

Please note: *This translation is provided as a courtesy, only. We cannot guarantee 100% accuracy so please read carefully and study the drawings before proceeding. We cannot accept liability for errors.*

Grumman J2F-5 Duck

GENERAL NOTES

This model is quite difficult and labour intensive to build. The general structure and large quantity of small parts makes the construction of some elements difficult. Of particular concern are skins of each float as well as the gradually sloping fuselage from the centre in the direction of the vertical stabilizer and down to the skin of the main float. The model has been designed in two configurations to enable it to be built by both beginners and more experienced modellers. The first concentrates on only the exterior of the fuselage, with a number of simplifications, and the second contains almost all of the equipment stored in the hold of the main float, the moving gun and equipment operated by the observer, realistic engine cylinders and exhaust ports, as well as the life-raft designed to the same scale. Of course, implementation of these elements may be begun and finished at the discretion of the modeller, selecting the most convenient time and combination of elements. For the experienced modeller, the assembly order of the basic model is discretionary, however beginners or less experienced modellers are advised to build the model in accordance with the instructions.

Here we will list the additional materials needed: 0.5mm thick card, for laminating to certain parts for strength, 0.5-1.0mm thick steel wire, sandpaper no. ²⁵⁰/₃₀₀, suitable coloured pencils or paints for retouching the edges and visible interior elements on the full version of the model. For gluing together large surface areas, we recommend 3M spray adhesive; for small parts, a PVA white or UHU. The general concept of gluing parts together is known by most, but for rolling or coiling certain parts, the best method is to draw the paper across the edge of a table several times, or across a pair of scissors or blunt side of a knife. It's advisable to take your time, cut out the parts very carefully and get into the habit of test fitting parts before permanently gluing them into position. Before beginning work on the model, take time to thoroughly read the instructions, and examine the parts sheets and drawings.

ADDITIONAL NOTES

* – Stick on to card of about 0.5mm thickness.

** – Stick on to card of about 1.0mm thickness.

↳ – Direction of assembly.

— — — — — Fold line.



— sand down the inside edge to an oblique angle.



— sand down the outside edge to an oblique angle.

✂ – Cut.



— Roll or coil tightly.



— Insert element with printed side to the inside.

W – Remove.

P;L – Right-hand part ; Left-hand part.

W ? – Optional variant (single part).

? – Optional, depending on version being built.



— sand down on both sides of the edge.

CONSTRUCTION GUIDE

We begin the construction by laminating onto card, those parts which need to be strengthened: Individual ribs, rib sheets, supporting beams and instrument panel. Before starting to build the fuselage, you need to decide which version of the cockpit and equipment you are going to choose because this is highly related to which ribs will be used. In either case, it is important to pay attention to the placement of the ribs and to make sure their edges are the correct shape. Ensure that each element fits exactly by sanding the edges with sandpaper on a flat surface to create a good joint. We begin the assembly by gluing together the frames: 1-1a together with ribs: A, A1, A2, A3, (for the basic version), B, B1 – The fixing of the bottom groove allows for the later assembly of the main float, together with template IV, C, C1 and in turn, template VII, parts: C2 for the basic version, D, D1 together with elements fixing the supporting beams of the wings (parts 16, 16a, 17, 17a). Next, parts E, E1, F, F1, with strengthened floor parts 5, 5a, 5b – for the advanced version: element P, next ribs: G, G1, H, H1, And, I1, J, K, L, L, M, N, O. It's assumed that those building the advanced version can continue with strengthening of the rear section by examining the drawings. The next task is to assemble the engine, which can be built either very simplified or near the genuine article. Each cylinder (parts 65, 66, 67, 68 and head part 64), tappets template II, III and propeller shaft, we assemble onto the main axis (parts 60, 62, 62a, 63, 63a). The optional part is part 64 which needs to be coiled tightly into a roll, or part 61 (refer to drawings). The next stage is to assemble the main float, containing the main landing gear bay as well as the space for carrying wounded personnel. The frame of the float consists of ribs: a, b, b1, c, c1, c2, r, d, d1, e, f, f1, g, g1, h, h1, I, i1, j. In the advanced version, insert coloured parts 22 and 22a between ribs d-e, using the rings on rib e. If you have chosen to fit the hold in the main float, omit ribs g-g1 and instead fit part 23 between ribs f1-h. It's important to remember that if you have chosen this option, the fields marked with scissors need to be cut out on parts 1a and 2a. With the two segments prepared, fit the assembly together, adding ribs B, C, D, F to the slots prepared earlier in parts d1, f1, g, i.

Now we look to adding the skin. It's best to start on the fuselage, parts 31, 32, 33, 34, 35, 36, 37, 38, 39, 40 and 41. Then attach cockpit parts 81, 82 and 83 (refer to drawings). Next, attach the skin of the float, which consists of: 42, 43, 44, 45, 46 and 47. Whilst adding part 46, make sure that the upper edge rests on part r and inner part 2.

Assembly of the wing frames should not cause any major problems. The process is similar to the fuselage and main float. It consists of complete groups: 6, 6P, 6L, 6a-7, 7P, 7L, 7a (bottom piece); 8, 8P, 8L, 8a-11, 11P, iiL, iia, 12, 13, 14, 15 (sketch drawing). The tension cables should be attached to the wing skins, positioning them in accordance with the drawings. It's best to first add the struts part 104, 105 and then 106 and 110. Assemble the horizontal stabilizers by referring to the drawings. To ensure the greatest strength, it's important to insert part 97 into its corresponding element at the correct angle as viewed from the front. The whole section is finished off by adding parts 111P and 111L to cover the joint between the horizontal stabilizers and the fuselage. The main landing gear is built depending on if you want it in the retracted or extended position. A view of the extended landing gear can be seen in the sketch drawings. This is not to scale. If the first part of the landing gear is not assembled accurately, even a small error will cause problems when fitting proceeding parts. The landing gear consists of parts 113, 138, and 139 which are assembled and inserted into the wheel recess. The wheel recess can be cut out and substituted with parts 51 and 52. The full version of the model includes the life raft and consists of parts 152, 152a, 153, 154, 155, 156 – the construction of which needs to follow closely the arrangement of each section. This also applies to the belts (part 157) which join to each segment. The integrity of the whole structure will be helped by addition of the strap part 160. Retouch any white edges and carefully add a coat of clear matt varnish.

***We hope you enjoy building this model and achieve great satisfaction
from the final result.***