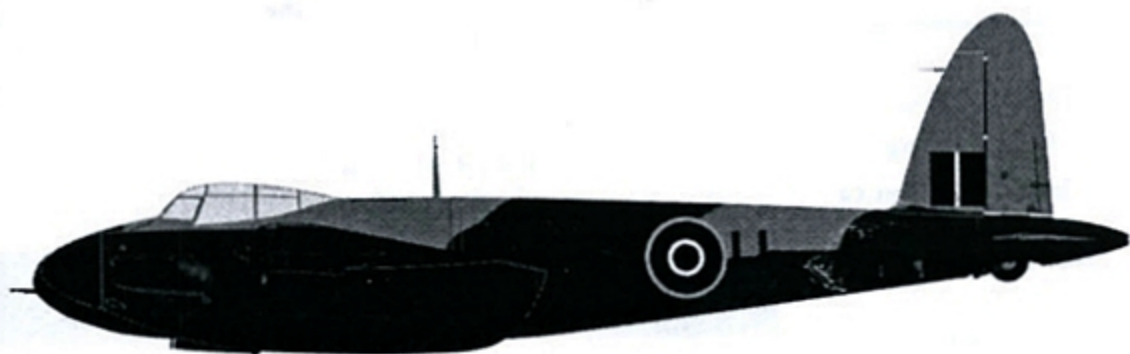


Canadians in Fighter Command #1

Mosquito FB.VI
(series I) HJ719
as aircraft TH • U of
418 Squadron RCAF,
RAF ADGB*,
Holmsey South,
circa early-mid 1944



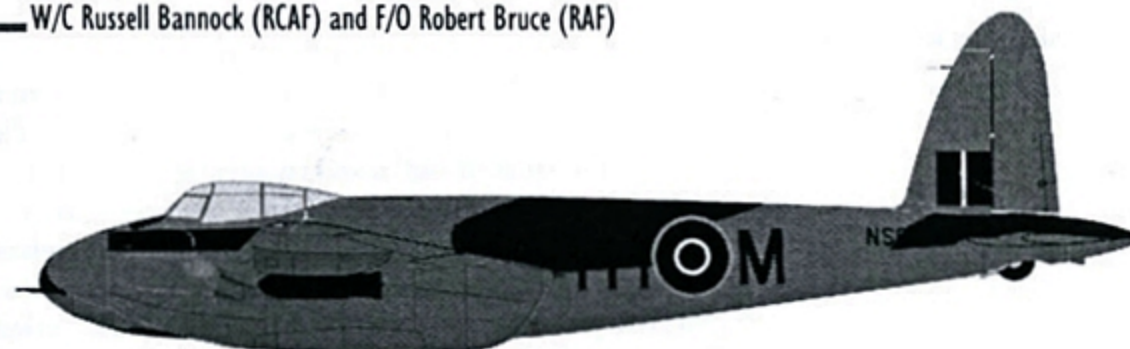
F/L James F "Lou Luma (USAAF) and F/O Colin Finlayson (RCAF)

Mosquito FB.VI
HRI47
as aircraft TH • Z of
418 Squadron RCAF,
RAF ADGB*,
Hunsdon,
circa late 1944



W/C Russell Bannock (RCAF) and F/O Robert Bruce (RAF)

Mosquito FB.VI
NS850
as aircraft TH • M of
418 Squadron RCAF,
RAF ADGB*,
Holmsey South,
circa mid 1944



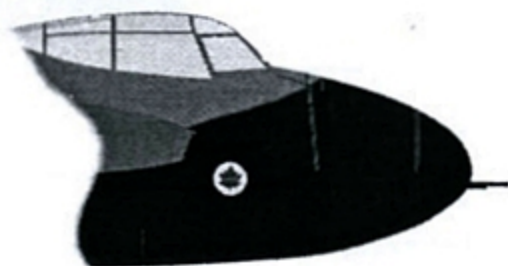
S/L Robert "Bob" Kipp (RCAF) and F/O Peter Huletsky (RCAF)

* *Fighter Command became Air Defence Great Britain (ADGB) on 15 November 1943*

NOSE ART!

All aircraft feature
unique nose art.
It's been done
before, but now
newly researched
and rendered in all
scales.

Plus 7 variations
of the RCAF WWII
Maple Leaf decal



Many thanks to
Carl Vincent, Mark
Proulx and Intruder
extraordinaire
Russell Bannock for
their assistance and
encouragement.

- FB.VI series I
- Older-standard radio aerial mast.
- Twin tail lights and possibly old style wingtips (see overleaf).
- No radar warning aerial fairing under tailcone.
- Early exhaust shrouds were more subject to heat damage to the extent that paint sometimes burnt off.
- Early 250 pounder hardpoint fairings shown, but were likely replaced by the larger 500lb ones by the time nose art appeared (see text on supplement sheet).
- Spinners and tail landing gear components also Smooth Night.
- Nose cone looks like a replacement (demarcation mismatch) at the time nose-art photo was taken.
- Upper Grey may be Ocean Grey (see text overleaf).

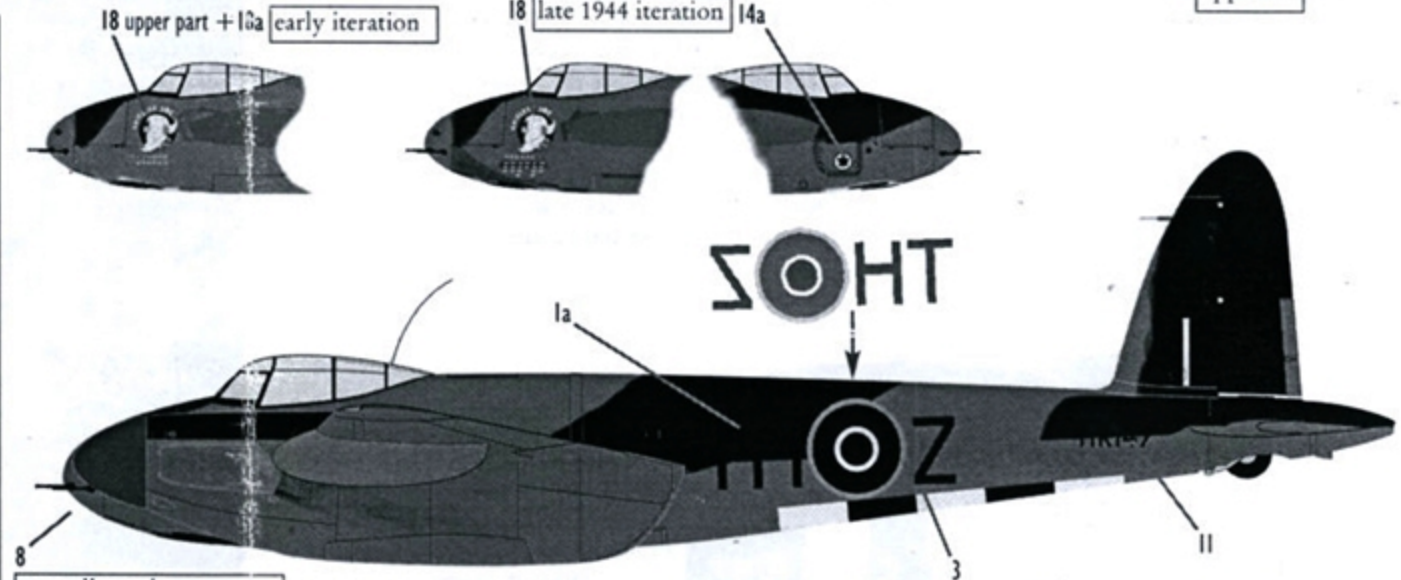
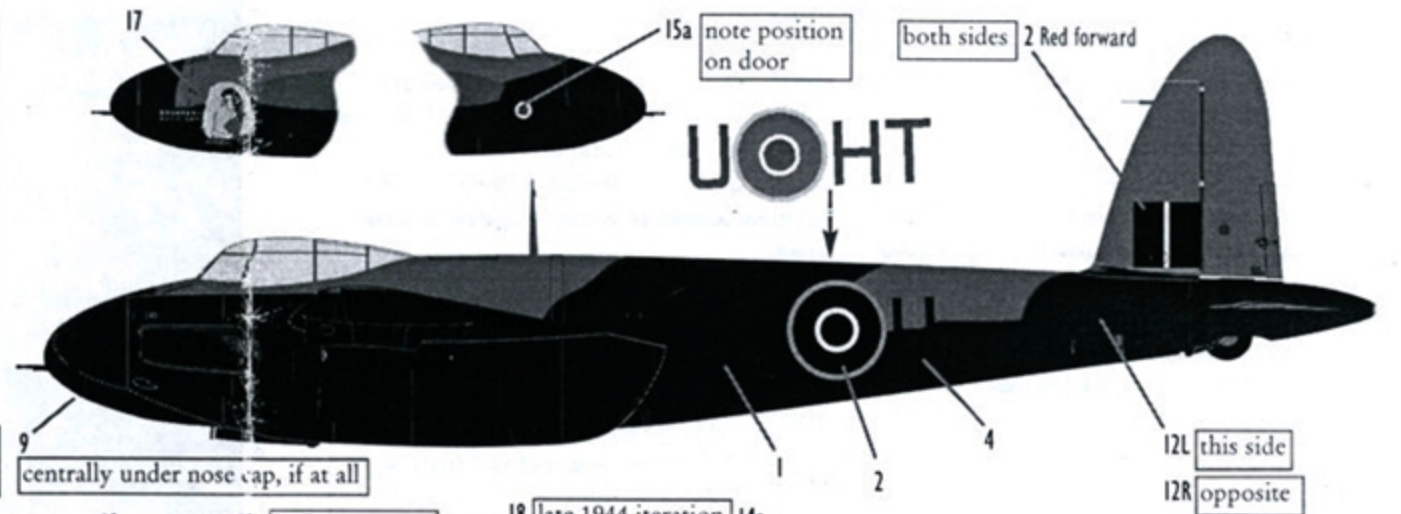
HJ719 "Moonbeam McSwine"

- FB.VI series II, early-production
- Older-standard radio aerial mast originally (see overleaf).
- Whip antenna when later nose-art photos were taken.
- Single tail light fixture and later wing formation lights.
- Radar warning aerial fairing under tailcone.
- Later exhaust shrouds were better at disappating heat, but paint still ended up somewhat burnished towards rear.
- Later 500lb harpoint fairings or drop tanks as standard (see text on supplement sheet).
- A.E.A.F. stripes are not exactly parallel to fuselage stations.
- Spinners, along with touch-up refinishing on the lower nose area, may have been Ocean Grey on later iterations.
- Nose cone looks like a replacement (demarcation mismatch) at the time both early and late nose-art photos were taken, and the gun bay cover looks as though it was repaired/replaced often.
- A noticeably darker tail top can be seen in one overall front-view reference photo. This may be the result of outright replacement or repair refinishing. It is possible that only the rudder was affected. This profile represents one extreme, while that overleaf represents an early service instance.
- Outer canopy framing was black when the aircraft had nose-art. Possibly a replacement taken from an older all-black aircraft?

HRI47 "Hairless Joe"

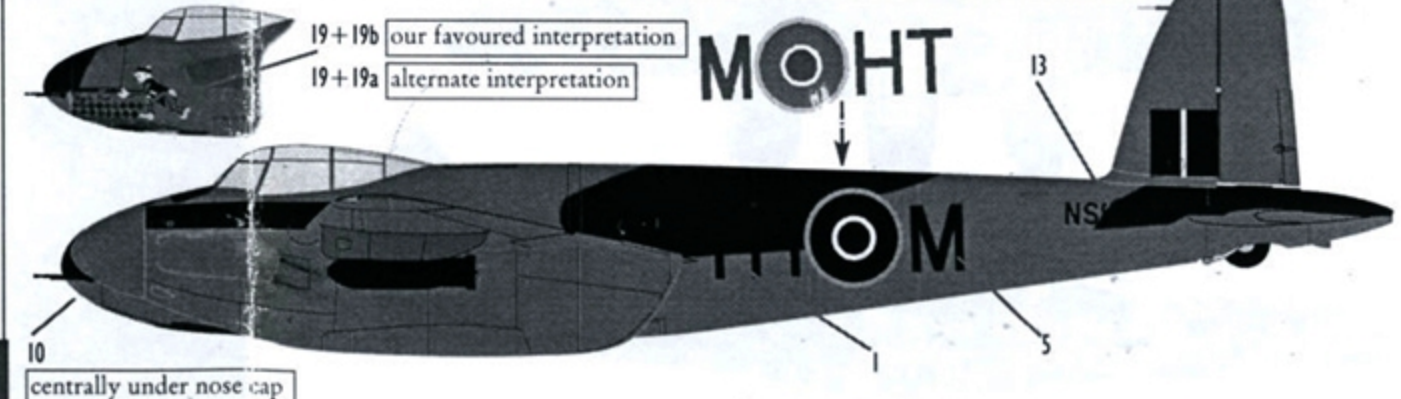
- FB.VI series II, mid-production
- Whip antenna when later nose-art photos were taken.
- Single tail light fixture and later wing formation lights.
- Radar warning aerial fairing under tailcone.
- Later exhaust shrouds were better at disappating heat, but paint still ended up somewhat burnished towards rear.
- Later 500lb harpoint fairings (shown here with 500lb MC Bomb) or drop tanks as standard (see text on supplement sheet).
- Nose strike camera orifice (hole in upper left nose cap) appears to have been patched over at some point. The dope used for this may have been red or the yellowish (described as "light ochre" or "dull amber") material sometimes used for Mosquito cannon ports and fabric repairs, or it may be a fresh brushed-on patch of camouflage paint.

NS850 "Black Rufe"



Note that the variation in touch-up refinishing seen over time in the lower nose (and to a lesser extent the forward nose-cap areas) was a common feature on wartime cannon-armed Mosquitoes. This was largely due to the patches, using dope and fabric tape, often applied to the cannon ports between sorties. The dope colour was typically a red oxide or dull amber yellow colour, sometimes overcoated with fresh Medium Sea Grey

Decals 14, 14a and 15 thru 15d are reconstructions of the various Maple Leaf decal disks seen on 418 Mosquitoes. 14a matches the description of the 10 inch decal supplied to the RCAF overseas squadrons from Canada while 15 and its offshoots match photos of that seen some squadron aircraft. Our closest "best guesses" are keyed in here.



Aviaecology Canadians in Fighter Command

Modeling Notes

General

- Airframe stencil / data decals are not supplied in this set as these are usually supplied within modern kits. The 1/48th scale Tamiya offerings feature a pretty complete set, for example. It would appear that completeness, or lack thereof, of stencilling varied greatly within the vast fleet of Allied wartime Mosquitoes. Typically new-to-service aircraft show evidence of carrying the complete set while examples subjected to ongoing maintenance and repair show overpainted, removed, and reapplied stencils to varying degrees. HJ719 as aircraft TH•U of 418 Squadron, for example, featured "holes" in the unit-applied Night undersurface paint so that ground crew could still read the factory-applied stencilling that indicate empennage jacking and trestling locations. While further forward, stencilling related to weapons bay operation were completely overpainted. With this in mind, a check of reference photos will provide some guidance. Barring that, perhaps observation of the subject aircraft's general "state" can suggest the extent of airframe stencilling to use. Bear in mind that 418 kept its aircraft and crews extremely busy, especially during the period of operation of these nose-art endowed examples.
- On a related note, examination of reference photos gives the impression that the overall paintwork on these aircraft was, as a general rule "dirty up front and clean behind." Looking beyond the nose art in close-up crew and kite photos, a great deal of variation in the paint and finish becomes immediately noticeable around cannon troughs, the nose strike camera orifice, wing root, root intake edges, et.al. In some cases this appears to be brush-applied fresh patches of the original colour, whereas in others it is clearly red dope (especially around the cannon troughs) or, as some references suggest, a special dope concoction for fabric over wood surfaces described variously as being either ochre or dull amber in colour.

Mosquito FB.VI HJ719 and "series I" possibilities

- 418 Squadron was an early user of the FB.VI and as such became one of the relatively few (113 aircraft in 4 in contiguous blocks from the HJ662-HJ833 serial range) initial operators of early-production series I aircraft. Just exactly what constitutes an FB.VI series I airframe continues to be the subject of much discussion among enthusiasts. Often, the delineating feature has been simplified to "they could only carry 1x 250lb bomb per hardpoint." presumably this was due to a structural limitation of the early wing design while later aircraft (i.e. with the strengthened wing) could tote up to 500lb per. However it should be noted that the squadron's official documentation calls this to question, revealing that many of these early machines (HJ773, HJ822 and HJ830) started to log missions toting 500 pounders on both wing and internal weapons bay hardpoints from 26 July 1943.

It seems possible then, that the aerodynamic fairing enclosing the wing hardpoint's Universal Bomb Carrier Mk.III (UBC Mk.III) may have been the limiting factor, given that those on early FBs were designed for 250lb bombs only, while the UBC itself was cleared for up to 600lbs. Later, a recontoured fairing, complete with attendant flight and release parameters for heavier ordnance, was developed for the Mosquito with the test flight help of A&AETE Boscombe Down.

Coming back to 418 Squadron for a moment, there is a series of photos featuring 3x early black-bellied aircraft (coded TH•B, H, and K) in formation. Interestingly "H" features the later conformal harpoint fairings while "B" and "K" carry "naked" UBCs; highly unusual for Mosquitoes. Could it be that these latter two are FB.VI series Is that the Squadron has already started using heavier ordnance on? If the fairing alone was the limiting factor, then this configuration would make sense. Was the "H" in the photo a newer series II machine? See the main illustrations for paint scheme notes.

Mosquito FB.VI HR147 and new production standards for Fighter Bomber Mosquitoes

- This aircraft, a relatively early-production FB.VI series II, was with 418 from 9 May 1944 and, as such, may have had the original factory-standard radio antenna mast. If so, as with other squadron aircraft of the same vintage, this removed and replaced by the whip antenna at some point. Apparently this later antenna served both the Gee navigational aid and the communications radio set. The later 500 pounder fairings were standard for production FB.VIs by now. These could accommodate the smaller 250lb

Part 1: RCAF Mosquitoes

bombs as well, or the fairing and UBCs could be removed altogether in favour of drop tank "horns:" Small protrusions, labelled as *slip release gear* in the manufacturer's manuals, to which the various sizes of drop tanks could be attached. The usual load here for Fighter Bomber Mosquitoes were 50gal tanks. In a recent short phone conversation (December, 2008), Russel Bannock told the author that this aircraft was predominantly his during his time as CO of 418, though it was flown by other crews on occasion and conversely, he did fly other aircraft when "Z" was down for maintenance or repair.

Mosquito FB.VI NS850 and later production Fighter Bomber Mosquitoes

- Although a later production aircraft, within its 418 Squadron service life this aircraft's features were practically identical to those of HR147 described above. The factory was still delivering aircraft with the old-standard radio mast installed, but it is likely that this was removed and the whip aerial installed at the receiving MU prior to its subsequent move to 418, as the MUs were responsible for mission-specific ex-factory upgrades and refits at this point.



Above: An early formation shot showing the variation in paint demarcation and wing hardpoint hardware.

Right and below: These photos illustrate the nose-art portion of each aircraft represented. The significance of the variety in swastika victory markings remains the subject of speculation. They may represent night / day victories, air/ground victories, or victories by different crews. Note that HR147 "Hairless Joe" shows the total scoreboard - for W/C Bannock just before he left 418 Squadron to command 406 Squadron.



All Photos: courtesy of the Mark Prowitz collection

The Mosquito FB.VI in kit form

- 1/24 scale: The Airfix kit is announced for November 2009 release. We'll work up an edition when it's certain.
- 1/32 scale: Revell's bomber-nosed oldie is still the only choice, though conversion to a fighter-nose is needed
- 1/48 scale: Tamiya... the FB.VI/NF.II boxing. The Airfix FB.VI is also a good choice.
- 1/72 scale: Lots to choose from, but obviously the newer tooling kits tend to offer better accuracy and detail.



Introduction

All new-release (c.2008-2009) Aviaeology decal sets are printed using a relatively new all-digital system referred to as *Digital Silk* by our printers. Though the net result is the same (you get markings on the model via the water-slide transfer method), there are some differences to be aware of. Like all model-building technique that ventures into non-traditional media such as resin, photo-etched, and vacuform parts, predictable, consistent results can be obtained with repeated use and observation. Breaking from tradition can have rewarding advantages.

Carrier Film

The clear carrier film covers the entire decal paper area. This is often portrayed as an inferior approach, and admittedly it can have its limitations. It can lead to unpleasant model finishing sessions if inferior film and adhesive formulas are used. *Digital Silk* decals are printed on the same high quality formula used by industry leader Microscale, so all of the colour decal elements sit on a traditional-technique-friendly carrier film. If carrier film related problems (adhesion, "silvering," etc) persist even with this top notch film and adhesive formula in use, they can generally be presumed to be technique - rather than technology - related. As long the individual *Digital Silk* elements are cut from the main sheet as recommended herein, and subsequently applied over a properly prepared surface, the results will be the same as with decals printed on "spots" of clear film of the same quality. Modellers who have employed sound application techniques with good custom decals, such as those printed to Microscale-type paper on Alps printers, know this to be true.

See http://www.internetmodeler.com/2008/april/aviation/sh_il6.php for further insight on this topic.

Ink

This aspect of the *Digital Silk* process is remarkably different from that of any other process; traditional silkscreen printing, generic inkjet / laser printing, and even Alps printing included. The ink used here results in extremely durable individual decal elements. They are superior to all other forms in terms of crack and scratch resistance, chemical resistance, and colour opacity. Generally speaking these are all advantages, but, since softening agents are a well known part of decal application technique, the chemical resistance aspect does require some *workaround* technique.

See <http://www.internetmodeler.com/2008/october/aviation/c46.php> for further insight on this topic

One key advantage of the *Digital Silk* process is the ability to print all colours in dead register with each other. This eliminates the need for the multiple decal elements that designers are often forced to use to compensate for silkscreen printing registration problems. This is especially true of thin outlines and complicated badge/crest type items. It also allows for the underlying white - the crucial "opaquing" layer necessary to keep the model's paint colour(s) from influencing other decal ink colours - to be printed right out to the edge of overlying colours. This keeps the opacity consistent right out to the edge of the marking. Not "choked back" a little (a lot with some printers!) for registration reasons.

As it sits unused on the decal sheet, the ink has a minor texture. This is normal, a result of the production drying process. This practically disappears once the model finishing process is completed.

One final note on *Digital Silk* ink. Unlike traditional volume production decals and, to a lesser extent, Alps printed decals, production complexity is not dictated by colour count. Basically this means designers can use as many colours as are necessary, including all of the nuance airbrush-like shading within "nose art" type markings, to render most markings in scale.

Production

These editions are printed in short run batches according to demand. This has an obvious advantage for manufacturers in terms of inventory, while the modeler benefits in the knowledge that the decal just purchased is practically as fresh as the day it was printed. Another advantage, for both this time, is that we can respond to new information on any given subject by changing the decal sets contents on the fly.

Preparation & Application

What follows has a lot in common with good traditional decal technique, incorporating a few changes to better accommodate *Digital Silk* process decals. This is especially true of water temperature, step 9 and step 10.

1. Pay particular attention to the models surface prep. A smooth well-cured gloss coat - like that obtained with *Future* clear floor finish or *Micro Gloss* left to dry a few days - is essential.
2. Prepare a bowl of water that is somewhat warm to the touch. It helps if you can maintain it at such a temperature for the entire decalling session. If you suspect "hard" water, add a very tiny droplet of dish soap and stir it around very gently to "soften" the water. *The reference web page cited under the "Ink" section overleaf features some additional technique for application over stubborn curves etc.*
3. Cut out the individual decal elements as close to its colour edges as you are comfortable with. Obviously, the closer the better is a good rule of thumb to minimize carrier film problems. It is also good practice to use sharp blades. Dull ones may produce small rips in the carrier film which may reduce contact and adhesion along the affected edge.
4. Sit the decal element on the water surface paper side down. There is no need to submerge it. Soaking water into the paper for 20 or 30 seconds is all that's needed. Don't let the decal float off of the paper.
5. Remove the soaked decal from the water and set it aside for 30 seconds or so. Keeping the decal in contact with the paper through these two steps is good. It will not fold and the adhesive remains undiluted at full strength.
6. Brush / place a pool of "softened" water or setting solution (like *Micro Set*) onto the model where you want to place the decal. Slide the decal off of the paper directly onto this and move it into its final position.
7. Blot the decal - gently at first - with the goal of bringing it into closer contact with the model's surface (i.e. the goal is not "squeezing out all of the setting solution from underneath" at this point).
8. Let it dry for a while. The decal should start to snuggle to the surface on its own as it dries.
9. A) If you suspect some underlying details may produce air pockets in the drying decal, puncture the ink surface neatly with a needle or pin, or slit with a sharp blade as appropriate. Then saturate the puncture with a little aggressive decal solvent such as *Micro Sol* or *Solvaset*.
B) The key here is to get the softening solution UNDER the durable ink layer (through the pinhole or slit) so that it softens the underlying carrier film. Note that, unlike traditional silkscreened decals, the *Digital Silk* ink itself is not affected by these softening agents.
C) After determining that the carrier film is sufficiently softened, a soft pencil eraser or similar pliable object can be used to rock and/or roll (seriously!) over the marking to make the decal conform over the protruding detail. For larger markings, feel free to use a finger tip instead.
D) Firm rocking and rolling motion, instead of rubbing, is preferred. After a while you get a sense of the technique and it becomes predictable with repeatable results.
10. The other main use for the more aggressive softening solutions is to "melt" the carrier film from around the colour elements. Once the decal has dried a bit more, apply something like *Micro Sol* or *Solvaset* to any carrier film remaining visible. The film will react like that of traditional decals... wrinkling some before snuggling down onto the gloss finish underneath. The ink will not distort or become fragile as the film under and around it reacts. In fact, you can still continue to poke and prod at stubborn protruding details if need be. Don't try this with traditional decals... they will likely disintegrate.
11. Once everything's dry, apply the desired clear finish as appropriate. Once dry, the surface of the model, over both paint and decal areas alike, should look pretty much uniform (at least as good as your last ace decal job!) and ready for show, shelf, or club night.

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123 Church Street, Kitchener

Ontario, Canada N2G 2S3

sales@aviaeology.com

www.aviaeology.com

<http://stores.ebay.com/Aviaeology>

fax: 519-742-2182

Intruder Mosquito Colours

The earliest fighter-nosed Mosquito Mk.IIs destined for night operations, whether intruders or radar-equipped pure night fighters, were finished in an overall black scheme. 418 Squadron seems to have received some of these aircraft early on. By the time they had transitioned fully from Boston III/IIIA to the much more capable Mosquito FB.VI, the factory-standard Night Fighter scheme had evolved from overall black (initially Special Night and later Smooth Night paint) to Medium Sea Grey overall with a Dark Green disruptive pattern on the top and side surfaces. This was outlined in the October 1942 AMO A.1096, and was the result of service trials started in the summer.*

Even while the new Night Fighter scheme was being established in written form and yet to be standardized on the production lines, 23 Squadron RAF (another early Mosquito Intruder unit) created a bit of a "flap" by continuing its own scheme trials in September 1942, with the eventual result that Intruder-tasks aircraft would have black applied to their under surfaces while regular Night Fighters would continue with the new 2 colour Night Fighter scheme.

By then, Smooth Night had become the service-standard black paint as the rougher, heavier Special Night had fallen out of favour due to its impact on aircraft performance and maintenance. With

all Fighter Command (ADGB) destined nocturnal Mosquitoes leaving the factory in the new scheme, the additional Smooth Night application was rendered ex-factory by the Service. This usually occurred at the attendant Maintenance Unit though it is plausible that Intruder squadrons did some refinishing of aircraft already on strength.

This situation was short lived however, as the Intruder scheme evolved yet again. By the beginning of 1944 FB.VIs were going to Intruder units in the standard 2 colour Night Fighter scheme.

* It should be noted that for a brief period, as a result of the earlier stages of said trials, some Night Fighters were finished in the then-new Day Fighter scheme of Dark green disruptive over Ocean Grey tops and sides with Medium Sea Grey unders. Since the serials on these transitional scheme Night Fighters were Dull Red, a case can be made for the Grey on HJ719 being Ocean Grey and not, initially at least, Medium Sea Grey. Starting with the transitional scheme and on into the new 2 colour scheme, the serials applied to subsequent Night Fighters were Night (black).

