



KIT LOTUS

Guide to paper modelling

Looking for something different but equal to the challenge of that plastic or white metal or resin kit you have just finished?

Ever thought of paper modelling with subjects close to your heart?

I hadn't until I came across PKAA Graphica from the Czech Republic. Pavel Krejci has some amazing paper creations of 1:24 F1 models including up to the minute variants and of course many Lotus subjects.

Recession beating costs with no cut backs on detail, when finished they really look the part. Here I try to pass on a few tips because it is more difficult than it looks.



Lotus 76 in paper, a rare model in any form above 1:43 scale



This 1:24 scale Lotus 49 is made of paper!



Camel liveried Lotus 99T (above)

Essex Lotus 81 (left)

Both in paper

Tools

It should also be remembered that all knives and scissors are dangerous and should always be used with extreme care. Adhesives should only be used in a well ventilated room. Always avoid inhaling any adhesive vapour as this is likely to be harmful. Always wash well any spills in contact with the skin. Always follow the COSHH (control of Substances Hazardous to Health) directions on the container.

Knife - The best modelling knives are surgical scalpels. They are extremely strong and can be purchased in a variety of styles with various blade types. X-Acto and other specific modelling knives are popular together with the basic but effective Swann Morton Craft Tool. The most important fact is that the knife is comfortable to use and strong. Remember to always wear safety glasses when using sharp instruments, and to cut away from you. All craft and surgical knives are extremely sharp!

Straight Edge - A simple but essential tool to ensure clean straight lines are cut in a controlled manner. When using any form of model/craft knife, always use a steel straight edge to prevent the blade cutting into the straight edge. A variety of sizes are useful from 15cm to 100cm depending on the work. Safety straight edges are an advantage as the 'holding' fingers are protected from the blade.

Cutting Mat - An essential item to save the best dining table available in a variety of sizes from A5 to A3, the 'self healing' surface provides a good flat surface for cutting without damage to the blade. Generally a good addition to any tool box.

Scissors - Good quality straight and curve blade scissors are often overlooked by model makers but they can save time when cutting irregular shapes. For accurate intricate work use scissors with a small blade and long handles eg surgical scissors, available in a variety of types. A pair of quality long blade straight scissors allows for neater straight cuts if a knife cannot be used.

Retaining Tools - Basically anything that holds the items in place whilst the adhesive sets. Useful items include bulldog clips, paper clips and paper weights. Masking tape or similar can be useful to hold the model while it sets or as a temporary fix when checking. Drawing pins can be invaluable.

Adhesives

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A wide variety of adhesives can be used on cardboard and glue depending upon the thickness/quality of material and the required finish. Some of the most popular types are listed as follows:

'All Purpose Adhesives' - These adhesives include Bostick, UHU and Humbrol All Purpose Clear. They are designed for use on most materials but are quick setting when used on card and paper. Generally clear and relatively thick they are most suited to sticking thin surfaces together as a strong rapid bond is formed. They are however a little thick in consistency and expensive for use on large surface areas.

'School Glues' (non PVA) - The best known name in this group is Gloy. A thinner, clear more liquid adhesive than the all purpose types. More suited to large areas although can over wet thin paper. When used sparingly it is extremely effective and easy to clean if applied incorrectly using a damp cloth when wet.

PVA or similar - Probably the most useful model making adhesive available. When used sparingly PVA is a very good adhesive on card and paper forming a quick strong bond. It is ideal for covering large areas as it is inexpensive and very little is required. Again any excess can be cleaned using a damp cloth while the adhesive is wet. It is best used as a 'neat' adhesive although dilution with water is possible. Some commercial makes are more dilute than others. Always purchase a thick smooth flowing PVA that dries clear.

Super Glue - An essential addition to the modellers tool box. Super glue has its uses with most modelling materials and therefore has a place in card and paper modelling. Super glue is ideal where holding the subject may be difficult and a rapid bond is required. It is also useful for adding detail to card and paper models. Do not purchase an expensive super glue as it is not necessary.

Techniques - Hints & Tips

Techniques/hints and tips are very simple with card and paper. Remember to read the tools section above as some useful hints are contained within. One of the most important tips is to remember that paper blunts blades rapidly! As soon as you feel the blade 'drag', replace it as ragged cuts will spoil the appearance of a model.

Card edges can be sealed using PVA adhesive. This allows the surface to be sanded at a later date. When making pre-coloured card kits, painting the edges using acrylic or water based paints improves the appearance. Reinforce card kits and structures using triangular corner pieces. Keep the knife blade vertical when cutting card to produce neat joints.

What is a paper model?

Paper modelling became popular in America during the material scarce war years- with airplanes printed on the backs of cereal boxes, and cut out doll books with an array of wardrobes and accessories. And that was yesterday, and this is today. Paper model kits now range from simple cut & put together in an hour, to intricate masterpieces like this range of PKAA 1:24 scale Formula 1 models. Pavel Krejci and his colleagues at PKAA Graphica have produced a stunning range of F1 models, not just Lotus, with amazing accuracy such as you would expect from laser printed graphics. Paper itself is a quite versatile medium, and the finished products are much more durable than I thought they would be the first time I saw one. Detailed paintjobs are printed right on the model eliminating the need for trying to place fragile wet decals. A few light sprays of a water clear floor polish gives them a "real car" shine, adds to their strength and durability, and makes them easier to keep dusted, like anything that lives on a shelf gets dusty!

Every artistic medium has its easy point and tricky points, but paper, slightly damp with glue will bend and form and even stretch a little. The best advice I can give is to be confident, it is paper, you can get it to do what you want it to do. As usual when we start something totally new to us, the hardest part is getting started but you will be excited by the finished article if you apply the same level of patience and skill that you normally apply to your other kit building. Paper kits are challenging, simple and difficult at the same time but just as much fun.

Building by the Numbers

The instructions here work for most paper model kits- the cutting, folding, gluing symbols are used by most designers. The PKAA models on the Kit Lotus website have instructions in Czech but there is a builders diagram and there are numbers on every part, every glue tab, and those numbers match the part you'll be gluing. Like all kits, study the plans and the parts before starting to cut & build, they will eventually make sense. These models are ready printed with all graphics in place so there is no need for body paint nor finishing decals. The only areas you will have to paint are the edges where you have made cuts. The card will show a white edge that will need painting with an acrylic paint or shaded using a pastel powder or similar. The graphics are that good, there is little need for covering edges.

The axles and very small details like the wing mirror struts are usually made from wood cooking skewers or small diameter dowels, or wire, an alternative to use is wire or a cut down sewing needle when a polished effect is needed.

You may have a tough time of bending curved parts smoothly with just your fingers, but help is at hand in the shape of various sizes of knitting needles, and sewing needles for the really fine parts. They are usually aluminium or steel so if you want to glue the part right on the mandrel, it won't stick to it like it would if using wooden dowel. A small metal straight-edge is a real plus, excellent for cutting, and for bending parts over the edge of it for smooth crisp lines.

Paper modelling can also breathe new life into old empty ball point pens, where a score line is needed on delicate material, using an old ball point pen will give you the solution.

So these are the basic tips, get cutting and gluing.

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