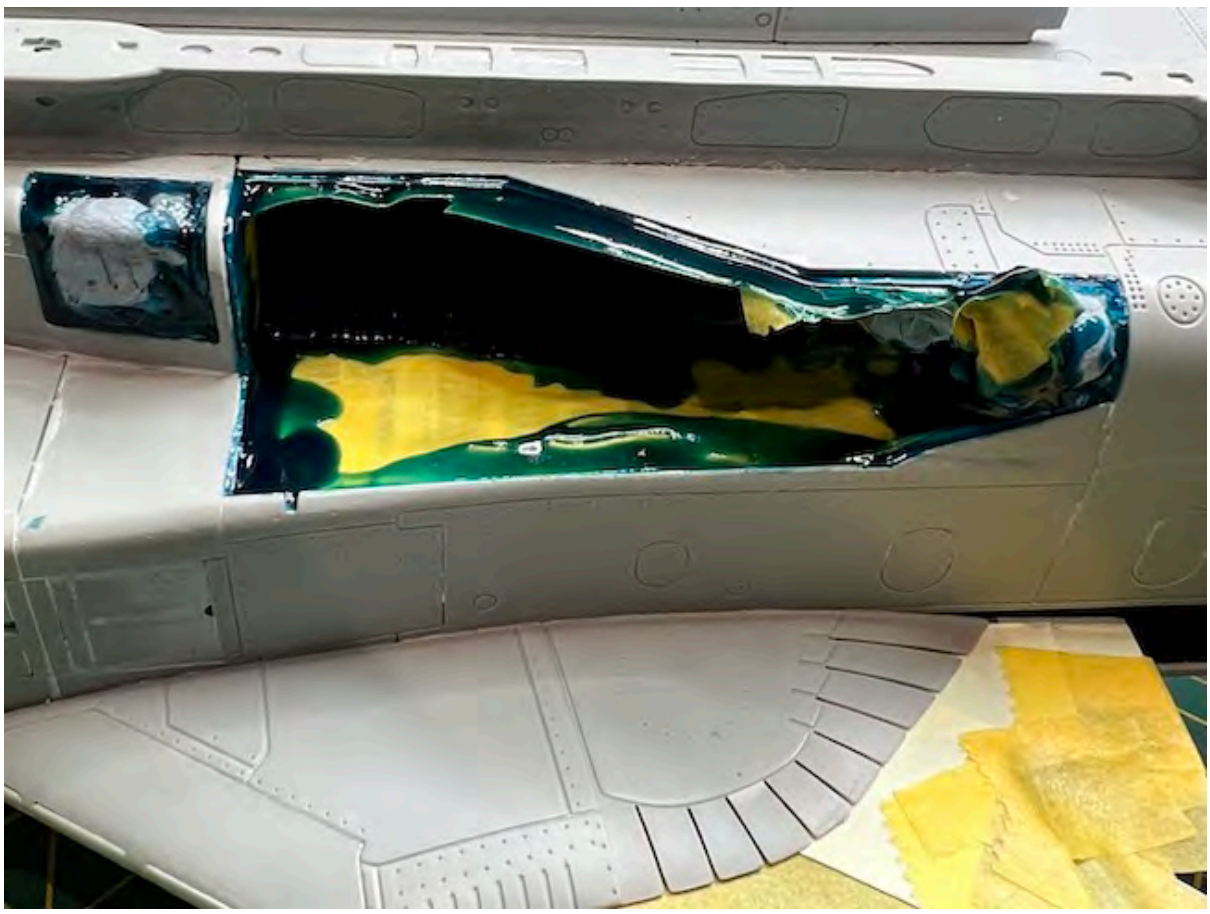

The AAR probe in place

Next it was just a case of masking everything of ready for the painting to begin.


DANGER
AIR INTAKE
KEEP CLEAR


The correct intake masking !!





Painting…

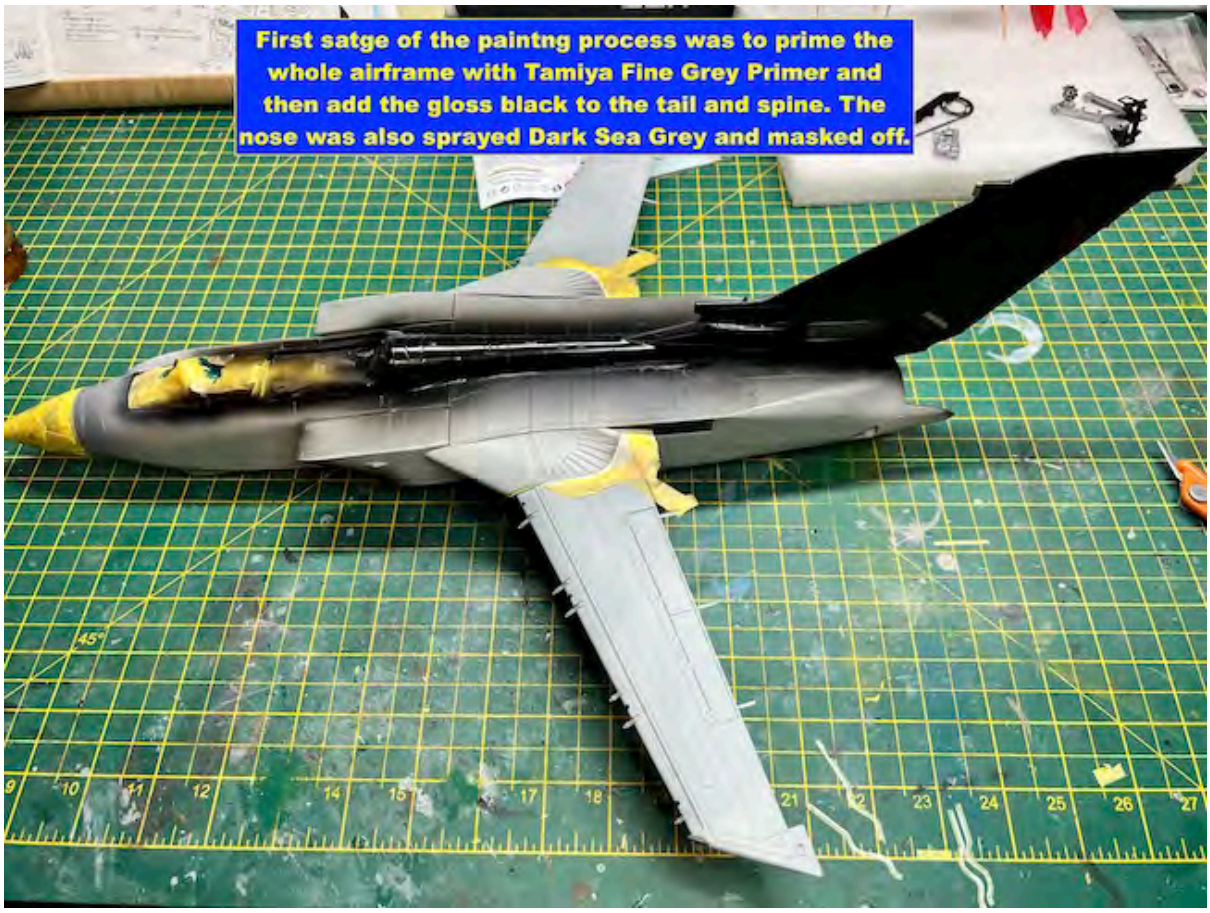
The first stage of painting the model is, in this case, looking for reference photos and there is an abundance of the subject that I wanted to model, namely the 9 Sqn disbandment scheme.

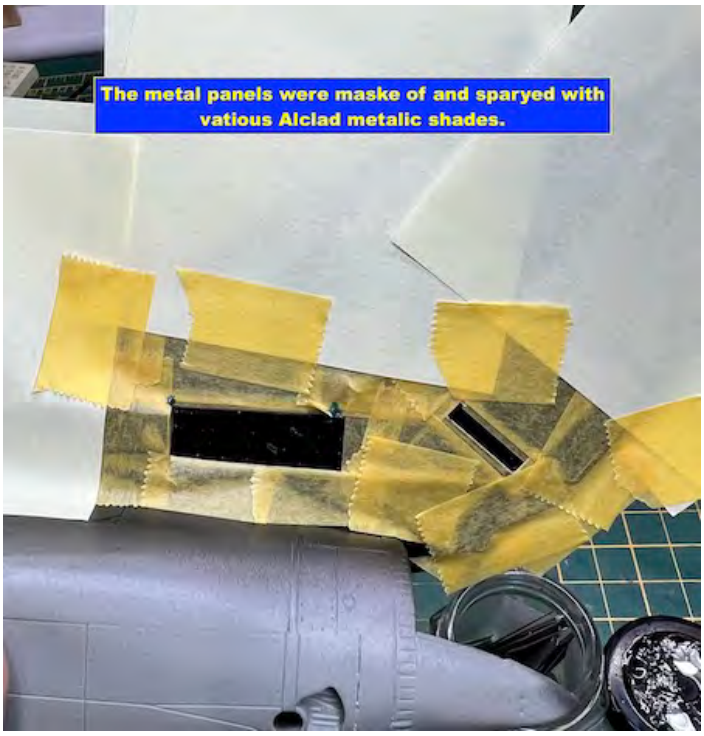

AF


AF
(XIII) SQUADRON TORNADO 1982 - 2019

The first thing to note is its quite clean when compared to the majority of ‘line’ Tornados. It also has the smaller 1500 Ltr wing tanks but I couldn’t source these so I will have to stick with the larger Hindenburg tanks. It also has two Boz pods on the outer pylons and although the kit does cover this I opted to stick with one Boz and one Skyshadow ECM pod. The other thing to note is the Litening targeting pod on the under-fuselage hard point.

With the reference located and a plan formulated it was time to start the painting. Stage one was to prime the whole airframe with Tamiya Fine Grey Primer to highlight and imperfections and to give a smoother surface for the paint. Next, I painted up the RWR antennas and the matt black antenna at the base of the fin and when dry these were masked up. Then I need to spray the black tail / spine gloss black. For this I used Tamiya TS-14 from a ‘rattle can’ as I find these give a great gloss finish that is far better than I can get from my airbrush. I then masked of the bare metal areas around the tail and sprayed these with various Alclad metallic shades. Once complete the tail and spine were masked off and it was time for the main camouflage to be applied.




The metal panels were maske of and sparyed with
vatious Alclad metalic shades.


Note the RWR antennas were also sprayed up and masked prior to adding the gloss black

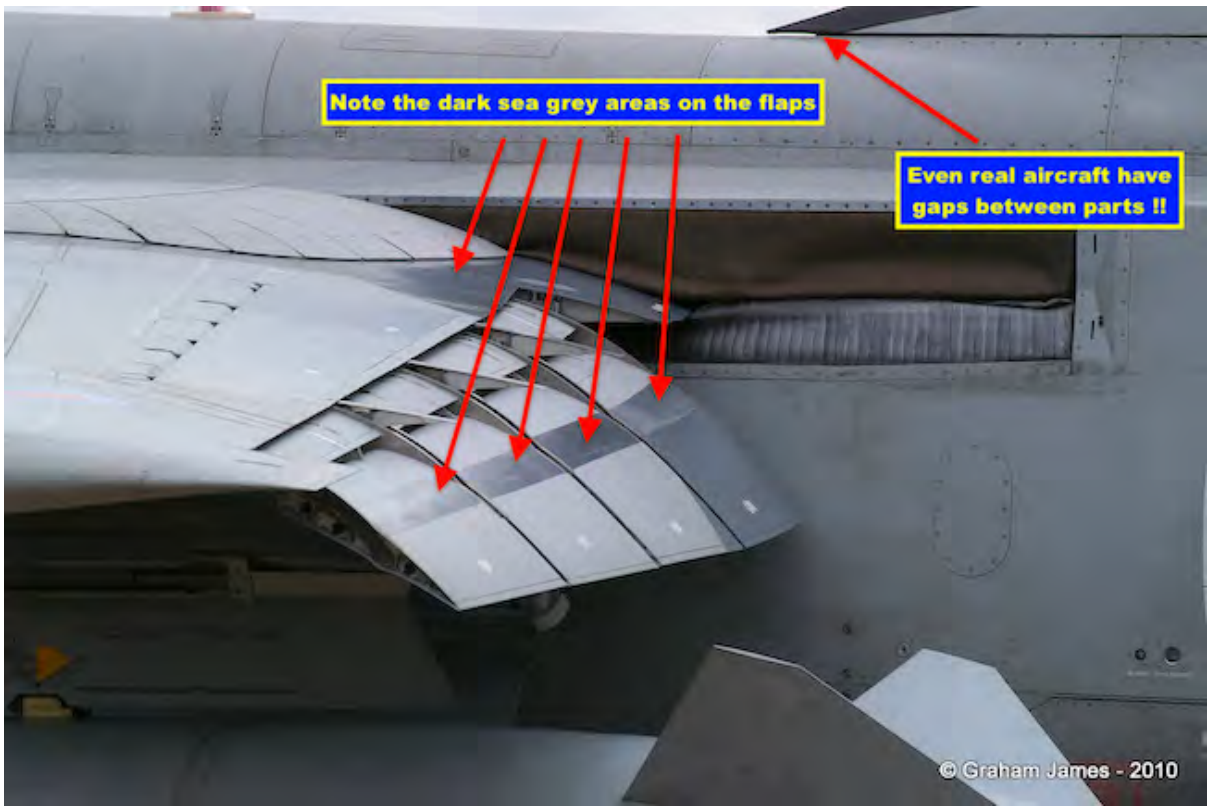
A little bit of research showed that the GR4 fleet changed its camouflage scheme over time from the green/grey of the 80's and 90's to a an all grey scheme in the late 90's onwards (not forgetting the 'Pink' GW1 in 1991). Even this grey scheme changed from an initial two-tone grey camouflage with a black radome to an all Medium Sea Grey scheme with Dark Sea Grey radomes from 2007 onwards. The moral of this is check your references to see which scheme you need. As an addition you will see aircraft with a 'patchwork' of different colour panels as replacement panels were often sourced from aircraft with the previous grey scheme.

For my subject it was easy, it was the later all-over Medium Sea Grey scheme and as it was a commemorative aircraft it had all the panels of the correct colour. The first thing I did was the radome in Dark Sea Grey and once masked off the remainder of the airframe was sprayed with Medium Sea Grey. The Medium Sea Grey came from several manufacturers including MRP, GUNZE and Tamiya as each had a slightly different shade. By using them all I 'patchworked' the base grey to give some tonal variation to add interest to the finish. Reference photos showed the flaps had Dark Sea Grey areas so these were masked off and added. Once complete I needed to add a wash to bring out the panel details. I used Flory's Dark Dirt wash and once dry I used a tooth brush to scrub and tone down the wash as the panel lining was far too dark and looked unrealistic.


The sprayed up airframe
For the wash I used Flory's dark dirt wash but I scrubbed it with a tooth brush to tone it down as it was initially far to stark

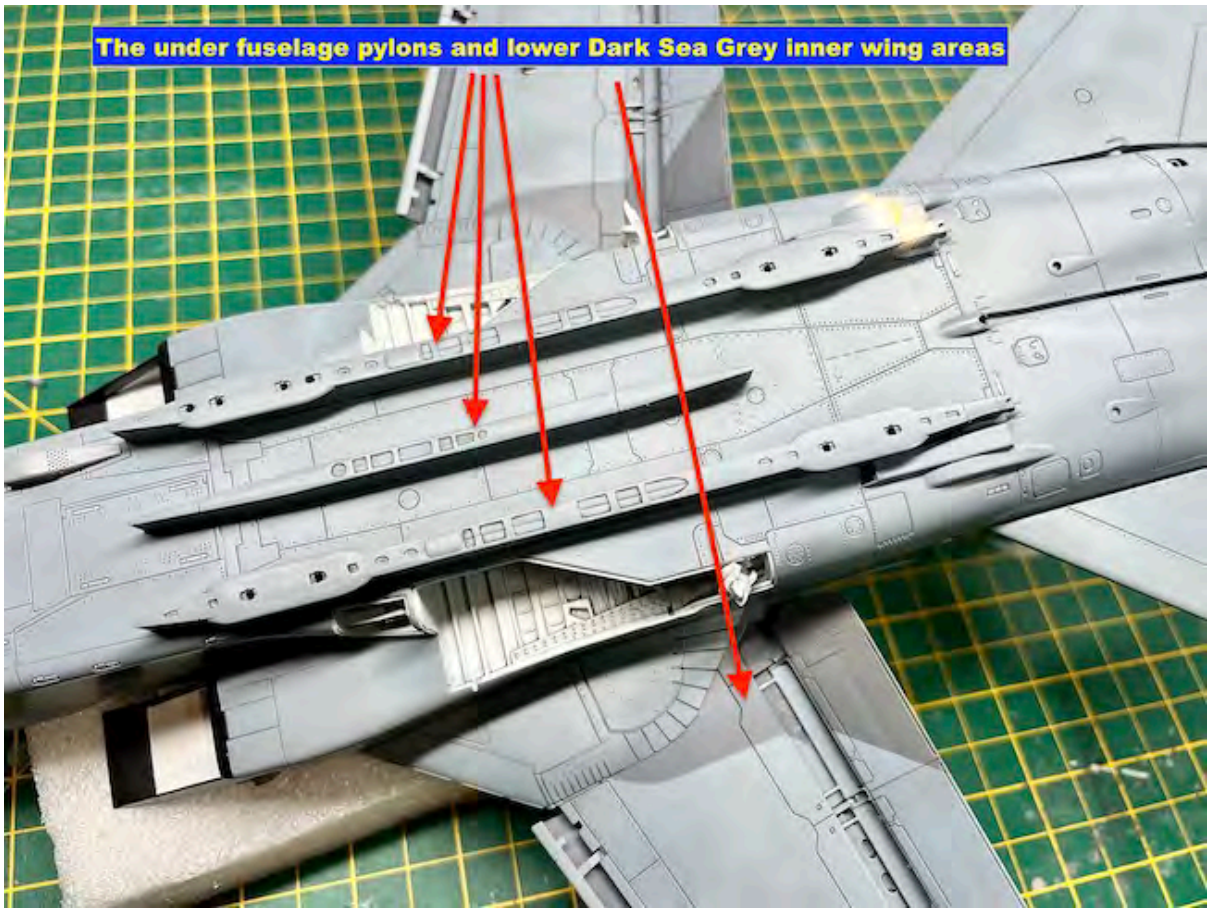

The base medium sea grey was varied on tone with the use of light and darker shades of the base colour. Further tonal variation will come with the oil weathering later on.


Tailerons - note the dark shade around the pivot. I sprayed this but there is a decal for it


Note the dark sea grey areas on the flaps
Even real aircraft have gaps between parts !!
© Graham James - 2010


The sprayed up flaps as seen in the previous picture.

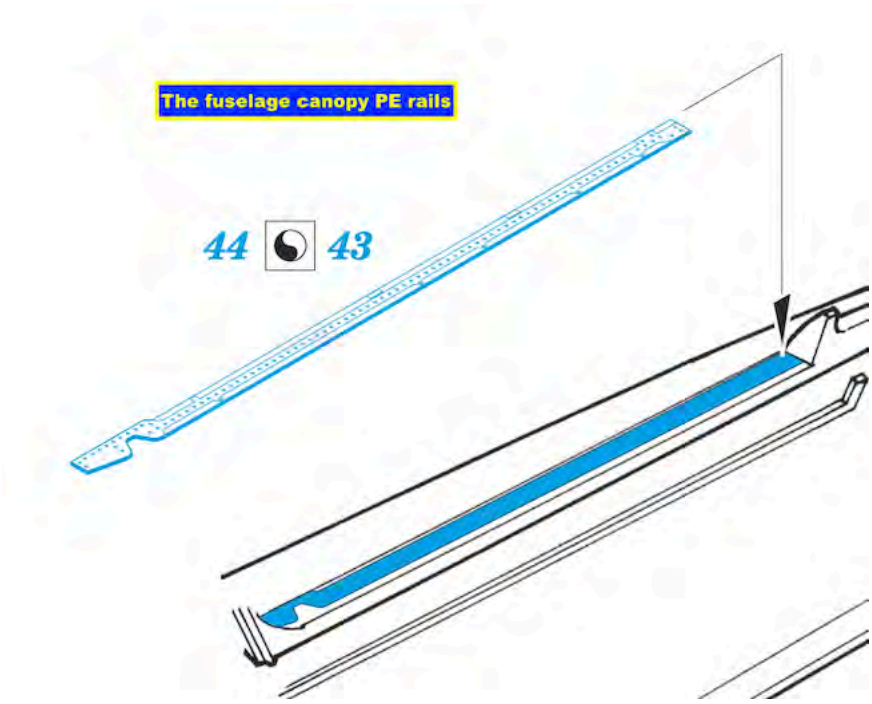

The nose bay and correctly demarcated intakes


The under fuselage pylons and lower Dark Sea Grey inner wing areas


The avionics bay - I repainted this later to the correct colours when I came across a good refernce picture of it.

Prior to the decals the grey airframe (the tail remained masked off) was given a gloss coat. The decals were then applied to the grey areas. They are made by Cartograf and perform flawlessly. Once all on they were sealed in with a second gloss coat and a satin coat was applied to the grey to dull everything down. The tail masking was then removed as this needed to remain gloss and the decals added to this area. What I wanted from this was the grey main airframe and decals to be finished as matt/satin and the black tail and spine to be gloss with the decals added with no varnish to sealing them in. On the real airframe the tail and spine marking are vinyl stickers that were applied directly onto the gloss black paint, hence this process.

I used eduard's PE for the cockpit rails as in this scale this area is very obvious if you have the canopy open as I was going to.

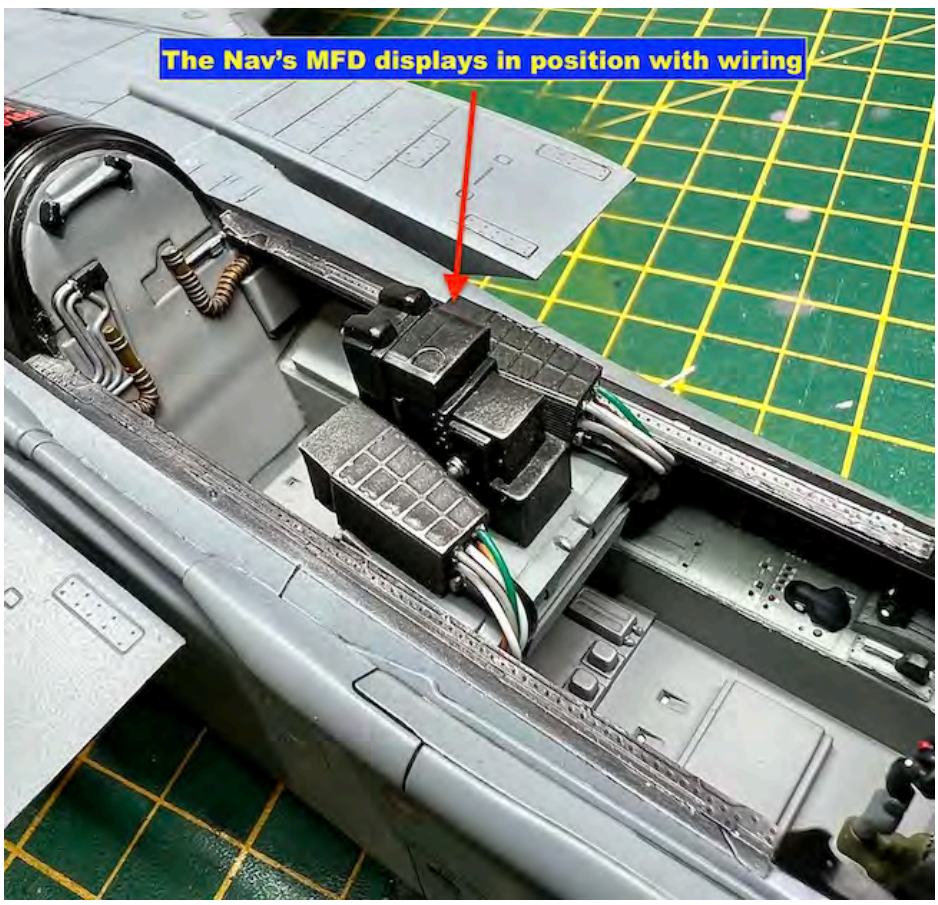

The fuselage canopy PE rails
44
43


The painted up and weathered cockpit rails

Now it was time to start adding all the ‘bits and pieces’ starting with the cockpit and canopy. The canopy has some great internal rail detail but I did add some eduard PE just because I now had it. The seats were also added at this stage along with the NAV’s MFDs with some wiring from the back of these LRUs.

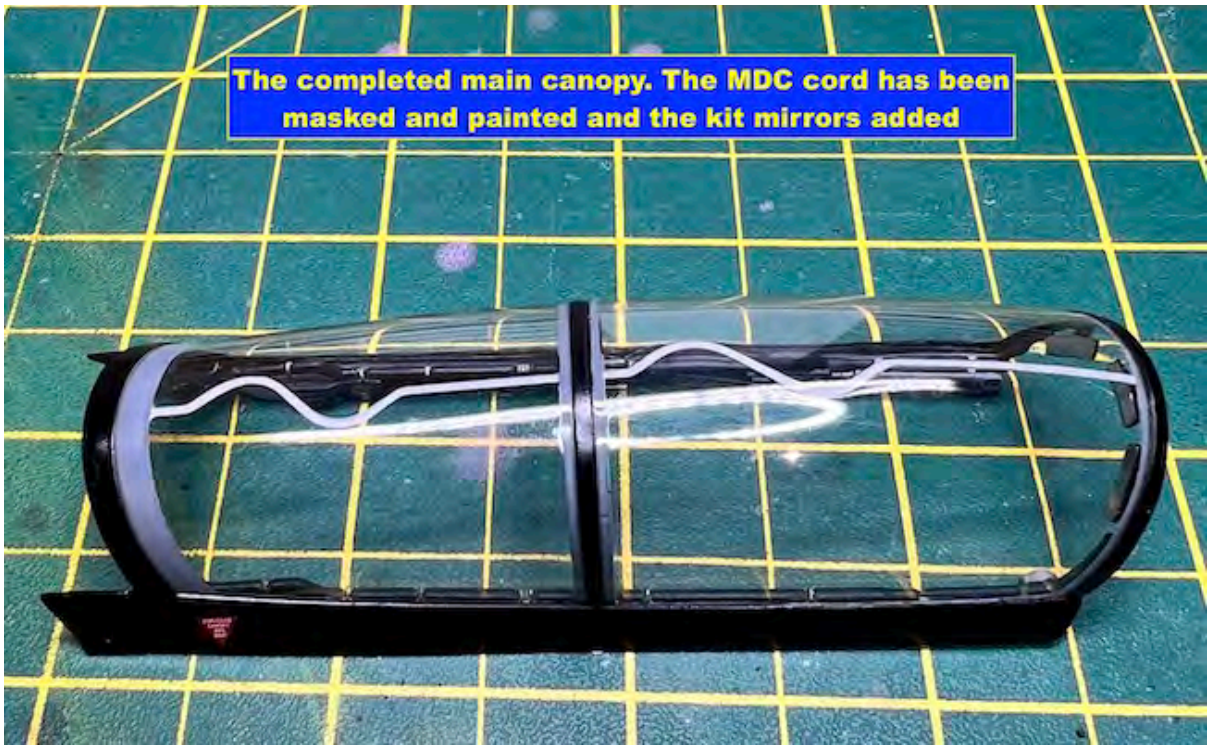

The AAR probe - note the green tape


The green tape was replicated with
a strip of green decal cut from the unsed decals.
RESCUE


The Nav's MFD displays in position with wiring

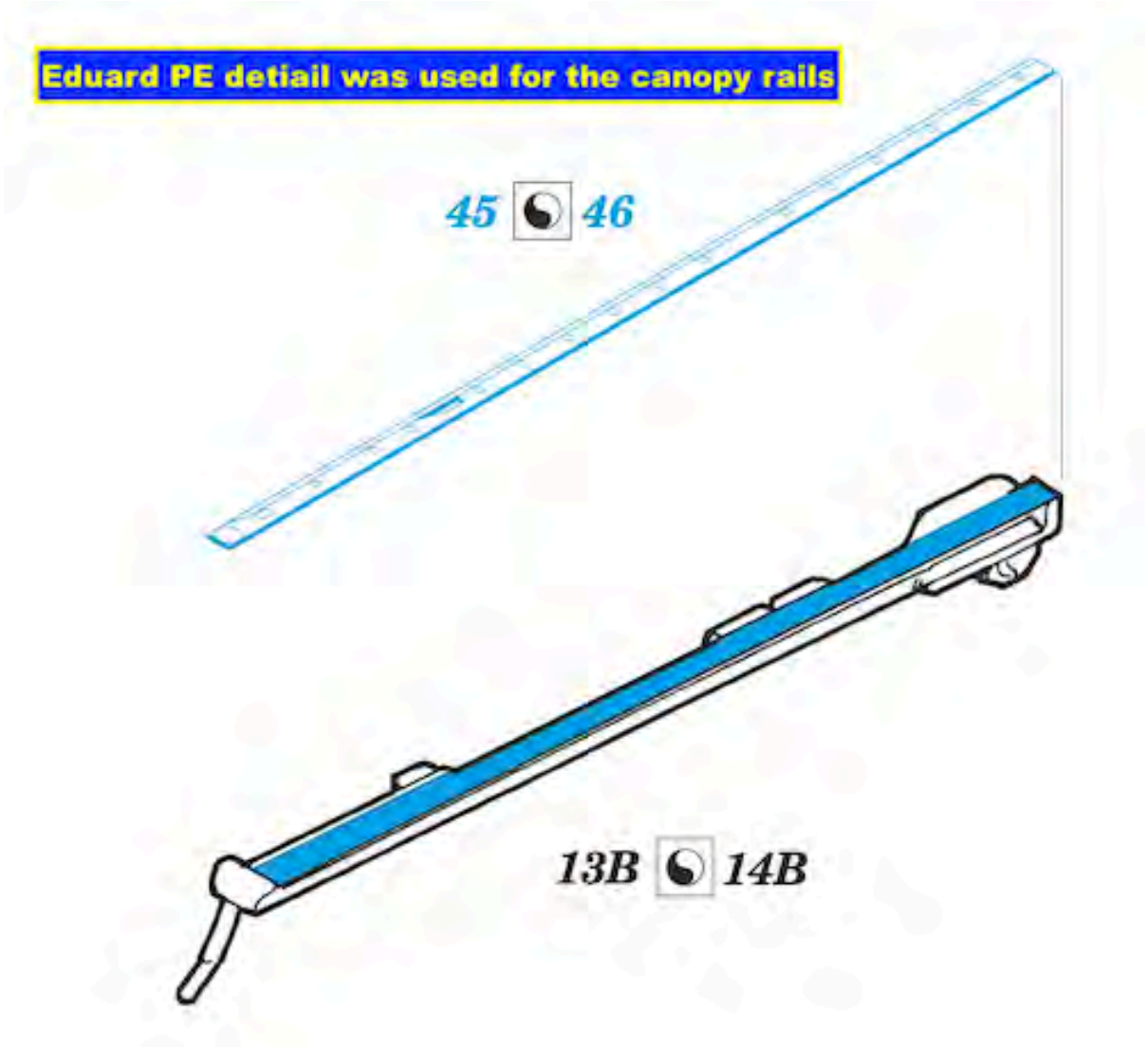

The Front Canopy fit is excellent
RESCUE


The Polot and Navs Ejection seats in place
RESCUE

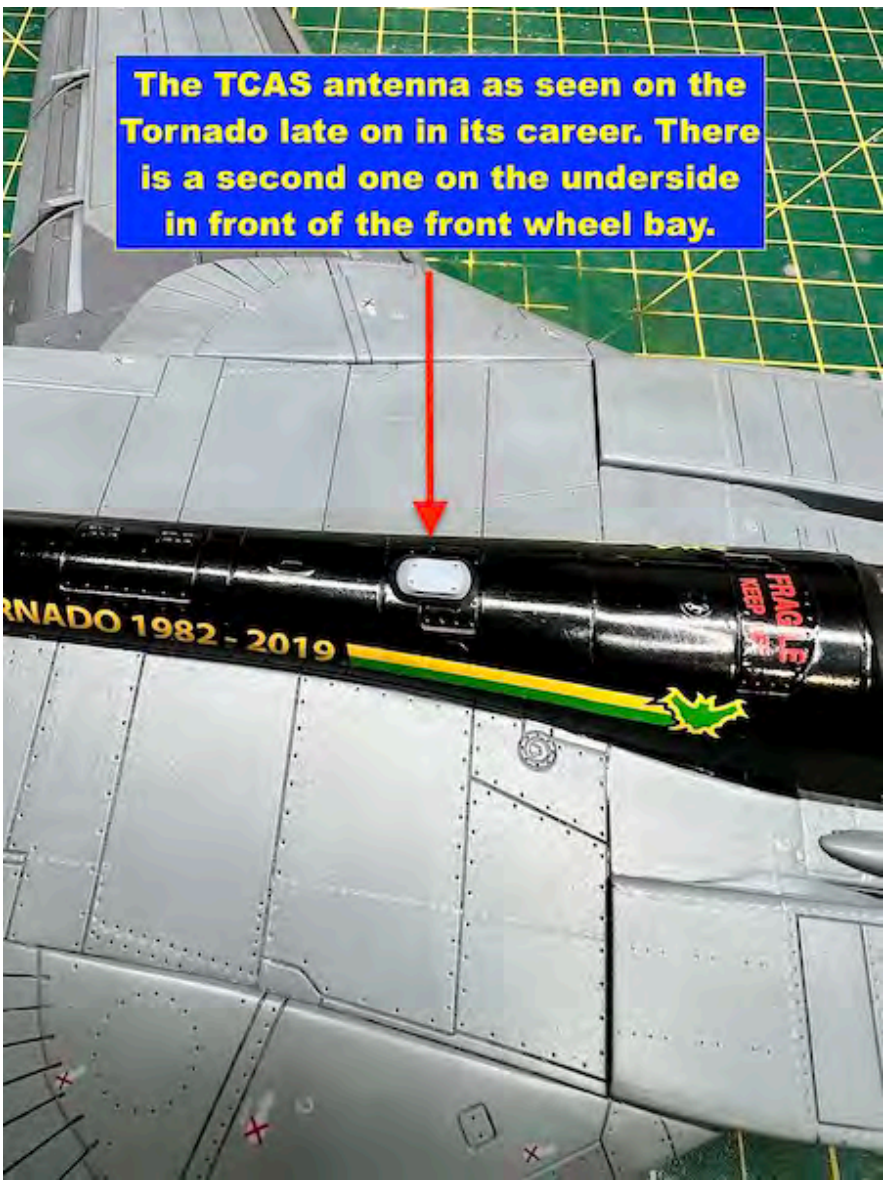

The completed main canopy. The MDC cord has been masked and painted and the kit mirrors added


Reference picture of the canopy interior


Reference picture of the mirrors

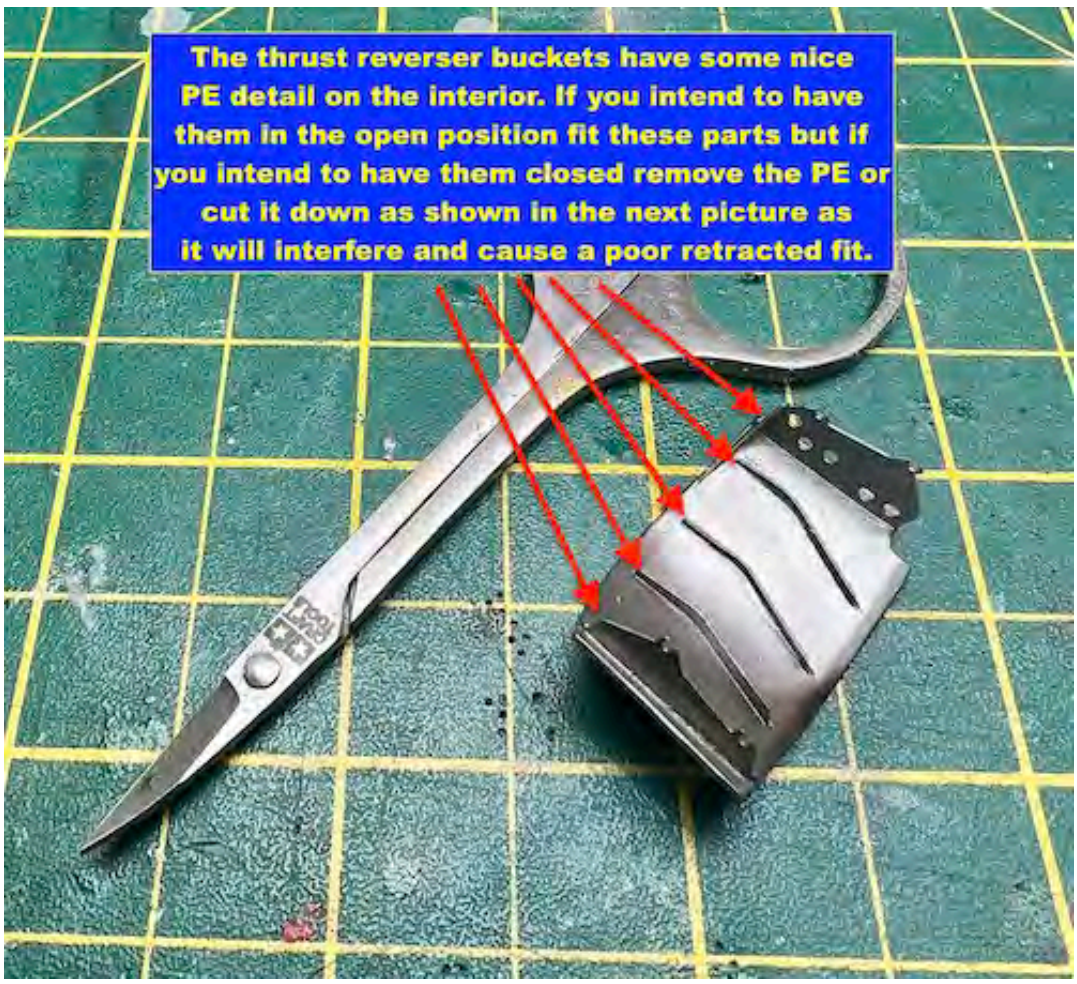

Eduard PE detiail was used for the canopy rails
45
46
13B
14B

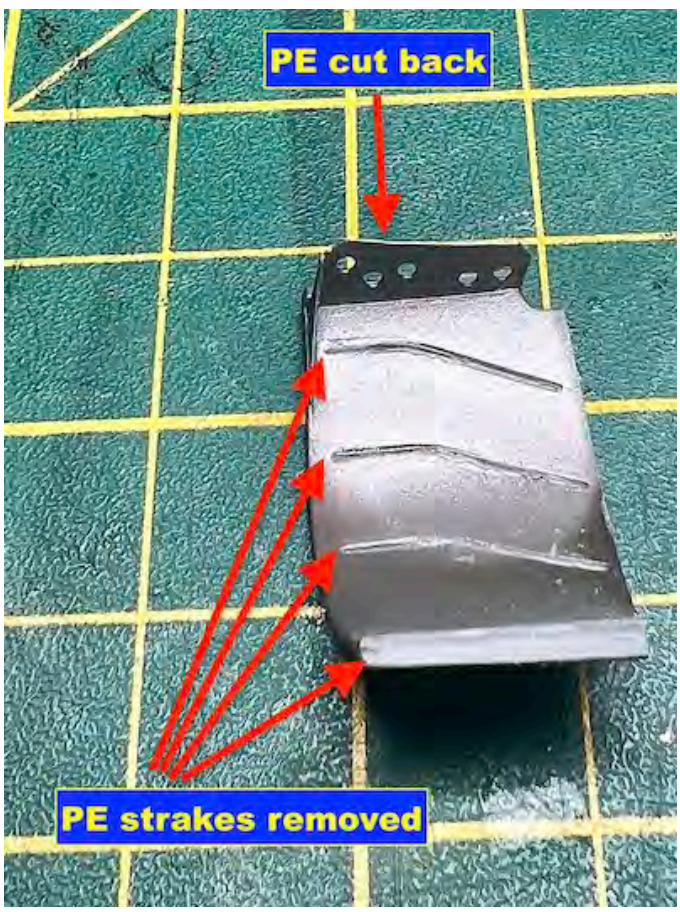

The canopy interior detail


The TCAS antenna as seen on the Tornado late on in its career. There is a second one on the underside in front of the front wheel bay.
RNADO 1982 - 2019

On these later aircraft TCAS was added so check your references, its easy to spot this addition as the two spine antennas have been replaced with a single flat antenna and the two in front of the nose gear bay have also been replaced with a similar antenna.

Now back to those engines that I ‘chopped up’. The rear section can now be slotted into the rear fuselage and it’s now a lot easier as you don’t have to worry about trying to line up the front of the engines with the intakes. With the engines in place I tried to fit the thrust reverser buckets that I had attached the PE to on the internal surfaces. These look great but all that PE leads to real fit problems if you have the reversers in the closed position. The easy solution is don’t fit the central PE strakes and cut back the outer ones as I have done in the pictures. The loss of the PE is not an issue as you can’t see this detail anyway when the buckets are in the closed position.

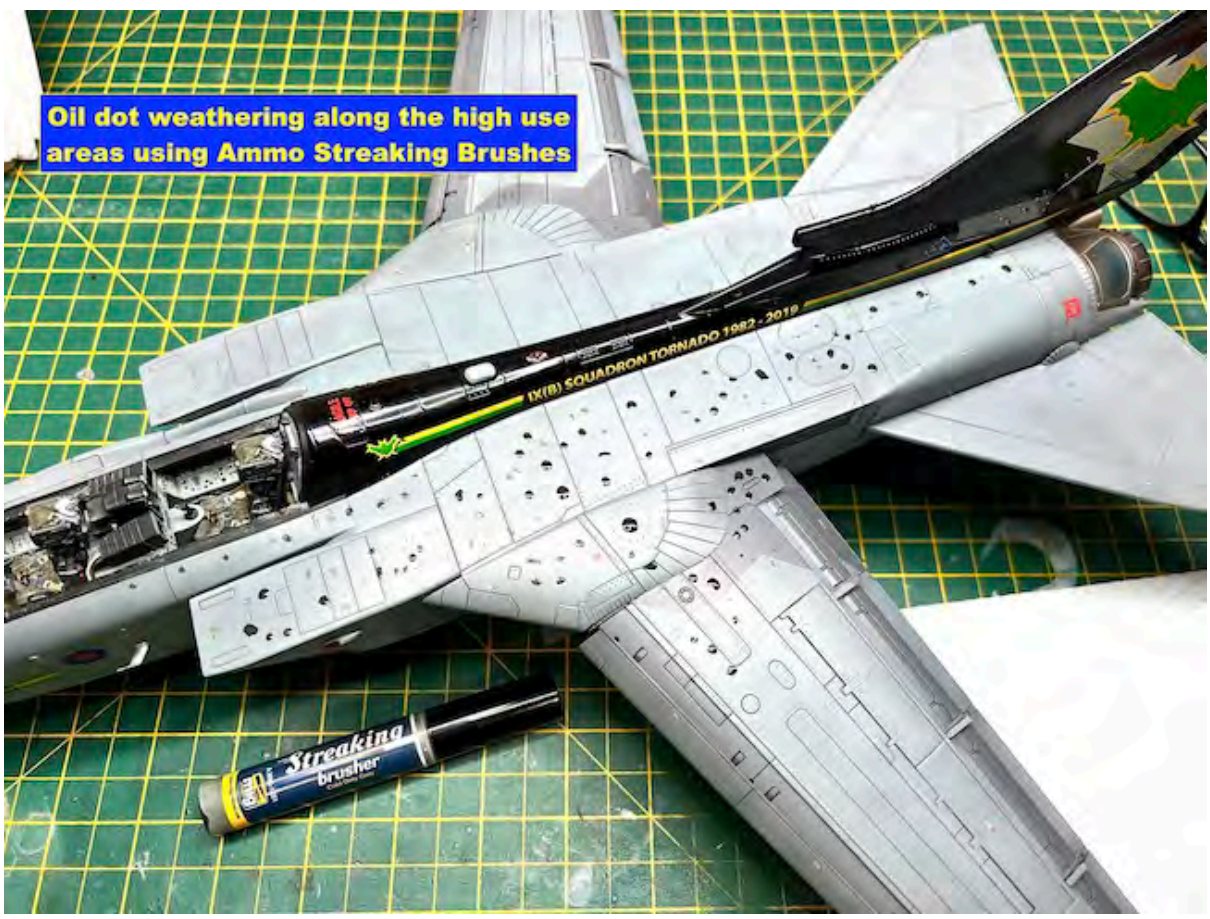

The thrust reverser buckets have some nice PE detail on the interior. If you intend to have them in the open position fit these parts but if you intend to have them closed remove the PE or cut it down as shown in the next picture as it will interfere and cause a poor retracted fit.

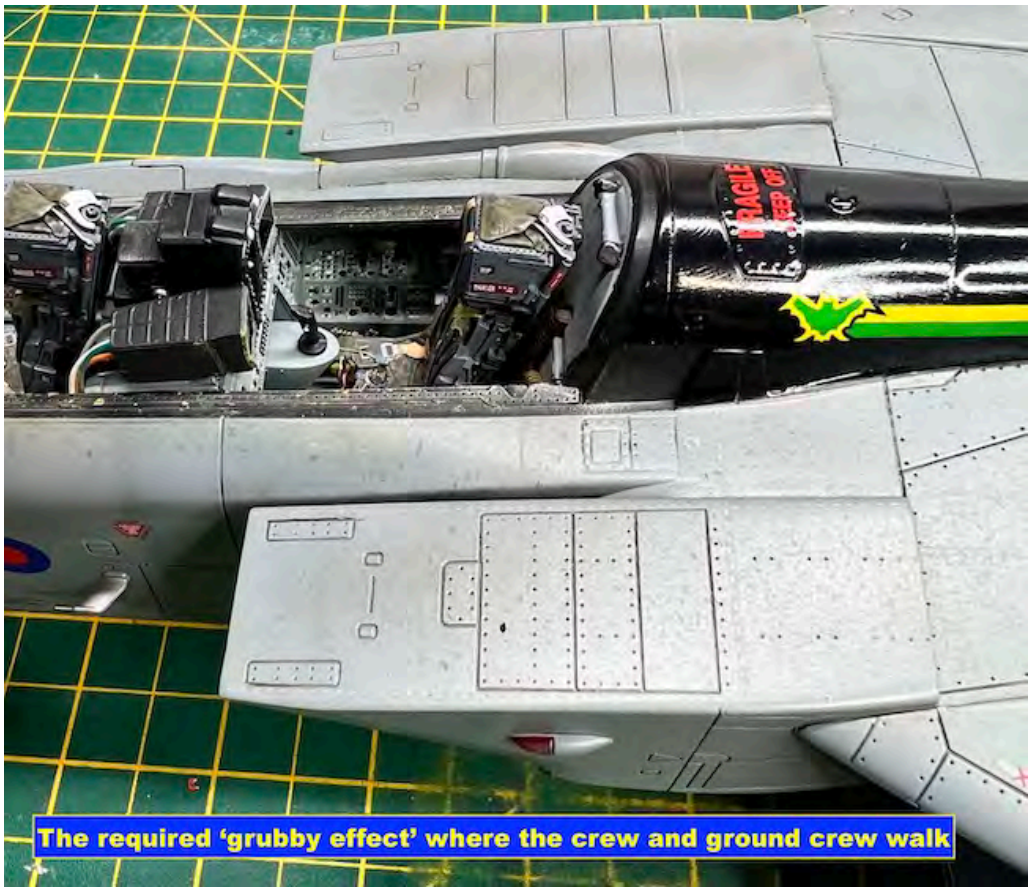

PE cut back
PE strakes removed


Fitted engines and thrust reverser buckets


Fitting the ‘chopped down’ engines


The model is now at the stage where I can add some weathering to dirty it up a bit, but not to much as its quite clean in the reference photos, and add the undercarriage, weapons and other 'bits & bobs' to finidh it off.


Oil dot weathering along the high use areas using Ammo Streaking Brushes
IX(B) SQUADRON TORNADO 1982 - 2019
Streaking
brusher



The required ‘grubby effect’ where the crew and ground crew walk

The thrust reverser buckets, with the PE cut back or removed, were now fitted. You cannot see under the buckets and I can confirm that removing the PE is not an issue. With this done the model was at that stage where some weathering could be done but this was to be kept subtle as reference photos showed the real subject to be quite clean. For the weathering I used AMMO Streaking Brushes to 'grubby' up the area around were the crew would access the aircraft and along the upper fuselage and wings were the ground crew would walk whilst servicing it.

The weapons were the next stage of the build…

What you get in the kit is quite limited for the GR4 build (there is quite a few more options but none of it is applicable to the GR4 option) so I had a look at my options. The wing stores options are quite standard with the outer pylons a having either a BOZ pod and Skyshadow ECM pod combination or two BOZ pods. If you are doing an operational GR4 you will have to source two TERMA pods but you can find these on the internet.

For the fuel tanks this kit only has the 2250ltr Hindenburg tanks which although used extensively on Operations were not that commonly used in the UK with the

preference being for the standard 1500ltr tanks. At the time of the build I couldn't

source any 1500ltr tanks so I had to use the kit Hindenburgs.

For the under-fuselage stores the kit has 4 LGBs and although correct they are usually used in conjunction with a LITENING pod on the front port station which isn't included. I originally thought of using some aftermarket STORM SHADOWS that I had purchased but these needed a lot of work to finish off so it was back to the LITENING pod and LGB combination. eduard Brassin make a LITENING pod but its configuration is wrong for the Tornado with the intake and access panel being on the wrong side. To get around this I removed the front and rear sections and reoriented the sections to get the intake and access door on the correct side – the door is still wrong as it is located too far back but it's close enough for me.

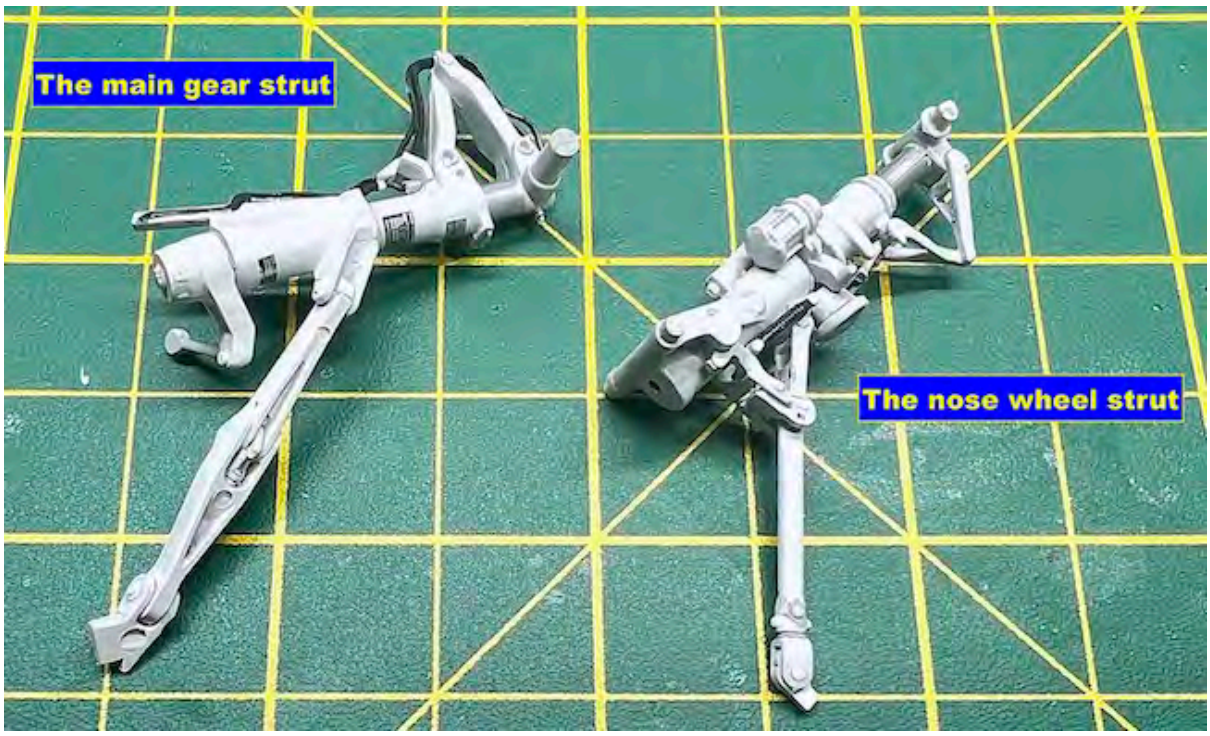

AN/AAQ-28 Litening
1/32
632126
eduard
BRASSIN
ACCESSORIES
FOR SCALE PLASTIC KITS
Best Brass around!
& Resin
eduard


The orientation of the Litening pod is wrong so to get it looking atleast semi correct I cut of the front and rear sections and refitted them at 180 degrees.


Pratice GBU - note the blue central section


The Kit GBU -12 LGBs and the Eduard
Brassin Litening Pod

The kit undercarriage legs are quite nice from the box with the brake lines moulded onto the main legs. These all fit quite nicely into place, even the front strut which I had altered so it could be fitted at this point.




INSTRUCTIONS


Fitting the nose wheel strut and doors


If you use the kit actuator arms to position the doors they will droop like this. This is due to the power being off for a prolonged period and the hydraulic pressure being lost.
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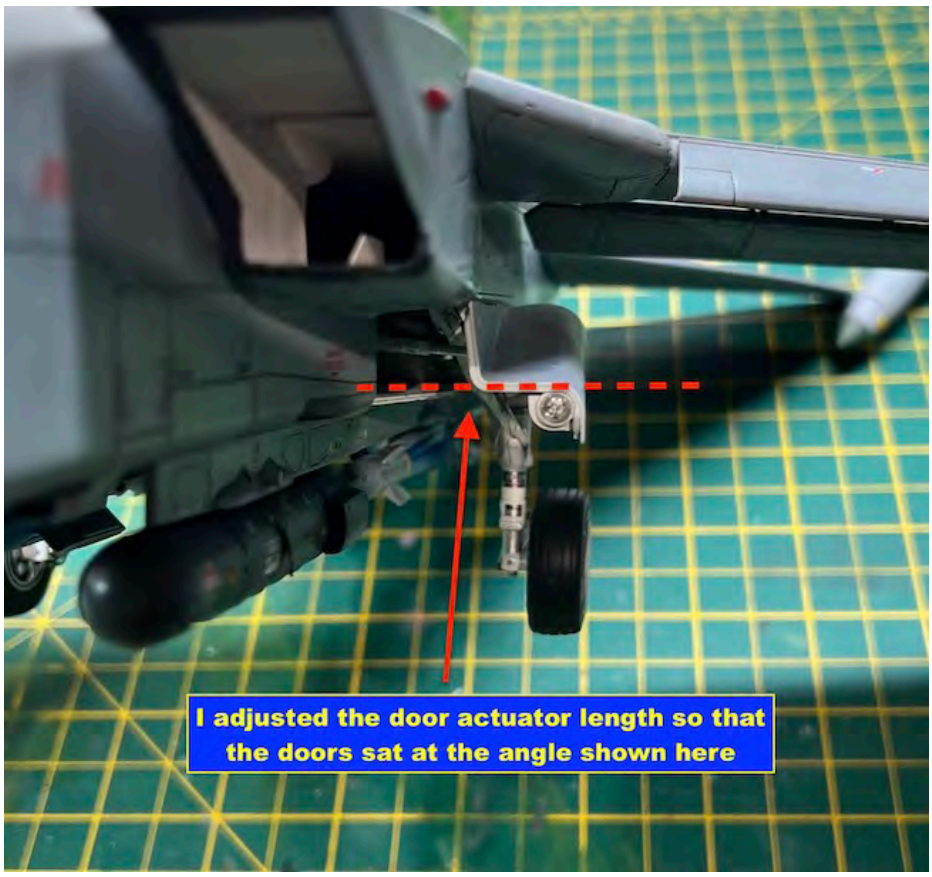
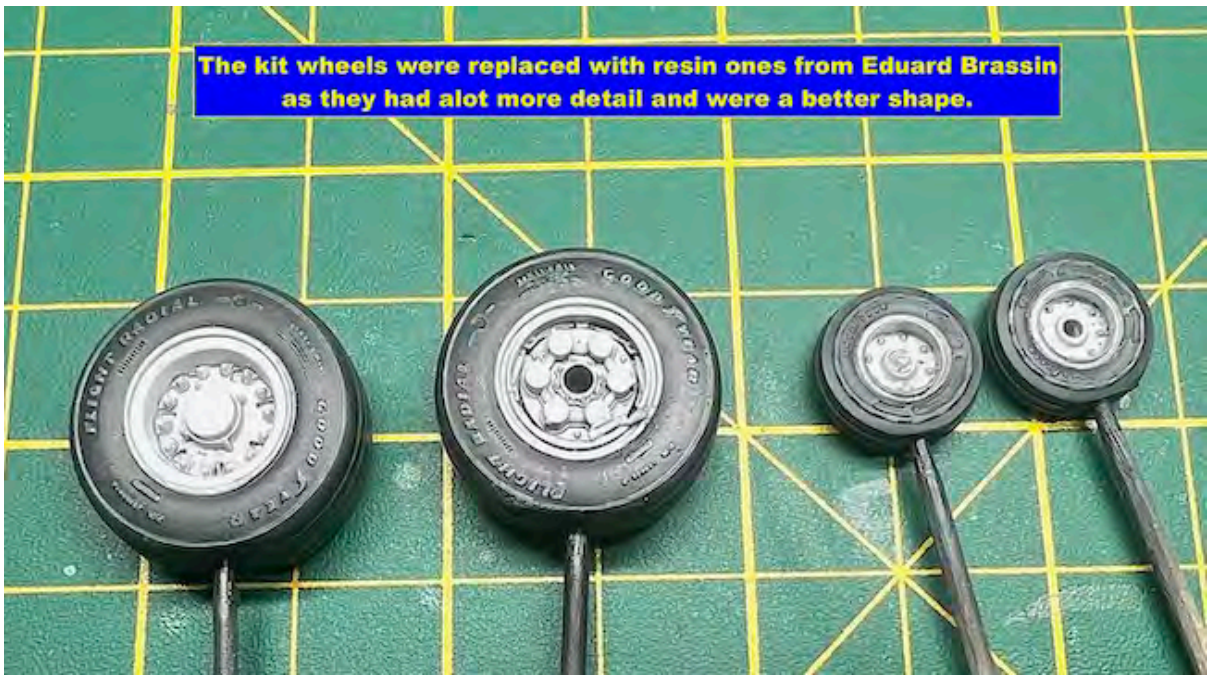
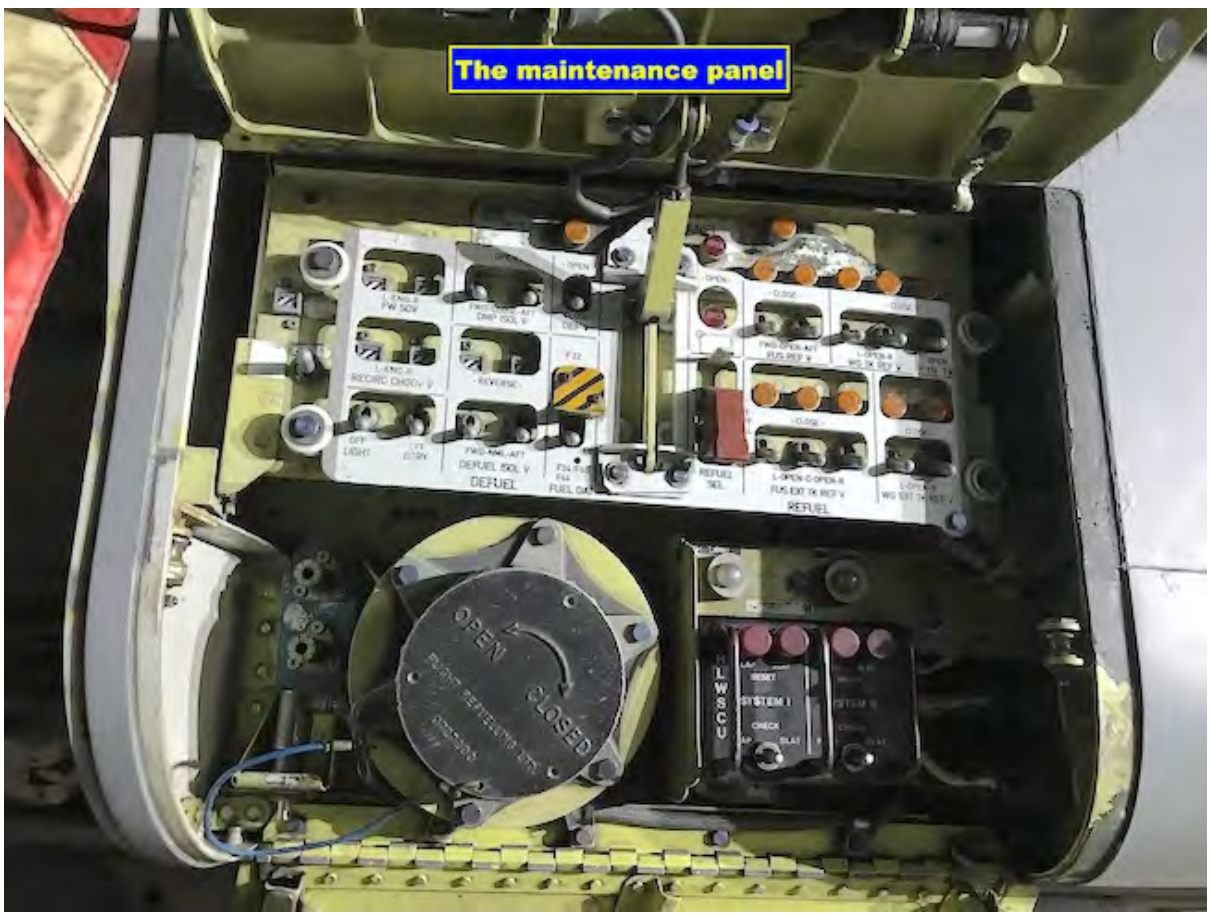
The main undercarriage doors if fitted as shown in the kit have a droop to them due to the length of the actuator arms. This is actually correct if the aircraft has been powered down for some time and hydraulic pressure has been lost as in the first picture below. I didn't like this look (call it my OCD !!) so I altered the arms so that the doors sat at the powered-up angle as in the photos.



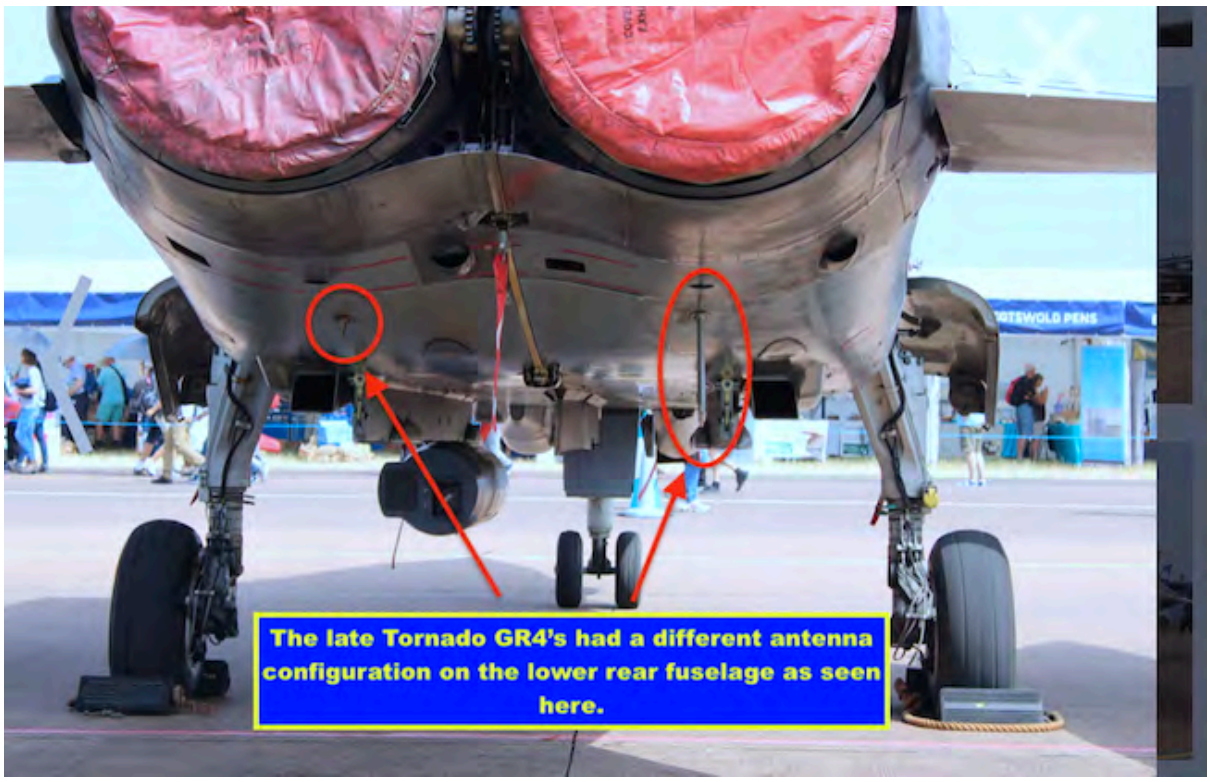
I opted to replace the kit wheels with a set from Brassin as the detail was a lot more refined.



As I mentioned earlier I found a reference picture of the maintenance panel which showed a base zinc chromate colour so this area was repainted as shown below.

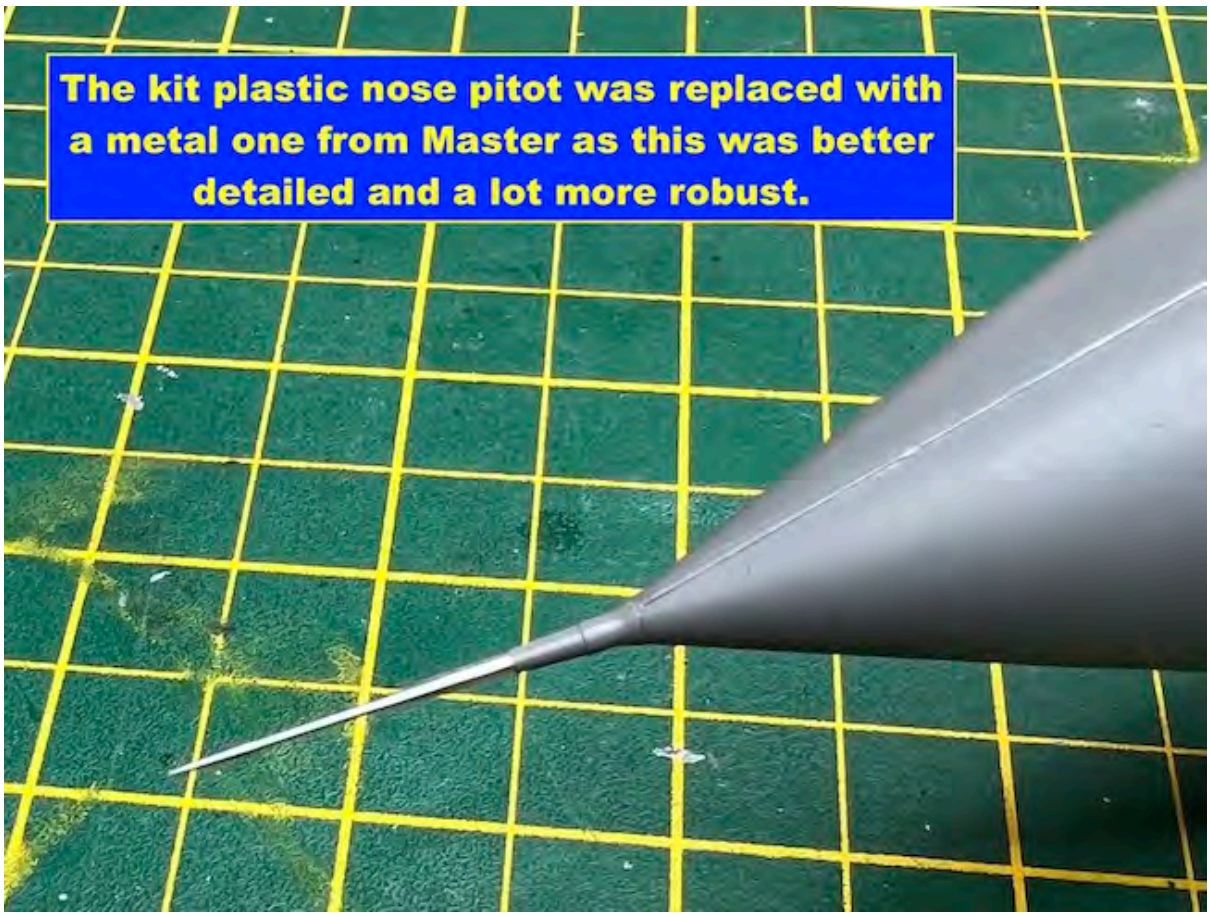


These late GR4's had an additional aerial on the lower rear fuselage which is mentioned in the kit but is not included so it needs to be scratch built. I used some evergreen plastic and stretched sprue to make mine.

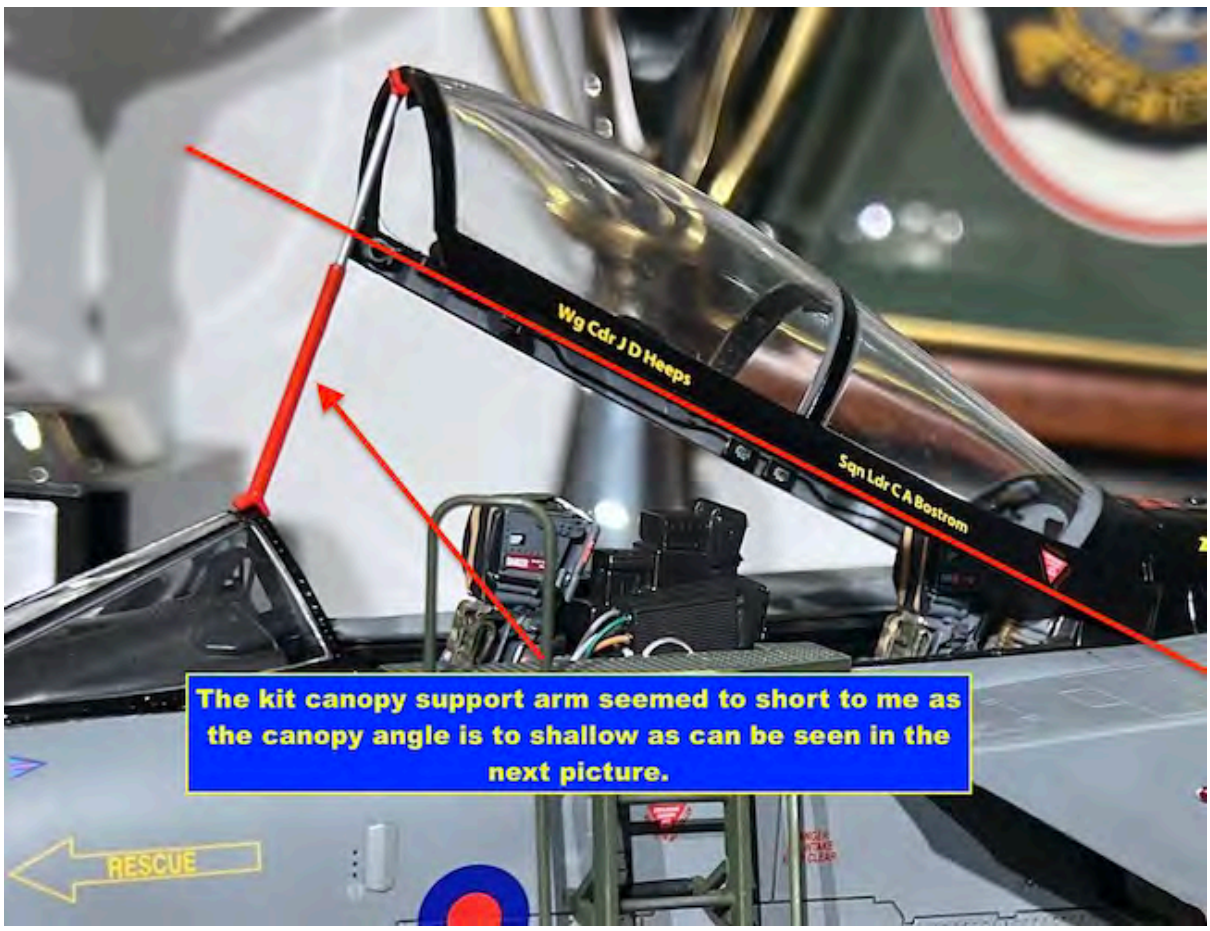



The larger antenna was scratch build and the smaller one came from a part not used in the kit.
DANGER HOT GASES
DANGER ARRESTOR HOOK
DANGER HOT GASES

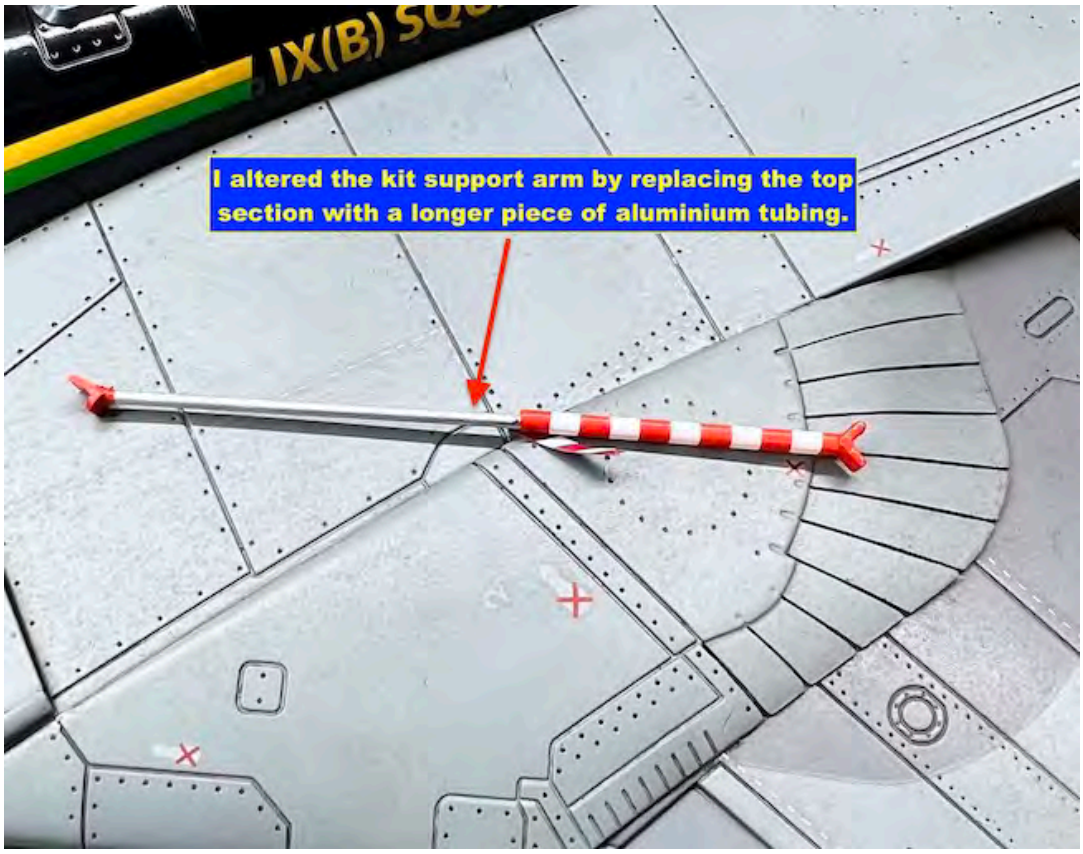
For the nose pitot I chose to replace the kit part with a metal replacement part from Master as it was more detailed but more importantly it was a lot more robust a I have a tendency to break these parts!



You can close the canopy if you wish as the fit is quite good but to me it seemed a shame to hide all that detail. For me gluing the canopy in the open position was a sure-fire way to brake it at some point. Fortunately, the kit contains a canopy support strut (is on the clear sprue if you're looking for it!) but this is a little too short to allow the canopy to sit at the correct opened angle. I replaced part of the strut with a piece of Albion Alloy aluminium rod to get the correct length so that the canopy sat at a far better angle.


Wg Cdr J D Heeps
Sqn Ldr C A Bostrom
The kit canopy support arm seemed to short to me as the canopy angle is to shallow as can be seen in the next picture.
RESCUE


092


I altered the kit support arm by replacing the top section with a longer piece of aluminium tubing.


To me this looks better
RESCUE

For the final touch the kit contains a very nice boarding ladder/platform. This was assembled from the box and it looks great on the finished kit.

Summary

This is quite an expensive kit but there is a lot of plastic in the box, the decals are excellent and the finished model looks great. It's not perfect though as the weapon provision could have had more options relevant to the GR4 and though good the fit isn't perfect but it's good enough. The additional late aerial could have been included and some of the reference material is missing information such as the relevance of the TARDIS displays on the later GR4's. These though are just minor points in what is otherwise a very good kit and definitely the best GR4 in 1:32nd if not all scales. A bit of experience is required to get the best out of it but it's well within the ability range of all but the very inexperienced modeller and it can make a very nice rendition of a Tornado GR4 straight from the box.

Overall, I highly recommend this kit as I really enjoyed this build and the finished model does look very good.

Quick summary	**Star rating out of 5**
Quality of moulding	****
Accuracy	****
Instructions	***
Decals	*****
Subject choice	****
Build enjoyment (for BN only)	****
Overall	****


IX(B) SQUADRON TORNADO 1982 - 2019
RESCUE


IX(B) SQUADRON TORNADO 1982 - 2019
AF
TORNADO GR


AF