



Aviaeology Sharkmouth Typhoon

SPECIAL EDITION - featuring 2x aircraft from 245 Sqn.

Typhoon IB MP197

as aircraft MR • U of
245 Squadron RAF,
2 TAF

January through May
1945

As flown by
F/L H.T. "Moose" Mossip
and S/L Tony Zweigbergk

Typhoon IB MP197

as aircraft MR • U of
245 Squadron RAF,
BAFO, summer of 1945

As flown by
S/L Tony Zweigbergk
and others



**+1 BONUS
option!**

Typhoon IB SW460*

as aircraft MR • Z of
245 Squadron RAF,
2 TAF

April / May 1945

As flown by
F/L Geoff Murphy



Trainbuster extraordinaire...

...Harrison Taylor "Moose" Mossip, who had been awarded the DFC for his earlier exploits on Typhoons with No.1 Squadron, later flew a number of successful sorties in Typhoon IB MPI97 as a member of 245 Squadron. This Canadian pilot's aggressive spirit is best illustrated by snippets from his log book detailing MPI97 sorties:

- 29 November 1944 — led an armed recce and claimed 1x barge damaged, 1x train, 1x factory, and 1x town (yes, these last two are verbatim from the logbook entry for his first MPI97 sortie!)
- Interspersed with other aircraft, he flew "Sharky" again on 3, 30, and 31 December 1944, 13 January, 6, 14, and 16 February 1945 variously on armed recce or R/P practice sorties.
- For one of the two 14 February missions in this aircraft the logbook entry refers to a locomotive destroyed and an *en passant* squirt of cannon fire at an Me262 with no result recorded.

Mossip was lost on 7 March in Typhoon JP936. The sortie was an armed recce to the Paderborn area. After destroying one train and damaging another he was observed to have hit high tension cables 12 miles S/E of Hamm and subsequently reported MIA.

Sharky in all her glory at Warmwell Armament Practice Camp in June of 1945, resplendent in 245 Squadron's blue and white livery of the period.

The Lone (?) Sharkmouth Typhoon

It seems very odd that the popular sharkmouth motif has, according to the current photographic record, adorned only one Hawker Typhoon. With its huge radiator and nose shape, the type seems eminently suited to such embellishment.

During the work-up for this special edition decal set, noted researcher / author Chris Thomas and I exchanged some banter on the colour of the open portion of the mouth marking. Without colour photos at hand to settle the issue I thought it would be prudent to present both of our conclusions herein. Chris makes a good case for a "low viz" treatment, while I went for a slightly more flamboyant possibility. Ultimately the choice will be up to you, the modeler. I'm sure I speak for both Chris and myself in saying that I am looking forward to seeing the yay/nay results show up on scale model exhibit tables and forums in the coming months (and years?).

In the meantime will some genuine genius finally figure out how to derive exact colour conclusions — not mere interpretations — directly from grayscale still images? It seems highly unlikely. For now it seems necessary to keep the black and often dubious art of photo interpretation in our historical scale modeler's collective tool box. With this in mind I hope you enjoy, without too much anxiety, what we present here...



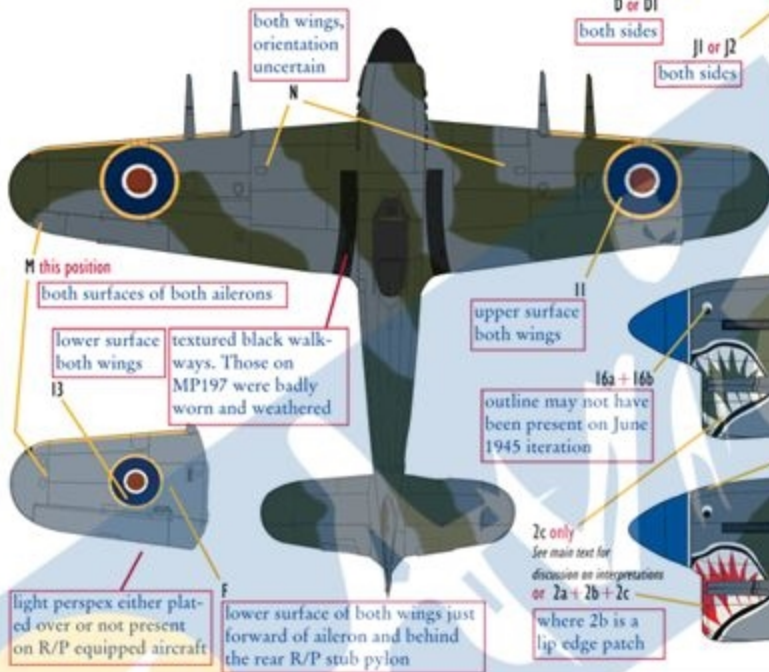
Many thanks to Brian Musson and Chris Thomas for offering up their knowledge, resources and research to make this project possible, and to our mutual friend John Melson for sparking the connections in the first place.

I'd also like to acknowledge the contribution made to Brian's research both by wartime RCAF photographer Mike Bunt and by the Mossip family.

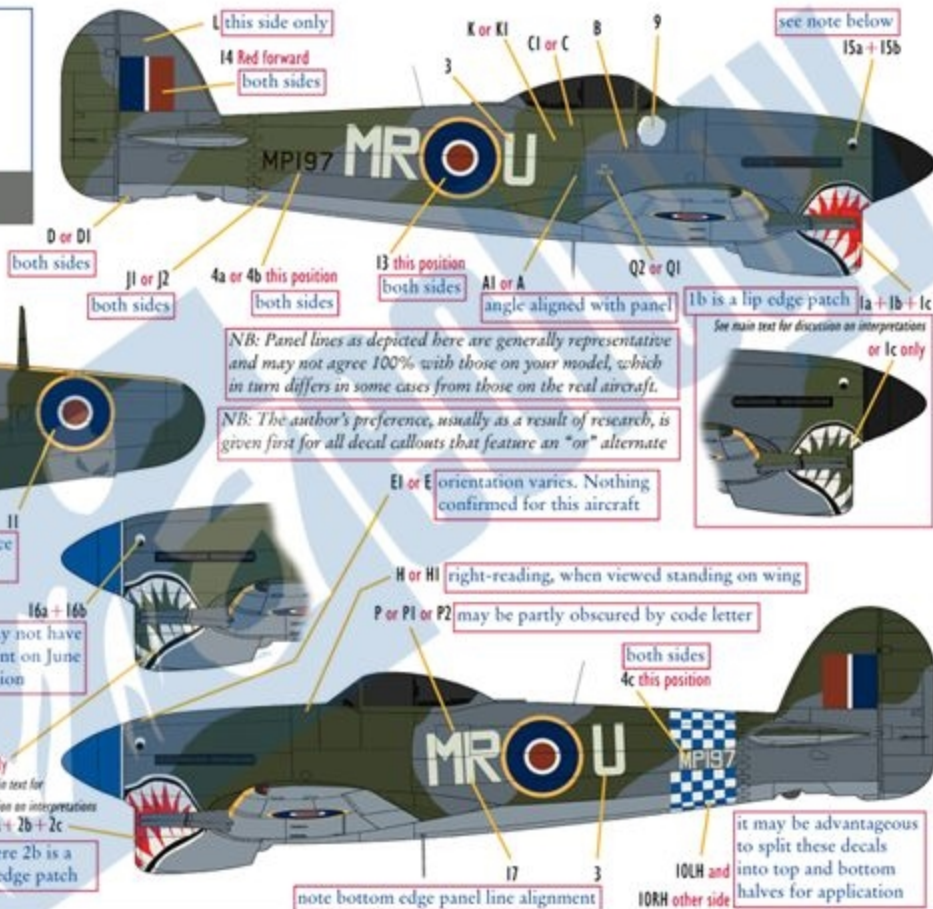
The part played by aircrew such as Geoff Murphy in adding to the knowledge base of Typhoon researchers such as Chris Thomas is also gratefully appreciated.

- 4 bladed propeller.
- Tempest type tailplanes.
- Standard exhausts (not flanged/ shrouded).
- Mk.IIIA R/P equipment (with later lightweight type rails).
- A mix of R/P and long range tanks were photographed on this aircraft.
- Tropical air filter presence not known for certain, but seems unlikely.
- "Cuckoo doors" radiator intake present.

MP197 / MR+U, 245 Squadron, January through May 1945



The paint scheme is the standard Day Fighter scheme of Ocean Grey and Dark Green upper surfaces with Medium Sea Grey under surfaces as detailed in most kit painting instructions. Yellow wing L/E stripes were also standard. The 2 TAF era Night spinners would have been common to both up until at least early May of 1945. The formerly Sky rear fuselage band was overpainted with camouflage colours for the period when both sets of markings featured in this set were applicable. The upper plan view shown here should be considered as representative. Minor variations were common. As with many of our bygone-era modelling subjects, filling in the blanks for the parts of the scheme not yet discovered in photographs remains an exercise of discernment-informed artistic license. Examining the schemes of aircraft with close serials might prove useful, along with some knowledge of the standards and variations of the day**. As always, check your references!



- Details as per the early iteration of this aircraft but note the post-war markings changes. Also included blue painted spinner, inner main gear doors, and intake centre. Exposed edge of spinner backplate was also finished in white.

MP197 / MR+U, 245 Squadron June 1945



Landing gear and nose scrap view illustrations appear courtesy of Chris Thomas © 2009

For further material on Typhoon configurations and markings (especially through 1945) please refer to the excellent article in Model Aircraft Monthly Volume 8, No.7 of July 2009 by Chris Thomas. If you don't have it, the publisher may still have back issues at http://www.sampublications.com/frames/mam_out_f.htm

A Google search with the above author's name and the aircraft name entered may also reveal a few great books on the subject. For more on Canadian Typhoon operations and personalities there is the thorough CANAV Books title Typhoon and Tempest by Hugh Halliday. The publisher still has a few left at a great price... <http://www.canavbooks.com/Publications/TyphoonAndTempest/>

**Need a workbench resource on the camouflage, markings and ordnance on 2 TAF aircraft, including the Typhoon? Follow this link volume... <http://www.amazon.co.uk/2nd-Tactical-Air-Force-Camouflage/dp/1906537011>

This decal set was designed around the following kits, with some decal elements adjusted to suit each:

- MDC kit # CV32037 in 1/32 scale.
 - Hasegawa kit # JT60 (with modification) in 1/48 scale. The necessary upgrade parts are offered by Ultracast.
 - Academy kit #1664 (with modification) in 1/72 scale. The link from the kit number goes to an in-depth build article. Or, alternately, here' an article showing a "Tempest tailed" Typhoon already built in 1/72 scale.
- Pavla also offers a complete conversion / upgrade set for the 1/72 scale Academy kit.

Note: If you are viewing this as a PDF on-screen instead of the paper hardcopy, just hover your mouse cursor over the kit or book descriptions. Any links will alter the cursor and you should be able to go to the appropriate web page.



Photos: this page and Inventions, front page, courtesy of Geoff Murphy via the Chris Thomas collection

F/L Geoff Murphy (left) and S/L Tony Zweigbergk with Sharky circa April 1945. From a modeling point of view the amount of weathering and wear is of interest. Behind the dirt and grime some parts of the sharkmouth design – particularly the teeth – are wearing away, even to the extent that rivet lines seem to have vibrated their way through! What this author purports to be red paint (see *Typhoon MPI97 Sharkmouth-eology?* at right) appears to have worn down to underlying camo in spots. And the camo itself has worn to metal on the leading edge of the intake lip. Given the amount of weathering and wear, the marking seems to have been on the aircraft for a while. However, we have no concrete evidence of its existence to this photograph's date. As the MAM article suggests, the application of the sharky design was likely instigated by the aggressive Mossip before his untimely death in the previous month. So it is not outside of reason to imagine (or perhaps even assume!) that at some point in early 1945 Mossip, 'mouth and MPI97 were all together in the air – at the same time over enemy territory attacking factories, trains, and motor transport.

Typhoon MPI97 Sharkmouth-eology?

In his July 2009 Model Aircraft Monthly (MAM) article, author Chris Thomas pointed out the contentious nature of interpreting colours from monochrome images. In my opinion he is absolutely correct in this. Nonetheless, if what is known about the schemes and markings of the era, and how they were applied, is combined with a little knowledge of the materials and processes used to record them photographically, then some believable best guesses can be made.

Typhoon MPI97 in 1945

The magazine article offers an entirely logical interpretation of the sharkmouth marking based on sound reasoning – white and black lips with white teeth over an otherwise camouflage-coloured chin intake. One of the features that supports this particular best guess is seen in both the photo at left and in our cover photo: the demarcation line between the upper and lower camo colours remains beneath the teeth on the lower forward curve of the intake. With this still visible, it seems logical to conclude that there is only the underlying camo colours, and no red paint at all, in the opened mouth part of the design. The idea that consideration would have been given to the conspicuity-enhancing, camouflage-compromising aspects of such a large patch of red is offered up as a supporting logical assumption. Seems reasonable...

However, imagine (uh-oh, that word!) that the artisan who applied the design to the aircraft decided to lay down the red first. The existing demarcation may have provided a convenient lower edge for this, the marking's first paint colour. Having blocked it out in this fashion, the white – the next large area of continuous colour – would have followed and then finally the black to neatly divide the white into lips and teeth. Having been gainfully employed as a sign-painter for more than a few years in my distant youth, I believe I would've approached it in this manner. That is, preferring to paint the teeth design additively rather than subtractively.

Imagine also that the extent of the design may have changed, as artistic endeavours often do, while painting was in progress. For the sake of argument (sorry Chris, I meant "discussion"...) let's suppose that the original idea called for the lower lip and tooth row to end against the intake lip above the camo demarcation line, but changed on a whim or peer suggestion somewhere between red and white! Could this be the reason why the upper / lower demarcation is still showing?

Enough about silly sign-painters...

... what about tonality?

Note how the yellow prop blade tip renders relatively dark in this image at left, indicating the likelihood that the photo was shot on orthochromatic negative material. If so, then other warm colours (i.e. red, which is typically warmer) would register dark (the warmer, the darker, as a general rule) in the same image. A subtle tonal variation is discernable both within and outside of the

mouth in this photo. This difference is also measurable as demonstrated in the close-up and caption below. So is the mouth red? Or is the original camo left untouched? Or maybe the Dark Green within the mouth has been refinished?

Compared to this, consider the different kind of tonal relationship captured in the Mike Bunt photos elsewhere in this package. If the difference between the Dull Red and Yellow of the national markings, combined with their lighter overall tonality, are anything to go by, then the RCAF photographer likely used a panchromatic negative material. Long story short, panchromatic images yield a closer-to-reality tone range (dark is dark, light is light irrespective of colour temperature). Here the Dark Green and (what I purport to be) Bright Red (for surely the artiste would not have used bland Dull Red!) come closer in tone.

Enough about tonality...

... what about surface sheen?

When examining the 3/4 front Bunt photo (see cover-page) at very high resolution on screen, a difference in surface reflectance can be observed between the darker parts of the sharkmouth design and the surrounding camo paint. This nuance may even be visible in print. Oily grime notwithstanding, this suggests a difference in the painted surfaces; brush-painted mouth over sprayed camo perhaps? When zooming in very close I can also convince myself that there are brush marks present. Especially in the black lip elements, but to a lesser degree in the open mouth element (where thinner, better levelling paint may have been used).

Yeah, yeah, whatever...

... so what was that about camouflage compromise?

Sure, this makes for a valid argument against the maw being red. Especially if logic is cranked up to full strength. However, with logic pushed a little to the side and a modicum of historical precedent introduced, ponder these questions:

- 1) Prior to the advent of modern day low-viz grey paint schemes, what percentage of sharkmouth-endowed operational combat aircraft have actually lacked red as part of the design? Think 112 Squadron RAF, 14(f) Squadron RCAF, the Luftwaffe's ZG.76, and the AVG / 23rd FG in the east.
- 2) On dark camouflage, wouldn't the contrast imparted by those huge white teeth and lips be the ultimate camouflage compromise?

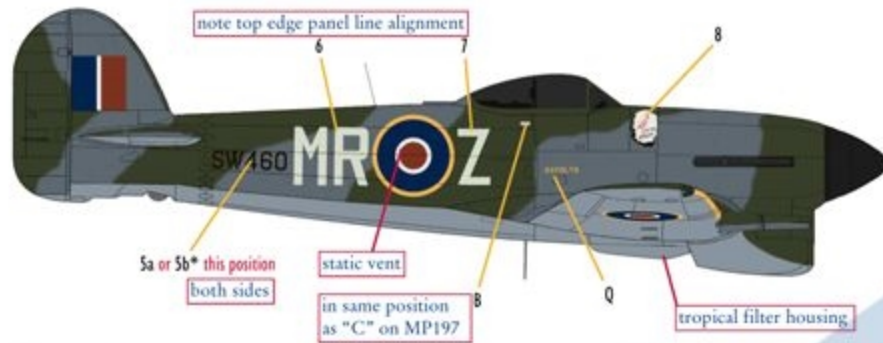
Well yes, but...

... what about my model?

Remember that old modeler's axiom *check yer references?* Perhaps when faced with subjects such as old Sharky here, we should add to that... "apply logic (but only where appropriate)", use available technology (Photoshop in this case), mix in a little historical precedent (hey, look! a all of those previous sharkmouths!) and then, just before the paint hits the plastic, extrapolate as intuitively as possible."



Using the sampling tool found in modern image editing software (Photoshop in this case), the grayscale value of a 3x3 pixel sample was read dead centre within the approximately 42 pixel diameter circles plotted in the close-up. The sample circle locations were chosen for the similarity of their planes relative to the light source, thus reducing the possibility of a large variance in shadows and highlights. Care was also taken to avoid what seemed to be heavily soiled areas. The results were 72% at 1, 73% at 2, 70% at 3 and 4, 64% at 5, 58% at 6, and 59% at 7. The dark lip ranges from 79% to 87% in its darkest non-shadow-influenced spots, with true uninfluenced black being 100% of course.



* This aircraft's serial number may have been SW560. Note that 2 commonly seen styles of "W" have been supplied – one with the SW460 string and the other with the SW560 string. You may have sufficient references to determine which is most correct

NB: The code and roundel presentation on the opposite side of the fuselage would likely have been aligned as shown for this side and followed the right-reading format as shown on MP197, even though the character shapes and proportions were different

- configuration similar to MP197 with the following exceptions...
- Small brass-coloured static vent (R/H side mid-fuselage) is present.
- Under fuselage tropical air filter was very likely present.

NB: All notes, standard markings deals including airframe stencil data, and paint scheme information is the same as those for MP197 except where changes are shown here

SW460* / MR • Z, 245 Squadron, April 1945

Typhoon SW460* – friend of Sharky

Typhoon historian Chris Thomas has had personal correspondence with Geoff Murphy on this subject, but sadly the absolute identity of his 245 Squadron mount could not be nailed down. Only the code, which was recorded in the pilot's logbook, is known for certain. Indeed, it is corroborated by these wonderful photos.

Both SW460 and SW560 were with the squadron at the same time and after cancelling out other possibilities (Chris's usual diligent research), the candidate list has narrowed to just these two. He also adds that, if it were his own model project, he would go with SW460. Given his profound knowledge of the subject, I wouldn't hesitate to follow suit.

As a matter of interest, both *Zephyr Breezes* and *Sharky* were on 245 Squadron strength at the same time. If you're so inclined, having these two sitting side by side in a 2 TAF rocket-arming diorama would make for a nice study in the finish and markings variations of contemporaneous squadron mates. Imagine, the elder MR • U with her somewhat tired paintwork, spot refinishing and teeth-embellished maw sitting next to the only slightly grimy MR • Z with her uniformly feathered upper camouflage demarcations, taller code letters and quaint personal art. In fact, have a look at the paintwork on the rudder and tail of the Typhoon sitting next to MR • Z in the photo on the far right... has this diorama already happened in 1/1 scale!

Note the stacks of HE rocket heads and separate rocket bodies stacked at a safe distance in the background, preparatory to loading on aircraft.



Photos: this page and beyond, from page courtesy of S/L Geoff Murphy via the Chris Thomas collection



F/L Geoff Murphy and ground crew posing for the camera with a smartly finished "Zephyr Breezes." The plain serial number style, the last numeral of which is visible at left, indicates that this photo was likely taken prior to 245 Squadron's postwar markings change.

Just behind the one crewman's ear and bridging the roundel white is the static port mod that started to show up on late-build Typhoons. It is also clearly visible in the photo below. Reported to be brass in colour, it should be easy enough to scratchbuild... a very thin piece of styrene sheet with a hole poked in it's centre would do the trick.

The position and character of the personal marking is shown to good effect in both photos below. Also note how the Ocean Grey camo paint and markings Yellow register nearly the same tone in these photos, making the "24 VOLTS" inscription (between cockpit sill and wing root) just about disappear.

