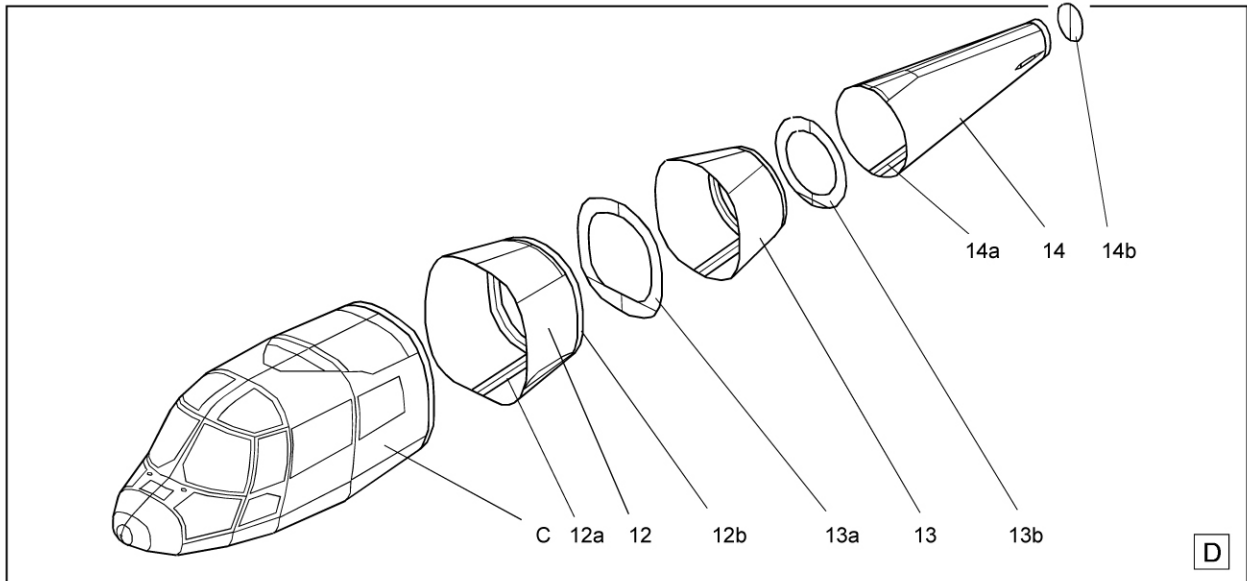
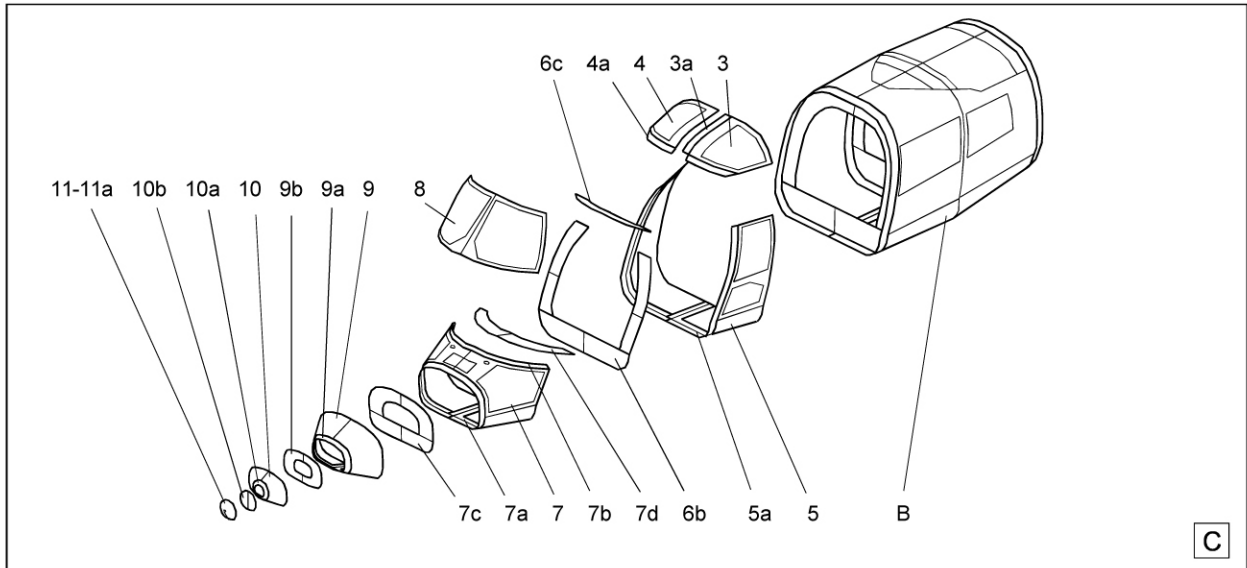
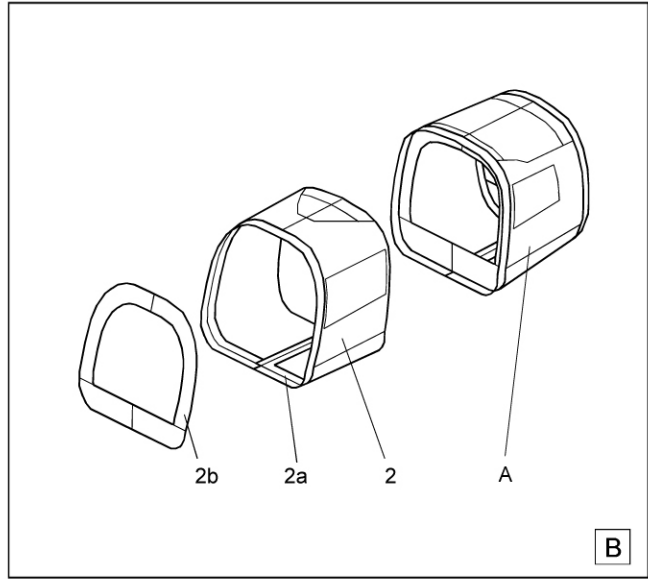
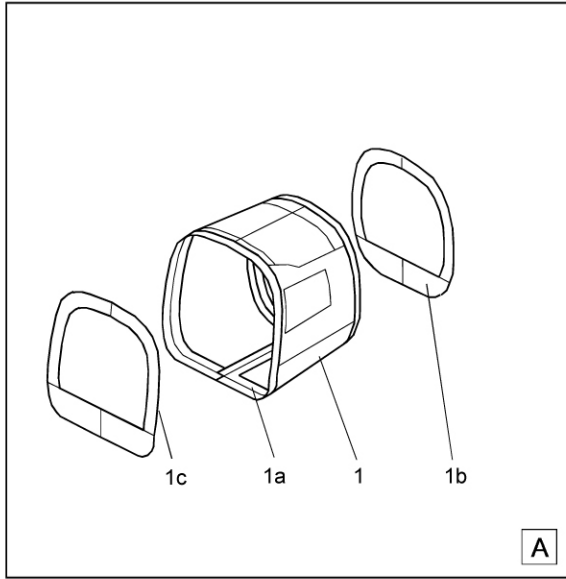


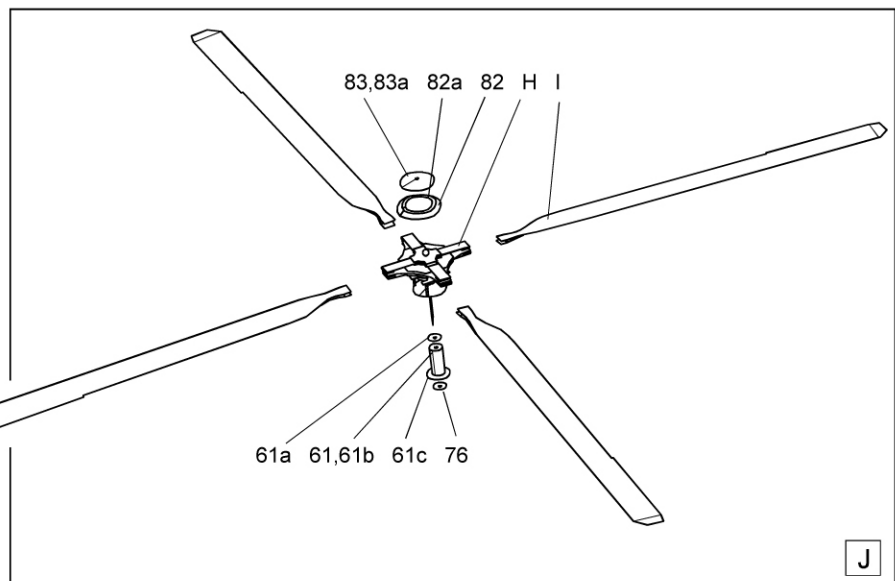
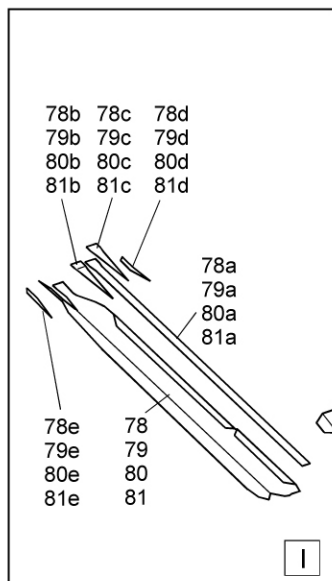
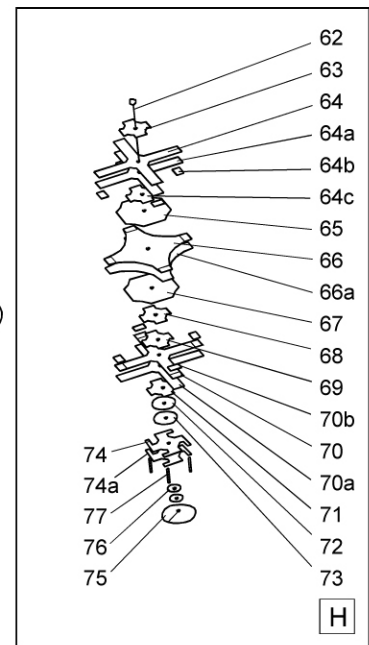
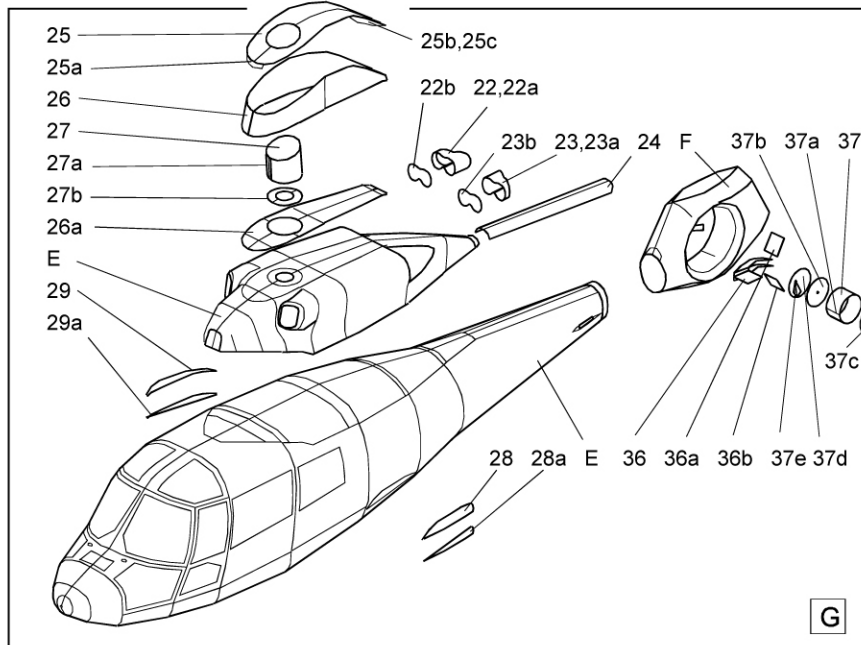
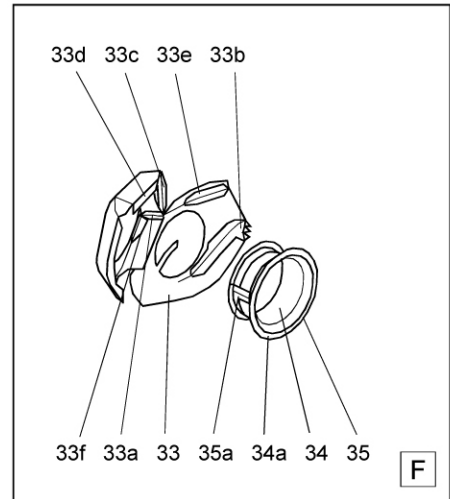
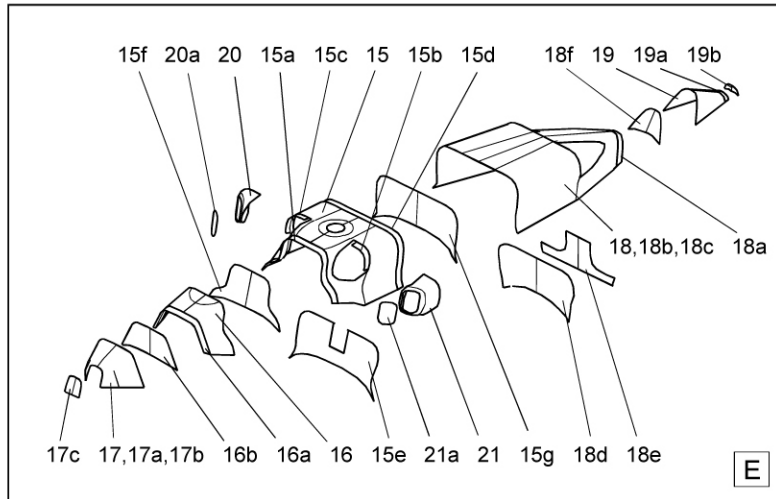
ASSEMBLY INSTRUCTION

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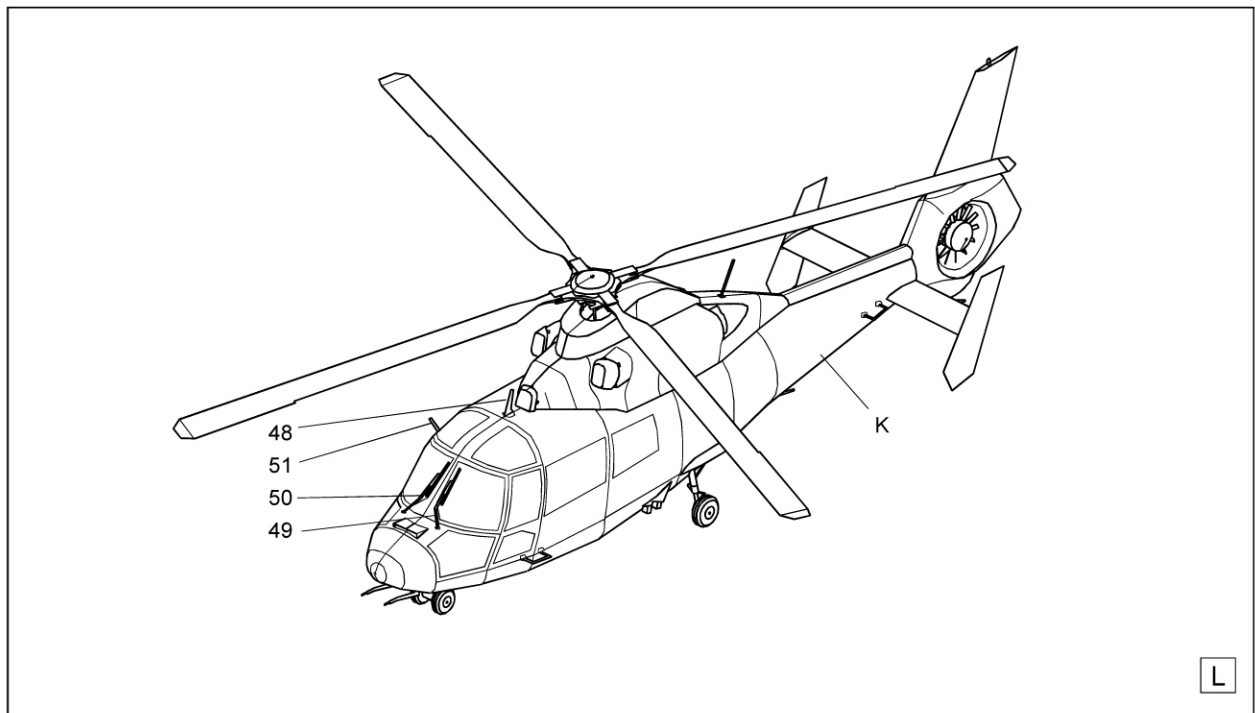
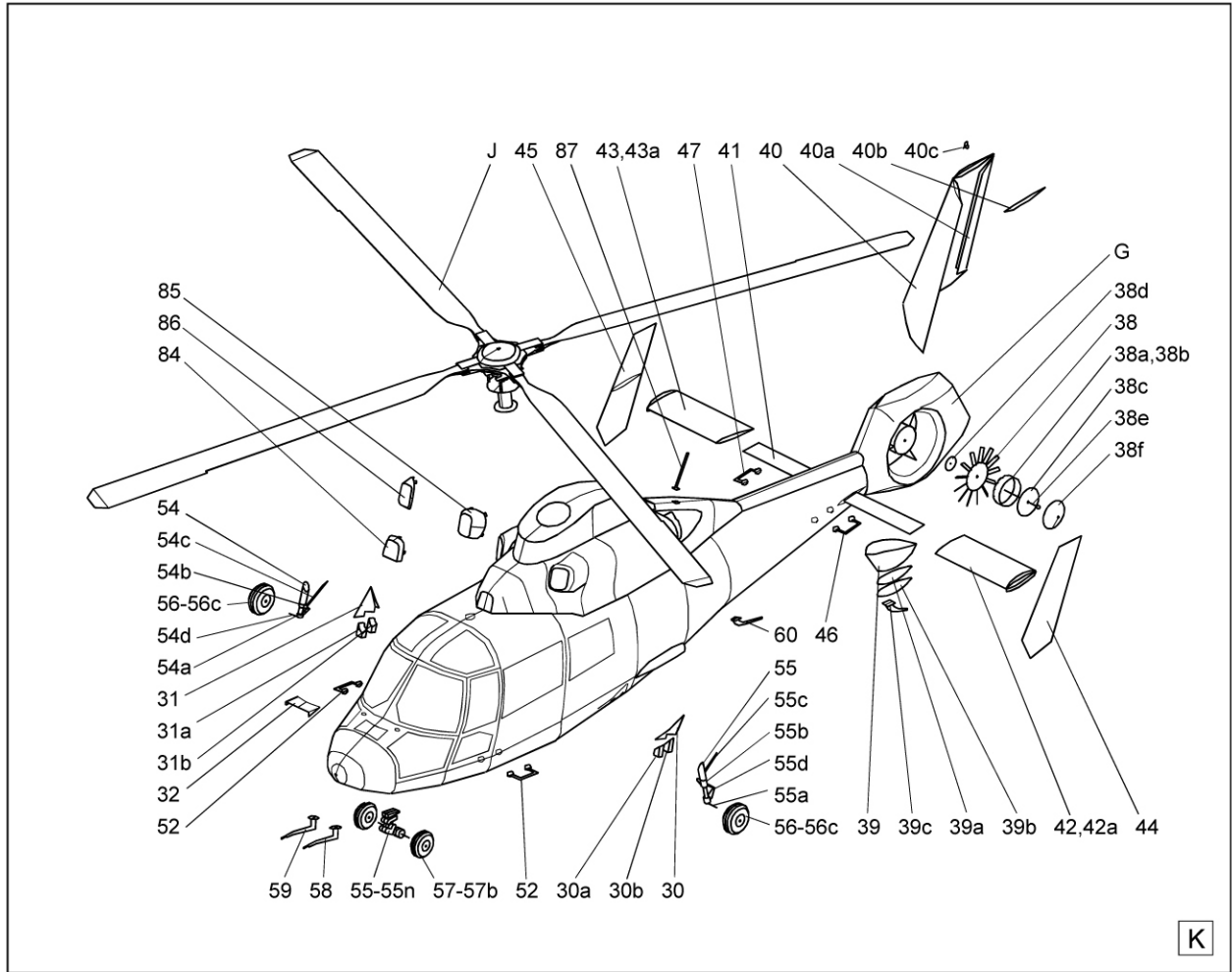
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Virgin HEMS Dauphin Assembly Instructions

Accurately recreating the complex and elegant shapes of the Eurocopter Dauphin Virgin HEMS Air Ambulance requires some modeling skills to assembling the scale model. But you can achieve excellent results by following these instructions, cutting and shaping the parts accurately, and positioning and gluing them with care.

Before you begin

Before beginning read the instructions carefully and look at the detailed diagrams carefully. Try to picture the assembly sequence and the purpose of each part. The diagrams are drawn to show both details of the assembly process and a view of the completed part.

The structures with complex shapes - the fuselage and engine cowling-- are separated into segments, each of which can be formed using only simply curved pieces and gluing. Strengthening elements (formers) prepared from thicker cardboard must be applied to keep the segments in their exact shape. To join the separate segments, connecting strips must be fixed to the inside.

Assembling each segment requires the following sequence of operations:

Cut out the segment and glue the corresponding connecting strips to its back. Carefully curve and form the segment and connect its edges together using the connecting strip. The exact shape will be obtained after inserting and gluing the formers. Each finished segment should be glued to its predecessor. Obviously the first segment is built using two formers.

During assembly, take care to line up the details and the centre-line markings.

Each segment is numbered, according to its order in the assembly sequence.

All the parts of the segment are denoted with the same number and a letter corresponding to the assembly sequence of the segment.

Do not cut all parts at once or you may lose them -- there are a lot of them, including many small detail parts.

Cut out the parts along the centre of the outline.

Careful and precise gluing of the separate segments is vital if the model is to look correct. Keep your hands clean as you build, and do not allow the glue to smear.

Before beginning, you will need the following tools and materials:

1. Some card about 0.35 mm thick.
2. Glue. The best results will be obtained using a transparent nitrocellulose based paper glue like "Bison" or UHU . Using water-based glues is not recommended.
3. Scissors
4. A sharp knife for cutting.
5. A blunt knife for scoring the fold lines.
6. A needle.
7. A few pins, or 0.5 mm diameter wire.

Preparing to build

Work on the model starts with the following preparation procedures:

Glue the details from page 5 and those in the rectangle on page 4 onto the 0.35mm cardboard and press firmly until the glue is completely dry.

Score all fold lines. Continuations of the fold lines beyond the edges of the part are marked by thin lines. Use a ruler or drawing curve. Use the blade of the blunt knife on to crease the cardboard without cutting through it.

Cut the internal holes in the formers and on parts 14, 15, 25, 33, using a sharp knife.

Make small holes in the wheels, rotor and fenestron details by using a pin

.

Building your model

Start with fuselage section 1. Glue connecting strip 1a onto the back and carefully form it, referring to view A of the instruction diagram. Glue the corresponding edge of the segment to the connecting strip and insert the formers 1b and 1c.

In the same way, prepare fuselage segment 2 and glue it to 1 as shown in view B. Continue with the cockpit and the nose of the helicopter (parts 3-11), following view C. Do not forget to add some weight in the nose so the model will stand on its undercarriage. Complete the fuselage, adding segments 12-14, using view D.

The engine cowling assembly sequence is shown in view E. Start with part 15. Carefully glue and form it to obtain the correct shape. Glue all 3 formers 15e, 15f and 15g on the inside of the part, ensuring symmetry throughout. In the same way, prepare segments 16 and 17 and glue them in place. Ensure accurate alignment of the segments' edges during gluing, and periodically test the fit of the cowling to its place on the fuselage. Form part 18 so the black area behind the engine exhausts is concave. Score bending lines along the edges of the area before forming it. Glue formers 18d and 18e together before fixing them to part 18. After adding segment 19 and the air intakes 20-21, glue the completed engine cowling to the fuselage, as shown in view G. Glue the rotor shaft cowling 25-26 and engine exhausts 22-23 to the engine cowling. Fix the landing gear cowlings 28-29 to both sides of the fuselage.

Assemble the fenestron cowling 33-35, insert the fenestron base 36-37 and glue it to the fuselage, together with fenestron shaft cowling 24. The assembly sequence is shown in views F and G.

Next, assemble the rotor (view H). Carefully cut out the parts and assemble it by stringing them on a pin that will be used as a rotor shaft. Do NOT glue together 64b to 66 and 66a to 70b. The blades' bases will be inserted there later. Adjust the rotor height using the requisite number of part 76.

Assemble the four blades (view I). Prepare the rotor bearing 61 and insert the rotor shaft. Glue 76 to the shaft so that the rotor can rotate freely. Glue the blades to the rotor, ensuring exactly a 90 degree angle between them. Note the color code of each blade which must correspond with those on the blade's holder on the rotor. Fix the rotor cowling 82-83 on the top of the rotor. Glue the rotor to the model at the end of assembly.

Now continue with detailing, shown in view K. Assemble the fenestron 38, using a pin 38e as shaft. Insert the fenestron shaft into the fenestron base 37c so that the fenestron can rotate freely.

Assemble the horizontal and vertical stabilizers. Note that vertical stabilizers are asymmetrical, due to their nonzero angle of attack. This feature is intended to unload the fenestron during straight and level flight.

Begin the undercarriage with by constructing the wheels. Cut parts 56-57 from thick card and glue them to each other, stringing them on a pin. After the glue is dry some sanding with appropriate sandpaper and painting with black ink or paint is needed. The landing gear contains many small details and requires accuracy during assembly.

After adding the remaining small details and gluing the rotor bearing base on its place according to view K and L, your model is ready.

Enjoy your DAUPHIN Air Ambulance helicopter.