

# **HUMBROL**

# **PANAVIA 200 TORNADO**

**KIT NO. HK72007** 

## HISTORY

The Panavia Tornado is a strike fighter made by a multinational "consortium" Panavia, representing BAC (G.B.), MBB (German Federal Republic) and Aeritalia (Italy). The origins of this plane, more generally known as the MRCA (Multi-Role Combat Aircraft) are rather complicated and are the results of trying to consolidate the specifications required by the air forces of Great Britain, the German Federal Republic and Italy.

The programme was started on March 26, 1969 and the first prototype (made by MBB, with the German Civil registration D-9591) first flew on August 14, 1974, commanded by the chief test pilot Paul Millet (from BAC) and his number two Nils Meister (from MBB). Shortly after, on October 30, there was the first flight of the British prototype: the Tornado P.02 (XX946); later on December 5. 1975 the first Italian version (the P.05-X-586).

The Tornado was designed, as can be seen from its original initials, as a multi-purpose plane (every kind of ground attack), replacing the various Canberras, Vulcans, Buccaneers, Phantoms, F-104G and F-104S. The RAF also

requested another version, known temporarily as ADV (Air Defence Version) meant for interception work which is at present handled by the Phantom and the Lightning.

So many were the orders for the Tornado that it will become one of the most common planes of the eighties: 220 interdiction and attack versions and 165 for interception for the RAF, 202 for the Luftwaffe and 120 (plus two modified pre-series versions) for the Marineflieger, and 100 for the Italian Air Force. The versatility of this modern and powerful plane, which is mainly due to the use of two RB.199 Rolls-Royce engines (made by the Turbo Union consortium) and to the wing with variable geometry (in flight) which makes it possible to go from a span of 13.90m to just 8.58m. The 200 Tornado IDS model (interdiction strike) can be used for tactical support, interdiction, ordinary and nuclear tactical bombing, attacking enemy air bases, attacking ships, reconnaissance and operational training; the Tornado during these operations has high supersonic speed and an ability to operate at low quotas in all kinds of weather, even better than the various F-111, A-6 and Buccaneers can.

## **GENERAL MODELLING**

You have a Humbrol Model Kit, each piece of which has been carefully researched and produced to allow you to construct a model kit of which you can be justly proud.

Before commencing the assembly Study these notes and the assembly instructions before starting the model. Identify the numbered pieces on each of the mouldings with the help of the plans. Make certain you know where pieces fit.

Where there is a choice of versions, make certain you know which pieces are required

dentify the pieces you have to paint before assembling and those that can be painted

Follow the step-by-step instructions carefully.

Assembling and gluing
Carefully cut the pieces from the sprue using a craft knife with a sharp blade. If necessary, trim the pieces with a file or a sandpaper board to ensure a perfect fit. Before applying cement, assemble the pieces "dry", in order to satisfy yourself that you know where each is located and that they fit perfectly together.
Use the minimum amount of Polystyrene Cement or Liquid Poly, following the instructions for these products. Make certain that pieces are located together to give

Certain pieces may need "clamping" together after cementing, until set. Use one or more spring-type clothes pegs or adhesive tape to assist you to get a

Use a pair of tweezers to assist you in assembling the smaller components. Polystyrene Cement and Liquid Poly will not adhere to plated or painted plastic, so carefully scrape away the plating from the points of assembly before applying cement. Any small gaps in the model can be filled using Humbrol Model Filler.

Painting
Use Humbrol Enamels for painting your model.

follow the instructions as to which pieces to paint before or after assembly. To matt down a gloss paint use Matt Varnish No. 49.

When intermixing paints to obtain a particular shade, make certain that you mix sufficient for the job in hand.

Identify the position for each decal on the model according to the version chosen by

Carefully cut round the decal, soak for a few seconds in luke warm water, carefully slide from the backing paper into the correct position.

Absorb excess water with a small piece of blotting paper or soft clean rag. Tools and materials usually recommended and used for modelling (files, pins, craft knife, cements, solvents, paints, etc.) can represent a danger if entrusted to children without the control of a parent. All modellers should exercise care in the use of heat or naked flames and the use of these should not be attempted by a young person under

The above advice is not given lightly and we kindly ask you not to ignore it.

Thank You . . . Happy Modelling

# **SPECIFICATION**

Two double flow turbojet engines Turbo Union RB, 199-348, 3060-3860 kg/s dry and 6120-6800 kg/s with afterburner.

SIZE
Length (without front probe) 16.71m height 5.74m wing span 8.58m (minimum sweep)
13.90 m. (maximum sweep) wing surface 30 sq.m.

## WEIGHT

Emptied but equipped 11,340 - 12,700 kgs - total 17,000-20,400 kgs - maximum total at take off 23,00 kgs.

PERFORMANCE

Maximum speed 2038-2336 kg/h at 11,000 m (Mach 1.9-2.2) or 1347-1408 km/h at ground level (Mach 1.1-1.5) – economy cruising speed 637 km/h – service ceiling 5,250-17,500 m - point of no return (maximum and minimum) 725-1300 km - fuel distance about 2220 kms - transfer fuel distance 3750-5000 km.

ARMAMENT
Two 27 mm IKWA-Mauser guns and about 7200 kgs war load.

## **PAINTING**

We recommend the use of Humbrol Britfix Polystyrene Cement or Humbrol Britfix Liquid Poly to assemble your model, and the following Modelling Paints for a perfect finish. Humbrol Colour Reference Numbers

56 Aluminium 81 Pale Yellow

105 Marine Green 125 Dark Grey 130 Satin White

82 Orange Lining 85 Coal Black 132 Satin Red

All external colours except those specifically marked matt should be overpainted with a final coat of Satin Varnish No. 135.

## IN CASE OF COMPLAINT

Your Humbrol Plastic Model kit has been carefully moulded and backed. Should you be in any way dissatisfied with the kit please write to the address below stating the nature of your complaint or the part imber(s) required, the kit number, your name, address and post code.

The Sales Department, Model and Hobby Division, Humbrol Ltd., Marfleet, Hull HU9 5NE

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