



Airbus H145 Helicopter 1/72 Fenestron tail Conversion Set MSC 72-01

For use with Revell Eurocopter EC-145 kits (or Heller with adaptations)

HISTORY

The Airbus H145 is anno 2020 a very popular helicopter both in use with many civil flying ambulance and rescue services around the world, as with military forces in the Light Utility Helicopter (LUH) role. Also for the SAR and associated training roles, plus other light civil utility roles like wind turbine servicing and VIP transport, the H145 is in increasingly widespread use across the globe.

The origin of the H145 traces back to the MBB Bo 105 from the 1970s. From this successful design a larger medium helicopter was developed in joint development with Kawasaki, the BK-117. When MBB merged with Aerospatiale into Eurocopter in 2000, the BK-117 was revised to have a longer and wider fuselage, and a windscreen similar to the then new Eurocopter EC-135, which was an adaptation of the Bölkow 108 prototype, improved by having an Aerospatiale designed fenestron tail. The advantages are much less noise and less danger for people on the landing area, which are very important assets for ambulance, trauma and police helicopters.

The resulting medium helicopter was the EC-145, however this type retained the conventional tail with anti-torque rotor from the BK-117. Also shared with this design were the very prominent stabilizer end plates fins, required for course stability. The type is in use around the world, including the US Army, Navy and National Guard, these units use some 470 helis as the UH-72A Lakota.

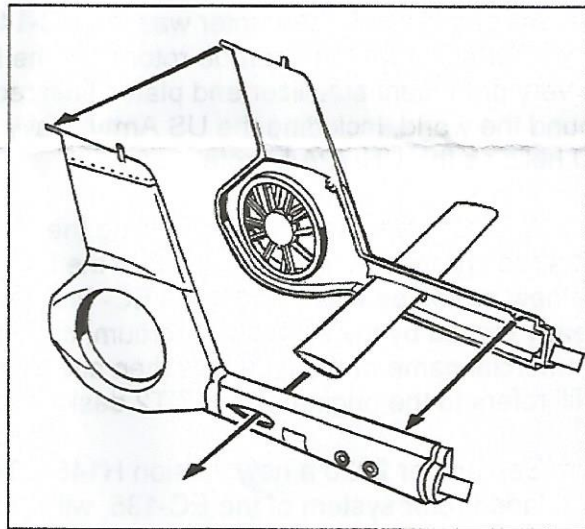
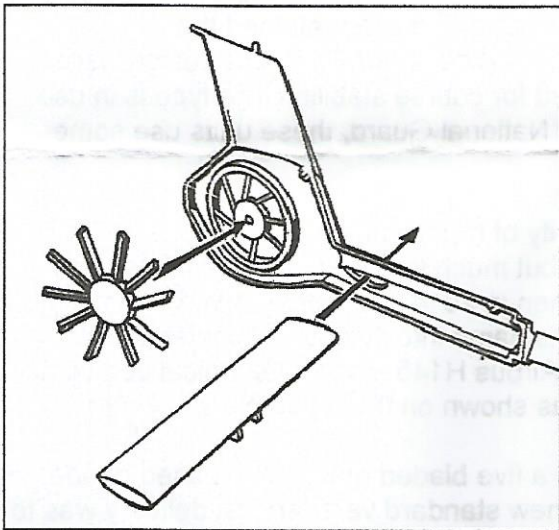
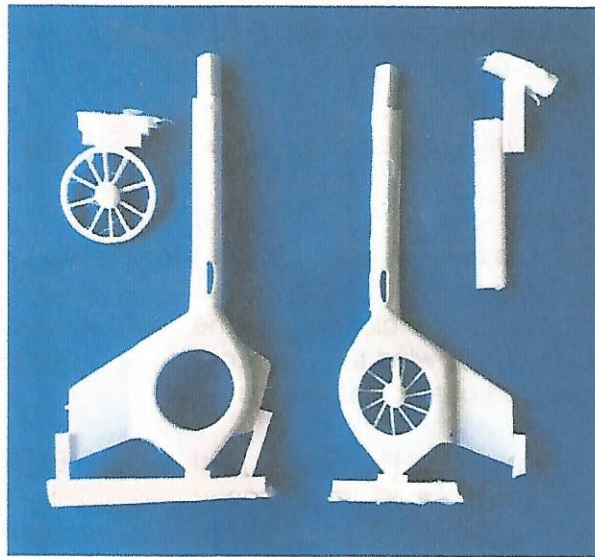
In 2012 Eurocopter started investigating the feasibility of replacing the conventional tail with a fenestron shrouded tail rotor, similar to the EC-135 but much larger and different in shape. The new prototype was designated EC-145.T2. When in 2014 Eurocopter, which was already owned by the Airbus consortium, changed its name into Airbus Helicopters, the commercial name of the type was then altered into Airbus H145. For the technical certificate it still refers to the original BK-117.T2 designation, as shown on their type plate.

From September 2020 a new version H145.D3 with a five bladed main rotor, based on the four bladed rotor system of the EC-135, will be the new standard version, first delivery was to Norske Luftambulans. Upgrade sets for existing H145s will be offered as well, several operators (REGA, DRF) already having announced that they will upgrade their fleet.

Also in August 2020 was announced that the US Army will expand their Lakota fleet with 17 UH-72B Lakotas, having the new fenestron tail. These helis will be delivered in 2021 by Airbus' Columbus (Mississippi) production facility. At present these will be delivered with the current four bladed main rotor, probably to maintain commonality with the existing UH-72A Lakota fleet.

THE CONVERSION SET

The conversion set consist of four parts, cast in white flexible resin. The tail is in two halves, to remain hollow for the least weight, as to make the model sit properly on it skids. Remove the two halves carefully from their casting blocks, using preferably a fine modelers' hacksaw (JSC for instance), or a very sharp modelers' knife or scalpel. Remove any flash and check carefully the fit of the two halves. Remove also the tail plane (stabilizer) from its casting block. Insert the stabilizer into one of the tail halves, flat side up, and then fit the other tail half over the other side of the stabilizer. Then carefully run little drops of cyano acrylate glue (CA) between the halves, while maintaining the two halves straight and the stabilizer square. When satisfied also fix the stabilizer with a few droplets of CA. The tail can be attached to the fuselage at this stage or later, as replacement of the original conventional tail.



Cut the fenestron rotor (the rotor blades are intentionally unevenly spaced!) from the supporting ring. The resulting diameter should be exactly 16mm. Paint the tail together with the fuselage in the required colours including the hub and the shaft cover. The ten fixed hub support struts are very light grey, as is the rotor hub between the rotor blades. The rotor blades are made from carbon and very dark grey/black, anthracite being a good paint match. The rotor hub cap is again in the fuselage and tailboom colour. If one wants to have a turning rotor adaptations are required, otherwise simply attach the rotor from the right side in the circular hole to the tail. Add a tiny tail light (0,5mm) to the flat rear face of the tail boom. Add the kit VOR antennas (towel rails) to each side of the tail boom at the indicated indentations. Add other antennas as required, there are several customer specific configurations possible.

The H145.T2 has additional skid buffer dampers attached to the forward crossbeam in streamlined covers, just below the pilots' entry doors. See red arrow in the diagram below. These can be simply made by tiny pieces of scrap 5mm long, and painted in the same colour as the skids. These dampers are deleted again from the D3 version with the five bladed main



GOOD LUCK BUILDING!

Naval Models
www.navalmodels.com

DECALS

Several decals sheets for the Airbus H145 are available from DF-Helostuff (Germany), both in 1/72 and in 1/32. More are to be announced soon.

<https://www.sparks-scalemodelshop.de/c/decals/international>