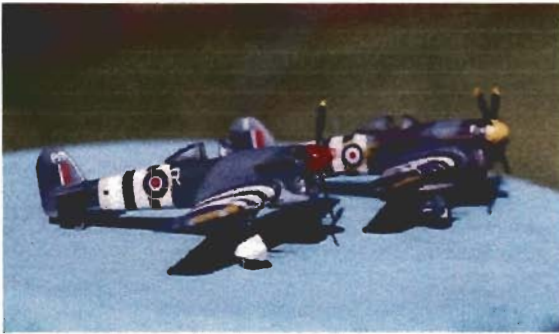




# **D-Day Hawker Typhoon**

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## BUILDING AND DETAILING THE AIRFIX 1:72 SCALE HAWKER TYPHOON : PART 1



*Fig 1 : The two Typhoon models as described by the various authors.*

### INTRODUCTION

The lines and looks of the Hawker Typhoon have always attracted me. As a young schoolboy I had built the Airfix model of the Typhoon and although a number of my early attempts were pensioned as time went by, somehow the Typhoon always remained on my shelves. The Typhoon was one of the most important Royal Air Force aircraft to operate in the air-to-ground role during World War II, especially in the immediate aftermath of the Normandy invasion. During 1997 I was fortunate enough to tour the Normandy invasion beaches for a week and thus had the opportunity to visit a number of museums and historical sites. This was really one of the most interesting visits that I have ever paid to Europe and any modeller who has the opportunity to pay a visit to this area should grasp at it with both hands.

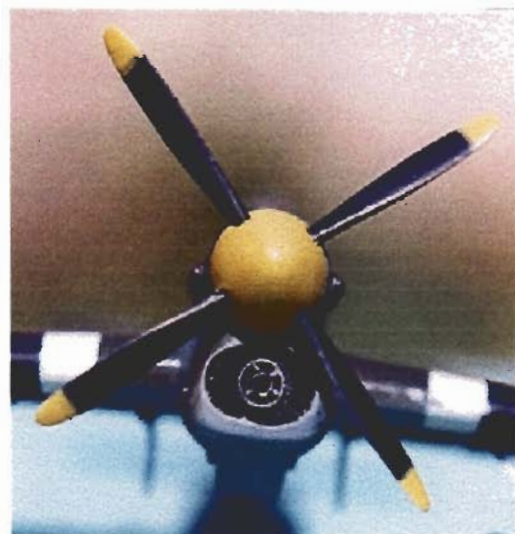
During a visit to the Memorial Museum in Caen, I viewed a 1:1 scale fibreglass model of a Typhoon that was suspended in a flying pose in the museum and only then realised what a large and sturdy aircraft it really was. This visit rekindled my interest in the aircraft and on return to South Africa, I bought myself another Airfix kit of the Typhoon. I decided to detail the model and after doing my research, decided

on building the model as a rocket armed Typhoon Mk 1B, fitted with a four-bladed propeller. This was one of the most common configurations used after D-Day against the German armour formations and was really the role and period that brought the fame it currently still has, to the Typhoon.

While studying my reference material, I made notes of all the modifications that I planned to incorporate in the model. Once this was done, I sorted all the information and then started with the construction.

### THE FUSELAGE

The first step in modifying the fuselage was to scribe all the panel lines and thereafter to sand down all the raised detail. This was completed before joining the fuselage halves, as I find it easier to do the scribing when the fuselage halves are still apart. The next step on the fuselage was to modify the solid nose intake into something more representative of the real thing. The solid plastic in the radiator intake was removed and a new screen from fine wire-mesh was cut to size and shape to fit into the opening. The fuselage halves were taped together during this part of the modifications, as the cockpit would still be detailed at a later stage.



*Fig 2 : The new intake area.*

Two rings cut from aluminium tubing of various thicknesses formed the radiator intake. The cross members acting as braces were made from plastic card strips. The centre of the intake was then drilled out.

The rear of the intake was then cut open, as this was a solid piece of plastic on the model and should in fact be a cooling exit, with a moveable flap. The wing leading edge carry through was added from plastic card. The intake duct was then added from plastic sprue, drilled out at both ends. The sprue was heated and bent through 90° to lead from the intake ring to the bottom of the engine. The engine was not built up but the bottom of the block was represented by a piece of plastic card, to which the intake duct was added. The radiator flap jack was constructed from telephone wire, with the plastic removed from one half to represent the jack. Finally the radiator flap was constructed from plastic card. The complete radiator area was then sprayed RAF Interior Green, with the grid dry-brushed in Gunmetal.



*Fig 3 : A front view of the model, showing the radiator area.*

The next step was to detail the cockpit. The firewall and rear bulkhead were constructed from plastic card and served as the basis for the rest of the cockpit detail. Stringers and cross members were added from thin copper telephone wire. The seat was constructed from plastic card and consisted of a seat back, seat bottom, two side panels and a front panel to form the seat pan. The floorboards were added from plastic card and a control column

from thin copper wire was added. Rudder pedals were constructed from thin plastic card and an oxygen bottle was constructed from a copper tube, fitted with plastic sprue end pieces. The instrument panel was constructed from two laminated plastic card pieces, with the primary instruments drilled out and filled with gloss varnish after painting was completed. The cockpit armour plating was added from plastic card. The throttle box was added to the left hand side of the fuselage and the hydraulic hand pump handle and seat raising/lowering levers added from copper wire. After the fuselage halves and all the detail were airbrushed Interior Green, the complete assembly was then placed inside one of the fuselage halves. The instrument panel, top of the control column and the throttle box were painted Matt Black. The rest of the cockpit was weathered using graphite from a soft HB pencil.

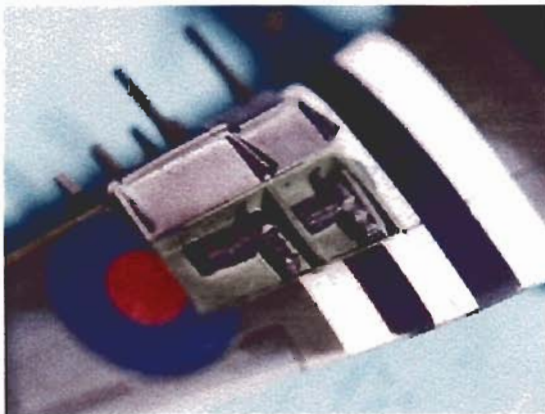
The fuselage halves were then glued together, using liquid glue brushed into the joint lines. The seams were carefully checked and putty was added where required. The joint lines were then sanded smooth. The final items added in the cockpit area were the cross member for the gun sight, added from thin copper wire and the gun sight constructed from plastic card. The fuselage was then placed aside and the wings were constructed next.

## THE WINGS

The wing panel lines were scribed and thereafter the raised detail was again sanded off. Once again the scribing was done before the wing halves were glued together. During my planning, I had decided to open the cannon bays on the left wing. The cannon bulges were therefore removed from the wing upper surfaces, as the bulges would form part of the open cannon bay doors. As mentioned during the introduction I planned to model the aircraft armed with rockets and the

underwing bomb pylons were therefore also removed. The left wing cannon bay covers were then cut out of the top wing surface and the two wing halves taped together. The cannon bay was then boxed in and divided with plastic card. Once dry and set, lightening holes were drilled into the various side panels.

The wheel well was also boxed in with plastic card and the wheel well ribs were constructed from plastic card strips. The cannon bay and wheel well were then airbrushed with Interior Green and the wing halves then glued together using liquid glue. The joint lines were once again inspected and putty was applied and sanded smooth where necessary.

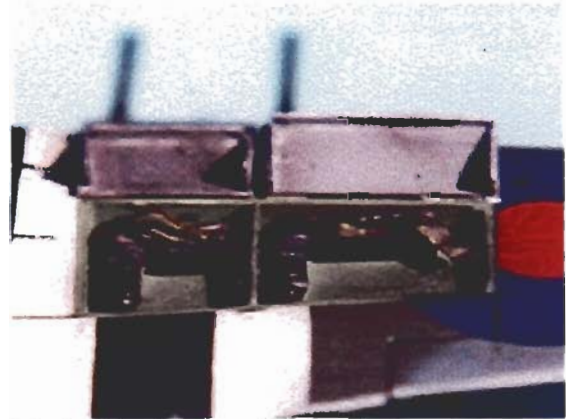


*Fig 4 : The left hand cannon bay.*

The two cannons were constructed next and each consisted of nine pieces. The barrel was constructed from copper wire, with the drum magazine feed added from round sprue. The breech block and magazine box were constructed from laminated plastic card. The solenoid was formed from telephone wire, while the ammunition box cover was constructed from thin lead foil. The breechblock detail was added from two strips of plastic card and the heating ducts were added from copper wire. The cannons were airbrushed in Matt Black and Gunmetal and were then added to the cannon bay. The cannon bay was then weathered using a thin black oil paint wash and some pencil graphite.

Finally the jack for the wing flaps was added to the cannon bay from telephone wire and painted in Flat Aluminium.

I was quite satisfied with the looks of the cannon bay and decided to also open up the right hand wing cannon bay. The complete construction procedure as described above for the left-hand wing, was therefore again followed for the right hand wing. On the right hand wing I opened up the ammunition boxes and added ammunition belts using thin lead foil sheet painted and scribed to represent the 20 mm rounds.



*Fig 5 : The right hand cannon bay.*



*Fig 6 : A view of the model, showing the open cannon bays on both wings.*

The cover doors for the cannon bays were constructed from plastic card. Each cover door was made up of a base cover plate, with the sides added and the cannon bulges added as applicable. Each wing bay had two cover doors. These cover doors were

then airbrushed with the applicable Dark Green and Ocean Grey patterns on the outsides and Flat Aluminium on the insides. Once the outsides were dry the applicable areas were masked off and airbrushed in White and Matt Black for the D-Day Invasion stripes.

### **FINAL ASSEMBLY**

The wings were now added to the fuselage and the joint lines were again filled and sanded smooth as applicable. The tailplanes were added next, ensuring that the whole assembly was nicely aligned and square. With the main construction completed, time was now spent on all the smaller parts that needed detail added.

The propeller was built up using a suitable spinner from an old Tempest kit and four propeller blades from the spares box. Ensure when doing this that the pitch of the blades is set correctly for the direction of rotation of the engine. The blades were airbrushed Matt Black with the blade tips and spinner in Matt Yellow.

The undercarriage was built up next. The struts were formed from wire, with masking tape rings around it. Brake lines were added from thin copper wire. Wheel doors were constructed from plastic card. A friend of mine cast two new wheels in resin, as I was not satisfied with the wheels from the kit. The undercarriage retraction jacks and piping were added to the wheel wells from various thicknesses of copper and telephone wire. The complete assemblies were painted in Flat Aluminium and added to the wheel wells. The cannon fairings were then added to the wings, after drilling out the openings with a thin drill and a pin vice.

The rocket rails were upgraded using the rails from an old Airfix Mosquito kit as the basis. They were airbrushed Medium Sea Grey after construction was completed. The rockets were added from the spares

box. The fins were sanded down to a more scale thickness and the rockets were airbrushed in Matt Black.

The kit canopy and windshield were sawn apart using a razor saw and then polished and varnished in preparation for fitting to the model. Canopy strips were masked off and airbrushed in Dark Green, using Humbrol matt enamel paint.

### **PAINTING**

I prepare all my models for airbrushing by firstly washing the models and then applying a Light Grey undercoat. I mainly use Humbrol matt enamel paints and Testors Model Masters enamels paints. My airbrush is a Badger 150 IL airbrush, which I have been using since 1978 without any problems.

The complete model was prepared for painting by washing it in luke warm water with a few drops of liquid soap added. This removed all stains and grease spots. The cannon bays, wheel wells and cockpit interior was then masked with wet tissue paper and liquid masking fluid and the complete model was airbrushed in a Light Sea Grey undercoat. All joint line blemishes that still showed were then finally filled and sanded smooth. The model was again washed and a final undercoat of Light Sea Grey was applied. This also served as the correct colour for the undersurfaces.

The rear fuselage band was next masked off and airbrushed in Matt Sky Blue using Humbrol enamel paint. The invasion stripe areas on the wings and fuselage were next masked out and sprayed in Matt White. The rear fuselage band and invasion stripe areas were then masked off and the camouflage pattern in Dark Green and Ocean Grey was applied. Once dry the wing leading edge areas were masked off and airbrushed in Matt Yellow, again using Humbrol enamel paint. The invasion stripe

masking was then removed and the areas to remain White were re-masked, as well as the areas to the outsides of the invasion stripes. The Matt Black stripes were next airbrushed on, using Humbrol enamel paint. Once the model was completely dry all the masking was removed and the model was ready for decalling.



*Fig 7 : A view of the right hand side of the model, showing the White and Black Invasion stripes and the Yellow wing leading edges.*

## DECALS

The model was airbrushed with a coat of Future clear polish to serve as a gloss base for the decal application. Once dry the decals were applied using decal-setting agents as required. The decals applied were that of Typhoon Mk 1B, RB222, TP-F of No 198 Squadron, Royal Air Force. The decals depicted the aircraft as operated on 06 June 1944, during the Normandy Invasion. After the decals had dried and the residue of the setting agents had been washed off, the decals were sealed by applying another coat of Future polish. The model was then airbrushed with a matt varnish and weathered with a thin Black wash.

## FINAL DETAILS

Final details were then added to the model. The windshield and canopy were added to the model using Future polish as glue. An antenna was added to the rear fuselage from stretched sprue and the tail wheel was painted and glued to the model. The

exhausts were brush-painted in a copper/rust colour and exhaust stains were applied by careful misting with the airbrush. The main wheels were airbrushed in a very dark Charcoal Grey and Flat Aluminium and glued to the struts using super glue. The previously prepared cannon bay cover doors were then glued to the bays, with thin lead foil depicting the hinges. Finally the rocket rails were glued to the wings, using super glue to ensure a strong bond on the thin surfaces. This completed a model that I greatly enjoyed building and for which I will always have a soft spot. I started construction of the model on 17 December 1997 and completed it on 10 February 1998. And yes, the original model has finally been retired from my shelves.



*Fig 8 : A view of the left-hand side of the model.*

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## **BUILDING AND DETAILING THE AIRFIX 1:72 SCALE HAWKER TYPHOON : PART 2**

The kit I used was the Airfix kit. Having a look at the kit, it is basically not too bad. The aspects, which I did not like, were the cannons, cockpit interior and engine intake and main gear doors.



*Fig 1 : A right hand side view of the model.*

### **CONSTRUCTION : COCKPIT**

I started to construct the kit with the cockpit. I replaced the kit seat with a scratchbuilt and vacformed version. Added to this was seatbelts from masking tape, a throttle quadrant to the left fuselage and a new scratchbuilt stick. The head armour behind the seat was added. I scratchbuilt the navigation light behind the seat armour and added the canopy sliding rail.

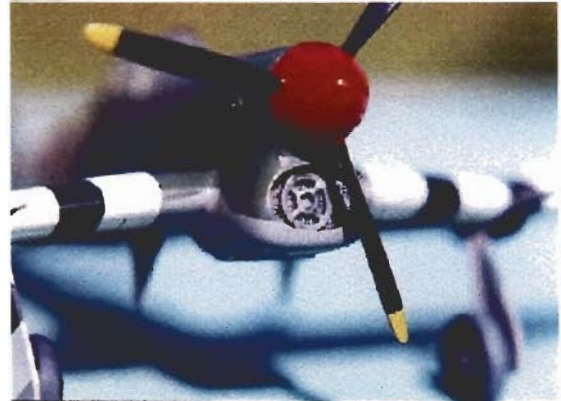


*Fig 2 : A view of the canopy and area on the rear fuselage decking.*

### **CONSTRUCTION : FUSELAGE**

Once the cockpit had been airbrushed, weathered and drybrushed, the fuselage

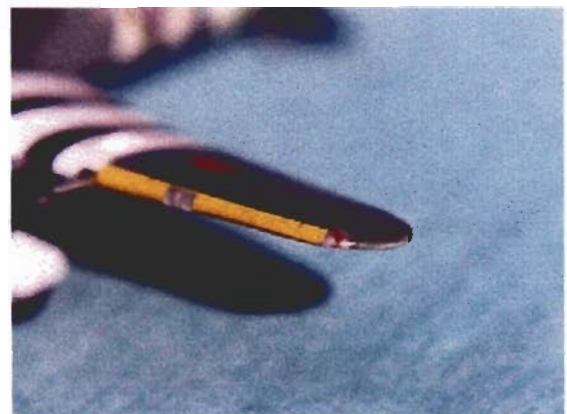
was glued together. I then added some fine mesh screen to the engine air intake and added the new scratchbuilt intake orifice. I then cut out the radiator flap at the rear of the engine intake and replaced it with thin plastic card. I also added a scratchbuilt curved supercharger air intake pipe with radiator flap actuating mechanism. This enhanced the overall appearance of the model tremendously.



*Fig 3 : A view of the new radiator intake area.*

### **CONSTRUCTION : WINGS AND UNDERCARRIAGE**

The wings were added and then the undercarriage. New main gear doors were scratchbuilt. The main guns were replaced with new guns turned on a Dremel tool. I next cut out the navigation and landing lights positions.



*Fig 4 : A view of the left-hand wing, showing the landing lights and navigation lights.*

These lights were replaced with new ones scratchbuilt from clear sprue. I made them

by drilling small holes into the sprue from the rear and adding some green/red/silver paint. I then superglued the lights into the cut out space and sanded the clear sprue down to match the wing curvature. I was quite pleased with the end results as this enhanced the model a lot. I then proceeded to scribe all panel lines on the wings and control surfaces.

## **PAINTING, COLOURS AND DECALS**

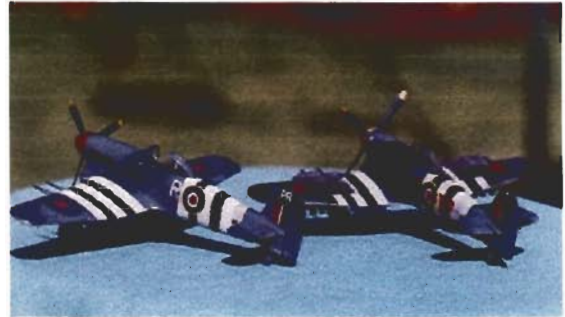
I have always wanted to do an Invasion striped Typhoon. The entire model was undercoated with Humbrol 28. All flaws were fixed and sanded smooth and the model recoated. I then airbrushed the white areas. When these were dry I masked it and airbrushed the black. Once this was dry I then masked the black areas. The model was then camouflaged in Grey and Green.



*Fig 5 : A left hand rear view of the model.*

The spinner was painted in red, black and yellow. Once the model was completely dry, I removed the masking and touched up the paint job where necessary. Once I was satisfied with the end results, the whole model was given a clearcoat of Future. I sanded the canopy smooth and buffed it up, it was then dipped into Future and set aside to dry, this then gives a beautifully clear canopy. The canopy was attached with some Future. The model was left to dry for a couple of days and I then started to decal the aircraft. Decals came from various sheets out of the spares box. Once the decals had set and the residue was washed off, the model was again given a coat of

Future to seal the decals. I then proceeded to wash the aircraft with a black wash, followed by some drybrushing in places of wear. This was followed with a coat of semi-matt Testors varnish.



*Fig 6 and 7 : Two more views of the completed models posed together.*

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