

THE LITTLE AVIATION MUSEUM

Random Modelling Notes

THE MYSTERY THAT IS ADC GREY

(with the Matchbox McDonnell F-101, the Hasegawa Convair F-102 and F-106, lots of head scratching and lashings of grey paint)

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Back in the mists of time when Hasegawa first released their Convair F-106 kit I thought it was the most magnificent looking aeroplane ever made. With its delta wing and slick fuselage it looked fast and deadly, which is what it was in full scale. I gathered together my finances (which were not great in those days) and bought one. Having recently rejoined IPMS I was keen to make it as accurate looking as possible and the result was very pleasing. There were two mysteries that I had to cope with during the project; the colour of the aeroplane and the colour of the cockpit framing. The instruction sheet said simply; Aircraft Grey and also the cryptic instruction to paint the cockpit yellow. Being a good little modeller I did what I was instructed.



A few years later I found that Hasegawa had also released a model of the forerunner of the F-106, the chunkier F-102. By then I had learned a bit more about modelling, in particular the Federal Standard colour system. Instead of just guessing what 'Aircraft Grey' might be I did the research that told me that the USAF interceptors were painted light grey; FS16473, also called 'Air Defense Grey'. By this time Modelmaster paints were commonly available so it was easy to get a bottle and spray the paint onto the model.

At this point another conundrum arose; how gloss was the finish on Air Defense Command aircraft. The '1' in the FS number implied that the finish was gloss but I had also learned, by this time, to do a bit of research and it appeared that some F-102's seemed to be highly polished and others seemed quite matt. However, the sources said gloss so that is what I did.



The trouble was that when I stood the F-102 and F-106 models next to each other they didn't look right. One was a much lighter grey than the other and one was matt and the other was gloss. One of the points of making models to a constant scale is that they can stand in relation to each other, but not these two closely related aeroplanes. To make matters worse, as time passed the matt varnish on the F-106 gradually went yellow and the specially made stretched sprue nose probe got the droop.



Decades pass... By late 2007 I was starting to run out of aeroplanes in my collection that had not turned up at MoB meetings, two that remained to go on show were the F-102 and F-106 and it was time to do something about it. The only solution that would solve the problem was to make new models of both interceptors. I'd known I'd have to face this problem at some stage so I'd collected all kinds of photographs, books, decals and kits in preparation, but I could put it off no longer. It was now time to grasp the nettle and any of those other metaphors for resolving what happens when you are on the horns of a dilemma.

To reach a successful conclusion all I had to do was resolve the three problems that had

already confounded me: what colour is ADC Grey, is it matt or gloss, and what is this stuff around the perspex in the cockpit canopies?

One of the problems with my existing F-102 and F-106 models was that I had made them separately so that whatever I decided to do on the day had not been repeated later on. So, even if I came to the wrong conclusions this time around, my new F-102 and F-106 models would look the same by being made at the same time. It then occurred to me that the USAF Air Defence Command also flew F-101Bs so if I also made that model, all three would look the same, no matter how wrong my decisions on these three conundrums might be.

As part of the research I read all the kit reviews I could find on the internet, they all said that the Hasegawa F-102 and F-106 kits were ancient and we needed new and better kits, but they were simple to construct in comparison to the Matchbox kit of the F-101 which needs a bit of work to bring it up to the same standard as the Hasagawa kits. But, having got the three models to the painting stage, it was time to confront the three conundrums.

What is ADC Grey?

There can be little doubt that ADC Grey is FS16473 and that is what my first F-102 model was painted. The trouble was that it doesn't look right. If anything the F-106 looked better and more like how the F-106 appears in most photographs (before mine went yellow, anyhow).

I've never been a great fan of the 'scale colour' philosophy that most modellers with AMS will discuss at great and heated length. The reason for this is not that it is wrong, it is probably right but once you take it on board you enter a whole new world of pain and a whole galaxy of questions. (Put the phrase 'scale colour' or even 'scale color' into your search engine and prepare to be confounded.)

Looking at the wide range of photographs of F-101s, F-102s and F-106s was only confusing because they presented colours ranging from darkish blue-grey to very light grey. Kit and decal instruction sheets were even less helpful although they all suggested a colour something in the range of 'light grey'.

After banging my head against this problem for several days I went to the kit reviews to see what other modellers had decided. It seemed that some had suffered the same agonies of indecision that I had. In the larger scales some had gone for FS16473, which did not seem to look so bad in those scales. In the smaller scales the best consensus that I could find was that the most appropriate shade might be Humbrol 166. I finally resolved that this might not be right either but since I would paint all three models the same colour nobody would notice. So I went out and bought three tins of



it, one for each model. The trouble was that after the first coat had dried I thought that the colour looked a little yellowish, more like the US Navy's Light Gull Grey, than ADC Grey.

In desperation I shuffled through all the tins and bottles of modelling paint I've gathered over the years and finally came to conclusion that Modelmaster's version of FS36495 'Light Grey' was as good as anything else, about the same shade of grey as Humbrol 166 but without the yellowish tinge. It might not be entirely accurate but it looks as good as anything else, and since all three models got the same paint who's to know.

All three models were made using Microscale/Superscale decal sheets. In comparison to the kit decals, the specialized decal sheets are much more crisply printed and have better detail. The kit decals for the F-101B are for the same aeroplane as the Microscale sheet but the difference is remarkable. The trouble was that the varnish on the F-106 sheet seemed to have evaporated so that it took two or three coats of Microscale Liquid Decal Film to encourage the decals to hold together, and even then the job was only completed with the help of a considerable amount of M+15 rated language.



What is scale gloss?

I had to go to the airport the other day to pick up somebody and I was reminded again that 'gloss' is a concept as much in the mind and eye of the beholder as a fact. Perhaps those with AMS should debate the matter of 'scale gloss' and reach a reasonable conclusion, to save me having to worry about it.

The trouble is that when you look at a shiny aeroplane from some angles it looks almost matt while from other angles it looks highly glossy. It seems to depend on the underlying colour, the angle with which light strikes the aeroplane and its intensity. Certainly, for a model to appear to have anything like scale gloss it has to be polished to do away with the sparkle that comes off the tiny variations in the surface of a model as apposed to the full scale aircraft. This, however, leads to a highly polished aeroplane model that does not replicate the subtlety of the look of shiny aeroplanes.

After worrying about this at length and trying a few experiments I came to the conclusion that the only way to get a perfect scale model looking like the real thing is to make the real thing. I quite like the result that Testors *Glosscote* gives but it comes out looking a little too shiny, so I decided to try a compromise solution and mixed a concoction of about three quarters *Glosscote* and a quarter *Dulcote*, in the hope of reaching something that approximated all the look of full scale gloss aeroplanes. The result was a lot better than I had hoped, not the ideal solution but coming as close as I have previously achieved to replicating gloss in scale.

The trouble is that I only mixed enough for one aeroplane, which went on the F-101B. When I came to mixing another batch I must have put in a touch more *Dulcote* with the result that the F-102 and F-106 do not have quite the sheen of the F-101B and do not look quite as good. Another lesson learned.

What is that stuff around the cockpit?

It turns out that the rather prominent material between the metal and perspex of the cockpits on all three interceptors is a form of fibre-glass that fills the surface gap between them. Like the equally enigmatic 'zinc-chromate' this material does not seem to have a particular colour, that depends on the particular batch that is used on a particular occasion.

If it was at all possible, modellers would simply leave this little strip of colour off their models, but it always appears prominent on photographs, probably in contrast to the large areas of grey on these interceptors. The main trouble is that in 1:72 this strip is very fiddly and enough to bring further bouts of excited and desperate verbal expressions.

I did the F-101B first and tried using decal sheet painted an appropriate colour. The result is not bad but the strips are perhaps a little too wide, making them a little too prominent. I tried all kinds of solutions to get something better for the F-102 and F-106 and was finally reduced to trying to mask the tiny 1mm lines, which resulted in even more excited and desperate language than previous traumas with these three models had caused. By accident I noted that the thin Tamiya tape I was using to do the masking did not look too bad, and so I used thin stripe of it in a perhaps reasonable attempt to replicate the fibre glass.



Conclusion, if any.

I will probably never make more models of any of these three aeroplanes so any conclusions would be unnecessary. Still, it does make me wonder why we sometimes spend so much time trying to solve problems that most people would not even know were problems in the first place.

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